Revitalising an Eco-Justice Ethic of Islam by way of Environmental Education: Implications for Islamic Education

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Dissertation Presented for the Degree of Doctor of Philosophy (Curriculum Studies) at Stellenbosch University.

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March 2012

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ABSTRACT

Despite the fact that Islam remains a powerful social force in the lives of many of its adherents, contemporary scholars lament the silence of Muslims on the environmental question. However, closer scrutiny reveals a burgeoning green movement amongst Muslims the world over. While scholarly works initially elucidated the scriptural basis for Islamic ecological ethics (ecoethics), efforts are now centred on translating the ecoethics of Islam into practice. The educational landscape of Islam is frequently put forward as the primary arena for imparting its ecological teachings. This thesis examines the connections between Islam, ecology and education, and investigates the revival of Islamic ecoethics by way of environmental education in the educational landscape of Islam broadly, and the maktab in particular. The maktab, the foundational educational establishment in Islam, remains underutilised despite its important place in the educational life of Muslims.

A liberation ecotheology research framework was employed to display the richness of traditional resources and institutions in meeting contemporary environmental challenges. Through a conceptual analysis of sacred texts, traditions and contemporary thought on Islam, ecology and education, this thesis constructs an eco-justice ethic of Islam and draws out the pedagogical implications for implementing this ecoethic. Content analysis, of environmental education activities in the broader educational landscape of Islam, provides insights into environmental teaching and learning. Environmental education in the *maktab*, which plays a pivotal role in imparting the elementary teachings and values of Islam, is brought into focus by way of a curriculum review which examines the environmental elements encapsulated in two *maktab* curricula produced in South Africa. Implications for environmental teaching and learning in the *maktab*, are then extracted.

This thesis affirms the important position of religious thought as a determiner of environmental action. It presents, from within a liberatory tradition of Islam, a theocentric eco-justice ethic which is based on the sovereignty of God, the responsible trusteeship of humankind and the intrinsic value of Creation. It puts forward an activist, transformative approach to environmental education, premised upon an integrated knowledge structure and educational objectives which require reflective and critical engagement with all ecological knowledge, responsible environmental action, and social transformation. And it proposes a transformative approach to environmental education to bring the liberatory intent of the Islamic environmental tradition into focus, both in the broader educational landscape of Islam, as well as the *maktab*.

Muslims own a fair share of the global concern around the earth's health and well-being. To varying degrees, they continue to draw upon religious teachings to shape their values, beliefs and attitudes towards life - including the environment. Revitalizing ecological ethics in the educational establishment of Islam provides an impetus to not only uncover Islam's environmental tradition, but to affect Muslim awareness and action on the ecological question.

OPSOMMING

Ondanks die feit dat Islam 'n sosiale krag in die lewens van baie van sy aanhangers is, beklaag hedendaagse geleerdes die stilte van Muslims op die omgewings-vraag. Nadere ondersoek toon egter 'n ontluikende groen beweging onder Muslims die wêreld oor. Terwyl navorsing tot dusver die skriftuurlike basis vir die Islamitiese ekologiese etiek (ekoetiek) verklaar, is pogings nou gevestig op die omskepping van hierdie ekoetiek in die praktyk. Die opvoedkundige landskap van Islam is dikwels na vore gebring as die primêre arena vir die oordra van sy ekologiese leerstellings. Hierdie tesis ondervra die verband tussen Islam, ekologie en opvoeding, en ondersoek die herlewing van die Islamitiese ekoetiek deur middel van omgewingsopvoeding in die opvoedkundige landskap van Islam in die algemeen, en die *maktab* in die besonder. Die *maktab*, die belangrikste grondlegging-stigting in Islam, bly onderbenut ten spyte van sy belangrike plek in die opvoedkundige lewe van Muslims.

'n Bevrydings-ekoteologie navorsing raamwerk was in diens geneem om die rykdom van die tradisionele middele en instellings van die Islamietise ekoetiek na vore te bring. Deur middel van 'n konseptuele analise van heilige tekste, tradisies en hedendaagse denke oor Islam, ekologie en opvoeding, bou hierdie tesis 'n ekogeregtigheids etiek van Islam, en ontrek die pedagogiese implikasies vir die uitvoering van hierdie ekoetiek. Inhoud analise van omgewingsopvoedingaktiwiteite in die breër opvoedkundige landskap van Islam bied verder insigte tot omgewingsopvoeding praktyke aan. Omgewingsopvoeding in die *maktab*, wat 'n belangrike rol speel in die oordra van die basiese leerstellings en waardes van Islam, is by wyse van kurrikulum-hersiening ondersoek. Hierdie hersiening ondersoek die omgewings-elemente vervat in twee *maktab* kurrikulums wat in Suid-Afrika geproduseer is. Implikasies vir omgewingsopvoeding in die *maktab* word dan ontrek.

Hierdie tesis bevestig die belangrike posisie van godsdienstige denke as 'n bepaling van omgewings-aksie. Dit bied, binne 'n bevreiheids-tradisie in Islam, 'n teosentriese eko-geregtigheids etiek aan wat baseer is op die opperheerskap van God, die verantwoordelike herderskap van mensdom en die innerlike waarde van die skepping. Dit poneer 'n transformatiewe benadering tot omgewingsopevoeding wat berus op 'n geïntegreerde kennis struktuur en opvoedkundige doelwitte wat reflektiewe en kritiese omgang met ekologiese kennis vereis; verantwoordelike omgewings-aksie; en sosiale transformasie. Dit bied ook aan dat die Islamitiese omgewings-tradisie deur middel van 'n transformatiewe benadering tot omgewingsopvoeding, beide in die breër opvoedkundige landskap van Islam sowel as die *maktab*, na vore gebring kan word.

Muslims besit 'n groot deel van die wêreldwye besorgdheid oor die aarde se gesondheid en welstand. Tot wisselende grade, gaan hulle voort om hulle waardes, oortuigings en houdings teenoor die lewe, insluitend die omgewing, op godsdienstige leerstellinge te baseer. Om nuwe lewe in die ekologiese etiek van Islam in die opvoedkundige vestiging te blaas, bied 'n geleentheid aan om nie net Islam se omgewings-tradisie te ontbloot nie, maar ook om die bewustheid en optrede van Muslims op die ekologiese vraag te beïnvloed.

ACKNOWLEDGEMENTS

All praise and thanks are for Allah, the Creator (*Al-Khaaliq*), Fashioner (*Al-Musawwir*) and Sustainer (*Ar-Razzaaq*) of the heavens and earth and all that is within it, the One who has gifted me with a love and appreciation for His Creation.

My gratitude also extends to my family for their words of encouragement; to my husband Muhammad for his unwavering belief in me; to my little man Umar who teaches me about life every day; and to the many hands who helped me mother him these four years. I am also thankful for the inspiring words and works of the countless Muslims who are raising the green banner of Islam around the world. My sincere appreciation goes to my supervisors Professors Lesley Le Grange and Yusef Waghid who challenged me to find, and express my voice. This study has enabled me to fulfil a lifelong wish – to come to know and share the environmental teachings of Islam.

The financial assistance of the National Research Foundation (NRF) and Stellenbosch University (SU) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are those of the author and are not necessarily to be attributed to the NRF or SU.

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LIST OF ABBREVIATIONS

AMA Association of Muslim Schools

AMEN Africa Muslim Environment Network
ARC Alliance for Religion and Conservation

DESD Decade of Education for Sustainable Development
DICE Durrell Institute of Conservation and Ecology

EE Environmental Education

ENGO Environmental Non-Governmental Organisation

ESD Education for Sustainable Development

EVE Environmental Values Education FORE Forum on Religion and Ecology ICE Islam & Citizenship Education

IFEES Islamic Foundation for Ecology and Environmental

Sciences

IIIT International Institute for Islamic Thought

IMA Islamic Medical Association

IMASE International Muslim Association of Scientists and

Engineers

ISESCO Islamic Educational, Scientific and Cultural Organisation

IUCN International Union for Conservation of Nature

JIMAS The Association to Revive the Way of the Messenger

JUT Jamiatul Ulema Taalimi

LINE London Islamic Network for the Environment MACCA Muslim Association for Climate Change Action

MDG Millennium Development Goals

MJC Muslim Judicial Council

NECCSA Network of Earthkeeping Christian Communities in South

Africa

NGO Non-governmental Organisation

OIC Organisation of the Islamic Conferences

SAFCEI Southern African Faith Communities Environment Institute

SANZAF South African National Zakāh Fund

SPNL Society for Protection of Nature in Lebanon

UN United Nations

UNCED United Nations Conference on Environment and

Development

UNDP United Nations Development ProgrammeUNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural

Organisation

Stellenbosch University http://scholar.sun.ac.za

USAID United States Agency for International DevelopmentWCED World Commission on Environment and Development

WCS World Conservation Strategy

WIN Wisdom in Nature

WSSD World Summit on Sustainable Development

WWF World Wildlife Fund

YEF Youth Engineering the Future

YES Youth Environmental Schools programme

TRANSLITERATION CHART

Arabic Letter	Romanized Form				
1	a				
ى or آ	ā				
	Ь				
<u>ب</u> ت	t				
ä	h (at end of the word)				
ث	th				
7	j				
7	h				
ج ح خ د	kh				
7	d				
2	dh				
J	r				
j	Z				
س	S				
m	sh				
ص	Ş				
س ش ص ض ط ظ	ș ḍ ţ dh				
ط	ţ				
ظ					
ع غ ف ق ك	•				
غ	gh				
ف	f				
ق	q				
اک	k				
J	1				
م	m				
ن	n				
٥	h				
و	W				
(as a long vowel) و	ū				
ي	у				
(as a long vowel) ي	y ī				
۶	,				



RELIGION AND ECOLOGY: AN ALLIANCE FOR CHANGE

Corruption prevails in the land and the sea because of all the evil that the hands of humanity have earned —so that He may cause them to taste something of that which they have done—so that they may return in penitence to God.

(The Byzantines 30: 41)

The coalescence between the religion and ecology movements is among the most fascinating trajectories of twenty-first century environmentalism. Since Lynn White's 1967 thesis that the historical roots of the environmental crisis are religious, faith communities have stepped up their activities in the environmental sphere. People of faith, who often stood at the forefront of the battles for human justice, are now reclaiming their roles as guardians of planet earth and advocates for her well-being. In shaping a contextual *and* practical theology, they are directing religious resources towards contemporary social concerns such as the environment giving rise to what is now commonly known as ecotheology.

One of the more intriguing contextualizations of theology emerging in the contemporary period is the sub-field of ecotheology. Insofar as generalization is possible with respect to those in the ecotheological movement, it is fair to say that these individuals seek to respond authentically to what may be the key contextual problem of our time—the ecological crisis. (Hrynkow, Byrne and Hendzel 2010, 301)

The environmental question, which loomed large on the horizon in the twentieth century, has not diminished as human development continues to place pressure on the planet's capacity to support life. Technology has been applied largely unchecked, resulting in a series of problems for human and environmental health. Reports on worsening ecosystem health, species loss and rising human consumption

¹ The translation of Ahmad Zaki Hammad (2008), *The Gracious Qur'an*: A Modern-Phrased Interpretation in English, which has a specialised index of life-forms mentioned in the Qur'an, will be utilised throughout this thesis, unless otherwise stated. The format for Qur'anic citations will be as follows: (Chapter Name Chapter Number: Verse Number(s)).

continue to raise alarm bells over the world's development trajectory. Evidence is mounting that excessive over-use of fossil fuels could trigger climate change. Global consumption, in monetary terms, remains skewed, with 1 billion residents of high-income countries consuming 80% of the world's resources (EarthTrends 2007). Coupled to the human onslaught on nature, social and economic justice indices are widening as millions of people continue to eke out a living to meet even their basic needs for food, water and shelter.

The primary causes of the environmental crisis, as identified in environmental writings, can be grouped into three broad categories: the widespread existence of an anthropocentric world view; the broad-based acceptance of the modern technoscientific paradigm; and the economic ideology of market or state capitalism which prevails across the globe (Watson and Sharpe 1993). Özdemir (2008) maintains that in the final analysis, the environmental crisis has metaphysical and philosophical roots since there is a relationship between human treatment of, and conceptualisation of nature. He therefore concurs with Frankena (1979, 16) that "we shape our values in great measure by our conception of the universe we live in". Through the revision of existing metaphysics and traditional ethical theories, both secular and religious, and the development of new metaphysical foundations, environmental ethicists are seeking a new way of framing human interaction with nature. For an increasing number of environmental thinkers, religion, which provides a conception of key metaphysical questions relating to humanity, nature and the Creator, continues to provide a rich metaphysical basis for developing an ecological ethic in the 21st century. This thesis, a study of religion and ecology, concurs and is fundamentally about how Islam considers and connects with the natural world.

In view of the dearth of research on Islam and ecology, environmental education in particular, this thesis attempts to present an understanding of an environmental narrative of Islam, and the manifestation of this narrative in the educational landscape of Islam. The work of the growing ecoIslamic movement, both theoretical and practical, alludes to the important position of the Islamic educational establishment in imparting environmental teachings, yet there have been few

attempts to consider the pedagogical implications of implementing the ecoethics of Islam by way of environmental education. Education remains high on the agenda in 21st century Islam. Boasting an extensive and growing educational establishment, both traditional and modern institutions, the mosque and Muslim school for example, continue to play a vital role in the educational life of Muslims the world over. While this establishment has undergone marked changes in the colonial era, educational reform efforts aimed at addressing the role and contribution of Islamic education² in post-colonial societies demonstrate that Islam presents educational visions and pedagogical understandings of relevance in the world today. In terms of the environmental question, Islam can thus make both an ethical and educational contribution since it not only possesses ethical reference systems which guide human interaction with Creation, but educational visions which impact upon environmental teaching and learning. Much of this is not known. This thesis attempts to contribute to this knowledge gap and addresses the following key question: What are the key features of an eco-justice ethic of Islam, and what are the pedagogical implications for implementing such an ethic in the educational landscape of *Islam broadly, and the maktab curriculum in particular?*

Critical approaches to environmental research, and the influence of liberation theology in the Islamic tradition, influenced the formulation of the research questions, as well as methodological approaches adopted in this study. The theoretical framework, termed liberation ecotheology and detailed in Section 1.2., recognises the importance of alternative and varied environmental imaginaries and knowledges; the role of social movements in effecting pro-people and environmental change; and the power of faith traditions to work for social and environmental justice. The transformative agenda of this analytical framework can be discerned throughout this study, which essentially seeks to provide an alternative environmental imaginary, and thereby contribute to the growing body

² The term Islamic education, rather than Muslim education has been used in this study to denote normative understandings of knowledge and education in Islam. While this thesis does consider Muslim education, i.e. the lived experiences and practices of Muslims in the educational sphere, it essentially seeks to present an ethical *and* educational vision for revitalising an eco-justice ethic in the educational establishment of Islam. It is thus centred upon constructing a particular understanding of knowledge, ethics and education, and therefore employs the term Islamic education rather than Muslim education.

of knowledge on non-Western ecological thought. It is an endeavour to counter the 'intellectual colonisation' or 'monocultures of the mind', which disregards local and traditional knowledge systems (including religion), and displaces and destroys cultural diversity (Shiva 1993).

This thesis constructs an eco-justice ethic of Islam and investigates the pedagogical implications for implementing this ethic, by way of environmental education, in the educational landscape of Islam, the *maktab* curriculum above all. In the transdisciplinary style which flavours most works on religion and ecology, and in keeping with the theoretical framework of this study, a range of fields including Islamic ecotheology, environmental education and Islamic education, have been drawn upon.

This religion and ecology study, aims to "understand theory and practice, ideas and actions, worldviews and lived religion together, as complementary and mutually informative" (Bauman, Bohannon and O'Brien 2011, 6). It adopts a synthetic methodology, of conceptual and content analysis, to build the connections between Islam, ecology and education and from there, to distil the educational implications for revitalising an eco-justice ethic of Islam. Through a conceptual analysis of the literature on Islam and ecology, a theocentric eco-justice ethic is constructed from sacred texts, traditions and contemporary thought; as well as Islam's system of juristic methods, laws, and institutions. This analysis then extends into the spheres of environmental and Islamic education to understand the conceptualisation of ecoethics in these educational systems. From within the tradition of Islamic education, the pedagogical implications for implementing an eco-justice ethic of Islam are then extracted. This conceptual analysis plays a vital role in the formulation of an eco-justice ethic of Islam, and in distilling the implications for activating this ecoethic by way of environmental education. A content analysis, of ecoIslamic educational initiatives in the broader educational landscape, and the maktab especially, brings to light the lived religion, i.e. what Muslims are doing about the environment in the educational landscape of Islam. This analysis is then extended by way of a curriculum review of two maktab curricula, produced and implemented in South Africa, to examine the incorporation of environmental elements within the *maktab* curricula, and to look at the ways in which these texts position the Muslim child in relation to the environment. While this review addresses the material elements of *maktab* education, such as the organisation and structure of curriculum materials; curriculum content; and teaching methods and environments, it also discusses broader pedagogical implications for environmental education in the *maktab*. This thesis thus examines the relevance of religious resources and institutions in building awareness and action around environmental concerns. While this is *the* central focus, it also begins to identify opportunities for building alliances between liberatory movements, such as Islamic and environmental educationists who recognise that the beliefs, values and knowledge embedded in people's cultures and religion provide environmental conceptions which can inform environmental action.

In this introductory chapter, I provide an outline of the key theoretical underpinnings of the research. The amalgamation of the theoretical constructs of political ecology, liberation ecology and liberation theology lends itself well to this thesis. At once an explanatory framework, and also liberatory in nature, this framework suits the action-oriented thrust of this study which seeks to contribute to the growing environmental consciousness and action among Muslims the world over. Secondly, I will detail the background and rationale for undertaking this study with specific reference to the place of religion in environmental thinking. And, finally, I will discuss the growing rapprochement between the religion and ecology movements and chart the development of the rapidly-growing arena of ecotheology. The structure of this thesis is outlined at the end of this chapter.

1.1. Towards a Liberation Ecotheology Research Framework

Struggles to abolish slavery and apartheid, isolated groups resisting the siren song of war, religious calls to respect the dignity of the working class, visionaries who proclaimed the sacredness of the earth and the sin of pollution—in these encounters and more, religious voices have been part of our collective efforts to steer civilisation toward a moral and fulfilling life. (Gottlieb 2003a, xviii)

This thesis rests on the assumption that the social and ecological malaise afflicting people and planet results from a crisis of worldview and presents a spiritual and moral, rather than a technological conundrum. Religious discourse, for many the world over, offers "the primary form of cultural conversation outside the modern story of economic growth and technological fixes" (Oelschlager 1996, 47). Religious resources for the environment are ideational, practical *and* political since religious conceptions of the human-nature relationship present not simply an ecoethic which recognises the intrinsic value of Creation, but an eco-justice ethic which acknowledges that social and ecological justice are inextricably linked (Pedersen 1998).

Three approaches to social and ecological justice—political ecology, liberation ecology and liberation theology—offer valuable insights which were drawn upon to provide a research framework for this study. Below, I will provide a brief outline of these approaches and thereafter highlight the distinguishing features of each which will be utilised in this study.

1.1.1. Liberation Ecotheology: An Amalgamation of Critical Ecology and Liberation Theology

Critical ecologists, representing the enduring conscience of the environmental movement, are comprised of a range of actors who question the prevailing development trajectory of the world. Social activists, peasant movements, trade unions, faith communities, and environmentalists (of the deep green variety), come together to raise awareness and challenge the political economic system of integrated world capitalism, oppose the oppression and exploitation of humanity and nature, and formulate solutions—ideological, practical, philosophical—which will liberate both humanity and nature. Three approaches have been drawn upon in this study – political and liberation ecology, and liberation theology. In the political and liberation ecology approaches the socio-political and ecological emphases are brought together in a cogent critique of the prevailing development and environmental imaginary. Liberation theology, however, forms the foundation of

the approach adopted in this study since it stressed the interaction between faith and action in the life of this world.

The intellectual roots of **Political Ecology** can be traced to three broad traditions in human-environment relations: cultural ecology; critical theory insights such as Marxist-based structural analysis, hazards research, peasant studies, common property theory, and feminist development studies; and systems thinking. One of the most important contributions of this approach is the "confluence between ecologically rooted social science and principles of political economy" (Peet and Watts 1996, 239). While this approach is characterised by similar areas of inquiry, political ecology, rather than presenting a coherent theoretical approach, consists of several central concerns. These include the need to provide alternative explanations of environmental change, other than recourse to the apolitical accounts of resource scarcity, population growth and poor land use practices; the need to formulate a radical ethical position which privileges the rights and concerns of poor people and the environment; and the need to understand the political and economic structures and institutions within which human transformation of the environment are embedded (Bryant and Jarosz 2004; Peet and Watts 2004; Neumann 2005).

The early period of political ecology research (1970s-1980s) is characterised by mostly Marxist-influenced analysis of resource use. Developments in social theory have also shaped political ecology research, not only on the analytical, but the empirical front as well. Neumann (2005) identifies some of these post-structuralist influences as post-colonial studies which consider the social construction of nature, as well as environmental and development discourse and imagery; the feminist critique of science; critical realism; critical environmental history; and new thinking in ecology. The social justice emphasis in political ecology research has also been made explicit in recent work on liberation ecology which seeks to "highlight the liberatory or emancipatory potential of current political activity around environment and resources" (Peet and Watts 1996, 2). This is discussed later.

Originally defined as "the concerns of ecology and a broadly defined political economy" (Blaikie and Brookfield 1987, 17), the structuralist, and mainly Marxistinfluenced political ecology of the 1970s-80s is now offering a range of critical explanations of environmental change, and exploring "alternatives, adaptations, and creative human action in the face of mismanagement and exploitation" (Robbins 2004, 12). Yes, political ecology is still concerned with effecting changes in the political and social machinery that structure people's everyday lives, but it is now drawing on a repertoire of critical social theory, post-structural, post-colonial and post-modern, to determine whether the "choices currently being made by our society satisfy our material and spiritual needs and avoid ecological destruction" (Atkinson 1991, 171). While there is no single methodology for political ecology research, common tools utilised include political-economic analysis, historical analysis, ethnography, discourse analysis, and ecological field studies (Neumann 2005). With the influence of post-structural and post-colonial studies came a new emphasis on discourse analysis, the production of, and "recognition of the existence of multiple, culturally constructed ideas of environment and environmental problems" (Neumann 2005, 7). Other key features of political ecology, of value in this study, incorporate the following:

- a critique of the modernist environment and development discourse drawing on a range of theoretical insights;
- an interrogation of the relationship between power and scientific technology;
- the recognition of different knowledges and plural perceptions on environmental change;
- a holistic mode of thought and action, and
- an emphasis on the role of social movements in effecting pro- people and environment change.

(Atkinson 1991; Blaikie 1995; Peet and Watts 2004; Neumann 2005)

Political ecology now has to contend with theoretical shifts which include retheorising political economy and the environment from various (non-Marxist) perspectives, considering the role of environmental movements in achieving social change, adopting discursive and historical analyses of environmental change, and exploring commonalities between the environmental movement and a range of civil society organs. These trajectories, which present new interactions between politics and ecology, and focus on opportunities for practical political engagement with the movements, organisations and institutions of civil society is exemplified in the field of liberation ecology.

Liberation Ecology developed primarily through post-structural critiques within the field of political ecology, as well as the need to broaden the engagement between various social movements, old and new, which agitate for both social and ecological justice (Peet and Watts 1996, Paulson, Gezon and Watts 2003). Identified as one of three contemporary approaches which seek to redraw the relationship between human beings and the natural environment, along with ethno- and social ecology, liberation ecology posits the idea that "although we may be alienated from our natural environment, due to contemporary socio-economic and ideological conditions, we may recover an appropriate relationship to that environment" (Heyd 2007, 64) through alternative development and environmental imaginaries. The field thus represents confluences within political ecology which include varied engagements within and between political economy, the power-knowledge field, and new thinking in ecology.

Liberation ecology is about much more than adding politics to political ecology, it is about "raising the emancipatory potential of environmental ideas and to engage directly with the larger landscape of debates over modernity, its institutions, and its knowledges" and to develop "nuanced, richly textured empirical work…which match the nuanced beliefs and practices of the world" (Peet and Watts 1996, 37).

The focus areas for liberation ecologists include investigating a wide spectrum of social movements which convey a message opposing hegemony and "extending far beyond control of productive resources to include culture, ideology, way of life" (Peet and Watts 1996, 34). It also includes understanding how varied perceptions and interpretations of development and environment must be placed within people's meaning systems; the ways in which people develop a sense of collective identity and commonality with others; the conditions which spur different levels or types of actions; and the linkages between social movements which create opportunities for broad-based political support on both environmental and social

justice concerns (Peet and Watts 1996). These and other foundational ideas of liberation ecology to be utilised in this thesis are:

- the analytical and practical association of political ecology and institutions of civil society;
- post-structural concerns with knowledge, power and cultural differences;
- a critique of development and modernity and an appreciation for alternative rationalities:
- a commitment to social justice and transformative politics, and
- the importance of public scholarship in advocating and centralising the rights and concerns of the poor.

(Peet and Watts 1996; Bryant and Jarosz 2004)

Even though liberation ecology in particular, is characterised by a strong ethical base, scholars have thus far been reticent about dealing explicitly with ethical issues (Bryant and Jarosz 2004). The recognition of alternative environmental and development imaginaries as more than critical reflection on development discourse is required - liberation ecologists need to understand how moral agendas and discourses, such as religion for example, are reflected in social and environmental practices. It is not surprising that ethics has entered liberation ecology via the work of ecotheologians such as Brazilian liberation theologian, Leonardo Boff, who links the "crises of impoverishment and environmental degradation" and argues "for an ethos of compassion and care for the earth in conjunction with the care and compassion for our fellow human beings" (Heyd 2007, 64). Religious environmental activities, in my view, formulate an alternative environmental imaginary which makes the links between economic and ecological justice, and also provides fertile ground for building alliances to challenge dominant imaginaries. It is therefore a vital area of investigation for liberation ecologists since at "stake in environmental [and religious] movements is nothing less than the way people understand their humanity" (Peet and Watts 1996, 268).

Liberation Theology is employed here to refer to actions - across the religious spectrum - which seek to harness faith as a vehicle for political, economic, and social change (Yadegari 1986). The term, however, has its antecedents in a range of Christian political theologies which emerged in the countercultural era of the 1960s. These include theological approaches which wanted to right the socio-economic

and political exploitation of the poor in Latin America and which sought to counter the black experience of slavery and discrimination in the US through Black Theology (Vashum, 2005). Liberation theology in this study will incorporate the liberative dynamic within faith traditions which focus on the oppressed and place the poor at the centre of liberative practice (Kerr 2000) – this is not confined to Christianity. It also presents a lived spirituality which situates believers *in* history, as active and engaged participants in achieving social transformation.

Regarded as the father of Christian liberation theology, Peruvian pastor Gustavo Gutiérrez, "postulates that discourse on faith must recognize and emphasise its relationship with human history and people's everyday lives, especially the challenge of poverty manifested there" (Gutiérrez 2009, 322). This is one of the distinguishing features of liberation theology – its emphasis on a lived spirituality which propels believers to move beyond the inner sanctum of the soul to take note of, and respond to the suffering, hunger, and poverty which millions continue to live. Liberation theology thus "arises out of believers' outrage and protest against injustice...and a commitment to transforming it toward justice, freedom, and dignity" (Solberg 2008, 310). Theologians of various faiths are beginning to highlight the need for religion to influence the course of events by challenging dominant systems which strip people of their humanity, deny them access to basic human needs such as food, shelter, and water, and which belittle their culture. While liberation theology has been criticised for employing Marxist-based structural analysis, the approach and solutions of liberation theologians are avowedly religious, and as Gutiérrez displays, advocate for a multi-dimensional understanding of human salvation which incorporates spiritual and earthly dimensions. Latour (2009) puts it this way: What use is it to save your soul, if you forfeit the world?

According to Kerr (2000), Islam represents political theology par excellence since the message of ethical monotheism culminated in the establishment of a socio-political community in Madinah which adhered to the ethical standards of Islam. The Qur'an stresses the inextricable connection between belief and the struggle for social justice; obligates the believer to stand in solidarity with the oppressed ($mustad'af\bar{u}n$) (Esack 2003); and Islamic scholar activists have, throughout the last century, refused

to "accept the Enlightenment's separation of religion and politics" and continued to seek political reform and counter injustice, both in former colonial regimes and the contemporary Muslim world (Kerr 2000, 143). Some, like Malcolm X and Sayyid Qutb, paid with their lives (Clasby 1988, Payne 2008). While Christian liberation theologians have, since the 1960s, been trying to "think afresh about the relationship between religion and political society, Islam consistently maintained this relationship" between belief and social justice for all (Kerr 2000, 61). As one classical scholar wrote:

God has sent His Messengers and revealed His Books so that people may establish *qist* [justice], upon which the heavens and the earth stand. And when the signs of justice appear in any manner, then that is a reflection of the *Sharī* ah and the reign of God. (Ibn Qayyim al-Jawziyyah 1973, 373)

The centrality of a liberation ethic in the Islamic worldview is captured in the work of contemporary scholar Tariq Ramadan who argues that Muslims need to understand the Islamic universe of reference and assess its sources, instruments and methodologies (interpretive, legal, ethical) to meet the challenges of our time, such as the ecological question. Even as Ramadan stresses the importance of Muslims developing their own terms of reference and ethics, his emphasis on transformative reform calls upon Muslims to become subjects of history, "responsible actors in history's evolution and stages, at the heart of transitions and crises, as agents of renewal and reform", resisting and seeking to change the aberrations in society (Ramadan 2009, 155). Put another way, Kazmi (2000, 388) refers to this as being-in-history in which spirituality is not life-negating but lifeaffirming – an approach which makes it abundantly clear that "the spiritual battle is won or lost on the plains of this world". This, of necessity, includes Muslim participation in and engagement with history to achieve an ethical life and therefore, of necessity, centralises one of the pressing social concerns of our time the ecological question.

Contextual theological approaches, such as liberation theology and ecotheology in particular, hold promise for Muslims since they are vital conduits for dealing with issues of relevance to society today (Castelli and Trevathan 2005). Muslim

ecotheologians can extend Islam's liberatory discourse to the ecological question by building on several factors within liberation theology which, amongst others, allows for contextual engagement with religious traditions. Liberation theology also

- links belief in God directly to the manifestation of right action in the life of this world;
- constructs alternative development (and environmental) imaginaries based on the sovereignty of God and the responsible trusteeship of humankind;
- highlights the importance of religion as a vehicle for political, socioeconomic and environmental change;
- shows that human liberation has several dimensions aside from the spiritual, such as socio-economic and political liberation, and
- extends liberatory discourse to all of Creation.

(Yadegari 1986; Esack 2003; Ramadan 2009)

The analytical framework of this study thus draws upon the confluences of three areas of critical ecology and theology - political ecology, liberation ecology and liberation theology, which show remarkable overlap in several areas of importance to this research. It acknowledges the validity of plural perceptions of the humannature conception, the need to formulate alternative imaginaries which reflect the 'nuanced beliefs and practices of the world', privileges a commitment to social justice, and recognises that religious belief hold the seeds for liberative and transformative practice in the world today. It provides a narrative which 'reaches back as it looks forward' and which seeks to strengthen the relationship between 'ideas and practice'. Liberation ecotheologians thus put forward an eco-justice ethic which encompasses both a political and spiritual vision and is of central importance to understanding the Islamic eco-justice ethic which will be formulated in this study. Building on this framework, this study will construct an eco-justice ethic and from within the educational tradition of Islam, present the environmental education vision which emerges. It is thus centred on achieving an ecological consciousness and praxis which recognises that it is not only the poor, oppressed and disenfranchised, but the earth which is suffering at the hands of humankind.

1.1.2. Liberation Ecotheology: Linking Faith, Ecology and Action

Liberation ecotheology provides the theoretical framework for the research questions posed in this study. The environmental questions we are facing today, from the impact of human-induced climate change to rampant consumerism, will not be solved through apolitical technocentric interventions. The wretched condition of the earth and the widespread prevalence of hunger and thirst in the world today stems from the spiritual and moral vacuum within prevailing worldviews and values. It is also inextricably linked to the culture-ideology of consumerism which holds sway in the world today. The environmental questions of deforestation, rapid urbanisation, pollution, and species loss are crises of the spirit, rooted in the materialist political and economic system, producing unequal social and economic relations, and sustained by this culture-ideology. Thus, "if we are to address the linked environmental, social, and even spiritual crises, we must address the wellsprings of human caring, motivation, and social identity" - religion (Leiserowitz and Fernandez 2008, 13). The earth cannot afford to lose the religious ethos which links faith and action, knowledge and practice, and social and ecological justice. And the environmental movement cannot afford to lose the opportunity of tapping into the wealth of religious resources which agitate for people and planet since

Environmentalism needs to sharpen its critique of contemporary culture, economics and politics, reach out and form alliances with other social movements, invest in the intellectual development of core concepts, ideals, and values, and wage effective campaigns to win hearts and minds. (Leiserowitz and Fernandez 2008, 28)

Since liberation ecotheology also focuses on the development of new social movements and alliances for ecological change, it is of value in this study. Without a doubt, religious environmental activities are now an established strand within the environmental movement and faith traditions have become legitimate and authentic partners in the political drama (Gottlieb 2003b). The fledgling ecoIslamic movement, though under-represented in the ecotheology literature, is spreading its wings in the Muslim world and building alliances for ecological change in the Western world.

In answering the central question of this study, 'What are the key features of an ecojustice ethic of Islam, and what are the pedagogical implications for implementing such an ethic in the educational landscape of Islam broadly, the maktab curriculum in particular?' I will employ some of the standard methodological approaches in religion and ecology research. The three common ecotheological methodologies include retrieval, re-evaluation, and reconstruction of religious environmental teachings (Tucker and Grim 2001). Retrieval involves finding "cosmological, scriptural, and legal sources in order to clarify traditional religious teachings regarding human-Earth relations" (Tucker and Grim 2001, 16). The re-evaluation and extension of "familiar religious beliefs, especially ethical ones concerning love and respect for other people, to nonhuman nature" (Gottlieb 1996, 10) is the second methodological approach in religion and ecology work. Liberation theologians, for example, who traditionally focused on the poor and oppressed, now agitate for a life-liberating ethic in which both social and ecological justice matter (Hedström 1990). Finally, reconstruction approaches "suggests ways that religious tradition might adapt their teachings to current circumstances in new and creative ways" (Tucker and Grim 2001, 17). This is a very challenging arena since ecotheologians strive to remain true to the authentic teachings of their faith, yet also form a common front of ecological resistance - "revealing and opposing the self-centredness, the consumerism, the disregard for life that feed the monster of ecological devastation now consuming the globe" (Knitter 1996, 124).

A distinguishing feature of religion and ecology research is a synthesis between worldviews captured in sacred texts, traditions and ideas, and the lived religion, i.e. the practices and actions of adherents (Bauman, Bohannon and O'Brien 2011). In retrieving, constructing and evaluating an Islamic eco-justice ethic, I will draw mainly on primary religious sources, as well as the works of ecotheologians writing on Islam i.e. on the revelation and reason which shapes contemporary ecoIslamic knowledge. Thereafter, I will delve into the 'lived religion'—what Muslims are saying and doing about the environment, by charting the development of the growing ecoIslamic movement. I will then evaluate this 'lived' ethic in light of the ensuing discussion on theo-, eco-, and anthropocentric conceptions of the human-nature relationship in Section 1.2..

The remainder of this study will focus on the reconstruction and revival of Islamic ecoethics by way of environmental education. The central thesis here is that the ecological teachings of Islam needs to take its place alongside socio-ethical instruction which Muslims receive from a young age. Ecological sage of the twentieth century, E.F. Schumacher, in his seminal publication, Small is Beautiful (1973), regards education as one of the most critical resources in the construction of an ecological ethic. He regards education, which fails to clarify our central convictions such as our purpose in life - which rests on metaphysics and ethics, as mere training or indulgence (Schumacher 1973). One of the greatest environmental educational tasks today is thus the metaphysical reconstruction and recognition of religious beliefs, ethics and actions (as they pertain to the earth) - as well as the language of ethics which we seemed to have lost. This is equally true for Muslims today who need to embark on a "comprehensive, earnest, far-reaching, realistic, and efficient contribution" towards an educational project which would transform the current situation and better respect the dignity of humanity and nature (Ramadan 2009, 254). This transformative project, with its exacting ethical requirements and demand for the liberation for all life, could make an important contribution in bringing the Islamic tradition to bear on one of the most challenging social questions of our times.

The three most important reasons for focusing on environmental education is firstly, its transformative ability in alerting us to think about, understand and fundamentally change the conditions which have led to social and environmental injustice. Secondly, educational interventions have been widely regarded as the primary avenue for translating the ecoethics of Islam into action and thirdly, environmental education has the potential to be liberatory, raising social and ecological consciousness and culminating in praxis which agitates for the common good of all Creation. Subsequent chapters of this thesis will focus on the opportunities for introducing the ecoethic of Islam into the broader educational landscape of Islam, including the pedagogical implications for activating an ecojustice ethic of Islam by way of environmental education, and will then home in the environmental education potential of the foundational institute for Islamic education, the *maktab*.

In the following section, a discussion of philosophical trends within the environmental movement demonstrates that, since its birth in the late 1960s, the movement has always contained voices which recognise the spiritual and religious dimensions of the ecological question. These voices postulate that the human-nature relationship is mediated by a worldview, an ecological philosophy or ecosophy, which plays a determining role in human action. To right the relationship between humans and nature, one therefore needs to "re-examine our understanding of nature, and our place within, and relationship to, the natural world" (Baker and Morrison 2008, 36). The environmental question therefore requires not only scientific and technological fixes, but moral solutions which will address the unjust relationship between the haves and the have-nots and between humans and the rest of Creation. It is a moral crisis, which can largely be ascribed to "human failings as well as foulings" (Zaidi 1981, 36) such as greed, extravagance and wastage, and is hence in need of a solution which will address deeply-held beliefs, values, and ethics about the human-environment relationship.

1.2. The Environmental Question: A Faith Perspective

What we do about ecology depends on our ideas of the man-nature relationship. (White 1967, 1206)

Interest in cultural perceptions and interpretations of the human-environment relationship has grown alongside increasing environmental consciousness. This stems from the recognition that to effect a deep and lasting change on the ailing human-environment relationship, one needs to reach the place of beliefs, ethics and convictions. Human perception of the environment is a "function of our cultural filter and the assumptions in it" and religion, which shapes how humans view the world, our place in it, and our relations with all beings – is pivotal to this project (Pepper 1984, 7). Increasingly, it is being realised that faith traditions are not 'anachronisms' in the modern world but rather continue to provide narratives about what it means to be human, and what it means to live in justice with all Creation (Witoszek 2006).

Human-environment relationships are manifested through a range of physiological, psychological and cultural processes, which incorporate beliefs, doctrines, values and ideas (Lawrence 2003). Several writers have put forward various conceptions of this relationship (O'Riordan 1981; Simmons 1993; Özdemir 2008) but the human-environment conceptions which will be utilised here, since it is the most useful for the theological slant within this thesis, are: anthropocentric, with a clear division between humans and nature; ecocentric where humans are regarded as an integral part of nature; and theocentric, placing humans within a created order.

Much ecophilosophical work has focused on challenging the human-nature dualism and utilitarian, mechanistic ontology of the prevailing anthropocentric worldview. The spiritual and ethical arguments of environmental thinkers reject this dualistic ontology and instead call for the recognition of the intrinsic value of nature. These arguments have been largely ecocentric in nature, incorporating a range of ideologies, both science- and spirit-based, such as paganism, Eastern philosophies such as Taoism, Native American beliefs, wilderness spirituality and scientific cosmology. However, Glacken (1967), in his seminal review of Western ecological thought, indicates that conceptions of nature are often characterised by a search for design, order and purpose in nature - metaphysical principles which fall squarely within the ambit of religion. The neglect of a religious or theocentric conception of the human-nature conception in many scholarly works today is thus a glaring omission and in my view, signifies the "continued imposition of the worldview of post-Enlightenment Western science on peoples around the world" (Foltz 2003, 3), drowning out the voices, beliefs and knowledge systems of cultures and peoples regarded as unscientific, illegitimate and inferior.

Ecological knowledge, defined as "the knowledge, however acquired, of relationships of living beings with one another and with their environment", and constituted by a knowledge-practice-belief complex is embedded within a worldview (Berkes 2008, 5). Since worldviews can be based on religious, spiritual or secular beliefs and ethics, religious environmental thought provides fertile ground for ecological knowledge. Unfortunately, human-environment studies, including environmental ethics, continue to display a Western-bias. This is not surprising

since "most dialogues on ethics have been 'monologues', in the guise of a dialogue, dictated by a dominant culture" (Nasr 2001, 14). Baird Callicott (2001), in his consideration of pluralistic, multicultural ethics presents a solution to the 'one problem-many solutions' dilemma of dealing with diverse (and competing) worldviews – the development of a universal environmental ethic, grounded in science—in evolutionary biology and ecology in particular—which is not only international in scope but also enjoys epistemological privileges such as internal consistency. He envisions humankind as bicultural, at once bound to traditional, local, indigenous and/or religious values and also linked into an international culture. When traditional or religious values "resonate well with contemporary theory in evolution and ecology, their images, similes, and metaphors may be incorporated into the globally current evolutionary-ecological grand narrative" since "[r]espect for the discourse of the Other has its limits" (Baird Callicott 2001, 94-95).

This view fails to ask critical questions regarding this grand narrative: Whose interests are served by this narrative? What if this narrative contradicts traditional and/or religious beliefs? Is evolutionary biology only one amongst many, probable and credible, stories of creation? Writing on science education, Mueller and Bentley (2006) caution against the totalising and homogenising influence of much of what passes as multicultural education. Instead, they argue for the recognition of the authenticity and meaning of ecological knowledges which are as valid as the theories and ideas emerging from the crucible of Western thought. In this way, it is acknowledged that the "cultural knowledges of the past contributes equally as much to our students' lives as the knowledge of the present and emerging future" (Mueller and Bentley 2006, 326). Increasingly, it is being recognised that environmentalists need to learn the language of belief and ethics, which millions across the world still speak. Environmental reforms could thus build on existing traditions which, for most of the world, is derived from a religious context. It could discover ways of being and living which can confront the realities of global inequality, injustice and cultural hegemony. And it could delve into the sources of knowledge and ethics which inform the worldviews of various cultures.

1.2.1. Religion and Nature in the Green Kaleidoscope

South Africans had a taste of the varied strands of environmentalism when it hosted the World Summit on Sustainable Development (WSSD) in 2002. While radical environmentalists were scaling the towers of the Koeberg nuclear power station in Cape Town, their 'suited and tied' comrades were negotiating in the boardrooms of the Sandton Convention Centre. These diverse courses of action are indicative of the kaleidoscope of colours in the spectrum of the green movement which is an "uneasy amalgam of competing ideologies and agendas…more an umbrella than a coherent movement, widely diversified and variable" (Mulvihill 2009, 502). The unifying factor in this eclectic movement is a concern and care for the well-being of the planet.

While historical analyses reveal the contemporary environmental movement's Western origins, it has since become global in scope. In the brief discussion that follows, I will draw on the phases of environmentalism as set out by Jamison (2001), see Table 1.1.. The first period (pre-1968), referred to as the awakening of contemporary environmentalism, saw nature conservation concerns transformed into a broader, responsive environmental consciousness. Biologist Rachel Carson, author of Silent Spring, is often associated with this early phase. At this time, American society was also presented with a number of problems for which there appeared to be no clear-cut solutions, at least not solutions that would be considered by the American government: the Vietnam War, distress with racial conflict, as well as growing dissent with the government (White 1986). The following phase, 'the age of ecology' (1969-74), of policy formulation, institutionbuilding, academic specialisation and organisational development, thus emerged within this era of counterculture activism. The environment was regarded as the issue of the 1970s by Time magazine and in April 1970 the Earth Day March of 300 000 Americans proved to be the largest environmental demonstration at that time (White 1986).

The 1970s also mark the organizational phase of environmentalism, as well as the emergence of a particularly pessimistic environmentalism. Termed the 'prophets of

doom', these environmentalists were concerned with the impact of continued population growth on the earth's finite resources. Curbing pollution and population growth through technological solutions were the dominant issues on this neo-Mathusian agenda. This overtly technocentric view possibly elicited the most severe criticism from environmentalists, both North and South, who recognised that this approach paid "scant regard to the disastrous implications of such policies for the poor, it led to bitter accusations of 'ecofascism' and for a time at least of deep suspicion of environmentalism on the parts of the underprivileged, at both the global and national scales" (Bayliss-Smith and Owens 1994, 118). This suspicion continues to taint the activities of environmentalists.

Table 1.1. Phases of Environmentalism (Jamison 2001)

Period	Emphasis	Examples
(1) awakening	public debate	World Wildlife Fund
(pre-1968)	issue identification	Silent Spring, 1962
(2) "age of ecology"	organization	Friends of the Earth
(ca. 1969-74)	programme articulation	Only One Earth, 1972
(3) politicization	social movement	"No Nukes"
(ca 1975-79)	energy policy	Soft Energy Paths, 1977
(4) differentiation	think tanks	WRI, CSE, Earth First!
(ca. 1980-86)	"deep ecology"	State of the World, 1984
(5) internationalization	sustainable development	UNCED
(ca. 1987-93)	global issues	Our Common Future, 1987
(6) integration	incorporation	Agenda 21
(1994—)	resistance	Natural Capitalism, 1999

The politicization of environmental issues followed suit (1975-79) with the emergence of Green political parties in Western Europe, Britain and America. Throughout this time, stark differences between First and Third World environmental concerns and actions emerged. Environmental issues in the Third World were often posing much deeper political challenges than mere policy and institutional reform – they were focused on issues of democracy, poverty, unemployment, hunger, and indebtedness. The three phases which followed, the differentiation (1980-86), internationalization (1987-93) and integration (1994-) of the environmental movement, are all characterised by an intensive amount of activity on the international arena. International think tanks, environmental managerialism, global environmental issues (ozone depletion, acid rain, and climate

change), sustainable development thinking, ecological modernisation (accommodating environmental concerns in the market capitalist system) and resistance efforts (critical ecology) shape the environmental arena today.

A range of analytical frameworks have been employed to make sense of this diverse movement. Three key frameworks will be discussed to identify the likely placement of ecotheological activities within the green movement. The varieties of environmentalism, from dry-, shallow- to deep green, has been categorised into ecocentric and technocentric environmentalism by O'Riordan (1981). Ecocentric environmentalism, with its roots in the Romantic philosophies of the late Victorian era, was essentially an intellectual reaction to the tenets of economic liberalism, such as individualism, competition and social rigidity. It promotes the idea that nature has an intrinsic right to exist, highlighting the immorality of environmental degradation. Environmentalists, of this deep green variety, are often viewed with suspicion since their morally righteous attitude can be regarded, at times, as being unconcerned with human life (Boff 1995; Walker 1996; Nordhaus and Shellenberger 2007). Furthermore,

...there is something deeply troubling in many ecological demands suddenly to restrict ourselves and to leave no more footprints on a planet we have nevertheless already modified through and through...especially when billions of other people still aspire to a minimum of decent existence and comfort. (Latour 2009, 462)

However, within the ecocentric strand of environmentalism, there exists a form of environmental resistance which is overtly concerned with notions of human justice. While ecocentric varieties of environmentalism has often been criticised for its lack of political argument amid glaring global inequalities (Sklair 1994; Scott 2003), radical environmentalism or critical ecology, with theoretical foundations in a range of ideologies such as political economy, political ecology, and ecofeminism, assert the need to challenge dominant philosophies, such as materialism, patriarchy, and consumerism. This unlikely hotchpotch of ecocentrics—Marxists, anarchists, feminists, ecophilosophers and spiritually-minded individuals—who agitate for both social and ecological justice represent the enduring strand of

counterculture resistance which was once one of the distinguishing features of the green movement.

On the other end of O'Riordan's spectrum lies technocentric or anthropocentric environmentalism which assigns a utility value to nature. It adopts the dictum that human beings are entitled to use the natural resources on the earth as they see fit. According to O'Riordan (1981, 11), technocentrism is "identified by rationality, the 'objective' appraisal of means to achieve given goals, by managerial efficiency, the application of organisational and productive techniques...and by a sense of optimism and faith in the ability of man to understand and control physical, biological, and social processes". This strand of environmentalism has often enjoyed much wider acceptance because it places faith in the findings of science and takes recourse to technological, administrative and legal structures to find solutions to environmental problems. It is exemplified in the institution-building phase of environmentalism which saw the establishment of various environmental regulation agencies. This approach has been criticised for its reliance on technological solutions obtained from 'objective, value-free scientific' analysis of environmental problems and ignoring the input or even role played by local people in environmental issues, leaving decisions in the hands of a managerial elite. Technocentric environmentalism is also much more acceptable to the market capitalist system since it poses no radical challenge to the sustainability of existing social and economic practices. This dry-green environmentalism persists in the present-day arena of global capitalism and the culture ideology of consumerism (Sklair 1994) and can be seen in the prevalence of ecological modernisation: green washing; the manipulation of the marketplace to right ecological ills; and the use of diaphanous terminologies, such as sustainability, to justify a myriad of actions which are hardly people- or environment friendly.

O'Riordan's classification reveals the odd bedfellows within both ecocentric and technocentric approaches to environmentalism. Ecocentric positions for example, incorporate both Gaianism and Communalism, bringing together Deep Ecologists; radical philosophers; ecosocialists; and intellectual environmentalists who demand the redistribution of power and the pursuit of justice for the earth and all

humankind. Technocentic approaches place their faith in "the adaptability of institutions and approaches" and in "the application of science, market forces and managerial ingenuity", uniting environmental scientists; business and finance managers; and right-wing politicians (O'Riordan 1981, 85). One of the shortfalls of O'Riordan's enduring analytical framework is philosophical. The simplistic eco- and technocentric categorisation does not accommodate God-centred conceptions (theocentric) of the human-environment relation such as stewardship; and neglects anthropocentric approaches which extend moral concern to all sentient beings (Silvertown and Sarre 1990). The environmental taxonomy of Pepper (1997), see Table 1.2., seeks to draw out the philosophical bases of the movement and in place of the two-fold division between techno- and ecocentric, Pepper has an alternative take on the anthropocentric slant in environmentalism: egocentric (self) and homocentric (society).

Unlike O'Riordan, who fails to identify a space for theocentric environmental conceptions, Pepper identifies three competing strands within religious human-environment constructions: environmental conceptions which are egocentric (human dominion on earth), homocentric (stewardship by humans) and ecocentric (unity of humans and non-human nature). This third strand, which Pepper terms eco-religious environmentalism, incorporates the earth spirituality variety of Native Americans, Buddhists and eco-spiritualists and is a cosmos-oriented, ecocentric environmentalism characterised by holism and the recognition of the interconnectedness of all life on earth.

Though Pepper's discussion is largely focused on Christianity, it does seek to accommodate, account for, and explain ecotheological activity across the religious spectrum. In a section entitled, 'Christianity and Nature: Despotism or Stewardship?', he identifies the dilemma of the Christian ecological ethic which accommodates both stewardship (homocentric) and mastery over nature (egocentric) views. Pepper concludes that religion (in its Christian guise I assume) could never be ecocentric since even in its ecologically-revitalized stewardship form, it "merely values other creatures for their value to (the anthropocentric) God, not for their intrinsic value" (Pepper 1997, 151). He fails to take into consideration

that the conception of the Creator in other religious traditions, such as Islam, is monotheistic to the extreme, making it avowedly theocentric.

Table 1.2. A Classification of Environmentalism with Reference to the Metaphysical Grounds for Environmental Ethics (Source: Pepper 1997)

Self: egocentric		Society: homocentric		Cosmos: ecocentric	
Self-interest Adam Smith Thomas Malthus Garrett Hardin	Religious Judeo- Christian ethic	Utilitarian Jeremy Bentham Murray Bookchin Social Eco- feminists Left Greens	Religious Robin Attfield	Eco-scientific Aldo Leopold Rachel Carson Deep Ecologists	Eco-religious American Indian Buddhism Spiritual feminists Spiritual greens
Maximization of self-interest: what is good for each individual will benefit society as a whole.	Authority of God. Protestant ethic. Individual salvation.	Grounds for a Greatest good for the greatest number of people. Social justice. Duty to other humans.	obligation Stewardship by humans as God's caretakers.	Rational, scientific belief system based on laws of ecology.	Faith that all living and non-living things have value. Duty to the whole environment.
Metaphysics Mechanistic Both mechanistic and holistic Holistic					
 Matter is composed of atomic parts. The whole is equal to the sum of the parts. Knowledge is context-dependent. Change occurs by the rearrangement of parts. Dualism of mind and body, spirit and matter. 				sum of the pa 3 Knowledge is dependent. 4 The primacy of parts.	se. greater than the rts. context- of process over

Pepper does make mention of Christian liberation theology which regards freedom from oppression and poverty as central to the Christian message, and which now agitates for the liberation of all life, including nature. He notes that liberation theology is regarded by ecocentrics as central to the establishment of an ecologically-sound society, yet in his categorisation of ecocentric environmentalism, he fails to incorporate religious-based environmental

conceptions such as liberation theology. The ecological ethic of religion-based environmentalism is increasingly being framed in terms of humankind's multifaceted role as just, responsible stewards who care for all Creation; as humble servants in awe of the Creator's handiwork; and as part of Creation, praising and glorifying their Maker. It is therefore necessary that non-anthropocentric conceptions, such as theocentrism, also be included in human-environment conceptions since it provides alternative metaphysical grounds for environmental care. Pepper's classification, however, does capture both traditional and evolving religious and spiritual conceptions of the earth, and provides an accurate depiction of the current ecotheology and ecospirituality trends in 21st century religious environmentalism, discussed further in Section 1.3..

de Groot and van den Born (2007), in a comparative study which examines the environmental ethic among five Canadian populations, incorporating religious and secular views, utilises Kockelkoren's philosophical classification to accommodate a range of human-nature conceptions:

- In the image of the *Master*, humans stand above nature and may do with it whatever they want, not bothered by moral restraints or knowledge about nature's fragility. The Master trusts economic growth and technology to solve environmental problems.
- The Steward stands above nature but above humans is God. Nature is a gift of God to humans who have the responsibility to care for nature. In the secular version of Stewardship this responsibility is towards future generations rather than to God.
- The *Partner* stands side by side with Nature. Nature has its own status, not under humans but rather beside them. Nature unfolds in its own independent value. Humans and Nature work together in a dynamic process of interaction and mutual development.
- The *Participant* is part of nature, not just biologically, but with a sense of (spiritual) belonging. Being part of nature is important for the identity of the Participant. Humans are not inferior to nature, but it belongs to the human possibilities to participate in nature like this.

(de Groot and van den Born 2007)

This categorisation captures a broad range of approaches which accommodates anthropo-, theo- and ecocentric conceptions. The study found that all respondents reacted negatively to the mastery image; that respondents affiliated with the

Abrahamic religions favoured the stewardship conception; and that the categorisation needed to be modified to accommodate variations, such as an expanded view of stewardship, at once guardian and partner of nature (de Groot and van den Born 2007). It is this categorisation, in my view, which goes the furthest in incorporating theocentric approaches to conceptualising the human-environment relationship.

Accusations of reductionism have been levelled at both eco- and anthropocentric approaches (Latour 2009). Anthropocentrism, it is said, seeks to reduce "nature to a function of humanity, while ecocentrism reduces "humanity to nature" (Scott 2003, 64). What then of other human-nature conceptions such as theocentrism? Many faith traditions, Islam included,

...are rooted in an ethic that denies anthropocentrism. If God is at the centre of things, humankind cannot be. There is a teleology of creation and God is the author of it. This theocentric position provides an alternative account of the worth of nature. It has value, not as a commodity to be exploited as in anthropocentrism, nor as a self-regarding organism, as in Gaian ecocentrism. In theocentrism, nature has value because God made it... (Ashley 2006, 92)

Religion possesses many of the ingredients to raise the awareness and status of the environmental question in the lives of its adherents. In spite of his thesis that the roots of our ecological troubles lie in religion, White (1967) also noted that the remedy must essentially be religious. Yet the environmental movement, for the most part, has seldom afforded even a second thought to the potential contribution of faith movements to the green cause (O'Gorman 1992). By relying on a largely science-based analysis of environmental issues, the movement has often accepted White's thesis, calling for an abandonment or transformation of religion, thereby perpetuating Enlightenment views on the incompatibility between faith and reason.

In spite of the growing critique of White's ideas and the burgeoning ecotheology movement, most ecophilosophers advocate for the development of new ways of ecological consciousness, such as nature-based spirituality, which rarely enjoy the broad-based support which religion does. Many also display a lack of insight into the relevance of religion today, as displayed in the valiant efforts of the men and women of faith who work for the liberation of the poor, disenfranchised, and oppressed - from the *favelas* in Brazil to the *mukhayyam* of Palestine. Rather than an archaic aberration on the post-modern world, religion remains a relevant and vibrant motivating factor in the lives of millions. It also offers the promise of reaching into the wellspring of human conviction in formulating environmentally conscious lifestyles.

Ecotheological activities extend across the green spectrum, from the professional, institutionalised resourcism of international environmental organisations to the realm of critical ecologists who recognise that environmental concerns are as much about people as it is about issues of power, greed, and oppression. The theocentric ecological ethic of most religions, which pivots human action around love and obedience to a Creator, could form the basis for an ethic which values all of Creation (Foltz 2003, Ashley 2006). By way of its demand for radical transformation, religion could also "become a powerful alternative to modernizing and a powerful help for ecologizing provided that a connection can be established (or rather re-established) between religion and *Creation*" (Latour 2009, 464). People of faith, who place the wealth of spirit and mind above that of material wealth, who value and revere Creation, and who live in accordance with the liberating power of their faith, thus have an undeniable role in the future of the green movement.

From the apocalyptic tones of the early decades to the internalization of ecological consciousness in our cultural, educational and political systems, the environmental movement has transformed public opinions and sentiments. The movement has not grown in a clearly-defined manner, from anthropo- to ecocentric philosophies for example. Rather, it remains as diverse as ever, with the coexistence of a range of philosophies, from the deep-green ecocentric environmentalism of Greenpeace to the neoliberalist sustainable development policies of the United Nations (UN). One of the concerns for the future of this movement is the ever-diminishing public space for articulating environmental concerns, launching environmental protests, and questioning the globalisation tendencies with sustainable development thinking (Jamison 2001; Jickling and Wals 2008). It is therefore imperative that

critical ecologists, composed of social, environmental and religious activists who highlight the moral and spiritual aspects of prevailing political and economic structures for humanity and the earth, work together (Gottlieb 2003a; Ashley 2006).

While the environmental movement has left lasting imprints on the minds of people, scholars are at variance over the future of the movement. In his book, *Post Environmentalism*, Young (1992) puts forward the argument that in spite of the fading environmentalism of the 1980s and the dominance of sustainable development thinking, philosophical disquiet about our human-environment conceptions remains. Creation spirituality; the religious sense of affinity for the earth; Deep Ecology, social ecologists and ecofeminists continue to be the conscience of the movement calling for a heightened sense of individual awareness, political commitment, and global environmental morality which recognizes the autonomy of nature (Heyd 2007). While environmentalism has contributed towards a positive appreciation for the non-human world and focused our attention on our responsibility towards future generations, what is needed now is not the politics of pessimism and despair but that of possibility which "open our eyes to the multiplicity of ways we can see and experience the world" (Nordhaus and Shellenberger 2007, 240).

While the environmental movement, diverse to the extreme, has launched a noteworthy response to this crisis, there appears to be an ill-fit between the scale and impact of implied threats and proposed remedial actions (Latour 2009). Many countries lack the political will and institutional capacity to implement the plethora of earth-friendly laws and treaties promulgated since the ascent of environment concerns; and the impact of technological innovations pale in comparison to rising global emissions of carbon dioxide, the lethal impact of water-borne diseases, and the war-mongering which is poisoning people and planet. Ecological reform efforts have also hardly dented the neoliberal economic agenda and its attendant culture-ideology of consumerism.

So, in spite of the worsening state of the environment, the vibrant environmental movement has not succeeded in making significant inroads to changing the

fundamental causes of the crisis. In fact, scholars are questioning the usefulness of the crisis narrative employed by the movement (Heyd 2007; Mueller 2009) and suggest that, by reframing the declining state of the environment as a *human* crisis - a chronic, anthropogenic problem rooted in an unjust relationship between humankind and the earth, solutions will focus on righting this relationship. This could create the space for considering a plurality of perspectives on the human-nature conceptualisation. In his reflection on the potential of faith to ecologize our society, Latour asserts that

religion...presents itself as a rather plausible alternative to an ecological consciousness whose ethical and emotional drives do not seem to have petrol (or soybeans) to carry us through the tasks it has burdened upon us. (Latour 2009, 463)

The emerging trends within the movement now show a blurring between eco-, anthropo- and theocentric approaches; the development of heterotopian visions and solutions; and decentralized and diversified approaches towards righting the human-environment relationship. In finding solutions to the varied dimensions of the environmental question, the environmental movement has matured, creating spaces for the emergence of unlikely alliances, many of which are now incorporating people of faith. In the following section, I provide the rationale for undertaking this research in the field of Islam and Ecology in particular.

1.2.2. Why Islam and Ecology?

A combination of childhood influences and historical context shape the rationale for this research. I was fortunate to have grown up in a small Muslim coastal community, surrounded by a majestic mountain range. It was a community where men, women and children were regular in attending the local mosque. At a very young age, I heard a sermon at the Friday prayers which sparked my interest. The *imām* spoke about the respect and reverence which humankind should have towards the natural world which was—despite our lack of awareness—constantly praising our Creator. Nothing was the same to me again. Not the trees, oceans, birds, sand or stones. With the sea a few minutes walk away and a childhood of collecting pine

cones; exploring rock pools; and watching the miracle of growth under my grandmother's green fingers, a deep appreciation and love for nature was impressed upon me. Yet this was also a time of immense injustice. It was the apartheid era and barricades divided humans, the sand and the sea.

Post-1990 I enrolled for an environmental science degree, and developed a keen interest in the critical ecology strand within environmentalism which resonated with my own convictions for ecological and social justice. The origin of my concern for the injustice and suffering of the earth and humanity was my faith, Islam. As a freelance environmental journalist and youth worker, I became involved and interested in writing and raising awareness about the ecological message of Islam. I decided to embark upon this thesis, with the awareness that the ecological message of Islam was slowly progressing from providing normative imperatives towards practical action. I wanted to contribute towards putting this message into action.

There were several other motivating factors. Environmentalism had, to my mind, failed to capitalise on the ecological knowledge and conceptions of religious worldviews. Several features of the Islamic faith convinced me that the ecological message of the Qur'an and its exemplar, Muhammad ³, possessed the ingredients for achieving positive environmental action. I am not alone. In the words of religious scholar, Richard Foltz: "Among the major universal religious traditions, Islam possesses perhaps the greatest sensitivity to the value of the natural resources and the need to preserve them" (Foltz 2006, 101). The rationale for undertaking this study is thus firstly that caring for the earth is regarded by all ecoIslamic authors, irrespective of their various emphases, as an ethical obligation. The importance of ethics in reaching the source of people's convictions and motivating them towards action, is becoming a central concern in religious and environmental movements. As one environmental educationist contends, "...it is not sufficient to impart knowledge or simply carry out practical projects, it is necessary to reach people's deep convictions and their emotions, at a level that informs ethical values" (Al-Naki

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³ Muslims praise all the Prophets after mentioning their names and use the words Peace be Upon Him (PBUH) after mentioning the name of Prophet Muhammad. The Arabic text for this phrase (ﷺ) will be used in this thesis.

2004, 138). Thus, revitalizing the environmental ethic of Islam could provide an impetus to not only uncover Islam's environmental tradition, but to affect long-term awareness and action on environmental issues. The value and place of religion, both as a provider of identity and a motivating force, is frequently cited by ecoIslamic writers who all, without fail, contend that environmental consciousness and care is a religious obligation and should be reflected in every act of a believer.

Secondly, the rapprochement between religious and environmental movements requires an articulation of the Islamic view on nature. According to Nasr, Islam has a responsibility in drawing the attention of its adherents, and the world at large, to the spiritual significance of nature and possesses an ecological ethic, "rooted in revelation and bound to the Divine Law, concerning the responsibilities and duties of humanity towards the nonhuman realms of the created order" (Nasr 1992, 105). To a large extent, solutions to the environmental crisis have been based, for the most part, on Western approaches without linking to metaphysical doctrines, while the present crisis is rooted in spiritual and moral deprivation. Religion offers more fitting solutions.

Thirdly, the growth of ecophilosophical movements, such as Deep Ecology, is indicative of the recognition that the ecological crisis is a result of a distorted worldview. This begs a response from Muslims who claim to possess a rich ecological heritage and philosophy (Al-Hamid 1997; Lubis 1998). Furthermore, Muslims, who currently constitute close to 20% of the world population, covering diverse environments, provide a captive audience which, to varying degrees, continues to draw upon religious teachings to shape their values, beliefs and attitudes towards life—including the environment. As Foltz states, "For many of the world's billion plus Muslims, the solution to this crisis must be an Islamic one—an environmentalist Islam rediscovered from the sources of the faith" (2000, 72).

A fourth motivating factor is the appalling environmental track-record of many countries in which Muslims constitute the majority.

When one looks at the Islamic world today, one sees blatant signs of the environmental crisis in nearly every country from the air pollution of Cairo and Tehran to the erosion of the hills of Yemen to the deforestation of many areas of Malaysia and Bangladesh. (Nasr 1997, 1)

Muslim countries are in fact the site of some of the world's greatest environmental problems such as deforestation and biodiversity loss in Indonesia and Malaysia, desertification in sub-Saharan Africa, destruction of the Aral Sea in Central Asia and depletion of oil deposits in the Middle East (Kula 2001). In addition, the Arab world in particular, is facing major environmental problems including water shortages, desertification, and pollution directly related to the wars and conflicts in the region (Selim 2004). The impact of militarism on Middle Eastern environments has been devastating. Linked to both ego- and ecoterrorism, military activities in the region will have grave implications for several generations (Al-Damkhi 2008). Efforts are being made in the Muslim world to rediscover the Islamic view on the environment, but a noteworthy point, which will be discussed in the following chapter, is the growth of environmental activism amongst Muslims living in the West. Yet there is widespread agreement that a return to the authentic and fundamental traditions of Islam is a requisite foundation for the development of ethical environmental practices (Wersal 1995).

Fifthly, the claim that Islam possesses a rich tradition of principles, laws and institutions promoting environmental care requires further investigation. While it is said that some aspects of this tradition continues to survive in the lives of its adherents, such as the kind treatment of animals and the frugal use of water during ablution for prayers, there is a need to re-examine these values and "extract from them a new value system that fits modern human beings, without rejecting the bedrock of Islam and the environmental elements that it supports" (Izzi Dien 1997, 52). It is also necessary to start moving beyond describing the normative imperative of Islam on the environment towards providing solutions as to how Islamic ecoethics could be implemented, to focus on practical ecological issues, and to develop Islamic guidelines on issues such as genetic engineering, nuclear energy and climate change (Ouis 1998).

A sixth factor relates to that fact that Islam represents not only a 'personal' religion, but a mode of organising society and its institutions premised on the ethical guideline of securing the universal common good of all created beings. The values and principles of Islam are therefore not confined to rituals, but imbue the entire life and lifestyle of Muslims. As a lived tradition which 'provides for the total orientation of life'—politics, economics, and environment, it is also "potentially threatening to a capitalistic socio-political order" (Kamla, Gallhofer and Haslam 2006, 248) which is perpetuating a utilitarian, technocentric human-nature conception. Revivalist movements in Islam also demonstrate the religion's continuing ability to influence normative behaviour (Simmons 1993), to reject capitalism (Young 1992), and to counter the crises of rampant consumption, cultural hegemony and corruption wreaking havoc in the Muslim world.

Finally, educational interventions, particularly in the sphere of Islam's rich institutional landscape, have been among the primary strategies promoted to revive Islam's environmental teachings and practices (Ashraf 1991; Nasr 2003; Al-Naki 2004). According to Sheikh (1993, 492), "...religious education has a tremendous contribution to make in promoting the protection of environment through inculcating moral and spiritual values." It is for this reason that this study is also concerned with investigating the way in which curriculum spaces within the Islamic educational landscape have been (and can be) utilised to introduce the ecological message of Islam to Muslims.

These factors provide the rationale for undertaking this study on the ecological ethic of Islam. Orr (2002, 1459-60) outlined the following steps towards achieving genuine sustainability: the creation of new metaphors and models of the human-nature relationship; the development of an improved, engaged and informed citizenry; improved education; and a higher level of spiritual awareness which would "lead us to a place of gratitude and celebration" and which "would also energize to act". I believe Islam has a role to play in achieving this.

1.3. Charting the Growing Rapprochement between the Religion and Environmental Movements

During the last twenty years Native Americans, Australian Aboriginals, Hindus, Buddhists, Muslims and many others have presented their religious traditions as authentically ecological and conservationist, and today, the religious environmentalist paradigm has its well-established position in the global environmentalist discussion. (Pedersen 1995, 260)

The publication of Lynn White's thesis that Christianity, in its Western guise, is responsible for the environmental crisis and that modern technology is in fact rooted in the anthropocentric Christian dogma of the "transcendence of, and rightful mastery over, nature" (1967, 1206), heralds the starting-point for much contemporary reflection on religious conceptions of nature. Around the same time and in a lesser-known publication, *Man and Nature: The Spiritual Crisis in Modern Man*, Nasr (1968, 9) identified the spiritual and intellectual roots of the ecological crisis which he regarded as "an externalization of an inner malaise" which "cannot be solved without a spiritual rebirth".

Echoing developments in the environmental movement, the religion and ecology movement was initially largely West-centred and consisted of varied responses to White's contentions, some sympathetic, others defensive and reactionary in nature. Efforts by non-Western (and non-Christian) religious leaders and thinkers have multiplied in the last three decades. One of the stalwarts of this movement is Iranian-American scholar, Seyyed Hossein Nasr, who calls not only for the restoration of metaphysical principles within Christian natural theology, but for an examination of non-Western religious thought in which the "legitimacy of a religious knowledge of nature has not been lost to the extent that it has in the West" (Nasr 2000, 20).

Present-day thinking, centred upon White's concluding sentiments that the remedy to the ecological crisis must essentially be religious, is now oriented to finding solutions to our ecological ills, and identifying the varied religious resources which exist to heal both people and planet. Before I embark on this consideration, some conceptions require definition.

The faith and ecology movement can broadly be divided into two strands: spiritually-motivated environmentalism and environmentally-motivated spirituality (Baker and Morrison 2008). The first variety, which I will term ecotheology, focuses on environmentalism in which religion "provides guidance and motivation to work on environmental causes" (Baker and Morrison 2008, 41). Religion is defined by the Oxford Dictionary as the belief in and worship of a superhuman controlling power (Pearsall 1999), and is the focal area in this ecotheological study which centres on uncovering and imparting the ecological ethic of Islam, a monotheistic faith tradition centred on the worship of One God, termed Allah, which means, The One Deity. Religion, to my mind, provides answers to some of the fundamental questions facing humankind - questions relating to the order and purpose underlying the universe, the place of humankind within the cosmic order, and the code of conduct which should characterise human sojourn on earth.

Nasr, as well as other scholars, are critical of the second strand within the religion and ecology movement, environmentally-motivated spirituality, which Pepper (1997) terms eco-religious environmentalism. Within this conception, the dominant human-nature conception is that of humanity as part of, and in partnership with nature. Nadwi (1975), for instance, identifies several shortfalls of non-religious civilisational structures, rooted in various sources of knowledge, for example sensory, intellectual, philosophical, dialectical, and mystical. He directs us to another source of knowledge and civilisational structure - revealed knowledge through the prophets of God, and the socio-ethical order that emerges from their teachings. Nasr is of the opinion that

...the ecological movement has become deprived of the revivifying breath of authentic spirituality and the significance of the veritable spiritual dimension of the ecological crisis has become forgotten, for there is no authentic spirituality without orthodoxy understood in the most universal sense of the term. (Nasr 1968, 6)

The ecotheology tradition has marked contrasts with environmentally-motivated spirituality, or ecospirituality, emanating from "experiences in nature" which "transcend the scientific, material environment" (Baker and Morrison 2008, 41). Taylor (2004) refers to these 'Nature-as-sacred' religions, such as paganism and indigenous cultures, as constituting the re-sacralization of the universe on postsupernaturalistic grounds. This approach is exemplified in the Deep Ecology movement. Orr (2003) and Dunlap (2004), in their discussion on the incipient religion in environmentalism, suggests that a scientific view of cosmology (ala evolutionary biology) in which humankind has a shared ancestry with the earth, and where the wonders of nature provide similar inspiration as traditional religious cosmologies, constitute the basis of this ecocentric ecological ethic. Ecological traditions of indigenous people (Berkes 2008); the use of the scientific image of Gaia (with its unmistakable connections to the mythic feminine ecological spiritual imagination) (Spangler 1996); and the focus on Eastern religions holds widespread appeal to scientists, environmentalists, philosophers and the 'world's intelligentsia' (Taylor 2004).

With its re-conceptualizations of human identity in terms of biological personhood, biocentric equality, and the recognition of human reciprocity with the 'more-than-human world' (Metzner 1994; Abraham 1996; Devall and Sessions 2003), the emerging ecological worldview of ecospirituality has been a driving force in ecocentric environmentalism.

Yet Deane-Drummond suggests that the tendency of eco-religious environmentalism to 'divinize' the natural world is too great a departure from religious traditions and suggests conception of humankind as 'creatures alongside other creatures' in which humanity should exercise ecological responsibility and exercise virtues which would ensure that all Creation flourishes (Deane-Drummond and Sideris 2011). Even as environmental philosophers and ethicists agitate for ecocentric conceptions of human-nature relationship and claim that eco-religious approaches are best-suited to right the ecological ills of our society, they

...might do well to consider that types of language other than philosophical discourse can provide alternatives to utilitarian individualism and that any one mainstream religious denomination alone influences the normative choices of more people than all ecophilosophies together. (Oelschlager 1996, 42)

In spite of the glaring contradictions between the ecotheology and ecospirituality strands within the religion and ecology field, there are, in my view, significant areas of commonality. Variants of key ecospiritual ideas, such as viewing the natural world as an integrated whole, considering humans as part of natural world, and marvelling at the beauty of the natural world, also exist in ecotheological conceptions. Furthermore, the challenge of focusing and living on the proper condition of human nature - justice to the human *and* non-human world, is now being put to all proponents of environmental resistance.

1.3.1. The Growth of the Ecotheology Movement

Just as religions played an important role in creating socio-political changes in the twentieth century (e.g. human and civil rights), so now religions are poised in the twenty-first century to contribute to the emergence of a broader environmental ethics based on diverse sensibilities regarding the sacred dimensions of the natural world. (Tucker and Grim 2001, 13-14)

The publication of Lynn White's thesis, *The Historical Roots of our Ecologic Crisis* (1967), heralds the awakening of the ecotheology movement. While the environmental movement had, since its inception, identified the spiritual dimension of the religious crisis, their proposed solutions were either of the eco-spiritual variety – religion was rarely considered as a likely source of eco-friendly ethics. Considering and acknowledging the validity of religions' take on the environment was just not on, and most environmentalists "continue to think of religion as the enemy" (Oelschlager 1996, 2), opting to accept White's assertion that religion needs to be transformed or abandoned. It was theologians, of the Western Christian variety, who responded, most vociferously in fact, to defend their supposedly 'ecocidal' belief system. This initial phase of ecotheology, which lasted well into the late 1970s was thus a period of Christian creation theologizing, drawing on medieval contributions such as that of St Thomas Aquinas's natural theology, and

highlighting the concept of human stewardship as opposed to domination as offering a more accurate description of humanity's position *vis a vis* Creation (Watson and Sharpe 1993). Concepts of Creation as opposed to nature, and steward as opposed to partner, thus became established nomenclature of the ecotheology movement.

The 1980s heralded the second phase of the movement, the period of diversification, characterised by inter-religious dialogue as exemplified in the Religion & Nature Interfaith Ceremony held in Assisi, Italy in 1986 (See Table 1.3.). The ceremony gathered faith leaders of major religious traditions and resulted in the publication of the Declarations of Assisi - declarations on nature by five of the world's major religions. The Declarations put forward the beliefs and ethics which underlie each tradition's environmental message. The gathering was opened with verses from the Qur'an.

Ecotheological activities in the 1980s were a far cry from the Western, insular, and mainly Christian response of the late 1960-70s. As Table 1.3. illustrates, even the scientific world was awakening to the need for a moral response to the ecological question, and calls by world-renowned scientists for a new ecological ethic included an appeal to the religious community. This period took ecotheological activity beyond Western borders. However, scholarly work on comparative ecological ethics, on the whole, continued to display a Western bias. It was only from the mid-1990s onward that greater attention was afforded to the voices and views of 'Others', signaling the integration of religion and ecology activities into the global environmental arena.

This third phase of ecotheological movement (mid 1990s-present) is characterised by four key features: the integration of the environmental question into faith dialogues such as the World Parliament on Religions; the proliferation of ecotheological material by non-Christian faith traditions; the establishment of a range of Conservation and Religion programmes by international environmental organisations; and the growing alliance between ecotheologians and critical ecologists. Faith leaders are now unanimous in their concern for the state of the

Table 1.3.: Key Initiatives in Religion and Ecology (Adapted from Tucker and Grim 2001, Gardner 2002)

Initiatives	Description
World Wildlife Fund (WWF) conference Assisi, Italy, 1986	In the first major meeting of its kind, representatives of five of the world's major faith discuss strategies for helping their communities to assist in protecting the environment.
Global Forum of Spiritual and Parliamentary Leaders, 1988, 1990, 1992, and 1993	In their 1990 statement, 32 globally renowned scientists appeal to the world religious community "to commit, in word and deed, and boldly as required, to preserve the environment of the Earth".
Parliament of the World Religions, 1993, 1999, 2004, and 2009	This Forum gathers representatives of the world's religions and has issued declarations of ethics regarding global issues, from environmental degradation to violations of human rights.
Summit on Religion and Environment, Windsor, England, 1995	Hosted by Prince Philip, leaders of nine world religions, along with secular leaders, gather to discuss implementation plans for religion-based conservation projects. The conference results in the creation of the Alliance of Religion and Conservation (ARC).
Harvard conferences on Religions of the World and Ecology, 1996-1998	Some 800 scholars from a broad range of religious traditions gather to discuss religion/ecology connections. Nine volumes, each focusing on a different tradition, are published. The Forum on Religion and Ecology (FORE) emerges to continue the work.
World Faiths Development Dialogue, London 1998	This initiative between development institutions and nine world religions, organized under the leadership of the World Bank and the Archbishop of Canterbury, incorporates a spiritual voice in shaping policies and practices of human development organizations.
Millennium World Peace Summit of Religious and Spiritual leaders, 2000	More than 1,000 religious leaders meet at the United Nations; environment is a major topic of discussion. UN Secretary-General Kofi Annan calls for a new ethic of global stewardship.
Sacred Gifts for a Living Planet Conference, Nepal, 2000	Organized by WWF and ARC, 11 major religions, representing 4.5 billion people, offer 26 conservation gifts to help improve the environment.
International Seminar on Religion, Culture and Environment, Tehran, 2001	Sponsored by UNEP and the Islamic Republic of Iran, the conference discusses the importance of fighting environmental degradation. The seminar culminates in the signing of the Tehran Declaration.
Publication of the Encyclopaedia of Religion and Nature, 2005	An award winning publication which consists of 1,000 entries from 520 international contributors, explores the relationships among human beings, their environments, and the religious dimensions of life.
IUCN (International Union for Conservation of Nature) Sustainability Dialogue: Conservation and Spirituality, 2008	This Sustainability Dialogue creates an opportunity for conversations between faith and spiritual traditions and the conservation community, to promote greater engagement and collaboration for sustainable living.
Many Heavens, One Earth: Faith Commitments for a Living Planet, ARC-UNDP Celebration, Windsor England, 2009.	Prince Philip and UN Secretary-General Ban Ki-moon honours 30 faith commitments to environmental action, bringing together world leaders and faith leaders from 9 faith traditions.

earth, and in formulating a response to the key environmental issues of our time, such as climate change. At the recent Global Parliament of World Religions held in December 2009, Melbourne, members formulated a Climate Change Resolution which was submitted to the Climate Summit in Copenhagen:

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)

From 1996 to 1998, Harvard's School of Divinity held a series of conferences on religion and ecology, bringing together the views of some 800 scholars - from a range of religious traditions - on the religion/ecology connection. Nine volumes, each focusing on a different tradition, were published and the Forum on Religion and Ecology (FORE) was established to continue the work in this growing academic specialisation. This period thus saw the emergence of scholarly ideas and initiatives of non-Western traditions on faith and ecology. Many of the key texts on Islam and ecology, for instance, were published in the late 1990s.

The environmental movement, particularly conservation organisations, was beginning to cotton-on to the idea that "lasting ethical solutions to our global environmental and social problems will need to come from diverse perspectives"...and that the world's religious traditions were a major source of ethical insights (Tucker, 2002). Some examples of religion and conservation initiatives include the World Bank's *Faith in Conservation: New Approaches to Religion and Environment* (Palmer and Findlay 2003) and the joint publication by the WWF and ARC, *Beyond Belief: Linking Faiths and Protected Areas to Support Biodiversity Conservation* (Dudley, Higgins-Zogib and Mansourian 2005). Today, several key international environmental organisations such as Conservation International and the IUCN have established conservation and religion programmes which are capitalising on religious teachings and institutions to spread ecological awareness and achieve action.

Another key area of interest, particularly in the context of this study, is the alliance between ecotheologians and critical ecologists. Boff (1995), one of the stalwarts of the Latin American liberation theology movement, suggests that a new paradigm can be built in uniting concerns for ecological sustainability and justice for the oppressed, what I have termed liberation ecotheology in this study. Some of the salient features of this alliance as outlined by Gottlieb (2003a) in *Liberating Faith:* Religious Voices for Justice, Peace, and Ecological Wisdom is presented below.

Since many faith traditions possess a profound impulse towards justice and builds on the heritage of the prophets of God who questioned the social and political structures of their time, religion can be "an activist, transforming presence in the world" and possesses "moral and psychological insights ...of enormous value for those seeking progressive social change" (Gottlieb 2003a, xvii). Religion should therefore not be relegated to the realm of the soul - a private affair - but should seek to remain relevant and impact on the course of events (Latour 2009). The failure of the radical political movement to effectively challenge the dominating consumer-ideology of capitalism also suggests that this movement might benefit from what religion has to offer: "an understanding of peacemaking, a commitment to social values beyond higher wages and benefits, and an ability to connect to a broad range of the population" (Gottlieb 2003a, xviii). Thus, opportunities for dialogue between faith traditions and groups agitating for social and ecological justice abound.

The ecotheology movement represents one of the key voices agitating for social and ecological justice in the 21st century and is indicative of the continued relevance of religion in the world today. Humankind's search for meaning, related to their place in the world, their position in relation to the Creator and the cosmos, and their quest to live a just life continues to draw upon religious teachings. Faith traditions, whether we regard them as scientifically-credible or not, also continue to provide a rich repository of beliefs, ethics and practises for millions of the faithful the world over – this includes the position of humankind in relation to the rest of Creation. Below, I will consider some of the key religious resources—metaphysics, beliefs, ethics—which underlie the ecotheological movement.

1.3.2. Ecotheology Resources for Creation Care

...religion, as a system defining cultures and guiding human behaviour, can provide the metaphysical foundation necessary for an environmental ethic. (Özdemir 2003, 6)

To move beyond the psycho-cultural causes of the ecological crisis—the Enlightenment mentality of faith in progress, reason, and individualism—requires an exploration of alternative ways of knowing, the recognition of varied patterns of human relatedness, and the motivation towards action (Wei-Ming 1994). Religious traditions represent one avenue of imagining (and living) an ecological future. It presents a range of worldviews, metaphors, alternative knowledge conceptions, educational approaches, religious practices, and a lived spirituality of simplicity, compassion and care. Kazmi (2003, 278) suggests that tradition is maintained and renewed by means of knowledge construction and, as such, "[e]very tradition creates its own characteristic form of knowledge", a language which makes sense of the world. Moreover, religion offers "a language of the heart that speaks to purposes and gives voice to issues outside the modern materialistic vocabulary of utilitarian individualism" (Oelschlager 1996, 48). It is one of the few remaining traditions that can offer a potent challenge to the homogenising cultural framework of integrated world capitalism today.

When considering the religious resources which facilitate earth and social justice, it is worth noting Pedersen's (1995) take on the phenomenon of religious environmentalism, particularly its spread to the Third and Fourth Worlds where it is associated with combating political and cultural dominance. Pedersen regards this trend as an example of 'cultural creativity' and a way in which "[m]odern and globally circulated ideas about nature are appropriated and merged with the local cultural repertoire into an invented tradition of a glorious ecological past" (Pedersen 1995, 272). In this way, he asserts, people of faith are able to separate themselves from the material capitalism of the West, and through their traditional values, acquire cultural significance. He maintains that while religious values do reflect environmental conceptualisations, these are not identical to modern understandings of nature, such as sustainable development or inter-generational

equity. Pedersen's cynicism, nevertheless, runs counter to the myriad of ecotheological ideas and initiatives which show that the language and practice of faith traditions express an authentic awareness of caring for the earth. He also neglects one of the most notable features of religion, its ability to remain relevant to the changing historical context and to respond to its particular challenges, such as the ecological question.

Ecotheologians have moved beyond their pre-occupation with 'defending' Christian conceptions of nature, as well as the overt emphasis on the human-nature conception of Western Christianity. Instead of 'abandoning or transforming' religion, they are now rediscovering the value of established, well-known religious teachings for solving the environmental question. The ecotheology movement is also truly international in scope and is now fully-integrated and well-represented in the global environmental arena. Before I table some of the key religious resources which people of faith can bring to bear on the ecological question, consider the words of UN Secretary General Ban Ki-moon to the faith leaders gathered at the recently convened Faith and Nature Celebration:

You are the leaders who can have the longest reach, the widest, and the deepest reach. Together the major faith groups have established, run or contributed to over half of all schools worldwide. You are the third largest category of investors in the world. You produce more weekly magazines and newspapers than all the secular press in the European Union. Your potential impact is enormous...Your actions can encourage political leaders to act more boldly in protecting our planet Earth. (Kimoon 2009)

Religion presents a worldview, constituted by beliefs about the nature, character and purpose of Creation. The hallmark of the religious view of nature is that the 'order' which governs the entire cosmos—humanity and nature—originates from a Divine Being (Nasr 2000). Amid the predominant religion of the West, science and technology, religious worldviews were regarded as 'a dead letter' and has been deprived of its vitality - restricted to mere furniture of the soul (Whitehead 1926). Yet, in spite of the modernist project, religious discourse, its metaphors and worldviews, its entire ontology in fact, remains intact. The religious worldview could present a cogent challenge to the monopolistic claims of science as the only

valid knowledge of reality, present alternative visions of the nature of being, and influence ethical conduct since "...they help people understand their relationship with each other and, in some traditions, their relationship with the natural world" (Gardner 2002, 13). The health of the planet is a factor which impacts all alike - Muslims, Christians, Buddhists, Sikhs - it will be in the common interest of all Creation living on the face of this earth to consider diverse worldviews, or as Foltz (2003) calls it, using 'all the tools in the box' to find the remedies to this common malaise. Religion offers a worldview to address the loss of cosmological context and is in dire need of rediscovery since

[t]his detachment from the greater cosmological context has critical implications for ethics, because as conceptions of human nature and values become increasingly self-referential, there is a pervasive failure to understand human beings as inextricably part of, and emergent from, nature and natural processes, with attendant moral duties, responsibilities, and obligations. (Leiserowitz and Fernandez 2008, 19)

Religion also presents a perennial source of norms of conduct, or ethics - a way of interacting and knowing the Creator, one's self, family, society, and the Created world. This ethic lauds qualities such as humility, simplicity and mercy, and combats rampant consumption, egoism, and hatred. Religion awakens humanity to values of justice, compassion and mercy towards all life. It also stresses the importance of action and propels its adherents to work for social betterment, not just for the particular interests of religious group, but for society as a whole. Knitter (1996, 71) narrows down the critical, "if not determinative, contribution of the religions to a programme of global, ethical concerns...to two major ingredients: vision and energy". The vision provided by religion is one of hope, "hope that they and their world can be transformed, made better" which is "nourished and vitalized by the energy that religion instils to act on this conviction, to give ourselves to it, no matter what" (Knitter 1996, 71).

The third resource within religious discourse is thus its moral authority to shape and impact ethical conduct. While adherence to religious teachings vary among adherents, in truth, many continue to heed to the voice of religion in their lives - to live a moral and good life, to value the spirit and soul, and to bring about a positive

change in society. This stems from the internal change which religion is capable of achieving, what Latour (2009) calls the deep reform of one's inner self. Thus religion has the capacity to inspire and urge both internal and societal change, with the results "that we act differently and find ourselves doing things that previously seemed beyond both imagination and realization" (Knitter 1996, 71). The green movement would do well to take note and harness the "moral force of reverence for nature evident in the world's religions" (Leiserowitz and Fernandez 2008, 47). Moreover, religious discourse is still widely heard, and accepted. It offers the hope of addressing one of the key shortfalls of the green movement, its inability to agitate for political action. Religious discourse on creation care is intellectually persuasive, psychologically potent and could be heard by millions of faith adherents the world over (Oelshlager 1996).

As key repositories of enduring civilisational values and as indispensable motivators in moral transformation, religions have an important role to play in projecting persuasive visions of a more sustainable future. (Tucker and Grim 2001, 4)

A fourth resource lies in the rituals of religion, such as prayer and supplication, celebrations, fasting, and alms-giving which remind the human soul of its non-material needs, its spirit, and also "awaken and reinforce a personal and communal sense of our connections" (Gottlieb 1996) to the Creator and to Creation, "for to God bows down all that is in the heavens and all that is in earth" (Bees 16: 49). As the environmental movement enters its transitional phase, heterotopian visions, including religious ones, are being recognised as fulfilling a key role in transforming humankind's relationship with the non-human world.

Spirituality, ritual, and scripture are all critical resources to draw on...[since] at the heart of the great transformation we seek is a sense of belonging and interdependence which religious and spiritual traditions are especially competent to articulate. (Leiserowitz and Fernandez 2008, 46)

The religious establishment extends from the great cities of the world to the forests, deserts and mountains, and represents an unsurpassed institutional base – truly global in its reach. These resources include Scripture, Sacred law based on the

teachings of revelation (as evidenced in the Talmudic and Qur'anic laws); an institutional framework which, in some instances, promotes conservationist tendencies; an active clergy; and a powerful institutional network which addresses the spiritual, educational, humanitarian, and even financial needs of humanity. Through its institutional resource base, faith traditions present their worldviews, ethics and programmes of action - a way of being - to its adherents. More often than not, the message reaches its target.

A sixth source of religious wealth is its physical, financial and social capital. This incorporates an impressive array of real estate holdings such as mosques, synagogues, churches, temples, and seminaries; monies generated through both voluntary and compulsory charity; ethical investment initiatives; and a vibrant social network characterised by strong bonds of trust, communication, cooperation, and information sharing.

Lastly, religions possess a large number of followers. Adherents of the three largest religions— Christianity, Islam, and Hinduism—account for about two thirds of the global population today and close to 90% of the world population ascribe to religious beliefs (Adherents 2010). Gardner rightly notes that while not all adherents are ready to translate their faith into political action or lifestyle choices, "the raw numbers are so impressive that mobilizing even a fraction of adherents to the cause of building a just and environmentally healthy society" (Gardner 2002, 16) would bolster the green cause.

These 'sources of power' are indicative of the fact that religious conceptions of the human-nature relationship are sorely needed. As the ecological question impacts the health of people and planet, believers are coming "face to face with the task of constructing – individually and collectively, new attitudes of respect, reverence, responsibility, and care for that Creation" (Baker and Morrison 2008, 50). Conditions are now ripe to build bridges between the faith and ecology movements, conceivably contributing to a historical ending to the schism between science and spirit, reuniting civilisation's head and heart, and drawing upon common concerns (Gardner 2002).

Islam possesses elements of all the resources cited above, yet "...within the context of environmental debate, the Islamic viewpoint has...been unduly neglected" while "Islamic traditions and values provide a very effective and comprehensive answer to the absurdities of our environmental situation" (Manzoor, 2005). This study intends to shed light on the ecological ethics of Islam.

1.4. Thesis Structure

This religion and ecology study will focus on ecological and educational thought and practice of one of the great monotheistic religions, Islam. Drawing upon a knowledge-belief-practice axis, it seeks to retrieve, understand and construct an eco-justice ethic of Islam. Thereafter, it delves into the activities of the ecoIslamic movement in the educational landscape of Islam, to identify curriculum spaces for introducing the ecoethics of Islam to the Muslim child; extract broader implications for environmental teaching and learning; and locate opportunities for rapprochement between environmental and Islamic education. The thesis structure is outlined in greater detail below.

This thesis is divided into six chapters, an introductory chapter; four chapters which contain the ingredients for revitalising an eco-justice in the educational landscape of Islam; and a concluding chapter. The key chapters include: a conceptualisation of an Islamic eco-justice ethic; a discussion on the place and position of ethics in environmental and Islamic education; an examination of the pedagogical implications for translating an eco-justice of Islam into action in the broader educational landscape of Islam; and a deeper exploration of the interplay between ethics, education and praxis in the foundational educational institution of Islam, the *maktab*. The concluding chapter seeks to contextualise this study in the field of Islam and ecology and highlight areas of future research.

Chapter Two, by way of a conceptual analysis, constructs an eco-justice ethic of Islam, comprised of both ethical precepts and an institutional framework. It centres on synthesising an environmental narrative of Islam as expressed in sacred texts and contemporary scholarly works to present an understanding of its ecocosmology

i.e. the place and position of human beings in relation to the Creator and Creation. A focus on environmental practices then takes us into the realm of environmental activism amongst Muslims, showing if, how and where, environmental activities are incorporating the ecoethics of Islam. Finally, in returning to the liberation ecotheology lens of this thesis, this chapter seeks to answer the question, 'How Green is Islam's Eco-justice Ethic', with a view to determining whether this ethic cultivates just, responsible and respectful interaction between humans and nature.

Chapter Three looks at the place and position of ethics in the two educational spheres considered in this study, Islamic and environmental education. It begins with a brief examination of the relation between ethics, knowledge, and action in Islam. This is a vital starting point since this thesis has set out to extract, from within the Islamic education tradition, the pedagogical implications for implementing an eco-justice ethic of Islam. The focus then shifts to determining the place and position of ethics within environmental and Islamic education by assessing, comparing and contrasting conceptions of ethics in these two educational spheres. The aim of this chapter is to identify curriculum spaces for introducing the ecoethics of Islam to the Muslim child; extract broader implications for environmental teaching and learning; and locate opportunities for rapprochement between environmental and Islamic educationists. Its central role though, is to distil the key elements of an educational vision for revitalising an eco-justice ethic of Islam.

Chapter Four identifies the curriculum spaces which have been harnessed to introduce Islamic ecoethics in the educational landscape of Islam, both internationally and in South Africa. It begins by discussing theoretical perspectives on Islam and environmental education. Thereafter, it provides an overview of environmental education activities, both globally and in South Africa, which have been initiated across the educational landscape of Islam. It then builds on the findings in Chapter Three to delineate the essential ingredients of an environmental education strategy aimed at activating an eco-justice ethic of Islam among Muslims.

Chapter Five delves deeper into the environmental intent of Islamic education and ethics by reviewing the environmental elements present in the curriculum of one of the primary educational institutions of Islam, the *maktab* or *madrasah* as it is known in South Africa. Curriculum materials of two key South African institutions, Madrasatul Quds and Jamiatul Ulema, aimed at children aged six to twelve years, will be considered here. This curriculum review will examine how these curriculum documents, and *maktab* curricula in general, can extend and broaden existing religious instruction to incorporate human interaction with the natural world, thereby giving shape to the action-oriented educational and environmental philosophy espoused in this study.

Chapter Six locates this study within the broader academic specialisation of Islam and ecology, summarises key findings, and highlights opportunities for further research.



CHAPTER TWO

KHILĀFAH: CONSTRUCTING AN ECO-JUSTICE ETHIC OF ISLAM

...and such are the servants of the All-Merciful: They are the ones who walk upon the earth softly... The Criterion 25: 63

Despite the fact that Islam remains a strong religious and social force in the lives of the majority of its adherents, scholars have commented about the silence of the Muslim voice on the environmental crisis (Foltz 2000; Kula 2001; Ramadan 2009). However, close scrutiny reveals a burgeoning movement, actively voicing its concern about the ecological crisis; unearthing the ethical teachings of Islam as it relates to the human-environment relationship; and increasingly striving to implement practical initiatives based on the ecological teachings of Islam. It would therefore appear, that

[a]mong world religions, Islam has a unique and little understood perspective on the question of man's relationship to the environment. Not only does it offer a clear moral position, but also, unlike many other religions, it offers practical solutions to the broader questions arising from the political, economic and legal dimensions of environmental issues. (Dutton 1998, 56)

All ecoIslamic writers, while approaching the issue from different angles, refer to the relationship between humans and the environment as an ethical one (Nasr 1996; Ouis 2003). The seminal lecture series delivered by Iranian scholar, Seyyed Hossein Nasr at the University of Chicago in 1966 is among the first efforts, to my knowledge, to articulate the need for a moral and ethical, in fact a religious response to the environmental crisis. Many initiatives to present the religio-ethical view on the environmental crisis have since been launched since

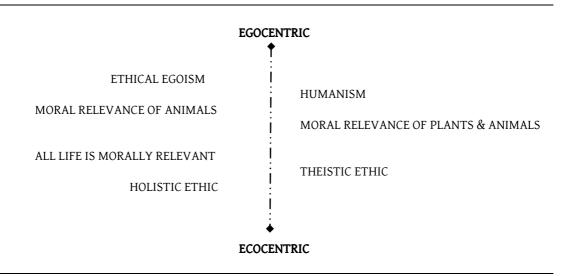
[r]ecasting the question of religion and the environment in terms of the religious or spiritual imagination...becomes theoretically important to identify the ideas available in a religious system to envision the human relationship with the natural world. (DeHanas 2010, 142)

Ethics is about the principles which guide our actions, the way we live and behave, including our interaction with the natural world or our environmental ethic. Environmental ethics is "concerned with the ethical problems surrounding environmental protection" and "aims to provide ethical justification and moral motivation" (Yang 2006, 23) for environmental concern and action. Environmental ethics also examines the "moral basis of our responsibility towards the environment" (Bourdeau 2004, 13). While environmental ethics has only recently started to acknowledge the contribution of non-Western ecological thought, including religion, others opine that, "eco-ethics have been a part of religious teachings from time immemorial and...have great relevance to contemporary developmental strategies in the context of the prevailing environmental crisis" (Agwan 1993, 245). Efforts at acknowledging this has begun to emerge, both in the academic and practical arenas. Furthermore, scholars are beginning to concede that the limitations within secular-based environmental ethics, which neither tells people what to do nor compels them to be environmentally moral, might be addressed by religious ecoethics (Hargrove 1986).

Pedersen (1998) lists the religious resources of interest to environmental ethics as beliefs, values and practices. While these might not necessarily centre on nature but on issues such as compassion, justice and simplicity, each religious tradition possesses resources for the reconstruction of an eco-justice ethic, "an ethic that holds together concerns for the natural world and for human life, that recognizes that devastation of the environment and social and economic injustice go hand in hand, and that affirms that human rights and environmental rights are indivisible" (Pedersen 1998, 254). Foltz's (2000) argument that Muslims are more interested in human-centred issues of justice than in the biosphere and more concerned with the human relationship with God than with other creatures could be countered with Pedersen's contention that the ecological ethic of many religions is in fact not that of eco- or biocentrism, which has become the holy cows of ecological philosophy, but in fact, an eco-justice ethic, overtly concerned with both ecological health and human well-being. This chapter seeks to construct a theocentric eco-justice ethic of Islam from within the growing environmental narrative of this faith tradition, and thereafter contrast this ethic with eco- and anthropocentric ecosophies.

Frankena (1979) outlines the variety of environmental ethics available (Figure 2.1.), with egocentrism and ecocentrism providing the two ends of the spectrum. Ethical egoism, akin to Pepper's (1997) egocentric environmentalism and O'Riordan's (1981) anthropocentric environmentalism is characterised by human self-interest. In this conception, one judges one's action purely on the basis of what is in one's own interest, this is the only criterion for determining whether an action is good or bad, right or wrong. This is also displayed in Kockelkoren's conception of humans as masters over nature, with no attendant moral concern for the earth (de Groot and van den Born 2007). The other end of the spectrum, ecocentrism, is encapsulated in a range of ecological philosophies such as Deep Ecology, biophilia and Gaianism which entail an ethic of 'letting nature alone' and living in partnership and harmony with nature. While environmental ethics is traditionally divided along the lines of anthropo- and ecocentric varieties, in reality a range of ecoethics exist between these two extreme conceptions. This is equally true in the case of Islamic ecological ethics.

Figure 2.1.: Varieties of Environmental Ethics (after Frankena 1979)



The spectrum, which primarily differs according to the moral standing of the earth, includes everything from the utilitarian ethic of many early conservationists to socially critical variants such as ecofeminism, Deep Ecology and social ecology. Theistic ethics, according to Frankena (1979), can take on various forms, for example in combination with humanism (care and concern for humanity), with

liberation ethics as in liberation theology; or with earth spirituality ethics, which combines theism and ecocentrism. As the growing phenomenon of ecotheology shows, the time is ripe to investigate the potential of religions to mitigate the environmental crisis. The defining criterion in Frankena's categorisation is the moral relevance of nature. This ranges from the extreme human self-interest of egocentrism in which nature has a purely utilitarian value to the conception of humankind and nature as equal and interdependent members of one community (ecocentrism). There is therefore not one ecological ethic, but a variety of ethical constructs which could be drawn on to formulate an earth ethic.

Theocentric ethics provide a rich and meaningful account of the relationship between God, humans and nature and speak to the major philosophical questions raised by environmental ethicists today, i.e. the intrinsic value of nature (Abedi-Sarvestani and Shahvali 2008). Environmentalists' calls for the development of a 'new' global ecoethic remain vague on the nuts and bolts which such an ethic would entail (Simmons 1988): What exactly is humanity's place in the earth? What implications would this ecoethic have for environmental action? Who chooses this global ecoethic? Or perhaps, as Frankena (1979, 3) states, the cry of 'new lamps for old' is premature, and we might just find that our old ethics "are entirely satisfactory as a basis for our lives in the world, the trouble being only that not enough of us live enough by it enough of the time". One such 'old' ethic is that of Islam which continues, to various degrees, to inform and shape the daily life of millions of Muslims the world over and which possesses, in the view of many scholars, a strong ecological message.

Ethical concepts in the Qur'an and Sunnah, the sayings, actions and tacit approval of actions by Prophet Muhammad , form the basis of ethics in Islam. The *Sharī'ah* (Sacred Islamic Law) translates the ethical principles of the Qur'an and Sunnah into practical injunctions and legal maxims, since faith, in the life of a Muslim, must be accompanied by action. While these principles constitute the conceptual framework for all knowledge constructions in Islam, such as ecological knowledge, an important principle in the Islamic epistemology is the adoption of the best of all beneficial knowledge as long as it does not negate the Islamic ethos. This thesis

however, will focus primarily on the ethics which relate to the relationship between humankind and the Creator, as well as those principles which regulate ethical relations among individuals and among humans and the natural world, to construct an eco-justice ethic and ecological knowledge structure of Islam. It will also illustrate the hierarchic ordering of knowledge in the Islamic epistemology which regards revealed knowledge as the highest form of knowledge. It should be kept in mind though that this ecoethic, in keeping with an integral Islamic epistemology, does not preclude engagement with other ways of knowing, sensory, spiritual, and intellectual, but does centralise the precepts, teachings and metaphors of the Qur'an and Sunnah, in short the Islamic worldview, as an interpretive framework for understanding the human-nature conception in Islam. It thereby encompasses all knowledge within an ethical and moral framework and shows how the Islamic epistemology, at once holistic and hierarchic, is ontologically and epistemologically at variance with secular knowledge systems which have "produced a body of knowledge that does not concern itself with the Islamic concerns of trusteeship of man, sacredness of nature, social justice, public interest and seeking the pleasure of Allah" (Sardar 1985, 104). This epistemology will be dealt with further in Chapter Three.

I intend, in this chapter, to draw upon the growing body of ecoIslamic literature to construct an eco-justice ethic by focusing firstly on the key ethical principles underlying Islamic ecoethics and the rich source of Islamic law (Sharī'ah) which possesses a range of injunctions pertaining to the environment. Secondly, I will chart the growing arena of environmental activism amongst Muslims to illustrate the ways in which Islamic ecoethics are being incorporated in environmental policies and practices in the Muslim world. Finally, I will attempt to illustrate how the eco-justice ethic of Islam, constructed in this chapter, can promote just, responsible and respectful interaction between humans and nature. This chapter, in effect, seeks to present the key features of an eco-justice ethic of Islam, and also underline the relevance of theocentric ecological philosophies in shaping human-environment conceptions.

2.1. Constructing an Eco-justice Ethic of Islam

While there is no Islamic doctrine of the environment *per se*, Islam puts forward a doctrine related to humankind's relationship with Allah, their fellow human beings and the natural world, of relevance to the environmental question (Hobson 1998). The Islamic view on nature is neither ecocentric nor anthropocentric, but is essentially theocentric (God-centred) (Ahmad 1997). Muslims believe that everything in the universe is created by God and the approach of Islam toward the use and development of the earth's resources was put thus by the fourth caliph 'Ali ibn Abi-Ṭālib to a man who had developed and reclaimed abandoned land: "Partake of it gladly, so long as you are a benefactor, not a despoiler; a cultivator, not a destroyer" (Bagader et al. 1994, 3).

Concern for the environment is deeply-rooted in all fields of Islamic teaching and culture according to leading contemporary Islamic scholar, Yusuf Al-Qaradawi (2005). Many concepts and principles in the Qur'an, such as <code>tawhīd</code> (unity), <code>khilāfah</code> (trusteeship) and 'adl (justice), carry substantive implications for the environment. Islamic ecoethics generally involves the extension of these broad ethical social principles regarding the nature, meaning and value of the world and its creatures to the human-environment relationship (Westcoat 1997; Ouis 2003). The <code>Sharī'ah</code>, which guides a Muslim's actions, translates these ethical principles into norms of action pertaining to resource use and ownership. Since the <code>Sharī'ah</code> does not separate between legal thought and ethics, Islam offers a worldview which is poles apart from secular approaches which tend to separate ethics and law (Bakar n.d.).

In adopting a methodological approach towards constructing an eco-justice ethic of Islam, I was concerned that this study could fall into mere reiteration of the works of most ecoIslamic writers of the last two decades. The majority of contemporary ecoIslamic writers display Islam's normative stance on the environment through copious citations of Qur'anic verses and Prophetic sayings which promote environmental care. While there is great divergence in the approaches and ideas of Muslim environmental scholars, there is widespread agreement on the key Qur'anic principles underpinning the ecoethic of Islam. In fact, some of these works have

distilled the ecoethic of Islam to three or four central principles (Naseef 1998; Khalid 2002). The majority of ecoIslamic writings therefore centre on raising awareness about the status of nature in Islam by viewing key theological principles, such as tawḥīd and khilāfah, through an environmental lens.

The methodology of revisiting Qur'anic principles, familiar to Muslims, appears to be a method suitable in raising awareness of the ecoethic of Islam. However, critics claim that much ecoIslamic writing is in fact redundant (Arensberg 2004a), citing litanies of verses without engaging in a meaningful way with contemporary issues (Foltz 2000). Jenkins raises a further critique, which proved of great concern to me, that "wanton quotation [of Qur'anic verses] may communicate only anaemic normative force" and often amounts to authorial commentary, while the environmental ethicist in fact needs to "demonstrate how she understands revelational texts to authorize her argument" which very few ecoIslamic writers do (Jenkins 2005, 342-343). He argues that jurisprudence rather than cosmology (or theology) is a more fitting starting point for ecoIslamic research since normative resources in Islam do not focus on producing a particular picture of Creation, but rather on clarifying prescribed actions. He also asserts that the Sharī'ah, though rich in laws pertaining to natural resource use, is at present inadequate to address contemporary environmental issues, it does possess the methodological tools and instruments to provide solutions to new moral precepts while maintaining the continuity of authority.

The science of jurisprudence animates social change from within the Qur'an's assurance: "Nothing have we omitted from the Book" (6.38). There may be global warming, and it may require dramatic legal change, but "you shall certainly not find any change in God's practice" (33.62). Jurisprudence can adapt Islamic practices to a world of climate change in continuity with the tradition's integrity. (Jenkins 2005, 341)

Jenkins' views are shared by Forward and Alam (1994) who cast aspersion on the ecological 're-reading' of Qur'anic concepts and regards Islam's laws about the use of natural resources, such as land and water, as better grounds to establish Islam's green credentials. Manzoor also argues that the environmental ethic of Islam can only be given practical shape through the *Sharī'ah* which should produce legislation

to address contemporary issues such as pollution, conservation and rapid urbanization (Manzoor 1984). While these arguments are quite persuasive, one of the main purposes of this study is to assess whether an eco-justice ethic of Islam, composed of *both* ethical precepts and laws, promotes societal and ecological welfare.

After close to a decade of reading about and interacting with ecoIslamic works, I concur with Izzi Dien (2000, 81) that the ingredients for an environmental theory of Islam are "dissected parts of Islamic theology, law and ethics, in outline form". Taken from a different angle, Islam is traditionally divided into three categories, beliefs (aqā'id), legal judgements (fiqh) and personal spiritual development (taṣawwuf) (Dutton 1998). The first category, also referred to as 'Islamic theology', includes the major ethical considerations of humankind's position in the Universe vis a vis both the Creator and Creation. The second category of substantive law is about putting the premises of the first category into practice and is about action rather than ideas. The third area, spiritual development, is about action, but applied inwardly towards reformation of the self. Each three areas have a profound bearing on the human-environment relationship.

In order to answer the key research question in this thesis, i.e. What are the key features of an eco-justice ethic of Islam, and what are the pedagogical implications for implementing such an ethic in the educational landscape of Islam broadly, and the maktab curriculum in particular?, requires an understanding of both the beliefs and spiritual teachings (ecoethical principles) and laws (jurisprudence) pertaining to the environment. Since ecological health is rooted in the psychological health of the human soul and environmental degradation turns out to be "less a resource-problem than an attitude-problem" (Setia 2007, 127), ethical precepts, which play a deciding role in shaping human nature and worldviews, is of importance in this study. I was heartened by Izzi Dien's comment that "while the legal rules and precedents are binding, ethics and awareness are far more effective in bringing about behavioural changes" (2000, 32). Contributing towards an awareness of the environmental imaginaries of Islam and thereby stimulating environmental action, is among the motivating factors for embarking upon this study.

Various sources have been drawn upon during this literature review, including texts primarily written by Muslims (and largely aimed at Muslim audiences) on Islam and the environment; some of which focus primarily on Qur'anic verses on nature, such as Khan's (1997), The Wonderful Universe of Allah: Inspiring Thoughts from the Qur'an on Nature and Bhatti and e-Jannat's (1997), The Holy Qur'an on Environment. The Qur'anic translation of Ahmad Zaki Hammad (2008), The Gracious Qur'an: A Modern-Phrased *Interpretation in English*, which has a specialised index of life-forms mentioned in the Qur'an, has been utilised throughout this thesis, unless otherwise stated. However, much of the medieval Islamic literature is in Arabic, with some selected texts and passages pertaining to environmental care having only been dealt with fairly recently (See Foltz 2006). The link between human health and the environment also featured strongly in medieval treatises since public health was one of the main concerns of Muslim rulers (Deuraseh 2009). A growing body of specialised works on Islamic environmental philosophy and Islamic environmental law, though still largely at the introductory level, is available in English. In addition, Muslims are beginning to write on diverse issues such as the Muslim perspective on climate change, fair trade, genetically modified organisms and conservation. Environmental NGO reports also make up a growing body of work indicative of the trend among many international organisations interested in incorporating Islamic perspectives on nature owing to the fact that "local attitudes and beliefs enjoy a higher degree of acceptance and credibility" (Schwarte 2003, 567).

Three key trends can be identified in the approach towards Islamic ecoethics: the mystical or Sufi slant which colours the works of Nasr (1968), Said and Funk (2003), and Chishti (2003); the orthodox perspectives of Özdemir (1998), Izzi Dien (2000) and Llwellyn (2003); and the anti-modernist critique which pervades the writings of most ecoIslamic writers, exemplified in the works of Sardar (1977, 1985), Manzoor (1984) and Nasr (2003). The approach in this thesis draws primarily upon the second and third approaches, which centralises the Qur'an and Sunnah and relies upon the works of classical scholars in building the environmental theory of Islam. The critique of Western science and technology, development imaginaries and knowledge conceptions also resonate with the liberation ecotheology approach in this study. The shortcomings of the prevailing worldview are at once ethical and

epistemological – as evidenced in the misapplication of technology and the reduction of knowledge to the sensual realm respectively (Bakar n.d.). The approach adopted here therefore draws on religious teachings such as justice, compassion and mercy to achieve emancipation of the self, society and nature. The ensuing discussion focuses on both the key ethical principles which shape the human-environment relation in Islam, as well as the legislative rules and teachings pertaining to the environment.

2.1.1. Key Ecoethical Principles of Islam

The key Islamic teachings concerning nature and the environment closely follow those dealing with the Islamic understanding of humanity. Thus, the ecoethical principles discussed below are well-known concepts related to the Islamic worldview on the nature, meaning and value of life, particularly humankind's relationship with the Creator, and its interaction with the rest of humanity, the world, and its creatures. Islamic ecoethics, drawing in various ways upon scripture, theology, mysticism and the literature on morals and manners, is held together by a common reliance upon the Qur'an and Sunnah (Westcoat 1997). According to Rahman (1989, 69), in his Major Themes of the Qur'an, while the Qur'anic cosmology is minimal, statements about nature and natural phenomena abound. These relate to the order and regularity in Creation; nature's utility for all living beings; and nature's magnitude as the miracle of God "since none but an infinite and unique Being could have created it". The term Creation best captures the multifaceted position of the natural world in the Islamic ecocosmology as I will illustrate in the section dealing with Creation (khalq).

Many different terms are used in the Qur'an to describe the earth. While the modern Arabic term for environment, $b\bar{t}'ah$ is not used, several other terms are found such as $ma'\bar{a}yish$ (the cause of life), $mas\bar{a}kin$ (place of stillness or tranquility), $kif\bar{a}ta$ (container that covers the dead and supports the living) and $fir\bar{a}sh$ (a bed). Furthermore,

[t]he Qur'anic metaphors of earth as something pure, a cradle, a couch or a carpet, a place to live in and return to, suggest that the earth is worth a certain respect. A natural corollary of it is that the earth should not be destroyed or polluted. (Ouis 1998, 167)

Various authors have put forward the central argument for the existence of an ecojustice ethic in Islam. Al-Hamid (1997) mentioned that the earth is a trust for present and future generations and equates environmental destruction to damaging the inheritance of future generations who are entitled to a clean, pure and healthy earth. He quotes the Prophetic saying, "If anyone deprives an heir of his inheritance, Allah will deprive him of his inheritance in Paradise on the Day of Resurrection" (Sunan Ibn Mājah n.d. 2(2703), 902)⁴ to support his claim. While this is a weak narration, when used in conjunction with other Islamic teachings, this notion has rightly been used by Muslim scholars to indicate that Islam emphasises the need to protect the earth for present and future generations alike.

Aside from being regarded as a trust, the earth is also seen as the arena in which human action will be judged, and failure to care for her is not only indicative of an abuse of this trust, but is also self-injurious, an act of *dhulm al-nafs* (self-harm), since damage to the environment is damage to humanity. This concept, according to Nomanul Haq (2001), carries within it the seeds of a comprehensive ecophilosophy. However, Deuraseh (2009, 529) takes this concept to a deeper level by regarding environmental abuse as not only self-injurious, but as a "crime against God, since the criminal conduct in question constitutes a violation of Divine prescriptions". Environmental abuse is therefore not only an act of injustice to oneself, but to all communities—human and non-human, present and future—and is moreover in direct contravention of Allah's command to be thankful for the bounties of the earth.

Others base the Islamic position on the need for ecological care on the notion of the whole earth as a mosque (*masjid*) and the need 'to walk on the earth in humility' (See The Criterion 25: 63), exhibiting qualities of gentleness to nature (Manzoor

⁴ All ḥadīth will be cited as follows: Ḥadīth Book Date of Publication Volume (Ḥadīth number), Page number.

1984; Ouis 1998; Setia 2007). Thus, in place of the attitudes of haughtiness, aggression and greed towards the earth, Muslims need to reflect on the Qur'anic ethico-spiritual value of 'treading lightly on the earth', paying careful consideration to their lifestyle choices and interaction with the environment, since the earth-asmasjid construct has "ethical, environmental, and spiritual implications" (Iqbal 2009, 77). Flowing from this is the view, frequently cited in the Qur'an, of the earth as a living being, who will speak of the actions—pure and evil—which she bore witness to. The earth will tell of the ones who have bowed down in prostration to Allah with joy, but will also recall the mischief, corruption and destruction wreaked upon her. How we live upon, and approach the earth, is thus a matter of great consequence for the Muslim.

That *this* earth is a masjid levels a demand on us. An onus: we are accountable not only for the things that we do and the narratives we author but for the very earth we walk upon. By how they walk ye shall know them, the psalmist might well have sung. (Iqbal 2009, 78)

Notwithstanding these positions, the most common reason cited for the protection and conservation of the environment is its position as signs of Allah, $\bar{a}y\bar{a}t$ Allah (Nasr 1992; Izzi Dien 2000). The same Arabic term employed to describe nature, $\bar{a}y\bar{a}h$ (a sign), is also used to describe a verse in the Qur'an. This awareness that the entire universe is in fact a Revelation, must, of necessity, be accompanied by respect—it must be read, understood, and protected (Ramadan 2009). The world of nature, as the cosmic revelation, thus reflects the Majesty and Might of the Creator, and should be looked upon, as with the Qur'an, with respect and honour. Thus, many ecoIslamic writers have suggested that the soundest legal basis for the conservation of the environment is the position of creation as signs of Allah ($\bar{a}y\bar{a}t$ Allah) (Bagader et al. 1994; Izzi Dien 2000; Llewellyn 2003).

These views will be discussed further when I will present the ecoethical principles of Islam, as put forward by foundational religio-ethical precepts in the Qur'an. EcoIslamic writers have prioritized these precepts differently. Fazlun Khalid (2002), the founder of the Islamic Foundation for Ecology and Environmental Sciences (IFEES) has condensed these principles into four: the unity principle (tawḥīd),

responsibility principle (khilāfah), balance principle (mīzān) and creation principle (fiṭrah). IFEES produced an educational resource, Qur'an, Creation and Conservation based on these principles, which has been used in workshops, lectures and seminars across the world. In a recent IFEES publication, these principles were expanded to include creation (khalq), humankind (insān) and corruption (fasād) (Khalid and Thani 2008). Other scholars present a variation of these key principles, adding other concepts such as servanthood ('ubudiyyah) and trust (amānah) (Shah Haneef 2002); mercy (raḥmah), moderation (tawāzun) and gratitude (shukr) (Setia 2007); and accountability (mas'uliyyah) and subjugation (taskhīr) (Khan 2008). Naseef (1998) claims that unity, trusteeship and accountability—tawḥīd, khilāfah and ākhirah—three central concepts of Islam, are also the pillars of the environmental ethic of Islam (Naseef 1998).

The eco-justice ethic put forward in this study centres upon the following ecoethical principles which, in my view, foregrounds the fundamental aspects of the environmental message of Islam: the position of Allah as the Creator, Owner and Sustainer of the whole universe $(tawh\bar{t}d)$; humans as trustees and representatives of Allah who have to adhere to a code of action reflecting the best social behaviour and highest ethical values towards all Creation $(khil\bar{a}fah)$; the place and position of Creation in Islam (khalq); and the nature, impact and way out of the environmental crisis $(fas\bar{a}d)$ and fitrah.

Tawhīd: The key principle underlying an eco-justice ethic of Islam is the oneness and unity of God, or tawhīd. According to Manzoor (1984), this principle is the sine qua non of the Islamic faith and asserts that God is the absolute source of all values, and also the Owner and Originator of the entire Universe of which humankind is but a part. All discussions of ethical conduct in Islam proceed from this concept since an understanding of the principles of divine Unity impresses upon the hearts of Muslims "what moral conduct or normal behaviour should consist of" (Irving 1979, 2). It is therefore not surprising, as mentioned in the preceding chapter, that the first instruction and indeed first prayer taught to the Muslim child is the testification of faith in One God, referred to as the shahādah. Tawhīd in fact gives Islamic civilisation its distinctive character.

Scholars have traditionally divided the science of <code>tawhid</code> into three categories. This includes belief in the oneness of God who alone is the Creator, Sustainer and Provider of all life, as well as the unbounded and implicit belief in His attributes. <code>Tawhid</code> therefore implies:

- believing in the oneness of God in terms of His unique characteristics of possessing the right to be worshipped alone, loved, obeyed and prayed to for attaining goodness and evading misfortune, called tawḥīd 'uluhiyyah (divine unity);
- believing in God's other attributes such as His characteristics of administering, controlling, nurturing, and sustaining all the universe that he has created, called tawhīd rububiyyah (oneness in Lordship); and
- believing in His holy names and functional attributes, such as the Almighty, the All-Knowing, the All-Seeing etc. called tawḥīd of names and attributes or tawhīd asmā was sifāt.

(Shah Haneef 2002, 244)

Discussions of tawhīd by ecoIslamic scholars have mostly revolved around the Creator-Sustainer quality of God, i.e. rububiyyah and the attributes of the Divine Being as it pertains to Creation specifically. The first category, divine Unity (tawhīd 'uluhiyyah), has also come under intense discussion, particularly by writers adopting a Sufi stance towards the human-environment relationship in Islam. Here I find myself at serious odds with the assertions of scholars such as Nasr who, based himself on the Qur'anic verse describing God as al-Muḥīṭ (All-Encompassing), regards God as being present within nature and thereby imbuing nature with sacredness. This raises contentious metaphysical questions related to God's presence within Creation (immanence), since claims that the Creator permeates the visible world of nature are spurned by mainstream Muslim scholars who cling to the Qur'anic dictum of transcendence: Allah is completely separate from His creation, above all things and 'there is nothing like Him' (Bilal Philips 1990).

This view of unity is simplistically echoed by many ecoIslamic writers. However, more solid (and less controversial) ground on which to establish the ecological implications of tawḥīd 'uluhiyyah (divine unity) is to recognise that all cosmic forces could be seen as uniformly applying the Divine Order (Izzi Dien 2000); that human beings are at one with nature through surrender to the presence of the Divine (Said and Funk 2003); and that humans are part of an integral system which originates

from the One (Zillur Rahman 1991). In spite of these differences, all Muslim writers hold a sacramental view of the earth as God's Creation, of which humanity is an integral part. Understanding this primary aspect of <code>tawhid</code> helps us to recognize that the Creator is One and His creation a unified whole.

Indeed your God...is the only God—the One besides whom there is no other god. He has encompassed all things in knowledge. (Ṭāhā 20: 98)

The second category of tawhīd instructs that there is only one Creator and Sustainer, Allah Most High and that He is the Lord of all Creation. Rububiyyah occupies a significant part of the environmental dimensions of tawhīd. One of the most important aspects considered under this category is the fact that God is the Owner and Creator of everything. This has a major impact when making decisions pertaining to the environment, since it is recognised that everything, including humankind, belongs to God. Moreover, "the idea that Allah is the True Owner and Manager of His Resources liberates the human mind from the false sense of autonomy or dominion over the Earth's natural resources" (Goolam 2003, 266).

For to God alone belongs all dominion over the heavens and the earth. And God is powerful over all things. (The Family of 'Imrān 3: 189)

One qur'anic commentator, Abul Faraj, noted, "People don't in fact own things, for the real owner is their Creator; they only enjoy the usufruct, subject to the Divine Law" (Ahmad 1997, 180). In this way, the metaphysical realm of belief is connected to the earthly realm of action where "every single creature must be treated with taqwa, or reverence toward its Creator, and, to serve the Lord of all beings, one must do the greatest good one can to His entire creation" (Llwellyn 2003, 188), in accordance with the way prescribed by Him. Ecological realities today, as Foltz plainly states, paints a different picture despite that fact that the "Qur'an reminds us that that earth does not belong to us", we are destroying it without "any vision of the consequences, and nowhere is the Islamic principle of $m\bar{\imath}z\bar{a}n$ (balance) being maintained" (Foltz 2006, 150).

The recognition that everything in Creation came into being through a primordial act of creation and continues to be sustained through the mercy of Allah, indicates that the Sovereignty and Beneficence of Allah are present realities, thereby affirming His continuing creative power on earth (Timm 1990).

Indeed, God—it is He alone who is the All-Providing, the Sole Possessor of Power, the All-Firm! (The Scattering Winds 51: 58)

While Islam does not put forward particular scientific theories pertaining to the origin of the universe, the epistemological framework of <code>tawhīd</code>, which "gathers all the threads of causality and returns them to God" (Al-Faruqi 1982, 62), opens up the world of nature and the laws which operate within the universe to discovery, exploration and understanding. <code>Tawhīd</code> is thus the epistemological framework which guides scientific observation and the

...existence of order and design in the universe, which modern science teaches us, leads us to belief in the existence of a Supreme Power and a Supreme Intelligence who is responsible for this complex but orderly design, of a Supreme Being who brought into existence and supplied it with all that it needed for its life and growth. He is none else but the only Nourisher and Cherisher. The Qur'an describes Him as Rabb al-Ālamīn the Nourisher and Sustainer of all the worlds. (Othman and Doi 1993, 37)

Rububiyyah also teaches us that the act of creation belongs to Allah alone. He is the Designer and the Constructor of the universe and the creative process is described in the Qur'an through the use of terms like *fatara* (to originate), *ansha'a* (to bring forth) and *anzala* (to send down).

I have turned my face, being ever upright of heart, to the One who alone <u>originated</u> the heavens and earth—and I am not of those who associate gods with God! (Cattle 6: 79)

For He is the One who has <u>brought forth</u> for your gardens, trellised and untrellised, and dates palms, and planted fields of varied produce, and olives and pomegranates—alike in their foliage yet unalike in their fruitage. (Cattle 6: 141)

For We <u>sent down</u>, from the sky, water. Then with it We brought forth in the Earth plants of every gracious kind. (Luqmān 31: 10)

Finally, the unity of Allah in His names and attributes affirms that He, the Most High, is without comparison in all His qualities. His attributes, while incomparable and entirely distinct from Creation, operates throughout the universe, and are drawn from the names ascribed to Him in the Qur'an and prophetic sayings.

The Qur'an is replete with verses enumerating Allah's attributes, many of which pertain to the act of creation, such as al-Khāliq (The Creator), al-Bāri' (The Originator or The Giver of Form) and al-Muşawwir (The Fashioner). Al-Muşawwir, for example, denotes how Allah fashions creation by "giving it form, colour and shape" and bestowing upon each creature the details of its "complicated spiritual and physical existence" which will fit perfectly into the rest of Creation (Abraham 2001). These names relate to Allah as the Creator of the entire universe and show that Creation has a true and just purpose and is ongoing, hence providing a strong argument against environmental destruction (Ouis 1998). Likewise, the Sustainer (al-Razzāq) and Nourisher (al-Muqīt) of all Creation, who has 'gifted' nature to humanity, must be shown gratitude through respect and care of all Creation. Other names of special interest in developing an Islamic ecoethic are al-Raḥmān and al-Raḥīm, both incorporating the qualities of mercy, grace and beneficence. In fact, all the actions of a Muslim are identified with these two names, since they are contained in an oftused invocation, 'In the Name of God, the All-Merciful, the Mercy-Giving'. Mercy should thus be a major motivating factor in the life of a Muslim (Ouis 1998). The attributes of Allah therefore provide a further theoretical basis for Islam's ecological narrative.

Khalid (2002, 6) calls *tawḥīd* the "bedrock of the holistic approach in Islam" as it affirms the interconnectedness of the natural order, the creation of One God. Indeed, it is *the* principle which gives the religion of Islam its distinctive morphology and makes the ecoethic of Islam wholeheartedly theocentric. *Tawḥīd* also indicates that an understanding of the metaphysical aspects of the Creator has profound implications for ethical conduct since humans are enjoined to act morally

in obedience to Him and in fulfilment of His commands. The following principle, *khilāfah*, will set out the purpose and nature of human conduct on earth.

Khilāfah: The second ecoethical principle relates to human vicegerency on earth - khilāfah. In short, the Islamic worldview is that God created humankind and bestowed upon it a position of a steward or trustee on Earth, referred to as a khalīfah. The term khalīfah, is derived from the verbal root khalafa meaning 'he came after, followed, succeeded' and 'offends against, violates or breaks a promise' (Cowan 1974) – noteworthy in view of the following Qur'anic verse:

Now, behold! Your Lord said to the angels: I am placing upon the earth a human successor to steward it. They said: Will You place thereupon one who will spread corruption therein, and who, moreover, will shed blood, while we ever exalt You with all praise and hallow You. He said: Indeed, I know what you do not know. (The Cow 2: 30)

The term *khalīfah* has also been translated as steward, deputy, viceroy, guardian and vicegerent. Vicegerency covers every aspect of life and essentially tests humanity's just exercise of authority over those within their stewardship, including nature (Sachedina 1999). The word *khalīfah* and its plural occurs in the Qur'an nine times, seven of these is apposed to *fil-arḍ* (on earth), on this planet, which clearly illustrates that vicegerency (*khilāfah*) is in relation to this planet (Al-Hamid 1997).

For He alone is the One who has made you successors in the land, O humankind, and He has raised some of you above others by degrees, to test you in all that He has given you. Indeed, your Lord is swift in punishment. Yet, indeed, he is most surely forgiving, mercy-giving. (Cattle 6: 165)

Thus, a *khalīfah* takes on a trust and must hold it in harmony with the wishes of its grantor, Allah, making human beings vicegerents and not lords and masters of the earth in a dictatorial sense. This principle, as discussed by Muslim environmental scholars, portrays men and women as trustees or stewards, who are provided with bounties that should be enjoyed within limits (Izzi Dien 2000; Özdemir 2003). In fact, Nasr (1997, 8) states that "to be human is to be aware of the responsibility which the state of vicegerency entails". *Khilāfah* is therefore a responsibility and a trial by

which human beings will be evaluated in terms of who has done the most good, acted according to Allah's purpose, served humanity and shepherded those under his care (Llwellyn 2003). As the Prophet Muhammad so eloquently uttered, "Each of you is a shepherd and will be answerable for those under his care" (Ṣaḥīḥ Bukhāri 1987 1(853), 304).

The ethical notion within every human being, the ability to distinguish between right and wrong, is the main reason why humans have been appointed as vicegerents on earth and accorded a central position in the natural order (Izzi Dien 1992a). However, this metaphysical exaltation of humans is linked to a weighty moral burden - to adhere to a code of action reflecting the best social behaviour and highest ethical values (Nomanul Haq 2001). These ethical horizons incorporate not only humankind, but all generations and all created beings. Humankind thus needs to use the foresight, wisdom and knowledge which they have been granted to guide the way in which they use natural resources (Shah Haneef 2002).

Abu Sa'īd Khudri reported that Allah's Messenger said: The world is sweet and green (alluring) and verily God is going to install you as vicegerent in it in order to see how you act. (Ṣaḥīḥ Muslim n.d. 8(7124), 89)

The effect of Islam on the environment depends on the interpretation of *khilāfah* as master or vicegerent, trustee or tyrant. If it is interpreted in an anthropocentric way and the purpose of Creation is appreciated solely for its instrumental value, then it does not bode well for the environment. But, if human vicegerency is seen within the framework of Divine Sovereignty, encapsulated in *tawḥīd*, it will result in responsibility to care gratefully for the environment that belongs to Him and serves His Will (Timm 1990). All ecoIslamic work has emphasised the environmental implications of *khilāfah* as human trusteeship on earth, incorporating responsibility and accountability for conduct towards fellow human beings, fellow creatures and the planet itself, with the primary purpose being to serve and worship Allah by acting in harmony with His laws, fulfilling His trust and gaining His pleasure (al-Hamid 1997). There are several Qur'anic precepts which expound on the concept of *khilāfah* and which have been alluded to above. The first concept under

consideration is that of 'ubudiyyah (servanthood) since the primary function of all Creation is to worship and glorify its Creator.

And know that I have not created either jinn or human beings for any other end but to know and worship Me alone. (The Scattering Winds 51: 56)

The Qur'an describes the human being as 'abd, at once God's servant as well as His active tool (khalīfah), fulfilling His orders (Izzi Dien 2000). As the servant of Allah ('abd Allah), the khalīfah is bound by the laws of His Maker while in his "khalīfahdom", he has been given the privilege of partaking of the bounties of the earth (Dutton 2003). Yet it is precisely because they are slaves of Allah that humans have to undertake the role of khalīfah by actively adhering to the commands of their Lord and "sustaining cosmic harmony and disseminating the grace" for which they are the channel as a result of being the central creature of the terrestrial order (Nasr 1997, 8). EcoIslamic writers thus contend that environmental care is part of servanthood to God. Consequently, vicegerency must be carried out in accordance with God's laws since

...nothing is more dangerous for the natural environment than the practice of the power of vicegerency by a humanity which no longer accepts to be God's servant, obedient to His commands and laws. There is no more dangerous a creature on earth than a *khalīfat Allah* who no longer considers himself to be 'abd Allah and who therefore does not see himself as owing allegiance to a being beyond himself. (Nasr 1997, 9)

The concepts of *khilāfah* and *amānah*, according to Manzoor (1984), sum up the entire Islamic rationale for an ecological ethic since nature, being an estate belonging to God, has been given to humankind merely as a trust (*amānah*). *Amānah* refers to the primordial covenant between humankind and Allah whereby human beings were the only ones in God's Creation prepared to undertake the task of trusteeship willingly (See The Federated Clans 33: 72). The word *amānah*, according to Setia (2007) is intricately connected with the notion of *amān* (security), in both its physical and spiritual dimensions. Thus, vicegerency in fact entails responsible trusteeship since humans, if they betray the duties of trusteeship, not only endanger the security of those entrusted in their care, but also forfeit the right to

their own physical and spiritual security in this world and in the next. The discharge of the vicegerency in Islam thus has consequences for both this world, and the life to come.

The cosmos is regarded as the temporary abode of humankind and belief in the hereafter ($\bar{a}khirah$) and accountability (mas'uliyyah) for one's actions constitute cardinal aspects of Islamic belief. This impresses upon the minds and hearts of Muslims that they are not the owners of anything on this earth. Everything belongs to Allah. All humanity will have to account for their actions on this earth, as well as for the goods which were in their care. This creates within the Muslim consciousness of all her actions, including her interaction with the natural world. This awareness of accountability (mas'uliyyah), could address environmental degradation in a much more meaningful way than remedial measures, which are at best palliative (Ahmad 1997).

These two concepts, ākhirah and mas'uliyyah, offer powerful incentives to the khalīfatullah fil-ardh (vicegerent of God on earth) to act in a socially-responsible manner since an awareness of one's spiritual responsibilities towards Allah is accompanied with the recognition that one will have to render account of all his actions to his Lord. Being aware, at every moment, that the All-Seeing and All-Hearing Creator is a Witness to her actions, impels the believer to live her life in fulfilment of His Laws, given that

...a people who know they have a reckoning with their Lord and then an eternity either in the Garden or the Fire, will step lightly on the earth and beware of what they consume and of what footsteps they leave behind them. (Ahmad 1997, 198)

Humankind must also carry out the *amānah* of vicegerency with goodness, benevolence, and sincerity - with 'adl (justice) and *iḥsān* (goodness or beneficence). Both the environmental interests of present and future generations are brought into focus through the concept of justice ('adl) in Islam (Izzi Dien 2000). Concern with economic and social justice, human well-being and countering oppression is

central to the Islamic message, thus it is natural that the welfare of people is integral to this eco-justice ethic.

O humankind! Indeed, God commands the execution of justice ['adl] among you, and the doing of good to others [$i\dot{h}s\bar{a}n$], and the giving of charity to close relatives. He forbids all obscenity and shameful deeds and aggression. He admonishes you with this, so that you may become mindful of His commandments. Bees 16:9

Robinson (2009) identifies key commonalities between the environmental justice and ecoIslamic movements: both prioritise the interdependence of the natural world and the right to be free from ecological destruction and both propose that public policy engenders justice for all people, without any discrimination or bias. Like the environmental justice movement, many ecoIslamic works recognise that social injustice plays a pivotal role in understanding the environmental crisis, particularly in the impact of environmental degradation which, unfortunately, continues to fall along lines of class, gender, race and ethnicity.

Stalwarts of the Muslim green voice developed a cogent critique of Western science, technology and development, its impact upon the Muslim world, and the need for reviving the Islamic civilisational worldview (Sardar 1977; Nasr 1968; Khalid 1998). They argue that Islam offers a worldview in which there is no separation between the sacred and the secular, which abhors the usury-based world economic system, and which is also one of the few remaining ideologies which provide alternative development (and environmental) imaginaries to Western ones (Vadillo and Khalid 1992; Young 1992; Kamla, Gallhofer and Haslam 2006). Recent ecotheological work has both lauded and lamented Islam's emphasis on social justice. Foltz (2000), while bemoaning the fact that environmental destruction, when mentioned at all by Muslim scholars, is almost always seen as a symptom of social injustice, does acknowledge the fact that "environmental initiatives within Muslim contexts offer some compelling alternative visions to Western models of environmental policy" (Foltz 2005a, xi).

EcoIslamic works also look upon the environment as an economic issue, providing a cogent critique of the social and economic injustices of the usurious economic

system and Western development paradigm (Ahmad 1997; Dutton 1998; Khalid 2003). Al-Hamid (1997) for example compares the corruption and destruction of international development agencies to the Qur'anic verse mentioning those who purport to do good, but who in fact cause mischief in the land (See The Cow 2: 204-205). To this end, he regards the unjust, inappropriate and in many cases environmentally-destructive Western developmental models and usurious economic systems as corruption of the land, trapping the poorest countries of the world in capital-intensive development projects based on Western technology. Instead of development, these have brought widespread indebtedness and have led to a breakdown in the social fabric of traditional societies, exacerbating poverty, malnutrition and environmental degradation. The Islamic ecoethic presented here thus centralises the quest for justice and liberation of humankind, and is, in my view, a liberation-focused ecological ethic.

Iḥṣān integrates beneficence, goodness, general charity and compassion to all living creatures. It is a subtle concept as indicated in the ḥadīth of the Prophet in which he is reported to have said that God has prescribed iḥṣān in everything, even when an animal is slaughtered the knife has to be sharpened and the suffering of the animal avoided (Izzi Dien 2000). Muslim scholars have argued that humanity's relations with all of creation should reflect this 'charitability' and goodness. There are numerous instances in the life of the Prophet Muhammad , related to environmental care, protection and reverence towards the community of life, which indicate the importance of iḥṣān (De Chatel 2003). The Islamic ideals of justice and goodness further shape the framework within which human vicegerency must operate.

Moderation (*i'tidāl*), another distinguishing feature of vicegerency, plays a central role in the Islamic *weltenschauung*. The Qur'an and Sunnah emphasises that all the Muslim's "actions should be guided by the spirit of moderation, from consumption and production, to the use of natural resources" (Al-Damkhi 2008, 18). Muslims are termed in the Qur'an as *ummatan waṣatan* (a balanced community) which does not over-react, does not take extreme views about things, remains moderate in temperament and behaviour, and is judicious in making use of the gifts of God

(ni'mat Allah) (Othman and Doi 1993). Yet, the 'rivalry in worldly pursuits and piling up of wealth' has become evident in many Muslim societies whose extravagant, wasteful and opulent lifestyles are antithetical to the notion of temperance. Instead of the community of moderation and the 'middle way', many Muslims, through blind emulation of the consumption-driven Western culture, are steeped in the unbridled pursuit of wealth; while others scrounge for food to eat, water to drink and clothes to wear. Muslim societies have been equally culpable in implementing unjust economic and social policies which have widened the gap between the rich and the poor and pushed the planet towards a state of disease. As an ummah (community), it is a far way from the Prophetic instruction to strive towards moderation.

Moderation, balance and conservation should be at the "core of every Muslim's move towards sustainable living, for it provides the framework for discrimination without which there is no limit to our current malpractices" (Al-Hamid 1997, 58). The principle of moderation in resource use is vividly illustrated in a <code>hadīth</code>, narrated by Imam Aḥmad in the <code>Musnad</code> (Musnad Aḥmad 1999 11(7065), 636). It is related that the Prophet passed by his companion Sa'ad who was washing for prayer, and said, "What is this wastage, O Sa'ad? "Is there wastage even in washing for prayer"? asked Sa'ad. "Yes, even if you are by a flowing river!"

This <code>hadīth</code> contains a central principle that should be upheld in the human-environment relationship. Bear in mind the following: the Prophet <code>#</code> prohibited wastefulness even in a situation where the resource is in abundance (a river), where excessive use would not have caused any deficiency to nature, would not have polluted the resource or disturbed the ecological balance, nor would it have harmed living beings. Moreover, the matter of ablution is not a trivial matter, but is a requirement for obligatory prayers. Accordingly, how great would the degree of prohibition be of an act which pollutes nature, harms living beings, and violates the rights of coming generations to a safe and healthy environment – as many of our environmental transgressions today are (Özdemir 2003)?

Thus, moderation and avoidance of wastage and extravagance are key features of the Islamic personality. The root of wastefulness is ingratitude and the ungrateful person is never satisfied no matter how much he has. He is trapped in a cycle of increasing consumption and waste, and in complete opposition to the Prophetic example (O'Barrett 2005). Today, the decline of "contentment" (qanā'at) and the rise of consumer society has made every whim and appetite worth pursuing" (Sachedina 1999, 43). In curbing the consumer appetite for more, bigger, and better, the true khalīfah needs to reject material maximisation by being content and displaying thankfulness (shukr) for the gifts which have been bestowed upon him because the

...gift of vicegerency is a test — a test to see if humans obey the will of Allah and acknowledge the sovereignty of God in an attitude of humility, repentance, loyalty and faith. The prime response expected, however, is gratitude. (Timm 1990, 51)

Man, Setia (2007) argues, is by nature inclined to gratitude (*shukr*), but how can he be grateful and hence be contented if he is brainwashed by the economics of consumerism to pursue his every want and desire? If all her time is spent on material growth, how can there be time for inculcating the values of justice ('*adl*), moderation ('*itidāl*) and beneficence (*iḥsān*)? If material growth is realized at the expense of nature, how can she be a true steward (*khalīfah*) and trustee (*amān*) of the natural order? How will he respond when held accountable (*mas'uliyyah*) for the environmental goods in his care?

True *khilāfah* is therefore not about lordship, dominion, mastery or control over any part of Creation, but is centred on responsible trusteeship, cherishing and carrying out the "capabilities entrusted to human beings" with "commensurate humility and sensitivity, predicated upon respect and reverence for the divine purpose in every thing" (Said and Funk 2003, 164). The Qur'an specifies the divine purpose in human creation, i.e. to worship the Creator, with worship entailing much more than prayer, fasting and alms-giving, but obedience to His Laws in all human endeavours. The notion of *khilāfah* or human vicegerency thus implies handling the trust in accordance with the purpose, wishes and expectations of its Bestower. By agreeing

to shoulder the task of vicegerency, humankind is entrusted to develop a civilisation for the good of all Creation.

Khala: This third principle spells out the position and place of Creation in Islam. Khalq, the noun form of the verb khalaqa, appears 249 times in the Qur'an and refers to both the act of creation and Creation itself (Abraham 2001). As mentioned in the discussion of tawhīd, al-Khāliq (the Creator) is one of the names of Allah. The value of the natural world in Islam can be condensed into three primary functions; firstly, all of Creation is regarded as signs or āyāt of Allah, worshipping and glorifying Him, even though humankind cannot perceive this. Nature therefore possesses an intrinsic value and Islam, like most religions, depicts nature as a theophany (Agwan 1997). Secondly, nature has an ecological value as an integral part of the whole ecosystem, created in measure and balance (mīzān) by Allah. And finally, nature has an instrumental value to humans who hold it in usufruct. The Qur'an states repeatedly that the natural world has been 'subjected' (taskhīr) or 'constrained' by Allah for human use, but this does not entail domination, exploitation or control of nature as will be explained later. Lubis (1998) considers these three functions in a hierarchical fashion with the intrinsic value of nature, as signs of the Most-High, as the raison d'être for its protection and conservation.

The Qur'an refers to the natural world as $\bar{a}y\bar{a}t$ Allah, using the same word, $\bar{a}yat$, which describes Qur'anic verses. In the view of Nomanul Haq (2001), this places the objects of the natural world and the Qur'anic verses metaphysically on par with one another since both provide conduits to knowing God. In the same way, Setia (2007) and Iqbal (2009) argue that the ethics applicable to the mosque should be applicable to the earth, as per the 'earth-as-masjid' construct discussed earlier. Furthermore, the Universe as the divine book of creation should, in the same vein, be treated as we would the Qur'an, with respect and reverence. The early verses of the Qur'an is an invitation to contemplate upon and observe natural phenomenon in a quest for meaning, to look to nature and to observe its perfection and order and from there, to deduce the Oneness of God (Özdemir 2003). Let us consider one of these verses:

Indeed, in the heavens and in the earth, there are sure signs of God for all who would be believers. Thus, in your own creation, and in that of every kind of creature He diversifies and spreads about in the earth, there are natural signs of God's creative might, for a people who would have certainty of faith. So too, in the alternation of the night and the daylight; and in all the provision that God has sent down from the sky, with which He gives life to the earth after its death; and in the shifting of the winds—there are natural signs of God's Oneness for a people who would reflect on the wonder of creation and understand. (The Kneeling 45: 3-5)

Ecological conscience, for Muslims, "springs from a genuine respect for all things and beings in virtue of their self-evident proclamation of the presence of their Originator" (Ahmad 1997, 162). The view that nature possesses value solely for human use has been challenged by both traditional and contemporary scholars who base their arguments on the sanctity of nature as described in the foundational source of Islamic law and ethics, the Qur'an. Ibn Taymiyyah, while commenting on a verse regarding the subjugation of nature to humankind, says that "it must be remembered that God in His great wisdom created these creatures for reasons other than merely serving man. Indeed God's reasons were greater than serving man, for in these verses He only explains the benefits of these creatures to him (man)" (Izzi Dien 2000, 99-100). Turkish scholar, Said Nursi, regards the true purpose of the existence of all things as being the miracle of power and the traces of the artistry of the Maker; as an object of contemplation; and the soul of the thing itself, its intrinsic value (Özdemir 2003). Thus contemplation of the universe serves as a reminder of the One who has created it and leads humanity to His remembrance.

Another aspect of Creation as $\bar{a}y\bar{a}t$ Allah is that it is considered as submitting itself to Allah's will and as praising Him, and is therefore regarded as Muslim since it "perfectly obeys the will of God and behaves in accordance with the laws established by Him" (Abraham 2001). Creation should be respected by humans because it joins them in worshipping Allah (Timm 1990), hymning His praise and following His commands. Accordingly, species extinction is akin to silencing other 'worshippers' of Allah (Hussain, M. 2007).

Do you not see that whoever is in the heavens and the earth exalts God—as do the birds outspreading their wings in flight? Each one of them among God's creation has known its way of prayer and exaltation. And God alone is all-knowing. (The Light 24: 41)

In his commentary on this verse, Sayyid Qutb sees the whole universe

...full of humility as it turns to its Creator, singing His praises and addressing its prayers to Him. It does this by nature. Its obedience to Allah is represented in its laws, which operate by Allah's will. When humans refine their senses, they see this scene as reality, as though they hear the rhythm of Allah's glorification echoed throughout the universe. They share with all creatures their prayers and appeals to Allah. Such was Muhammad, Allah's Messenger (peace and blessings be upon him): When he walked, he heard the gravel under his feet singing Allah's praises. Such was David (Dawud): When he chanted his Psalms, the mountains and the birds chanted with him. (Qutb n.d.)

Another dimension related to the intrinsic value of the natural world is the fact that several species, such as ants, bees and birds, are referred in the Qur'an as nations or communities, in Arabic as umam (See Cattle 6: 38). In fact, the Prophet in arrated a story of one of the earlier prophets who, upon being bitten by an ant, ordered the entire colony to be burnt. Allah then revealed to him that because of one ant, he had destroyed a community from amongst the communities which sings His glory (Ṣaḥīḥ Bukhāri 1987 3(2856), 1099). The use of the word community or nation in reference to the non-human world confers sanctity upon all of Creation. Since, "[n]ot only does each species preserve its characteristics, but is also received Divine command (wahy) and acts accordingly, the Qur'an tells us" (Iqbal 2006, 92).

Moreover, your Lord has revealed to the bees: Take dwellings for yourselves in the mountains and in the trees, and in the hives that people construct for you. (Bees 16: 68)

Islam thus values the reality of non-human experience and lessons regarding kindness to animals, even when they have out-lived their 'value' to humans, are plentiful. Prophetic sayings also include many instances which clearly illustrate that there is reward for the kind treatment of animals and punishment for harming them, as the <code>hadīth</code> below illustrates.

A man was walking along a road and felt thirsty. Finding a well, he lowered himself into it and drank. When he came out found a dog panting from thirst and licking the earth. He therefore went down again into the well and filled his shoe with water and gave it to the dog. For this act God Almighty forgave him his sins. The Prophet was then asked whether man had a reward through animals, and he replied, "In every thing that lives there is a reward". (Ṣaḥīh Bukhāri 1987 2(2234), 833)

Thus, while the reasons for conservation is not found in traditional Islamic textbooks, contemporary ecoIslamic scholars have put forward the principal reason for the conservation of nature being its position as signs of God, reflecting His Greatness and as an object of wonder and serving as a reminder of His Grace. The harmonious pattern woven into nature, when viewed with eyes of faith, affirms the Beauty, Compassion, and Power of the divine reality, making the ultimate significance of nature, as a sign of Allah, spiritual (Said and Funk 2003). The Qur'an abounds in statements that nature is the proof ($\bar{a}yah$) of God's existence, submitting to His will and praising Him. Thus, environmental conservation is based on the Sovereignty of God and not on human need, which is variable (Izzi Dien 2000). The primary ethical reason for conservation is therefore the sanctity (hurma) of Creation (Bagader et al. 1994; Izzi Dien 2000).

The second function related to nature is its practical value as a component of the ecosystem which supports life on earth. Through its divinely ordained and measured role, each being contributes to the welfare of the whole, leading to a cosmic symbiosis by which God sustains all living things (Llwellyn 2003). Thus, the universe is a system of design, well-knit and without flaw, in which everything has been created in measure (See The Moon 54: 49) and balance (mīzān) which is called by Said Nursi 'the 'Sharī'ah of creation' (Nursi 1989). Mīzān, the Universal Plan of the Creator also implies constraints. It is mentioned in numerous instances in the Qur'an that humankind should observe the order in Creation and should not cause corruption (fasād) therein after it has been set in order. Akhtar (1996) regards excesses, both in the consumption of natural resources and the production of waste, as transgressions of the Sharī'ah of creation. He argues that environmental balance is kept in check by two key institutions, the Islamic way of life, of environmental consciousness, simplicity and compassion or fellow-feeling for Creation which

operates at the individual level; and the Islamic State charged with securing the welfare of all Creation (Akhtar 1996). The Islamic institutional support system, the individual mandate and legislative instruments, which pertains to environmental care, is discussed further in Section 2.1.2..

The Qur'anic term, $m\bar{\imath}z\bar{a}n$ has often been used to refer to the concept of ecological balance—the balance that exists between the different components of our environment—but should not be interpreted as describing a system in statis (Parvaiz 2003). This term should be read metaphorically and with reference to the measure and design observable in nature—the creative order—be it centred on equilibrium or flux. There are several key points to extract from the concept, firstly, that the measure in which the world was created was set in Heaven, and "must not be transgressed at any level, whether at that of the harmony of nature or in the spheres of human justice, morality or everyday commerce" (Hobson 1998, 41).

And as to the sky—it is He alone who has set the balance of all things so that you might not transgress the just balance. Therefore, shall you establish weights and measure with justice. And you shall not by fraud diminish the balance. (The All-Merciful 55: 7-9)

True stewards must maintain the "primordial equilibrium between the needs of man and the rights of other creatures to live out their lives on this earth" (Setia 2007, 132). Most ecoIslamic writers 'interpret' the destruction of the environment as an impairment of this balance for which humanity will be called to account (Ahmad 1997; Parvaiz 2003). In the words of Abdul-Matin (2010a, 131): "By treating the natural world as though it were our dumping ground, we risk disturbing the delicate balance (*mizan*) that exists in nature". The second point which can be gleaned from $m\bar{z}a\bar{z}$ is that Creation is an inter-related system in which all things, from the delicate butterfly of the Himalayas to the mysterious sea creatures inhabiting the ocean depths, serve a purpose, making "the world one telic system, vibrant and alive, full of meaning" (International Institute of Islamic Thought 1987, 25). Creation, in addition to providing a means of subsistence to humans, also plays a role in fulfilling the needs of other creatures, in a manner created by Allah (See The Stone Valley 15: 19-20) and (Tāhā 20: 50).

And as to the earth—it is He alone who has laid it down for all living creatures. (The All-Merciful 55: 10)

Every individual creature and element has its own ontological existence as a sign of God which He has given form, nature and guidance and to which He has assigned a specific role (Özdemir 2003). The proportion and interdependence of the natural world is set forth time and again in the Qur'an, revealing the connections between all things (Al-Hamid 1997). The final aspect of mīzān relates to its implications for the wise utilisation of the earth's resources since Allah has created "...everything related to life in a most delicate balance" (The Stone Valley 15: 19). Yusuf Ali, in his commentary on this verse says that "every kind of thing is produced in the earth in due balance and measure...an infinite chain of gradation and inter-dependence" (Ali 1993, 640). Balanced usage of the earth's bounties, and the need to take reasoned actions to preserve this balance should thus be the guiding factors in utilising the natural resources of the earth. Özdemir (2003, 13-14) suggests that the Qur'anic verses pertaining to mīzān would be sufficient in developing Islam's ecoethic since they "establish, first, that justice and balance are universal, second, that this universal balance is created by God, and third, that humans must attempt both to comprehend this universal balance and to follow it in their social life as well as in their interactions with the environment."

The most contentious aspect associated with the position of creation in Islam is $taskh\bar{u}r$, often translated as subjugation of the earth's resources to humankind. $Taskh\bar{u}r$ is the verbal noun of the verb, sakhkhara which means 'to subject', 'to compel something to be of service to something else', 'to make something subservient' and 'to turn to profitable account' (Cowan 1974). However, subservience does not imply domination or exploitation and should not be taken to mean "the ordinary conquest of nature as claimed by so many Muslims" (Nasr 1997, 8), but rather, use of the earth's natural resources exercised according to God's Will. This includes being mindful of the order and balance ($m\bar{t}z\bar{a}n$) within nature since

[t]he Qur'an considers Sakhkhara as an activity of God (14:33). As we have seen earlier, non-human beings have value in itself and there is no evidence in the Qur'an to prove that it is created only to serve human

beings. So scholars reinterpreted the word Sakkhara different from its literal meaning, i.e., subservience. (Abraham 2001)

Nomanul Haq (2001) draws attention to the ethical thrust contained within the notion of *taskhīr* which is always accompanied in the Qur'an by an attending moral dimension, drawing attention to that fact that Allah has subjected the earth to humankind *so that* they might give thanks and reflect. *Taskhīr*, hence "refers to Allah compelling the heavens and the earth to be of service to humankind that they may consciously appreciate His manifold blessings upon them and thereby give thanks to Him" (Setia 2004). Islam therefore, does not have to carry the burden of any scriptural imperative to subdue the earth and to establish dominion over the natural world, which the Judaeo-Christian traditions have been accused of. Manzoor contends that in spite of the "common 'monotheistic' vocabulary...the Qur'anic statement on man's ultimate purpose, and hence his relationship with nature, differs not only in tenor and syntax but in substance as well from that of the Bible" (1984, 154). The Qur'an expressly states that the dominion of the earth belongs only to God.

God alone is the One who has subjugated for all of you the sea, that through it the ships may run—by His command—so that you may seek of His bounty, and that, therefore, you might give thanks to God alone. And He has subjugated for you all that is in heavens and all that is in the earth—all of it from Him and no other! Indeed, in this there are sure signs of God's Oneness for a people who would reflect. The Kneeling 45: 12-13

While Creation fulfils the function of being of service to humanity, the human-environment relationship in Islam, is based on much more than utilization, construction and development, it includes meditation, contemplation and gratification (Izzi Dien, 1992b). Hence, *taskhīr* does not mean domination, control and exploitation of nature, but suggests that nature be seen as "a precious gift in the form of a ready and able companion or helpful friend who deserves to be treated with respect, understanding and a strong sense of responsibility and appreciation, as a precious divine bounty to be held in trust for all posterity" (Setia 2004).

In summary, nature fulfils three key functions, as signs of the Most-High, worshipping and glorifying Him; an ecological function as part of the inter-related and well-ordered universe; and an instrumental value in service of humankind and all living beings. Through an acceptance of the task of vicegerency, humanity is transcendentally committed to maintain the measure (qadr) and balance ($m\bar{t}z\bar{a}n$) in the cosmos. Setia (2004), in his discussion of the implications of intelligent design for scientists argues that "uncovering of the fine-tunedness of design parameters in nature compels them morally to work within the narrow confining limits of these parameters in nature, and never to transgress nor alter them" since, "...these are the ordained limits of God, so do not transgress them. For whoever transgresses the ordained limits of God, then it is such as these who are the wrongdoers" (The Cow 2: 229). The following principle, $fas\bar{a}d$, will delve into the implications of human transgression for the environment.

Fasād features prominently in the ecoIslamic discourse. Translated as destruction, corruption or mischief, fasād is said to apply to the realm of the environment as it does to any other part of life. It is the result of transgressing the limits of human behaviour as ordained by God. In addition, fasād is "inflicted by man's unwary interference with the natural laws and environmental systems" and "[e]nvironmental pollution, which is tantamount to the disruption of natural balance, is the main form of corruption on the earth" (Ghoneim 2000). The Qur'an refers to this as follows:

Corruption prevails in the land and the sea because of all the evil that the hands of humanity have earned—so that He may cause them to taste something of that which they have done—so that they may return in penitence to God. (The Byzantines 30: 41)

According to Qur'anic commentator, Bayḍāwi the meaning of fasād is "dryness of the land, many fires, many drowned and a reduction in the blessings of God" (Izzi Dien 2000, 53). Ibn Kathīr states that fasād will result in the rain being withheld thereby reducing the amount of crops in both food plants and fruits; and will also cause an adverse effects on sea animals (Al-Mubarakpuri 2000). Fasād is regarded as a test and punishment for what humankind has done on land and sea, since

"Whoever disobeys Allah in the earth has corrupted it, because the good condition of the earth and the heavens depends on obedience to Allah" (Al-Mubarakpuri 2000, 554). Muhammad Asad also remarks that humankind should not allow any change to corrupt the natural 'disposition' in God's creation (Asad 1984, 621). Thus,

...in the Koran there are ample instructions as well as warnings to the faithful not to abuse their power in dealing with the environment. Distortion of the natural order and ill-treatment of God's creatures, whatever they are, are considered as sins that lead to punishment. (Kula 2001, 4)

This interpretation, which extends the meaning of *fasād* to incorporate environmental pollution and destruction, has been wholeheartedly adopted by ecoIslamic thinkers. Many have in fact put forward the idea that the environmental crisis is primarily a failure of human trusteeship, and that nature becomes the index of how well a particular society has performed its responsibility towards God (Ouis 2003). *Fasād* is seen as resulting from the failure of stewardship of the human soul, which is ungrateful and obstinate in its transgression of Allah's Laws (Setia 2007).

The Qur'anic verse immediately following that of *fasād* calls upon the reader to travel in the land, and to observe and learn from the fate of earlier nations who had caused mischief in the land (See The Byzantines 30: 41). The fateful end of these peoples who were given power, authority and abundance but who abused the trust and rejected guidance is called to mind. Environmental cataclysm struck. This should serve as a stark reminder to contemporary societies, who are truly clever and well-settled in the earth, but who have 'transgressed' the boundaries and 'violated' the '*Sharī'ah* of creation' through its pursuit of limitless wealth and misapplication of technology (Lubis 1998). Thus, evidence of environmental *fasād*, such as desertification, the emission of poisonous gases, the unjust distribution of resources, and lack of clean water, is becoming apparent.

In their articulation of Islam's environmental ethic, Muslim writers are virtually unanimous in their contention that the environmental crisis is a direct manifestation of Western civilisation's application of science and technology, material capitalism and its attendant culture-ideology of consumerism (Nasr 1992;

Parvaiz 2003; Kamla, Gallhofer and Haslam 2006). Foremost among the critics of Western science is Nasr who claims that technological development by Muslims in the Middles Ages in fact came to an end because of an awareness of a threat to the natural environment. Le Gai Eaton, commenting upon the human settlements established by Muslims claim that these "blended perfectly into the surrounding natural environment" (1998, 45). While these claims require to be substantiated and might be regarded as nostalgic, it is becoming apparent that an environmental ethic is a logical outcome of a Qur'anic understanding of nature and humankind (Özdemir 2003).

While the West and scientists still negotiate whether we have an environmental crisis or not and the validity of the global warming phenomenon, Islam, some 1427 years ago, thus warned against mischief and mistreatment of the Earth. (Kamla, Gallhofer and Haslam 2006, 255)

However, the Islamic view of nature has been swept aside by forces of history and modernisation which treats the natural world entirely as an exploitable resource (Khalid 2002). The destructive impact of rising consumption, extravagant lifestyles, the misapplication of science and technology, and the usurious economic system—the outcome of <code>fasād</code>—is equally evident in Muslim societies (Lubis 1998; Dutton 2003). In addition to the revival of the Islamic ecoethic, Muslims must rethink the very basis of scientific inquiry, question the blind emulation of Western science and technology, and champion the use of alternative technologies (and economies) which are based on environmental and social justice. However, governments in the Muslim world

...seem to have neither the insight nor the courage and will to create an Islamic economic order in which the Islamic view of the relation of human beings to the natural world would be central. And, being at the receiving end, they are even less prepared than the highly industrialized countries to ameliorate, to some extent at least, the negative effects of modern technology. (Nasr 2003, 88)

Yet the Qur'an warns humanity to desist from wrong action and corruption (fasād) against the measured norms and order established by the Creator (Ahmad 1997):

O believers! Call upon your Lord, in humility and privately! Indeed, He does not love the transgressors who violate God's commandments. Nor shall you spread corruption in the earth, after it has been set aright by God. So call upon Him, in fear and hope. Indeed, the mercy of God is ever near to whose who excel in doing good. (The Heights 7: 55-56)

The balanced natural environment is a great favour of Allah, and as the vicegerents of God on earth, humans have to act with 'adl and iḥsān, with goodness and justice. The fasād verse (The Byzantines 30: 41), it is argued, calls humankind to desist from polluting and destroying the earth and to turn back from evil towards their 'innate' goodness. From the discussion thus far, it would appear that the conservation and sustainable use of the natural environment is regarded as an act of good in Islam. The notion of turning away from the unjust, evil actions which are destroying the earth towards goodness (environmental care) is expressed further in the next principle, that of fiṭrah, the primordial nature of humankind.

Fiṭrah, in this discussion, will focus on the natural inclination and predisposition towards goodness with which every child is born in accordance with the ḥadīth, "Every new-born child is born in a state of fiṭrah" (Ṣaḥīḥ Muslim n.d. 8(6926), 52). Intrinsic to this primordial state is the belief in the oneness of God, tawḥīd. Muslim scholars explain that as the physical body submits to natural laws, "the soul also submits naturally to the fact that Allah is its Lord and Creator" (Bilal Philips 1990, 49). The prophets and messengers serve as reminders and guides towards that which is intrinsic in human nature. Fiṭrah, the concept of original goodness and belief in One God, thus incorporates not only "passive receptivity to good and right action, but an active inclination and natural innate predisposition to know Allah, to submit to Him and to do right" (Mohamed 1996, 21). Yusuf Ali translates one of the key verses on fiṭrah as follows (Ali 1993, 1059-1060):

So set thou thy face steadily and truly to the Faith: (establish) God's handiwork according to the pattern [fiṭrah] on which He has made mankind: no change (let there be) in the work (wrought) by God: that is the standard religion: but most among mankind understand not. (The Byzantines 30: 30)

In his commentary on this verse, Yusuf Ali states that humans are created innocent, pure, true, free, inclined to right and virtue, and imbued with true understanding about humanity's position in the Universe and about God's goodness, wisdom, and power. This is the true nature of man, just as the nature of a lamb is to be gentle and of a horse is to be swift. Muhammad Asad concurs that the term *fiṭrah* connotes natural disposition as "man's inborn, intuitive ability to discern between right and wrong, true and false, and, thus, to sense God's existence and oneness" (Asad 1984, 621). Through his intellect and the exercise of free will, man is able to transcend negative influences and return to his original state of goodness. When living in her original state of *fiṭrah*, a human being becomes the perfect *khalīfah*, believing in and submitting to her Creator and His Laws (Mohamed 1996).

What implications does *fiṭrah* have for the issue of environmental concern? There are three central implications of *fiṭrah*: that right action is natural to humans; that Islam as *dīn al-fiṭrah* is the religion true to the primordial nature of humankind; and that human capacity to choose between right and wrong and the initiative to change himself or his circumstances can impact on the condition of the environment (Mohamed 1996). *Fiṭrah* is considered to be the natural state of humankind which is one of being in harmony with nature. Muslim ecotheologians argue that what is required is a "return" to this natural way of living - embodied in the teachings of Islam. The notion of *fiṭrah* is therefore in sync with the call by environmentalists to live with an understanding of the interconnectedness of everything in nature (Ouis 2003, 2). The conscious expression of *fiṭrah* is in the hands of humankind who must decide to live according to their deepest human nature which is beautiful, harmonious and right (Khalid, 2002).

Chishti, in her discussion of *fiṭrah* as a model to establish Islam's human-environment relationship, makes the following case. Since the environmental crisis is essentially a loss of the relationship between humans, nature and Allah, living according to one's *fiṭrah* provides a way to 'right' this relationship. Muslims, if they were to follow the dictates of the *Sharī'ah*, would discover that the primordial nature of humans is altruistic, that humans exhibit a conservationist bias and are lean consumers of natural resources, and that they always display thoughtfulness in action, carefully

weighing the implications of all their actions. According to Chishti, life in accordance with the *Sharī'ah* translates into life in accordance with the *fiṭrah* (Chishti 2003). Khalid (2005) concurs that a genuinely Islamic lifestyle, based on *fiṭrah*, will naturally be environmentally sensitive.

For Muslims, the Prophet Muhammad is the perfect expression of this *fiṭrah*, since his life depicts the Qur'anic teachings in action. In terms of environmental care, voluntary simplicity, moderation, and respect and concern for all Creation, his life abounds with examples of the Islamic environmental philosophy (De Chatel, 2003). Thus, in following the guidance of Islamic teachings and practices and emulating the lifestyle and behaviour of the prophets, humankind will discover the essence of the life transaction, which is ethical and moral behaviour in all human endeavours including

...behaviour towards Allah, behaviour towards people, behavior towards all of Allah's creatures. It is the pattern of living by example and discernment, and of living in a natural state in accordance to the laws that govern the universe, which we in Islam call fitra. (Lubis 1998, 1)

Thus, in order for human beings to 'find their way back' from the state of environmental crisis or <code>fasād</code>, would mean finding their way back to the original and natural state of purity into which they were born (Hussain, M. 2004). The solution is simply to live a truly Islamic life, "avoiding evils of extravagance and insanity of materialism, and attaining harmony with our surroundings and compassion for other creatures" (O'Barrett 2005, 33).

From these foundational ecoethical principles of the Qur'an, a clear picture of the human-environment relationship in Islam emerges. The Owner, Creator, and Sustainer of the entire universe is Allah. His Oneness, $tawh\bar{u}d$, infuses the entire environmental worldview of Islam with the recognition that nature originates from Him, is purposive, and functions in accordance with His Will. Humans have only been appointed as trustees on earth, holding it in usufruct, answerable for the just and responsible discharge of this trusteeship in accordance with the Divine Laws. *Khilāfah* is further shaped by the belief that humans, in their servanthood, are accountable for

all the goods in their care. Vicegerency must thus be fulfilled with justice ('adl) and goodness (iḥsān), moderation (i'tidāl) and respect.

Creation (*khalq*), which is a reflection of divinely-arranged structure and order, is deserving of care and respect since it possesses inherent value as the signs of Allah, ecological value as part of the integrated system which He designed, and utilitarian value in sustaining both humans and the rest of Creation. Thus while humans have the right to partake of the natural bounties of the earth, these rights must be tempered with moderation, balance and conservation. When nature is disrupted by evil human forces, such as misuse, destruction, extravagance and waste, corruption (*fasād*) will appear on the earth. This trend can only be reversed if humankind delves deep into their selves to uncover the innate goodness (*fiṭrah*) which they have been given to live in harmony with all of Creation.

These ecoethical principles, in my view, outline the major ethical considerations related to humanity's position vis a vis both the Creator and Creation. While this conceptual framework, if fully operationalised in the Muslim community, could lead to "a deep respect for nature, an appreciation of the interconnectedness of all life, recognition of the unity of creation and the brotherhood of all beings," (Sardar, 1985, 228), it is only the tip of the iceberg. The following section will focus on environmental jurisprudence, the principles, and institutions of the Sharī'ah as it pertains to the environment. According to Manzoor (1984, 158), any theoretical Islamic search for an environmental ethic "must pass through the objective framework of Sharī'a" since it "provides both the ethical norms and the legal structure" within which actual decisions pertaining to concrete ecological issues are made. The Sharī'ah is thus the roadmap defining the limits and conditions of human trusteeship.

2.1.2. Islamic Jurisprudence and the Environment

The word *Sharī'ah* means a path to be followed and linguistically refers to the way to a source of water. The source of law in Islam, which encompasses all aspects of life, is termed the *Sharī'ah*. While the Qur'an is the foundation of this sacred law, it

constitutes, together with the prophetic sayings and actions (Sunnah), the primary sources of the *Sharī'ah*. I will now consider the importance of this divine law in the lives of Muslims.

The acceptance of trusteeship places all human actions, first and foremost, before divine arbitration and subsequently every earthly act, whether "humble or grand, public or private, becomes charged with legal consequences" (Manzoor 1984, 157). However, in His mercy, the Most-Just Creator provided guidance to humanity in the form of the Qur'an and the Sunnah which lays down the parameters for human life on earth. Many Muslim scholars contend that according to the *Sharī'ah* caring for the environment is a religious obligation (Bagader et al. 1994; Izzi Dien 2000; Ahmad 2005). Thus, in order to implement the environmental teachings of their faith, Muslims will have to know which acts are mandatory, prohibited, disliked or recommended, in other words, they need to know the *fiqh* (substantive law) of dealing with the environment. Nasr (1992, 104) concurs that "the ethical treatment of the environment…cannot take place without an emphasis upon the teachings of the Divine Law, and hence upon the ethical and religious consequences for the human soul". Adherence to the *Sharī'ah* is ultimately incumbent upon every Muslim man and woman.

Secondly, many ecoIslamic writers contend that an environmental policy based on the teachings of the *Sharī'ah*, regarded as God's law, will resonate more with Muslims and elicit a higher degree of voluntary compliance than secular law (Ahmad 2005). This might especially be true in the case of societies where there is scope to introduce *Sharī'ah* law into the public sphere. However, in reality, there are few countries where this opportunity exists. Nevertheless, much effort is being directed towards producing environmental legislation, and "legislation becomes more effective and useful when it emanates from a nation's creed and when it represents its cultural and intellectual heritage" (Bagader et al. 1994, v).

Thirdly, the arena of the detailed judgements of the substantive law, *fiqh*, remains vital in the lives of many Muslims. Not only do Muslims learn the *fiqh* of prescribed acts of worship, but increasingly they are learning about the Islamic manner of

conducting economic transactions, participating in politics and interacting with members of other faiths - the stuff of everyday life. In the Islamic consciousness, Abu-Sway (1998) argues, *fiqh* is accepted and associated with laying down the foundation for the lawful and prohibited in human behaviour. In this way, it will be capable of modifying behaviour positively. Since it is also one of the core subjects taught in religious schools, 'environmental *fiqh*' could also be incorporated in books of *fiqh* and school curricula.

Fourthly, many Muslims are searching for solutions to contemporary challenges, including questions relating to the environment. Islamic jurisprudence can clearly contribute. While most of the existing jurisprudential work relates to ecological issues which earlier scholars faced, present-day jurists need to evaluate the same primary materials in light of modern challenges. The interpretation of the Islamic law in the light of contemporary environmental concerns can "make an outstanding contribution in establishing an environmental awareness among Muslims" (Ouis 2003). Muslim scholars therefore have a great task ahead to interpret the Islamic sources in an ecological perspective. Law and ethics in Islam is inextricably linked since it is concerned with righting the relationships between human beings and the Creator, with their fellow human beings, and with the rest of Creation - the *Sharī'ah* therefore plays a crucial role in defining the ecoethic of Islam.

Many ecoIslamic writers have put forward a convincing argument that time-honoured Islamic legal principles can be applied to address environmental issues which, they posit, were traditionally always a part of the *Sharī'ah* (Abu Sway 1998; Llwellyn 2003; Özdemir 2003). They suggest that existing institutions within *Sharī'ah*, such as *ḥimā* (reserves) and *ḥarīm* (inviolable zones surrounding water courses, roads and settlements) could easily be applied in contemporary environmental and conservation planning. In addition, Ouis (2003) challenges Muslim jurists to address practical (and contentious) environmental issues related to the permissibility of technologies such as nuclear energy and genetic engineering; the penalties associated with environmental damage; and the undesirability of living high-consumption lifestyles. Environmental jurisprudence is sorely needed to address these, and many other issues, which Muslims are facing.

While it is argued that the *Sharīʿah* translates the foundational ecoethical principles of Islam into practical injunctions, social institutions and legal maxims pertaining to the natural resource use, this environmental heritage has largely been lost in practice as many Muslim countries discarded (most of) the *Sharīʿah* (Bagader et al. 1994). In addition, the political situation in the Muslim world, including the tendency to view most religion-based activities as subversive, poses a major challenge to the introduction of anything Islamic—especially Islamic law. Ouis (2003) adds to this the adherence to the modernist development paradigm, premised on rampant consumerism, as well as the existence of ecological modernisation and superficial 'greenwashing' in Muslim countries.

Notwithstanding these challenges, ecoIslamic writers have started to look into the environmental issues dealt with in the *Sharī'ah*; identified contemporary challenges which require clarification; and established the basis for the development of a discipline of Islamic environmental law which will build the much-needed bridges between Muslim environmental and legal scholars.

2.1.2.1. The 'Environmental' Aims of the Sharī'ah

The *maqāsid al-Sharī'ah*, the fundamentals which the *Sharī'ah* aims to safeguard, have generally been divided by Muslim jurists into five: religion, life, posterity, reason and property. These constitute the essential prerequisites that should be protected for human society to function and prosper (Llwellyn 2003). Before discussing these, I will consider three aspects concerning the environmental implications of the *Sharī'ah* (Jenkins 2005). These three notions provide an integrated view of the goals of divine law as theocentric, in which the law intends to rectify an individual's spiritual standing with God; as anthropocentric in the creation of a just and holy society; and as ecocentric in mitigating creaturely harm.

The theocentric view centres on the status of an individual's relationship with her Creator and thus regards environmental care as spiritual obedience. Jenkins (2005, 352) states that *Sharī'ah* environmental laws, when regarded as occasions for

personal holiness, "may induce unrivalled personal motivation, resulting in environmental practices perhaps more appropriate" since according to this view

...any pretension to care for the 'environment' is bound to be either false, selfish, or fragmentary and thus short-term and short-sighted, unless it is grounded in awareness and love of Allah. (Hobson 1998, 37)

Thus, within the theocentric view, the aim of the *Sharī'ah* is to develop a right relationship with Allah, and ultimately to be a true *khalīfah* (vicegerent) on His earth. Environmental destruction is thus tantamount to a failure of human trusteeship as it is disobedience to the Divine command to caretake. But this Godcentred view of adherence to the divine law also has profound social implications – it addresses environmental problems as they pertain to the establishment of just relationships between humankind (Jenkins 2005). This view, which could be termed the human- or anthropocentric slant of the Islamic ecoethic supports the central role which environmental justice thinking has taken in many ecoIslamic works given that the

...Shari'a is more than a set of inward spiritual exercises, externally manifest in specifications unrelated to earthly goals; it expresses God's will for a holistically just society. More than 'ibadat, matters of service to God, the Shari'a is objectively concerned with matters of interpersonal justice, mu'amalat. Indeed, mu'amalat make up the greater proportion of legal provisions. (Jenkins 2005, 352-353)

The third view, which highlights the ecocentric slant within the aims of the *Sharī'ah*, has been central in much ecoIslamic works. This view "envisions the entire cosmos as the relevant legal community, thus orienting obedience to a justice embracing all creation" (Jenkins 2005, 353-354). A common assertion is that all creatures possess sanctity as signs of Allah and righteousness would then extend beyond human boundaries. One example of this view is the following statement which frames the ultimate objective of the *Sharī'ah* as "the universal common good of all created beings" with "no species or generation…excluded from consideration in the course of planning and administration" (Bagader et al. 1994, 17).

The fundamental ecoethical precepts outlined in Section 2.1.1. show the integration of all three visions—theo-, anthropo- and ecocentric— in formulating an Islamic ecoethic. While the ecoethic of Islam is undisputedly theocentric, as evidenced in the centrality of tawhīd and khilāfah; it also displays anthropocentric and ecocentric facets as shown in the ethical notions of justice, goodness and moderation ('adl, iḥsān and i'tidāl) and in the vision of Creation as āyāt Allah. While theocentric approaches towards the aims of the Sharī'ah dominate ecoIslamic writings, most in fact assimilate aspects of all three approaches, albeit prioritizing anthropocentric and ecocentric facets differently. The ultimate objective of the Sharī'ah, in the words of Llwellyn (2003), is in fact maṣāliḥ al-khalq, the universal common good and welfare of the entire Creation.

The traditional maqāsid al-Sharīʻah, according to many ecoIslamic works cover much that concerns environmentalists (Abu Sway 1998; Shah Haneef 2002; Llwellyn 2003). These five fundamentals of faith, which the Sharīʻah seeks to protect and safeguard, are:

- Religion $(d\bar{\imath}n)$ including the foundation of beliefs, moral values and ethics upon which Islamic society is built.;
- Life (*nafs*), referring to the sanctity of life;
- Posterity (*nasl*) or offpsring, ensuring that progeny are born and raised within secure family relationships;
- Reason ('aql) encompassing rational behaviour, both individually and collectively; and the
- Possessions, property or wealth $(m\bar{a}l)$ necessary for individuals to secure their livelihoods.

(Llwellyn 2003, 193-194)

Scholars are beginning to delve into the environmental implications of the *maqāsid*. Within the ambit of protecting religion, Izzi Dien (2000) considers all acts which 'manifest the eminence of God' as worship. Thus, any deed through which the doer seeks to achieve closeness to God is an act of worship and devotion. He then expands the notion of worship to include the worship of all creatures who submit to God in fulfilling a particular function, including the bee which pollinates the flower and produces honey and the tree which removes carbon dioxide from the atmosphere and produces fruit. Environmental destruction would therefore amount

to the destruction of both the arena in which this worship occurs, as well as the living beings which are in a state of worshipping the Most-High. Abu-Sway (1998) claims that environmental deterioration undermines the *Sharī'ah's* concern for life, mind, property, and religious observance. In his opinion, excessive pollution might pose threats to the existence of humanity (life), impact upon the health of natural resources (property), while life in highly-polluted cities impacts negatively upon psychological health (mind). Shah Haneef (2002) comments that environmental disaster could threaten the existence of living beings, including humanity and thereby 'vanish' the five essentials of life which the *Sharī'ah* aims to protect and preserve. Gallant (2006) goes one step further in suggesting that protection of the environment be added to the *maqāsid al-Sharī'ah* since none of them could be safeguarded in the absence of a healthy, functioning environment.

The application of the *maqāsid* to other species has also been considered by Llwellyn (2003) who posits that the *Sharī'ah* protects the life of all animals from wanton destruction, the posterity of animals by allowing them to breed, and the psychological well-being of animals through its prohibition of keeping them in cramped spaces, slaughtering the young in front of its parents and setting animals against one another in fights.

Another critical point derived from the *maqāsid al-Sharī'ah* is the consideration of the welfare of both present and future generations, both in a direct (through the preservation of offspring) and indirect (through safeguarding possessions, including natural wealth) manner. The most pervasive view, however, is that since the natural environment is concerned about all five dimensions with which the *Sharī'ah* is concerned.

...saving the environment in effect means protecting the essential objectives of the *Sharī'ah* and thus is an obligatory duty to be fulfilled by Muslims – a policy that God strongly urges Muslims to pursue and adopt. (Shah Haneef 2002, 254)

2.1.2.2. Sources and Methods of Islamic Jurisprudence

The *Sharī'ah* provides an understanding of how to implement the Divine Will in the most ethical and moral way (Llwellyn 2003). Before turning to a discussion of the particular environmental laws within the *Sharī'ah*, I will consider the key sources and methods employed by Muslim jurists to evaluate human actions. The science of the legal methodology of Islam (usūl al fiqh), a highly specialised area of Islamic law in which the "relationship between text, ethics and social application is scrutinised" (Izzi Dien 2000, 17), forms the basis for this section.

All acts in Islam are evaluated on a five-tiered scale - obligatory, recommended, permitted, reprehensible or prohibited. Jurists categorise human actions by drawing upon the principles of usūl al fiqh. This section will outline the key elements related to the formulation of Islamic law and will not delve into the varied methodological approaches adopted in the different schools of thought (madhāhib). Suffice to say though that within the different madhāhib, the sources of law are accorded different degrees of authority, save the Qur'an and Sunnah which are unanimously accepted as the primary sources of Islamic law.

The Primary Sources of Islamic Law: The foundational source of Islamic Law is the Qur'an. While Qur'anic legal rulings related to the environment are few and are of a general nature (Llwellyn 2003), the ethical precepts discussed above provide the framework for the human-environment relationship in Islam. Although the essence of Islam's ecoethic can be distilled from these Qur'anic precepts, deriving detailed rulings from general verses requires the skills of interpretation. This point has been discussed briefly in relation to the critique that ecoIslamic writers are not trained in the science of jurisprudence or in possession of the skills required for Qur'anic exegesis. Thus, as a matter of precaution, it is prudent that they restrict their writing to highlighting the broad ethical thrust of these teachings and work with Muslim jurists to derive rulings pertaining particular actions.

The second source of law, the Sunnah, is an expression of the Qur'an since the entire life of the Prophet , his sayings, actions and teachings, accorded with the

Qur'anic message. Muslim scholars developed a methodology to 'test' the authenticity of both the chain of narration and text of aḥādith. The most famous compilations of ḥadīth, in which the majority of aḥādith have been rigorously authenticated, are the collections of Bukhāri and Muslim.

Many Prophetic traditions, says Izzi Dien (2000), have an environmental flavour. He extracts key legislative guidelines gleaned from the Prophetic example, including: encouraging conservation as an act of good; caring for all forms of Creation; raising awareness of the universe and natural world; and environmental care as a personal responsibility which can gain reward or earn punishment. By way of an illustration, the famous hadith which states that a person carrying a palm cutting should plant it even if doomsday comes, is seen as encouraging tree-planting as an act of good. Thus, even when all hope is lost, planting should continue since it is regarded as good in itself (Izzi Dien 2000). Ramadan (2007a, 203) says this hadīth indicates that the "believer's conscience must, to the very end, be sustained by this intimate relation with nature." Furthermore, the Prophet's & love, care and concern for the kind treatment of animals is legendary; his protection of trees, plants and water sources, even in times of war, proves his respect for nature; and his lifestyle of simplicity, moderation and benevolence testifies to the Qur'anic dictum to 'eat and drink freely, but do not be excessive. For, indeed, He does not love those who are excessive' (The Heights 7: 31).

Before proceeding to discuss $ijm\bar{a}'$, $qiy\bar{a}s$ and other secondary sources of Islamic law, it is necessary to understand the concept of $ijtih\bar{a}d$, defined as an effort or exercise to arrive at one's own judgement (Doi 1984). While $ijtih\bar{a}d$, as a method of applying human reasoning to extract law extends to the interpretation of Qur'anic text and the evaluation and interpretation of $ah\bar{a}dith$, it also includes the process by which a jurist exerts his reasoning to formulate the principles of revealed law and to apply them to new problems or new situations (Doi 1984). Thus, it is at once a source of Islamic law when drawing upon earlier jurists' opinions and methodology of reasoning to make independent judgements; and a process which must adhere to the rulings and principles of interpretation (Jenkins 2005).

The 'newness' of present-day environmental problems indicate that resort to *ijtihād* is necessary. Contemporary environmental law thus requires "not only legal rulings and precedents from centuries gone by or ideal statements of general principle, but creative, practical, detailed application of these precedents and principles to specific environmental, socioeconomic, and technological problems" (Llewellyn 2003, 237). It is thus imperative to bridge the gulf that separates the Muslim environmentalist and jurist in order to display the richness of traditional resources in meeting contemporary environmental challenges.

No matter how sincere and well intentioned, attempts at *ijtihād* by environmental specialists without qualifications in Islamic jurisprudence are invalid, and attempts at *ijtihād* by jurists without practical experience in environmental issues are irrelevant. (Llwellyn 2003, 237)

The Secondary Sources of Islamic Law: While the hadīth corpus constitutes a rich resource for extracting environmental laws, the third traditional source of the law, universal consensus among scholars (ijmā'), is seldom used as conditions for its contemporary use seem unlikely. Qiyās (analogical reasoning) on the other hand, offers one of the most important tools for addressing new ethical challenges with traditional resources (Jenkins 2005).

Qiyās is a particular form of *ijtihād*. Known as deductive reasoning by juristic analogy, *qiyās* is a process whereby a jurist would, through analogical reasoning, apply the findings of an established ruling to a new case. This allows for the application of legal resources in situations not covered by policies developed from the first three sources of Islamic law. It does this by applying the rule (ḥukm) of established cases to new ones which share the same primary attributes and, transferring the legal justification (*'illah*) from the original case to one that is relevantly similar (Jenkins 2005).

EcoIslamic writers have already started exploring the use of $qiy\bar{a}s$, which is of particular relevance to addressing many present-day environmental questions. Abu-Sway (1998), for example, prohibits offshore sewage releases by making an analogy with a $had\bar{i}th$ in which the Prophet $had\bar{i}th$ forbade urinating into waterways. The

two cases share an attribute, i.e. human waste being released directly into water, thus the prohibition in the $had\bar{\imath}th$ is extended to offshore sewage release, which is in fact much greater in harm than the original case. Jenkins (2005) cites another potential case in which $qiy\bar{a}s$ could be employed, applying the extensive system of laws developed around the establishment and maintenance of a protected zone ($har\bar{\imath}m$) around water sources to water resource management today. Contemporary jurists would first need to identify a shared attribute, for example running water vulnerable to human disturbance. They then need to find an explicit reason ('illah) for addressing the attribute, such as maintaining public accessibility to safe water, before applying the ruling (hukm) of particular cases to similar situations.

Al-maṣālih al-mursala refers to judgements made on the basis of public welfare or benefit. Public interest, also referred to as maṣlahah, is the process of achieving good and removing harm within the boundaries of what Islam considers to be morally correct (Izzi Dien 2000). Scholars have divided public interest into three categories, the first of which was discussed above under the maqāsid al-Sharī'ah, the five fundamentals of life. The other two categories are maṣlahah hājiyyah, interests which are needed to live prosperously and without unjustified hardship e.g. human need for shelter; and maṣlahah tahsiniyyah, interests which beautify human life e.g. a beautiful and clean environment. Protecting the public benefit can be a powerful rationale for environmental legislation, but caution must be exercised in placing the interest in the correct category. Moreover, maṣlahah can only be established if it is based on actual and not imaginary interest, if it relates to public and not individual welfare, and if it does not violate any injunction of the primary texts (Izzi Dien 2000).

Though secondary sources of Islamic law, such as *maṣlahah*, allow for the formulation of law without explicit textual justification, it is always subject to the juristic rules and principles established in the primary sources. This would prevent them from becoming instruments of "broad social utilitarianism, only nominally connected to revelational sources" (Jenkins 2005, 350). Nevertheless, *maṣlahah* has the potential of garnering action on many environmental quandaries such as water

pollution (major interest), biodiversity conservation (needed interest) and public cleanliness (embellishing interest), as classified by Izzi Dien (2000).

Sadd al-Dharā'i, which literally means blocking the ways, refers to preventing the use of "outwardly legitimate means" as "pretexts for illegitimate ends" (Llwellyn 2003, 192). Scholars have explained it as closing the gate to evil where danger is anticipated, or in modern-day language, adopting a precautionary approach. Thus, legitimate activities which carry the risk of environmental damage could be prohibited. This source is similar to maṣlahah and many of the rules categorised under this source are in fact related to the preservation of public welfare or interest (Doi 1984).

Al-'urf al-ṣālih refers to customary practices and definitions which may acquire legal force when they accord with the aims of the Sharī'ah (Llwellyn 2003). It is regarded as a secondary source of Islamic law by all the schools of thought and it too falls under the same proviso as all other subsidiary sources: that they should not contradict any law derived from the primary sources; that they are only valid if there is no provision in the primary sources; and that they are used with utmost caution.

Through adherence to the methods of extracting laws, Muslim jurists, set forth the standards of behaviour which are chiefly enforced through individual conscience. While the jurisdiction of the courts also plays a pivotal role in applying the rulings of the *Sharīʿah*, the primary concern of the law is in fact individual actions. While this may provide some unease to ecoIslamic activists, especially those interested in institutionalising Islamic environmental law, others might see an opportunity "to underscore the spiritual importance of observing environmental protections" (Jenkins 2005, 351).

By adhering to the principles of the *Sharīʿah*, jurists draw upon the various sources of Islamic law to evaluate the consequences of a particular action, i.e. whether it will result in social good or social detriment. While safeguarding the universal common good is the ultimate objective which Muslim jurists seek to achieve, most often they

need to reconcile between different interests to reach the best solution. To this end, they often draw upon general legislative principles (*qawā'id fiqhiyyah*) which have been formulated from the Qur'an and Sunnah. These legal maxims are drawn from a comparative study of similar rulings and are used to solve a range of legal problems, to determine the benefit and detriments of particular acts and to prioritize acts according to specific criteria. Some of these, with their attendant legal principles, are listed below:

- Weighing the welfare of the greatest number; 'Priority is given to preserving the universal interest over particular interest.'
- Assessing the importance and urgency of the various interests; 'Every necessity shall be assessed according to its value.'
- Evaluating the certainty or probability of benefit or injury;
- Gauging whether those affected could secure their welfare without the governments intervention; and
- Averting harm.
 'There shall be no damage and no infliction of damage'.

(Bagader et al. 1994)

A study examining the judgements of Moroccan jurists from the ninth to fifteenth centuries, looks at the use of the axiom, 'There shall be no damage and no infliction of damage', to solve disputes and generate legislation related to a range of sociospatial issues. These include issues related to changing a residential property to a factory; determining the visual space of various parties; and ruling on incidences of encroachment in streets and alleyways (Kahera and Benmira 1998). Othman and Doi (1993) citing the principle, 'Damage shall not be eliminated by means of similar or greater damage', contend that the impact of modern science and technology cannot be mitigated in ways that result in equal or even greater damage to the earth. Thus the problems of waste disposal and exhaust fumes need to be countered through the best means possible. Another example considers the juristic principle, 'The averting of harm takes precedence over the acquisition of benefits'. Based on this maxim, a jurist could decide that a factory which pollutes the environment may be closed or that a housing development, which may be needed, be prevented in environmentally sensitive locations (Llwellyn 2003).

These juristic principles have been employed extensively by Muslim jurists and present an opportunity to not only introduce new regulations related to the environment, but to guide developmental decisions. However, these principles are never considered in isolation and the jurist is in fact required to reconcile between various interests to arrive at the decision which safeguards "the greater good by the exclusion of the lesser" and removes "the greater harm by acceptance of the lesser" (Bagader et al. 1994, 20). The legal maxims thus constitute a rich source of rulings which can be applied to many environmental questions today.

2.1.2.3. Environmental Jurisprudence in Islam: Laws, Institutions and Enforcement

The substantive legislation (*fiqh*) related to the environment is scattered across various subject areas in books of Islamic law. Examples of environmental laws relate to the use and protection of natural resources, such as land, water and minerals; laws relating to hunting and slaughtering; and the establishment and management of charitable endowments. Some of these will be considered below.

Islam's laws about the ownership, use and protection of natural resources, particularly land and water, provide the most extensive source of environmental law. Land is divided into developed, undeveloped and protected zones (Dutton 1992). Developed lands are places of human settlement and/or agricultural activity; undeveloped lands are neither settled nor cultivated (e.g. forests, natural grazing land and wilderness areas); and protected zones (harīm) or 'greenbelts' around developed land, play a role in safeguarding the land and ensuring access to it. A harīm is associated with all developed land, be it a well, house, or urban settlement, and therefore varies in size. For example, the harīm of a water source will incorporate that area around the water which enables access to it, by people, livestock, and wild animals, without causing congestion, damage, or pollution of the water. Whereas developed land and harīm land are either privately or communally owned, undeveloped land is held in common and may be administered by the government (Dutton 1992, 53-54). The category of harim land has captured the interests of modern-day scholars, with respect to its potential application in environmental planning. Harīm, as well as other institutions of land ownership will

be discussed later. While Islam recognises and protects the right to private ownership, there are important restrictions related to land use. A private owner could in fact forfeit his right of use and ownership if, for example, he contravenes or damages the rights of others or of society (Llwellyn 2003). The important caveat here is that whatever one 'possesses' on earth is in fact only held in trust and must be used in accordance with the Divine Will.

Islam's water laws, though largely extinct, remains one of the areas which continues to arouse the interests of researchers. Muslim jurists have a long history in the use, allocation and distribution of water resources in arid lands. Like other essential elements, water, in its natural state is regarded as common property as per the <code>hadīth</code>, "Water, forage and fire are free to be used by all. In these three things Muslims are partners" (Al-Muwaṭṭa 1999 3(836), 277). While Islam does make a distinction between private and public ownership of water, "all uncovered sources of water—rivers, oceans, lakes—are to be shared by all people and no individual or group of individuals can claim to privately own these resources" (Atallah, Ali Khan and Malkawi 1999, 65). However, when someone has put in effort to collect or store water, they can use and distribute it as they wish, except in situations of dire need where they are expected to share the water. In addition, ownership of land does not automatically confer ownership of groundwater resources.

The merit in providing drinking water to people and animals is greatly stressed in Islam, both by the Prophet & and his companions. In a famous incident, one of the companions, 'Uthmān ibn 'Affān, bought a well and established it as a charitable endowment, for use by all. Based on numerous Qur'anic injunctions pertaining to the equitable and sustainable use of water, prophetic sayings, and historical incidents, Muslim jurists established an intricate system of water rights. The classical legal system in Islam is chiefly focused on water rights to quench thirst; to establish ḥarīm; to determine the purity of water for ritual use; and to set up charitable endowments (waqf) for water distribution (Foltz 2002). This system was applied throughout the Muslim world until the early twentieth century. While its application has receded, even in countries like Iran which commits itself to following the Sharī'ah, many researchers are commending the revival of Islam's

water law, both in promoting the Islamic message of water conservation (Al-Roubaie and Vicas 1998; Gilli 2004), managing the shared water resources of the volatile Tigris-Euphrates basin (Atallah, Ali Khan and Malkawi 1999), and setting up charitable endowments to provide water to those in need.

Other natural resource laws which will be considered here are laws pertaining to plants and animals which have been categorised as domesticated and wild. With respect to domestic animals, rulings generally relate to ownership, obligatory annual taxation on livestock, and their kind treatment, including the etiquette of slaughtering which should be done "efficiently and humanely, and in a way that causes them least anxiety" (Dutton 1998, 63). The rights of domestic animals, as well as rulings pertaining to hunting wild animals, are enshrined in the writings of thirteenth century jurist 'Izz al-Din ibn 'Abd al-Salaam (Özdemir 1998). These include: not burdening a domestic animal beyond what it can bear, making its resting and watering places comfortable, and putting its males and females together during mating season. Furthermore, Muslim history testifies to the rights accorded to domestic and wild animals by way of the establishment of reserves (himā) for the cavalry as well as aged and helpless domestic animals; the hospitals created for the treatment of sick animals (Özdemir 1998); and the prohibition against killing wild animals for sport and without reason. Perhaps the most cogent take-home message concerning the status of animals in Islam is that kindness to them earns reward and their cruel treatment, punishment.

The wilful destruction of trees and plants, even in times of war, is strictly prohibited in Islamic law. In fact, numerous prophetic sayings extol the virtue of planting trees which will earn the doer great reward, as mentioned in the Prophetic instruction of planting a sapling even at the approach of Doomsday. The central message pertaining to these living resources are that they "demand respect and may only be used within very clear limits" (Dutton 1992, 65).

The laws, principles and rulings outlined here are intended to ensure equitable access and wise use of natural resources. It also endeavours to protect and safeguard land and water resources from misuse, damage and pollution and to guard against

the exploitation, ill-treatment and abuse of animals and plants. While these merely serve as an indication of the environmental laws which are in existence, they are by no means exhaustive. Islam also possesses a host of rulings related to protecting society from environmental damage; securing common pool resources such as water, forests, and pastures; and extracting the penalties associated with the contravention of these rulings.

A range of *institutional mechanisms*, some of which were discussed above, are also of relevance to Islam's environmental law, especially those associated with land and property. Many of these institutions need to be adapted to new technologies and socio-economic realities to enable them to survive. What we need to do is learn their basic principles and apply them to present-day environmental and conservation planning (Llwellyn 2003).

The following Islamic institutions, related to landholdings, all have important implications for the conservation of the environment:

- Land reclamation or revival of undeveloped land (*iḥya al-mawāt*) has the condition attached that only beneficial utilisation can establish the right of ownership. Furthermore, land in which development would be injurious to the public interest may not be reclaimed such as land which contains valuable water sources or a communal reserve.
- Land grants by the state (iqṭā) are grants of unowned land which is given for agriculture and other purposes by the state with exacting stipulations regarding how it may be used. This institution can be used to channel development to environmentally-suitable locations. The land subsequently becomes the property of the developer.
- Leasing land to a cultivator (*ijārah*) involves the leasing of state land with particular stipulations related to the type of development that can occur, as well as the improvements that may be made. Both *iqta* and *ijārah* are suitable institutions for managing land that requires special management practices.
- Reserves (ḥimā) established for public purposes and for the preservation of natural habitat can be managed either for conservation or sustainable production. Historically, most have combined both aims. Moreover, the ḥimā, which has been in existence since the pre-Islamic era, could most likely be the most widespread and long-standing indigenous, traditional protected area institution in the Middle East, and perhaps on Earth.
- Inviolable zones (ḥarīm) are akin to buffer zones or commonages where development is prohibited or restricted to prevent impairment of resource utilization, like a greenbelt surrounding every settlement. This concept is

- applied to water sources, roads and settlements and could easily be applied to managing the municipal lands of settlements, water catchments, and ecologically-sensitive areas.
- Charitable endowments (waqf) are the most important institutions by which Muslims contribute towards the common good. Charitable endowments play an important role in conservation today, and Muslims need to look at history to understand the potential application of waqf in achieving environmental objectives.
- In the two inviolable sanctuaries (al-ḥaramayn), i.e. Makkah and Madinah, injury and disturbance of wildlife and native vegetation are prohibited. These cities should therefore be models of environmental protection in which all development should proceed with care. However, the exigencies of development have taken over and most environmental rulings pertaining to these areas have been suspended in practice. This is indeed an opportunity lost as Makkah and Madinah could demonstrate the highest standard of both human conduct and environmental excellence when millions of pilgrims gather each year. The call to 'green' the annual pilgrimage (ḥajj) is now being championed by one ecoIslamic organisation, the Muslim Association on Climate Change Action (MACCA).

(Adapted from Llewellyn 2003)

The institutions of himā, harīm and waqf, in all likelihood, have the best chance of being applied in developmental and conservation planning in the Muslim world today. Ḥimā, meaning 'protected or forbidden place' existed before the advent of Islam, but was regarded as an instrument of oppression since it was used by powerful nomadic tribal leaders to protect the grazing and watering rights of rich lands for their own use (Gari 2006). However, the "socially conscious Prophet of Islam transformed the hima from a private enclave into a public asset in which all community members had a share and a stake, in accordance with their duty as stewards (khalifa) of God's natural world" (Verde 2008).

Many proponents of the revival of the $him\bar{a}$ system today cite several reasons for its potential, including the fact that remnants of $him\bar{a}$ still exist in some parts of the Middle East (Gari 2006). Characterised by great flexibility and highly adaptive to the needs of local people, the $him\bar{a}$ is still known to local people. While addressing the ecological problem of habitat loss, it could, at the same time, also promote sustainable use of natural resources by allowing traditional uses of the land that are compatible and even contribute to the ecological health of the reserve by allowing restricted hunting, grazing and collection of wild plants (Verde 2008). The $him\bar{a}$ also has immense potential as research sites for ecological and socioeconomic research

(Llwellyn 2003). One non-governmental organisation, the Society for Protection of Nature in Lebanon (SPNL), has already established several $him\bar{a}$ in Lebanon and is working towards reviving this system across the Middle East (Hala, Serhal and Llwellyn 2007). Inspired by the success in Lebanon, other Muslim countries are beginning to look into the hima which, according to Llwellyn, could be the "most important legal instrument in the shari'a for conservation of biological diversity" (Llwellyn 2003, 216).

The concept of <code>harīm</code> refers to a protected or banned zone which can preserve public areas from misuse by people, pollution and congestion. As discussed above, it can be applied to water sources, roads, and human settlements. Dutton (1992) contends that in <code>Sharī'ah</code> law, all developed land should have an attendant <code>harīm</code>. This institution can be of great value in addressing many contemporary problems, particularly those related to environmental planning. The institution of <code>waqf</code> remains vital in the Muslim world and the challenge to ecoIslamic activists is to highlight the environmental applications of this institution. One example of this institution is the Tree-Food-Water <code>Waqf</code>, a charitable endowment fund set up to plant trees, grow food and provide water in poor communities (Awqaf South Africa, 2009). The rationale for the establishment of this fund rests on the Prophetic sayings regarding greening, tree-planting and environmental awareness.

While the role of the individual and social conscience plays a key role in the *enforcement* of the rich body of environmental laws and institutions in Islam, "ethical teachings must be backed with sanctions" and law, power and authority is necessary to command the right and forbid the wrong (Llwellyn 2003, 220). Thus, enforcement of the moral imperative of good and right actions functions at various levels, the individual, communal, and state level. The Islamic State fulfils a powerful role in establishing the common welfare, including protection of the environment. The State has the responsibility to protect the environment and conserve natural resources, ensure adequate access to all resources held in common (such as water and pasture), and to develop new laws, where needed, to protect the environment. In addition,

Muslim governments are free to synthesize rules from traditional Islamic sources or to borrow from foreign sources, so long as the end result created is consistent with Islamic law and promotes the well-being of the community. (Roughton 2007, 119)

The function of establishing good and eradicating evil, the mandate of every individual Muslim, was also institutionalised in the office of the hisbah headed by a jurist called the muhtasib. The hisbah's duties, while incorporating environmental protection, extend beyond environmental considerations to ensuring broader societal well-being (Izzi Dien 1992a). The important role of the State in protecting the environment is further illustrated in the words of one Muslim governor in his 'inaugural' speech: "The Amir al-Muminin, Umar, has sent me to you to teach you the Book of your Lord and the Sunnah of His Prophet and to clean the streets" (Muinul Islam 2004, 58). From being one of the most important mechanisms for enacting and ensuring adherence to the law, the hisbah has all but disappeared. What remains today is the mandate of the individual conscience which, upon acquiring the knowledge to reform error and establish good, should act to correct any undesirable act, both within itself and others, while remaining within the ambits of the law. In the absence of the *hisbah*, this self-regulatory system should be harnessed and put to practical use in enhancing environmental issues and placing it "on par with the other social behaviour expected to prevail in Muslim society" (Izzi Dien 2000, 94).

While most Muslim countries have established environmental agencies, virtually none have incorporated the ideals of *Sharī'ah* or included elements of these traditional Islamic institutions (Hamed 2003). Llwellyn (2003, 221) poses the very pertinent question as to whether it would be feasible to revive these institutions, "extend it, and update it to discharge the responsibilities of its contemporary successors", i.e. environmental agencies or "to reform these contemporary agencies in a manner that would enable them to interpret and implement Islamic law?" Perhaps the latter would be more 'doable' since the institutional environment in most Muslim countries is still characterised by the virtual absence of personal freedom, an unwillingness to share environmental information, and limited citizen participation, the very ingredients required to implement a vibrant, people- and

earth-centred institutional system. In addition, proposals to revitalize traditional Islamic institutions are still "few in number, sketchy in content, overly optimistic" and have avoided any "serious assessment of implementing their schemes under the political conditions that prevail in Muslim countries today" (Hamed 2003, 417). In her assessment of the scope for implementing $\hbar im\bar{a}$, Gari (2006) agrees wholeheartedly with Hamed that the greatest obstacle facing the institutionalisation of Islam's ecoethic in the Muslim world is not environmental but political. Llwellyn (2003) concurs and concludes that

[t]he reality today is that the citizens of Muslim countries are among the least empowered people on the planet. The average citizen is not man—or woman—but a mouse! How can he or she be a *khalīfah*? Perhaps the worst thing about authoritarian rule is that it causes human beings to abdicate their roles as *khalīfas* on the earth: it reduces them to something less than fully human. (Lwellyn 2003, 222-223)

Opportunities for implementing and institutionalising the *Sharī'ah* are limited. While the link between law and action was much stronger in the early Muslim community when the ruler was both the leader and *faqīh* (jurist), the situation today is such that any hint at the introduction of Islamic law is met with opposition in most Muslim countries, ironically not by the people but by the leaders. It should therefore come as no surprise that much ecoIslamic activity can be found in the Western world where Muslims, fleeing political unfreedom, now constitute a budding minority community. Below, I will investigate the rise of environmentalism, based on the environmental teachings of Islam, to reveal what "Muslims are doing to save and protect the environment" (Foltz 2005a, xiii).

2.2. Muslim Eco-activism: Raising the Green Banner of Islam

The burgeoning interest in the Islamic position on the environment is reflected in the steady growth a 'green' movement amongst Muslims the world over. Drawing upon the ecoethic of Islam, these 'green' Muslims have started to establish ecoIslamic projects in the cities of Canada and England, the forests of the Philippines and Malaysia and the coral reefs of Zanzibar. The green banner of Islam is also surfacing on the internet through the vibrant discussions on blogs, Facebook

and various mailing lists. These initiatives reflect the fact that Muslims are increasingly looking towards the environmental teachings of Islam to change the direction of not only their own lives and lifestyles, but that of their communities and societies. This is evidenced in the timely publication of the books, 199 Ways to Please God. How to (Re-)align Your Daily Life with Your Duty of Care for Creation (ten Veen 2009) and Green Deen: What Islam Teaches About protecting the Environment (Abdul-Matin 2010a). Both publications seek to provide practical suggestions on ways in which Muslims can live in harmony with nature. Building on the growing awareness that environmental care is a religious obligation in the life of a Muslim, ten Veen (2009) suggests 199 ways in which every Muslim can earn the pleasure of Allah, 199 ways of caring for the earth that has been entrusted to humanity.

Within the context of diverse Muslim societies, Foltz (2005a) in his seminal publication, *Environmentalism in the Muslim World*, argues that a successful indigenous environmental movement world requires demonstrated compatibility with Islamic norms. Religious teachings, it would seem, remain a strong factor in the ethical dimensions of Muslim life; while the theology of nature, outlined above, has not been entirely forgotten in Islam.

Practical efforts to translate the Islamic ecoethic into practice have emerged worldwide. In Saudi Arabia, the Jabal 'Aja Biosphere Reserve, set up under the *Sharī'ah* system of *ḥimā*, is contributing to the revival of the *ḥimā* system in the country (Khalid 2005). In Pakistan, Islamic environmental ethics is being infused into the environmental education strategy of WWF-Pakistan (Ayaz et al. 2003), while the United Nations Educational, Scientific and Cultural Organisation (UNESCO) has initiated the establishment of a network of Qur'an Botanical Gardens, housing plants mentioned in the Qur'an, throughout the Middle East (Bibbo 2008). The Misali Ethics Project based in Zanzibar, captured international attention when it brought together environmentalists and religious scholars to promote conservation messages through Qur'anic texts (Ooko 2008). The discussion below will outline some of the key organizations—international, governmental and nongovernmental—as well as various initiatives demonstrating the rise of green Islam.

At the international level, several inter-faith initiatives such as the Alliance for Religion and Conservation (ARC), the Harvard-based Forum on Religion and Ecology (FORE), and various UN initiatives have created opportunities for showcasing the environmental perspective of Islam. These global activities have brought together leading ecoIslamic thinkers through conferences and produced key publications and official statements on Islam and the environment. Within the Arab World, the Organization of the Islamic Conference (OIC), with a membership of 57 countries spread over four continents, has organised three inter-governmental conferences of Environment Ministers, the First (2002) and Second (2006) convened in Jeddah, Saudi Arabia and the Third Islamic Conference of Environment Ministers recently held in Rabat, Morocco (2008). The first conference led to the production of the Islamic Declaration on Sustainable Development which was presented at the WSSD in Johannesburg (First Islamic Conference of Environment Ministers 2002). Other outcomes of the OIC initiative has been the development of a twelve-point plan on the environment; as well as proposals to establish of a range of communications initiatives to raise awareness of environmental issues in the Arab world. These include the establishment of an Islamic media network concentrated on the environment (Islamic Network for the Environment); as well as a TV channel specialized in the environment and called Bee'atee (My Environment). Moroccanbased, Islamic Educational, Scientific and Cultural Organisation (ISESCO), plays a pivotal role in co-ordinating the activities of the OIC initiative. Most importantly though is the commitment by the OIC to draw on the Islamic approach towards the environment.

The governments of Saudia Arabia and Iran are the most likely candidates for the formal articulation of an Islamic environmental ethic due to official commitment to implementing *Sharī'ah* law. Saudi Arabia has played a key role in spearheading the OIC initiatives, and through its wildlife and environment departments are beginning to make headway in reviving the <code>himā</code> system (Khalid 2005). Iran, according to Foltz (2005b), provides the strongest evidence of an applied Islamic environmental ethic. Environmental care is enshrined in the Iranian constitution; Iran's Department of Environmental Protection promotes the retrieval of Islam's environmental values through conferences and workshops, and urges leaders to use Friday prayers to

impart the environmental message of Islam. However, much of the official efforts have been hindered by unenforceability, as well as a lack of interest on the part of religious leaders (Foltz 2005b).

Other governments, however, are only just beginning to acknowledge the potential of Islam's environmental perspective in raising ecological awareness. While most of these countries, such as Turkey, Pakistan, and Egypt have established environmental ministries, they have rarely tapped into the religious resources of Islam. Within the changing political environment of Turkey, there is now official cooperation between the Presidency of Religious Affairs and the Ministry of the Environment to educate religious leaders (*imāms*) on the environment (Özdemir 2005). In Egypt, a country which is 90% Muslim, Islam's environmental teachings have been equally underutilised (Hamed 2005; Rice 2006). Surprisingly, efforts at integrating the ecological teachings of Islam in Pakistan have not come from the government, but influential international NGOs active in this ecologically-rich country (Rizvi 2005).

The secular basis of the environmental movement in the Muslim world is equally visible in the NGO sector. While environmental non-governmental organisations (ENGOs) have been set up across the world, for example the Green Front of Iran, the Environment Foundation of Turkey and Egypt's Society for Improving the Environment, very few are based upon the eco-justice ethic of Islam. Even Iran's environmental movement, which is grassroots and broad-based, representing a diverse range of opinions, has seldom used Islamic messages (Afrasiabi 2003). There are notable exceptions, such as the Green Front of Iran, which while not overtly Islamic, established a committee to compile Qur'anic verses and aḥādīth on the environment for religious leaders and organisations (Foltz 2005b). Intellectuals and academics have played a leading role in reviving Islam's ecological message, as evidenced in Turkey (Özdemir 2005). Influenced by the anti-modernist critique of Nasr, and the works of Turkish mystic poet, Yunus Emre and Islamic thinker, Said Nursi, Turkey's ecoIslamic thinkers have had to contend with the overtly secular structure of its government, suspicious of any form of religiosity. This is beginning to change.

The Muslim ENGO sector in the United Kingdom, United States and Canada, tells a different story. An active Islamic environmental movement, spearheaded by the Islamic Foundation for Ecology and Environmental Sciences (IFEES), Wisdom in Nature (WIN), and iEnviro Canada, is lending its voice to critical environmental debates. From tentative beginnings in the mid-1980s, IFEES is internationally recognized for articulating the Islamic position on the environment (Khalid, 2005). It has conducted workshops on Qur'an, Creation and Conservation throughout the Muslim world, from Madagascar to Indonesia, and played a pivotal role in the Misali Ethics Project in Zanzibar, where a conservation project based on Islamic ethics has been successfully employed in a marine conservation environment. Working with community leaders and fishermen, the project promoted marine conservation awareness based on Islamic teachings and produced a range of resources including posters, a video and the recently published, Teachers Guide Book for Islamic Environmental Education (Khalid and Thani 2008). IFEES has also partnered with Lifemakers UK in the publication of a Muslim Green Guide to Reducing Climate Change (Lifemakers UK and IFEES 2008). In addition to the publication of EcoIslam, an online journal carrying news of ecoIslamic environmental initiatives across the world and the maintenance of an e-list, IFEES remains active in representing the Islamic voice on the environment across the world.

The London Islamic Network for the Environment (LINE), renamed Wisdom in Nature (WIN) grew out of an e-list, *Ecobites* and was established in 2004. It has been actively involved in the UK environmental movement, joining in national campaigns related to fair trade, climate change and genetic engineering. Its on-line newsletter, *Line Leaf*, publishes information related to environmental activities across the UK. WIN has also organised a Green Islam Day, runs regular seminars and lectures, and has held organic *iftār*, occasions in the month of *Ramaḍān* where Muslims would break their fast with organic food. While both IFEES and WIN have been working on raising awareness of climate change amongst Muslims, UK-based Earth-Mates Dialogue Centre, focuses specifically on developing a Muslim response to climate change. It released the Istanbul Declaration, the Muslim 7-year-action-plan on climate change, endorsed by more than 50 religious scholars from across the Muslim world in July 2009. One of the key outcomes of the Istanbul Declaration

is the establishment of the Muslim Association for Climate Change Action (MACCA) which will oversee the implementation of the action plan.

In the US and Canada, iEnviro Canada and the Muslim Green Team, have raised awareness of Islam's environmental message through a range of community activities and educational programmes, such as clean-up campaigns; EcoFairs; recycling programmes in mosques; tree-planting; and a planned Green Hijab Day during which Muslim women would don green headscarves (ḥijāb). Other initiatives, many of which are internet-based, also originate from these countries such as websites on genetically-modified food and Islam, animal rights and vegetarianism and greening and tree-planting. Facebook groups, such as EcoIslam, Green Deen and Muslims for the Environment, as well as blogs, Green Muslims in the District (Washington-based), Green Creation (UK-based), and A World of Green Muslims are additional examples of these activities.

In the rest of the world, it has been mostly Muslim academics and intellectuals who have roused interest on ecoIslamic perspectives, the local NGO sector, on the whole, remains silent and/or inactive. The Africa Muslim Environment Network (AMEN), established in 2005, does not appear to have launched any activities yet. It was in fact an international NGO, CARE, which supported the Misali Ethics Project in Zanzibar in conjunction with IFEES. A similar trend can be observed in the populous Muslim communities of the Philippines, Pakistan, Malaysia and Indonesia where international ENGOs have cottoned-on to using the environmental message of Islam, both to raise awareness and to encourage compliance with environmental laws.

The United States Agency for International Development (USAID), through its offices in Mindanao, Philippines produced a sourcebook on environmental governance based on Islamic teachings and practices (USAID, 2007). Entitled, *Al Khalīfa (The Steward)*, the book is available in the local language as well as English and seeks to apply the ecoethical code of Islam to local environmental problems related to forest management, marine and coastal resource management and waste management. In the production of the resource, the active involvement and

endorsement of religious leaders was obtained. USAID has also investigated the connections between faith and conservation in Africa with a view to establishing partnerships with faith communities (Gambrill 2011). Arensberg, in a 2004 study, found that there were no conservation education projects in Malaysia explicitly using Islamic environmental principles; no government policies incorporating Islamic thought on the environment; and that the very idea of Islamic environmentalism had not yet taken root (Arensberg 2004b). Five years later, one finds a different situation. The World Wildlife Fund (WWF) has enlisted Malaysian *imāms* (religious leaders) "in the fight for wildlife conservation, using passages from the Koran to raise awareness and help protect some of the world's most endangered species" (WWF 2009). WWF Pakistan and the IUCN have acknowledged the value in winning the support of religious leaders in environmental work. WWF Pakistan published the book, *Conservation and Islam* (Ayaz et al. 2003), specifically aimed at Islamic scholars, while IUCN assisted in the compilation of Pakistan's National Conservation Strategy (Rizvi 2005).

Conservation International and the World Bank have been active in the most populous Muslim country, Indonesia, by co-opting religious leaders in the establishment of conservation programmes. Conservation International through its programme entitled, Conservation and Religion, has promoted environmental awareness through workshops and educational initiatives in Islamic schools. A river conservation programme, piloted by an Islamic boarding school (pesantren) near Bogor, Java, and modelled on the Sharī ah conservation model of ḥarīm, has just been launched. It is hoped that the project will showcase Islamic forms of conservation and raise environmental awareness in Indonesia, in which the rural populace remains heavily dependent on natural resource to sustain their livelihoods (Mangunjaya 2009). It would appear that the Islamic environmental message is even entering Indonesian politics with one Islamic party developing a strategy to improve environmental performance; and the recent religious ruling (fatwa) issued by notable jurists in Java prohibiting the development and use of nuclear power (Ali and Hidayat 2008).

The introductory nature of the literature reflects the fact that Islamic environmentalism is still in its formative stages. The main focus of ecoIslamic organisations at present is centred on the revival of Islamic ecological ethics – thereby building the environmental literacy of Muslims. Since caring for the environment is a religious duty in Islam, knowledge of how to care for the environment, in other words environmental education, is necessary (Abu-Hola 2009). Education, according to IFEES' Fazlun Khalid, is just the beginning and already the impact of the initial period of awareness-raising is being seen in the growth of Muslim environmental groups and the alliances being built between Muslims and social activists on environmental and social justice issues. As an "active religion concerned with action on core ethical principles that are deeply congruent with a love of the planet", Abdul-Matin proposes that the key tasks of Islam's growing environmental movement are to tell our stories, get educated, and connect with people of other faiths with the ultimate aim of becoming better representatives of God on the planet (Abdul-Matin 2010a, 14).

Arensberg's (2004b) suggestion that Islamic environmentalism primarily possesses utility in education and awareness-raising is being put to the test by initiatives which are beginning to look at the revival and application of Islamic institutions, such as the <code>himā</code>, <code>harīm</code> and <code>waqf</code> in the Muslim world. In addition, a number of organisations and scholars are starting to articulate the Muslim response to climate change, water conservation, genetic engineering, cloning and the development and use of nuclear energy (and weaponry). In the following section, I will draw out the key features of the theocentric eco-justice ethic of Islam constructed in this chapter, and evaluate this ethic in relation to anthropo- and ecocentric ecosophies.

2.3. How Green is Islam's Eco-justice Ethic?

The eco-justice ethic of Islam formulated in this chapter is comprised of broad Qur'anic ethical principles which define the relationship between the Creator, humankind and Creation, and a system of juristic methods, laws and institutions—the *Sharī'ah*—which puts these precepts into action. When viewed "in an environmental sense, the Shariah and Qur'anic concepts provide a very effective

ethical and pragmatic answer to our environmental crisis" (Sardar 1985, 224). Furthermore.

The concerns now being expressed are not new readings or interpretations of Islam but a much-needed expression and recognition of the relationship between humanity and nature, and accountability to God, that have always been present within Islam. (Ball 2008, 2)

Rooted in the concept of monotheism, this ecoethic is avowedly theocentric. The oneness and unity of God, or tawhīd, affirms that God is the absolute source of all values and the Owner and Sustainer of the entire universe. Tawhīd has profound implications for human conduct, including human-environment relations. The notion of khilāfah or human vicegerency entails living in accordance with the expectations of its Bestower. Khilāfah thus has profound implications for the life and lifestyle choice of a Muslim. Several parameters have been set in the Qur'an to guide human trusteeship on earth - these have been applied to how humans perceive and interact with Creation. Moderation, justice, kindness, prudence, wisdom and respect should guide natural resource use. Nature (khalq) and its bounties are to be appreciated not only for its value in sustaining life on earth, but as signs of the Most High, praising and worshipping Him. Muslims are repeatedly forewarned in the Qur'an against causing corruption (fasād) on earth, by exploiting and oppressing the weak and poor, and misusing, polluting and wasting natural resources, created in measure and for the benefit of all. Instead, Islam urges Muslims to observe the rights of others, both present and future generations, human and non-human, and to live in accordance with the teachings of the Divine Law, the Sharī'ah, which concurs with human fitrah, the beautiful deepest human nature which has been gifted to humanity.

The eternal and dynamic Islamic legal system, the *Sharī'ah*, is composed of both a legal methodology and substantive laws which respond to contemporary environmental challenges. The ultimate objective of the *Sharī'ah* lies in securing the universal common good and welfare of the entire Creation, in compliance with the Qur'an and Sunnah. The *Sharī'ah*, at once, seeks to rectify humanity's relationship with the Creator, inculcate just and moral behaviour in society, and mitigate all

creaturely harm. Thus, Muslims are meant to actualise the precepts of their faith by implementing the *Sharī'ah*, the roadmap for navigating life on earth. While matters of worship such as prayer, fasting and the pilgrimage are discussed in detail by Muslim jurists, the bulk of legal provisions pertain to social intercourse ($mu'\bar{a}mal\bar{a}t$). Justice pervades Islamic laws pertaining to the ownership and use of natural resources, such as property laws, water resource management, and the treatment and rights of domestic and wild animals. The *Sharī'ah* in fact advances the norm incumbent on all believers – this includes the standards for interacting with Creation. Even in the absence of enforcement, every Muslim is aware of her responsibility to live in accordance with its teachings since she will be called to account for every atom's weight of good or evil committed on this earth.

How does this eco-justice fare on the green scale? Neither O'Riordan's (1981) techno- versus ecocentric environmentalism, nor Pepper's (1997) ego-, homo- or ecocentrism accurately captures the Islamic eco-justice ethic formulated here. While Pepper (1997), in his discussion of Christian liberation theology acknowledges the growing alliance between ecocentric and theistic approaches, neither his egocentric religious (human dominion) nor homocentric religious (human stewardship) categorizations depict the human-nature conception of Islam accurately. The key differences between anthropo-, eco- and theocentric environmental ethics are outlined in Table 2.1..

Kockelkoren's categorization of master, steward, partner and participant in nature provides greater space for Islam's theocentric ecoethic (de Groot and van den Born 2007). In her relation to the Creator, a Muslim is a *steward* on earth, with the responsibility of living in kindness, compassion and justice with all of Creation and caring for the gift of nature in accordance with the laws of its Bestower – in accordance with the *Sharī'ah*. In relation to Creation, humankind enjoys the rights – as do all other living beings, to partake of nature's bounties, but humans are at the same time a *partner* of Nature, unified in praising and glorifying the Originator of the Universe.

Table 2.1.: A Comparison of Environmental Ethics

Environmental	Key characteristics		
Ethic	Human-Nature Conception	Orientation of Responsibility towards Nature	Value of Nature
Anthropocentric	Humans and Nature as two distinct entities.	Humans	Nature is valued for its utility to humankind.
Ecocentric	Humans and Nature as members of one biological community.	Ecosystem	Nature has intrinsic value.
Theocentric	Humans and Nature as God's Creation.	God	Nature has intrinsic value as Creation, and is of ecological and utilitarian value to all Creation.

Stewardship has both secular and religious interpretations and involves responsible usage of resources in which the trustee is answerable to a higher authority, either in the form of societal moral agents or God. It therefore provides an "explicit, rational, moral underpinning for our treatment of the natural world" (Worrell and Appleby 2000, 266). Environmental ethicist, Attfield (2003), concurs that the true value of this concept lies in its emphasis on responsibility and answerability. Rather than the extreme anthropocentric interpretation of stewardship, akin to human dominion, both the religious and secular interpretations of stewardship encourage environmental concern and "remains a significant metaphysical belief, capable of inspiring more specific principles of environmental ethics, and capable also of motivating people to live responsibly" (Attfield 2003, 36). Since stewardship or khilāfah in Islam incorporates both responsible trusteeship (amānah) and accountability (mas'uliyyah), and requires the believer to live by the Qur'anic principles of justice, kindness, gratitude and compassion to all of Creation, it is easily tractable to environmental stewardship. Moreover, khilāfah in Islam exemplifies the 'lived spirituality' which liberation ecotheologians are calling for.

What then of humankind as a *partner* of nature? In his categorisation of ecoethics, Frankena (1979) places the theocentric ethic closer to the ecocentric end of the spectrum (See Figure 2.1.). While he does not discuss theistic ecological ethics in

detail, he does allude to the various shapes which they could assume, depending on whether God is conceived of as a person, as immanent or as transcendent. In Islam, the Creator, Allah is conceived as transcendent, and the <code>tawhīdic</code> (Divine Unity) framework, outlined in Section 2.1.1. shapes the human-nature conception in Islam. Humankind is regarded as a partner of nature since the "Oneness of God as a creator, links his creation to His sacredness", rendering all beings dependent upon Him, and tying all of Creation together "in an ephemeral relationship of interdependency and respect" (Ammar 2001, 194). While some ecoIslamic works have suggested that this notion parallels Deep Ecology thinking, i.e. humankind as participants in nature, there are marked differences.

Gottlieb (2001, 17) suggests that spiritual Deep Ecology, with its sense of reverence for and sacredness of nature, "occurs within the discursive, emotive, cognitive, and at times, even institutional space of world religions". Deep Ecology originated as a movement which brought together disparate voices focused on a deep questioning of the worldviews underlying the ecological crisis, and set out basic, shared values to unite these positions. Deep Ecology and religion do share common concerns, such as a deep-seated unease with the anthropocentric environmental ethic which unleashed the modern scientific worldview and a search for meaning in the universe. The Islamic ecoethic, like Deep Ecology, is opposed to the 'secularization' of the natural realm, an approach which they believe has played a major role in the disenchantment of nature in the modern world. Both also contest the dichotomy between faith and reason, mind and body, ethics and law, and humans and nature. Some of the leading contemporary Muslim scholars have in fact established the ecological ethic of Islam on the central epistemological caveat that no knowledge in Islam exists independently of ethics (Shah 2001). Other commonalities, between Deep Ecology and Islam in particular, include: assigning an intrinsic value to nature independent of its benefit to humankind; viewing the environmental crisis as an opportunity for humans to transform and better themselves; recognising that humankind is a part of Creation; raising awareness of the significance of the natural world and the dire consequences of its destruction; and regarding the earth as living (Ammar 2001; Al-Naki 2004; Hussain, M. 2004). However, the human-nature conceptions of Deep Ecology and Islam are, at its core, markedly different.

While it started as a political platform, Scott (2003) opines that the 'looseness' of the Deep Ecology movement is now disappearing and its philosophical precepts, which incorporate cosmological models, are not amenable to theological interpretation. Islam is unequivocal in assigning divinity to God alone, nature, while possessing intrinsic value by virtue of it being the Divine book which has to be revered, contemplated and respected, is at best a theophany, attesting to the Magnificence of its Creator. Islam also posits humanity as occupying a central position in the natural order, albeit linked to the weighty moral burden of responsible trusteeship, which incorporates right action towards all of Creation. The Islamic human-nature conception therefore is antithetical to positions in which "one who, being awed by those signs, worships them, instead of God to whom they point; or one who, seeing nothing in those signs except distractions in one's way of seeking God, rejects them; and one who, having denied God, appropriates the Divine Signs for one's own ends and changes them in pursuit of illusory development" (Ismail 2008, 17). Neither extreme ecocentric or anthropocentric ecophilosophies, nor misplaced ascetism, feature in the eco-justice ethic constructed here.

The eco-justice ethic of Islam constructed in this study is comprised of cogent ecoethical precepts and a dynamic, powerful legal system which promotes just, responsible and respectful interaction between humans and nature. The religious duties of humankind, in the Islamic worldview, extend to the environment since caring for the earth is an act which can earn reward and lead to punishment. Thus, the Muslim should "not only feed the poor but also avoid polluting running water. It is pleasing in the eyes of God not only to be kind to one's parents, but also to plant trees and treat animals gently and with kindness" (Nasr 1997, 9). This ecoethic, to my mind, presents an example of liberation ecotheology since it shows that caring for the earth and humankind is a religious duty; focuses on right action in the life of this world; and constructs an alternative environmental imaginary, based on the sovereignty of God ($tawh\bar{\iota}d$), the responsible trusteeship of humankind ($khil\bar{\iota}a$) and the value of all Creation. It also highlights the importance of religion as a vehicle for political, socio-economic and environmental change.

The ecoethics of Islam is being revived by a growing ecotheology movement which is establishing alliances for social and ecological change. EcoIslamic activities are sprouting across the world. IFEES has launched an 'eco-jihad' clean-up campaign entitled, Clean Medina (A Clean City), in Birmingham, UK with plans to replicate it across the Muslim world. The Misali Ethics Project, in 2000, was accepted by WWF International as a Gift of Islam at the Sacred Gifts for a Living Planet Programme, the only project on offer from the whole of the African continent. Ḥimā Al Humayd, a community conservation area in Saudi Arabia is indicative of the move to restore this age-old conservation system, which has dwindled from 3000 to a few dozen. By reminding Muslims of the Qur'anic environmental teachings of moderation, thankfulness and responsible trusteeship; and Prophetic sayings related to water conservation, environmental awareness and tree-planting; ecoIslamic activists are working towards reviving the green teachings of Islam. They are also building alliances with other social movements to address a wide range of social concerns such as debt relief, fair trade, and genetic engineering.

A wealth of opportunities exist for the practical application of this ecoethic, both in countries where Muslims constitute the majority and where they are living as minority communities. The African continent for example, where close to 60% of the population is Muslim, begs further investigation. There are several barriers to implementing an Islamic ecoethic, but above all else is the challenge of raising Muslim awareness of the environmental implications of Islamic teachings.

Despite the existence of this ecological ethic within the teachings of Islam, the environmental track record of Muslim countries is dismal and the extent of environmental problems staggering. Regardless of the religious injunctions and encouragement to respect and care for Creation, evidence of environmental degradation, wastage and excessive consumption are equally visible in countries where Muslims are living. Muslims, for the most part, are at present moving away from the non-commodified way of life espoused by their faith, and are rapidly adopting and emulating the consumption-driven lifestyles and neo-liberal development agendas. The Muslim world also continues to regard the environmental crisis as an external problem, arising as a result of the application of Western

technology (Ammar 2001, Foltz 2005a). Few acknowledge the fact that this technology has in fact been uncritically accepted and emulated in the Muslim world; that scientism remains the dominant paradigm; and that the solution to the environmental crisis, as with all other issues, is still largely based on Western models (Nasr 2003).

Le Gai Eaton and Nasr criticize contemporary Muslim movements who display carelessness towards environmental concerns. They concur that both modernists who "insist that 'outward things', including much that is required of us by the *Sharī'ah* (Islamic law)...do not matter" (Le Gai Eaton 1998, 44) and revivalist movements who are 'blind' to Islamic teachings on the environment, even though they are justice-based, and could thus easily incorporate the ecoethics of Islam in their programmes (Nasr 2003). The latter group, spearheaded by liberation theologians such as Egyptian Sayyid Qutb, continue to face the autocratic and dictatorial regimes in the Muslim world. The establishment of an environmental movement, based on Islamic principles, is a necessary, but threatening undertaking (Nasr 2003). In my view, revivalist movements in the Muslim world are well-placed to broadcast the ecojustice ethic of Islam to the hearts and minds of Muslims across the world.

Profound political change in the Muslim world, which was a pipedream a year ago, is now afoot. It remains to be seen whether the anticipated political changes will impact upon the prevailing political economy of the Middle East which, for the most part, emulates conventional Western models of development. It will also be interesting to observe whether environmental groups, concerned with the rights and freedoms of humanity and nature, will now be able to tap into the ecological ethics of Islam and thereby contribute to the much-needed liberatory discourse in the Muslim world.

The lack of awareness of the Islamic teachings on nature is regrettably found among both ordinary Muslims and religious scholars, 'ulemā. The 'ulemā, who continue to play an influential role in Muslim society, need to become aware of Islamic teachings about the environment, speak about and act on them (Nasr 2003). EcoIslamic activists thus have to focus much of their activities on enlivening Islam's

ecoethic across a broad spectrum, including the impressionable Muslim child, wealthy petro-dollar executive, erudite jurist and learned *imām*. Initiatives aimed at reviving and implementing the environmental teachings of Islam must therefore take all these factors into consideration.

In spite of these challenges, there are positive aspects of the global Muslim community (*ummah*) which make it conducive to the introduction of ecological ethics based on the teachings of Islam: religion, as grounded in revelation, remains vital in the ethical dimensions of life and continues to guide the lives of Muslims (Nasr 1997). Islam could thus be an important catalyst, helping believers to take a serious step towards respecting and caring for the environment (Izzi Dien 2000). By developing the Muslim understanding of the natural world, ecoIslamic activists can give practical shape to the environmental dictates of the Qur'an and Sunnah, produce legislation on pertinent environmental questions, and develop new thought and thinkers in Islamic environmental ethics.

In the following chapter, I will begin to address the second part of the core research question in this thesis, i.e. the pedagogical implications for implementing an ecojustice of Islam in the educational landscape of Islam. In particular, I will examine the place and position of ethics and ethics education in two educational spheres, environmental and Islamic education with a view to extracting implications for environmental teaching and learning in the educational landscape of Islam.





ETHICS IN THE PHILOSOPHY OF ENVIRONMENTAL AND ISLAMIC EDUCATION

Read, O Prophet, in the name of your Lord who has created!

He has created man from a clinging clot.

Read! For your Lord is the Most Gracious One,
who has taught by the pen, has taught man what he has known not.

(The Clinging Clot 96: 1-5)

From these very first verses of revelation, knowledge occupied a central place in the Islamic weltanschauung, in preserving and transmitting the norms and values of Islam, in shaping human character and in constructing society. The proliferation of Muslim scientific inquiry in the Middle Ages is rooted in this knowledge culture which is an outstanding feature of Islam. These verses, revealed to the unlettered Muhammad , forever established the link between faith, knowledge and action in Islam (Ramadan 2007a). If faith propelled the Muslim mind to seek knowledge and to ponder, reflect on, and understand the Creator and the workings of the universe; faith must also, of necessity, be anchored to right and just action in this world, to 'amāl ṣālihāt, as the Qur'an repeatedly affirms.

The ethical principles of Islam are brought into motion by a myriad of educational networks which engages the Muslim from early childhood throughout her life, spurring her towards right action and seeking to secure the common good of all Creation, maṣālih al-khalq. The theocentric liberation ecotheology presented in Chapter Two is established upon an eco-justice ethic – an ethic which acknowledges the intrinsic value of the natural world, which prizes environmental care, and which centralizes the importance of justice in human interaction with the Creator and Creation. This chapter seeks to extend this liberation ecotheology of Islam from the realm of thought and ideas into the educational arena and suggests that an activist form of environmental education (EE), rooted in the worldview, epistemology and pedagogical principles of Islam, will be the most likely conduit for enlivening this eco-justice ethic in the Muslim world.

Education is regarded as central to the development of the Islamic personality. From the time of the community of men and women around the Prophet \$\mathbb{B}\$ to the present, learning has been regarded as a praiseworthy activity. While Muslims believe every child to be born in a state of \$fitrah\$ (essential human nature), with an "innate predisposition to believe and worship God" (Haron and Mohamed 1991, 5), Allah, through His Grace, has granted humanity further sources of guidance. Through the revealed books, the words and actions of prophets and messengers throughout the ages, and the wondrous gift of the intellect, humankind has been given the criteria to distinguish between right and wrong and tasked with the responsibility of enjoining what is good and forbidding what is evil, thereby establishing a just societal ethic. Ethics, in Islam, as we will discover in this chapter, has to enter every sphere of a Muslim's life, and should be part of her everyday normal behaviour.

The companion of Prophet Muhammad , Muʻadh ibn Jabal, is reported to have said: 'Knowledge is a leader and action is its follower' (Ibn Taymiyyah 2005, 136). Muslim eco-activists, working towards translating the Islamic ecoethic into action, have earmarked the educational sphere as the primary arena for raising ecological consciousness and achieving action. As discussed in Chapter Two, Muslims draw upon the Qur'an and the Sunnah to guide not only their actions pertaining to specific rites of worship, but also their interaction with the human and non-human worlds. The eco-justice ethic of Islam presented in this study is composed of ecological knowledge rooted in the ethical precepts of the Qur'an, vividly displayed in the character of the Prophet , and enacted in the *Sharī'ah*. While this ecoethic exists in Islamic teachings it is, nevertheless, in need of revival. If Islam possesses an ethic of caring for the environment, why do we need to build a relationship with, and draw from environmental education to revitalize this ecoethic?

The intent here is not to construct the ecological ethic of Islam on the basis of the philosophies, knowledges and principles which have driven the development of EE, but to assess the educational approaches, methods, and tools which constitute a valuable resource in achieving ecological literacy and action today. In addition, many environmental educationists are beginning to acknowledge the homogenizing

influence of globalization on the educational landscape and the need to acknowledge multiple traditions of knowledge and culture, including religion, as a basis for developing environmental ethics (Hitzhusen 2006; Jickling and Wals 2008). Thus, while an EE programme aimed at Muslims

...may look to the West for inspiration in terms of teaching strategies to open up environmental thinking, Western environmental educators may well benefit from a realisation of how closely some current thinking aligns to Islamic doctrine. (Al-Naki 2004, 128)

Reflecting the critical ecology strand within environmentalism, EE has also opened up towards building alliances with liberatory movements, which would include liberation ecotheologians. Religion provides primary values concerning our place in the universe and our interaction with Creation; it possesses a wealth of resources—beliefs, ethics, rituals— which promote Creation care; and is capable of translating beliefs into social action. The religious metaphor of Creation care is at once intellectually persuasive, psychologically potent and has the greatest potential for leading to action than any other alternative according to some. Alliances between the religion and ecology movement, and Islamic and environmental educationists in particular, could thus prove to be a mutually-beneficial coalition which

- recognizes and values the context that sustains human existence, including the belief, knowledge and skills embedded in people's culture and religion;
- works towards challenging prevailing social, political and economic philosophies and structures which underlie environmental destruction, and
- respects the existence of varied human-nature conceptions informing environmental action.

Islamic and environmental educationists would also be responding to calls seeking closer engagement between religious, educational and environmental scholars in the widespread effort to sustain people and earth (Mueller 2009). Since the environmental question is in need of a moral response, it obliges humankind to seriously question the absence of justice, compassion and respect which has impacted the health of both society and nature. It has also been said that one of the greatest environmental educational tasks today involves both the metaphysical

reconstruction and recognition of religious beliefs, ethics and actions (as they pertain to the earth), as well as the revival of the language and metaphors of ethics (Schumacher 1973; Jickling 2004). Furthermore,

[a]s citizens become increasingly aware of environmental problems, the challenge for environmental education remains to foster a sense of responsibility and environmental stewardship...To inspire action, it must consider culture, diversity, ethics, and justice. (Venkataraman 2008, 9)

Through an understanding of each other, both Islamic and environmental educationists will have recourse to a wealth of knowledges—worldviews, scientific information, pedagogical strategies, analytical skills, institutions—necessary in the construction of ecological ethics today. There is a growing acknowledgement that in order for EE to reach the wellspring of human action, it needs to speak to the existing values and ethics, including religiously-inspired ones, which people possess. Thus, both Muslim eco-activists and environmental educationists have much to gain from such a rapprochement. In keeping with the liberation ecotheology approach adopted in this study, new social movements and alliances for ecological change, akin to the one proposed here, are critical for achieving social and ecological change and recognizing the knowledge and insights of Others.

This chapter will centre on understanding the position of ethics (and ethics instruction) in environmental and Islamic education. In Chapter Two, I offered a broad definition of ethics as the principles which guide our actions. Environmental ethics, in particular, is primarily concerned with the precepts underlying human interaction with, and conception of, the natural world. It also conjures up an array of other meanings including rules of behaviour; environmental values; moral principles; right conduct; and the cultivation of virtues such as mercy, respect and generosity towards the non-human world. Ethical conduct with humanity and the natural world is a valued educational outcome, as we will discover, for both environmental and Islamic educationists.

According to Jickling (2005, 21), ethics is "a potentially underdeveloped research area in environmental education research". There are however, several barriers to

the introduction of ethics in environmental education, including the belief that ethics or moral education falls within the ambit of the home or religious institution. Other barriers include a fear of indoctrinating students; inadequate teacher training; limited resource material on ethics education; as well as uncertainty among teachers on how to deal with competing and contradicting student values (Hargrove 1996). Furthermore, as Nasr (2001) points out, discussions about ethics have, in most instances, been monologues, defined and dictated by a dominant culture and worldview. Fortunately, a broader consideration on the impact of cultural history (including religion) in shaping ethics and values is beginning to emerge. This is also evident in the field of EE where, at one of the earliest international meetings on EE, a call was made to "restore to education an ethical function it has sometimes lost" (UNESCO and UNEP 1977, 8-9). Moreover,

This linking of values with schooling, and with environmental education, is appropriate as values underpin everything we humans do in (and with) the world, not least our understanding and practice of that social interaction which we call education. (Scott and Oulton 1998, 209)

Ethics in Islam seeks to achieve and establish the universal common good, justice and welfare of the entire Creation, masalih al-khalq. Islamic societal ethics, including the eco-justice ethic constructed in this study, endeavours towards achieving equilibrium, and "hence felicity with God, nature and history" and requires that one submits oneself to the Will of God, accepts the mandate of trusteeship and strives to be moderate in all relationships (Manzoor 2005). From the cradle to the grave, a Muslim is charged with seeking knowledge—of her Creator, of His Laws, and of the workings of Creation—drawing on all the sources of knowledge placed on planet Earth – in revealed and non-revealed knowledges, through sensory and spiritual experiences, in the Qur'an and in the universe. This wondrous search for knowledge should be visible in her life, and manifested in just action in this world, in a 'mal' salihat (good works) which incorporate, as discussed in Chapter Two, environmental care.

This chapter will discuss the place and position of ethics thinking and ethics instruction within the two educational spheres considered here, environmental and

Islamic education. From the cursory introduction to ethics in Islamic and environmental education above, it should be noted that this chapter is essential in extracting the pedagogical implications for implementing an eco-justice in the educational landscape of Islam today. It also plays a central role in uncovering commonalities between environmental and Islamic educationists working towards social and ecological justice. Its central role though, is to distil the key elements of the educational approach required to revitalise an eco-justice ethic of Islam by way of environmental education.

In the following section, the aims and objectives of environmental education, manifested in diverse orientations to environmental education, are brought to light. Thereafter, the evolution of ethics thinking in environmental education is traced through an engagement with defining statements on environmental education. And finally, a discussion of ethics education or environmental values education delivers valuable insights into the inclusion of religious ecoethics in environmental education. The epistemological underpinnings of environmental teaching and learning in Islamic education, particularly as it relates to knowledge construction and educational objectives, are then examined. Ethics instruction in Islamic education is then detailed before comparing the conceptions of ecological ethics in the two educational spheres under consideration.

3.1. Ethics in Environmental Education

Ethics, often referred to as values in the literature on environmental education, is put forward as one of the key objectives of environmental education (EE). The field of EE has its origins in the rise of the environmental movement in the 1960s and 70s. In fact, many of the key developments, paradigm shifts and focus areas within EE mirrors that of the environmental movement such as the shift from an initial focus on wildlife or nature conservation towards one which integrated environmental and developmental concerns.

At one of the earliest international meetings on EE in Tbilisi in 1977, the importance of ethical concerns was noted:

Environmental education should prepare the individual for life through an understanding of the major problems of the contemporary world, and the provision of skills and attributes needed to play a productive role towards improving life and protecting the environment with due regard given to ethical values. (UNESCO and UNEP 1977, 24)

In subsequent years, EE researchers and practitioners have acknowledged that the development of environmental ethics is a critical component of this field. Research has indicated that the presence of sufficient knowledge is not always enough to ensure that learners act in a pro-environmental way and that more attention needs to be given to environmental values education (Ashley, 2000). While the arena of ethics and values education is regarded as "dangerous ground", calls are mounting to delve deeper into the hearts and souls of humanity to find solutions to the environmental crisis. As Aho (1984, 187) states, "if the aim of environmental education and teaching is...to enable an individual to behave responsibly in his environment, some attention will have to be paid to...ethical education".

In the following section I will outline the broad aims and objectives of EE. Thereafter, I will adopt a historical approach towards understanding the place and position of ethics by looking at key statements related to EE in order to develop an understanding of the thinking and practice around environmental ethics instruction.

3.1.1. The Aims and Objectives of Environmental Education

The key texts outlining the aims and objectives of EE, the Belgrade Charter (1975) and Tbilisi Declaration (1977), continue to provide a basic understanding of EE. The Belgrade Charter defined the goal of EE as follows:

To develop a world population that is aware of, and concerned about, the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones. (UNESCO and UNEP 1975)

While the objectives of EE were outlined by the Charter, the Inter-governmental Conference, convened two years later at Tbilisi spelled this out in greater detail. Bringing together more than 250 delegates from 65 countries, the Conference was specifically aimed at providing the impetus for developing EE at the local, national and global levels. Tbilisi outlined the goals of EE as

- fostering clear awareness of, and concern about, economic, social, political and ecological interdependence in urban and rural areas;
- providing every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment; and
- creating new patterns of behaviour of individuals, groups and society as a whole towards the environment.

(UNESCO and UNEP 1977)

The categories of EE objectives were further delineated into five key areas: awareness, knowledge, understanding, skills and participation.

Awareness: to help social groups and individuals acquire an awareness of and sensitivity to the total environment and its allied problems.

<u>Knowledge</u>: to help social groups and individuals gain a variety of experience in, and acquire a basic understanding of, the environment and its associate problems.

Attitudes: to help social groups and individuals acquire a set of values and feelings of concern for the environment, and the motivation for actively participating in environmental improvement and protection.

Skills: to help social groups and individuals acquire the skills for identifying and solving environmental problems.

<u>Participation</u>: to provide social groups and individuals with an opportunity to be actively involved at all levels in working towards resolving environmental problems.

(UNESCO and UNEP 1977)

Several other factors related to the implementation of EE were put forward at Tbilisi, including the need to consider the environment in its totality; to regard EE as a continuous, lifelong process; to employ a range of disciplinary and methodological approaches; to utilise diverse learning environments with an emphasis on practical and first-hand experience; and to emphasize the complexity and inter-related nature of environmental concerns.

EE is a continuous learning process, involving a range of tools and targeting a varied audience, which strives to promote the analysis and understanding of environmental issues. It aims to promote citizen willingness and ability to participate in environmental decision-making by creating an environmentallyaware and responsible citizen. Furthermore environmental educators strive to provide opportunities for finding appropriate, culturally-relevant and effective solutions to environmental problems, motivating citizens to participate in wise and responsible environmental decisionmaking. Consideration was paid to the role of values in shaping the attitudes required to promote responsible environmental behaviour in foundational EE texts such as the Belgrade Charter. Yet, it was only in later statements that the importance of incorporating the social and cultural context in which beliefs and attitudes toward the environment are shaped, were recognised. The field of EE, despite enjoying a common concern regarding the central role of education in human-environment relations, is characterised by widely differing discourses (Sauvé 2005). Ultimately, ideological orientations, both towards education and the environment, have had a profound impact on the aims and objectives of EE as we will see below.

In an attempt to understand the varied interpretations of the term, Lucas (1979) has delineated EE into three classes of educative programmes: education about the environment, education in or through the environment, and education for the environment. Within these various orientations towards EE, different objectives are emphasised, e.g. education about the environment highlights awareness, knowledge, and skills; education in/through the environment builds attitudes and awareness of the natural world; and education for the environment has an action-orientation and prioritises knowledge, attitudes and participation. Smyth (2006) provides a useful outline of the stages of EE, from an initial focus on environmental awareness (building knowledge and understanding of environmental issues), environmental literacy (improving understanding of the systemic nature of the environment), environmental responsibility (environmental citizenship), environmental competence (understanding the world system and the need for action), to transformative EE which emphasizes the need to challenge, participate and reform the socio-political structures which are at the root of social and environmental

injustices. It is the latter trend which resonates with the action-oriented eco-justice ethic of Islam which links values and attitudes to practice. The varied pedagogical landscape of EE and the marked changes in orientation within the field (Palmer 2003; Robottom 2005; Sauvé 2005), has opened up spaces for creative dialogue with critical theorists in education, ecology and theology, of interest in this study. An Islamic eco-justice ethic, which emphasises knowledge *about* the environment, learning *in* and *through* the environment, concern *for* the earth and its inhabitants presents an untapped and underutilised arena for environmental educationists.

In order to delve into the philosophies and ideological foundations which underlie the three approaches, EE *about*, *through* and *for* the environment, I will draw on the work of Fien (1993). Fien argues that the ideological underpinnings of EE needs to be made explicit since it has implications for the epistemology and pedagogical shape of EE initiatives such as the curriculum content, learning style and theory, knowledge conception and desired student outcomes. His matrix (See Table 3.1.), in which he locates various EE approaches in terms of their educational and environmental philosophical orientation, is of particular value in identifying commonalities between EE and Islamic education.

The three educational orientations which he draws on is firstly a vocational/neoclassical outlook in which students are equipped with the skills to fulfil a role in the workplace. It is an outlook which accepts and promotes technocratic and managerial values, is often uncritical of social structures, and adopts a view of knowledge as 'scientifically objective'. The second educational philosophy, liberal/progressive education, seeks to prepare students for life and displays a concern for the practical, social and expressive aspects of knowledge. It adopts a reformist approach, but is essentially couched within the structures of democratic societies, seeking to develop an aware and active environmental citizenry. Socially critical orientations to education are explicit about righting the structural inequality in society and the specific role of knowledge in social action. Educators and learners are regarded as active members of society, both reflective of, and active in society. Fien thereafter addresses the values and beliefs about the environment through a consideration of the environmental philosophies which exist in society. O'Riordan's categorisation of environmentalism, discussed in Chapter One, is used to map the various shades of green ideologies which exist in society. These are drawn across the green spectrum from techno- to ecocentric orientations, or from light to dark green environmentalism: the technocentric Cornucopian and Accommodation Managerialism versus the ecocentric orientations of Eco-Socialism and Gaianism. These environmental philosophies are then placed alongside educational philosophies. Fien now positions the various EE approaches, about, through and for the environment, in terms of their ideological orientations, and hence the assumptions they make about environmental ethics.

Table 3.1. Educational and Environmental Philosophies in Different Approaches to Environmental Education (Adapted from Fien 1993)

ENVIRONMENTAL PHILOSOPHY Varieties of Environmentalism		EDUCATIONAL PHILOSOPHY		
		Vocational/ Neo-Classical	Liberal/ Progressive	Socially Critical
Technocentric	Cornucopian	Conservative education about the environment	+	
	Accommodation Managerialism (Light Green)	+	Liberal education about the environment	
•	Eco-Socialism (Red-Green)		Liberal education through or in the environment	Critical education for the environment
Ecocentric	Gaianism (Dark Green)		Liberal education for the environment	*

[→] Major ideological directions of 'less restrictive definitions and analyses' of education *about*, *through* and *for* the environment

Fien regards education *about* the environment as being of two types, one which "promotes cornucopian environmentalism and the values of vocational/classical education" and the other which reflects the "liberal/progressive goals of education and light green approaches to environmental management" (Fien 1993, 40-41). Both are couched in technocentric environmental ideologies that focus largely on the acquisition of ecological knowledge and which proposes technical solutions and

approaches towards 'managing' the environment. EE approaches which display this orientation include the resourcist, scientific and problem-solving currents in EE (Sauvé 2005). Education *through* or *in* the environment, outdoor or experiential EE, such as the naturalist, bioregionalist or place-based currents in EE, centralises the environment as a medium for education with the aim of building a personal ethic of environmental concern and awareness premised on love, respect and awe for nature. This orientation is representative of the ecocentric trend within EE, and is indicative of the impact of Deep Ecology thinking on EE. The 'outdoor and experiential education' trend in EE has been criticised due to its neglect of social justice considerations. In addition, the limitations of this 'scientific curiosity' and 'love of nature' approach can only go so far in motivating political analysis and action. Nonetheless, education *through* the environment, as education *about* the environment, remains integral to the EE process.

Education *for* the environment, in my view, is closest to the objectives of an ecojustice ethic of Islam, since it reflects a complementarity between the personal (faith) and the political (action). While this orientation is informed by the dark green (ecocentrics) and red-green (eco-socialist) ideologies in Fien's categorisation, this orientation promotes "informed and active concern for the quality and preservation of human life *and* [my emphasis] the environment" and "the development of moral and political awareness as well as the knowledge, commitment and skills to analyse and participate" in environmental care (Fien 1993, 43). It therefore reflects many of the features of the Islamic eco-justice ethic outlined in Chapter Two. Examples of this orientation in EE include recent strands which have been influenced by critical social theory such as the ethnographic, ecoeducation, and eco-justice currents in EE (Bowers 2003; Sauvé 2005).

The 'education for the environment' orientation in EE has its critics. Jickling and Spork (1998) suggest that this approach, in employing the language and rhetoric of activism and not education, is deterministic and privileges eco-socialist approaches to EE, thereby closing the doors to other environmental conceptions. Fien's response to this critique (2000, 186) shows that this orientation "is a lot more eclectic and tolerant of diverse educational and environmental positions and

practices than portrayed" and that the action-oriented pedagogy being proposed does in fact resonate with many strands within critical or transformative EE. Its usefulness for entering into dialogue with liberation ecotheologians, as suggested in this thesis, bears testimony to this.

In the preceding chapters, the liberation ecotheology approach, premised on developing a personal ecoethic (based on the ecological teachings of Islam), in essence challenges the economic and social processes which impact humans and nature and engenders both personal action and political participation. According to Fien (1993), the socially critical orientation to EE incorporates both personal and structural transformation, and has an overt agenda of values education and social change. The eco-justice ethic of Islam, encapsulated in the conception of humans as steward and partner with nature, at once khalīfah and khalq, is one which promotes just, responsible and respectful interaction between humans and nature. However, as I have argued in Chapter One, critical ecologists, including those within EE, have been slow in engaging with the liberatory and socially critical discourses within faith traditions. Instead, they have continued to enclose themselves in ecosocialist politics and/or ecocentric ethics, as in the case of Fien's conceptualisation of ecophilosophies in Table 3.1.. In deconstructing the nature of knowledge underlying EE, even socially critical orientations to EE continue to reify and privilege local and traditional ecological knowledge, to the exclusion of religious ecological knowledge which remains, as we saw in Chapter Two, a rich source of life-liberating ethics with an attendant ontology, epistemology and pedagogy. This needs to change.

While political action *for* the environment is undoubtedly one of the most effective and powerful tools to change the way in which we interact with the natural world, it is "virtually impossible to avoid confronting the personal values of learners that form the basis of their actions" (Caduto 1985, 1). The environmental question is not simply an issue of physical survival, but of our spiritual survival, "that is, our understanding of what we are and how we should relate to the world around us" (Bonnett 2007, 719). Drawing from this, EE must have two agendas, a short-term agenda focused on limiting damage to the environment and a long-term one of developing a right relationship with nature (Bonnett 2007). The latter is concerned

with our ethics, our values and our beliefs about nature and our place in it and should, of necessity, include an examination of the potential of religion to ground the environmental ethic underlying EE. The following section will begin to look at the ways in which ethics have been conceptualized in the EE discourse.

3.1.2. The Place of Ethics in Environmental Education Thinking

Environmental ethics are the root of environmental education and ground the promise that we can restore and maintain a healthy balance between humans and all other life, including earth's living systems. (Engel and Sturgis 2006, 11)

In the preceding section, the broad aims and objectives of EE were outlined, with specific reference to the centrality of ideology in determining the epistemology and pedagogy of EE. This section will adopt a historical approach to outlining the key events or documents of relevance to a discussion of EE and ethics. These include conferences, workshops and key documents developed in the environmental and conservation sectors (See Table 3.2.).

Ethics in EE is about asking the searching questions that we all need to ask, such as "What is nature and what is our place in it?" or "How can we know nature and what should be our attitude towards it?" (Bonnett 2007, 709). Statements about ethics in the EE literature abound, yet there remains a lack of understanding and skill about how to incorporate values and ethics in EE instruction (Simmons 1988). The following events and documents provide some understanding of the evolution of ethics thinking in EE.

One of the landmark events related to the environmental movement, the UN Conference on the Human Environment held in Stockholm in 1972, firmly entrenched the link between environment and human development. The Stockholm Declaration, one of the principle outcomes of the Conference, affirmed the importance of EE "in order to broaden the basis for an enlightened opinion and responsible conduct by individuals, enterprises and communities in protecting and improving the environment in its full human dimension" (Principle 19) (UN 1972).

EE was considered one of the key action areas required to combat the world's environmental crisis. Recommendation 96 of the Conference Proceedings further outlined the call for the establishment of an international programme of EE.

Table 3.2.: Key Developments in Environmental Education

YEAR	KEY EVENT / ORGANISATIONS	MAIN OUTCOME
1972	The United Nations Conference on the Human Environment, Stockholm	Stockholm Declaration
1975	International Workshop on Environmental Education, Belgrade	The Belgrade Charter
1977	Intergovernmental Conference on Environmental Education, Tbilisi	Tbilisi Declaration
1980	International Union for the Conservation of Nature (IUCN), World Wildlife Fund (WWF) and United Nations Environment Programme (UNEP)	World Conservation Strategy
1987	World Commission on Environment and Development (WCED)	Our Common Future / Brundtland Report
1991	IUCN, WWF and UNEP	Caring for the Earth
1992	United Nations Conference on Environment and Development (UNCED)/ Earth Summit	Agenda 21
2000	Earth Charter Initiative	Earth Charter
2002	World Summit on Sustainable Development (WSSD)	Johannesburg Implementation Plan
2007	Fourth International Conference on Environmental Education, Ahmedabad	Ahmedabad Declaration

While Stockholm kick-started the international debate on human-environment interactions, the next three years saw a series of meetings on EE being convened, culminating in the International Workshop on Environmental Education held in Belgrade in 1975. This meeting resulted in the formulation of one of the key EE documents, The Belgrade Charter and also saw the establishment of the

International Environmental Education Programme by UNESCO and UNEP (UNESCO and UNEP 1977). At Belgrade, key statements on the aims and objectives of EE were made, including the importance of developing a new environmental ethic:

We need nothing short of a new global ethic – an ethic which espouses attitudes and behaviour for individuals and societies which are consonant with humanity's place within the biosphere; which recognizes and sensitively responds to the complex and ever-changing relationships between humanity and nature and between people.

(UNESCO and UNEP 1975, 1)

Educational reform is regarded as essential in achieving this "new ethic" of thinking about and living within the natural world. In addition, the Charter highlighted the necessity of transforming individual values, priorities and actions in order to achieve this "new ethic".

As per the recommendation of the Belgrade workshop, the Inter-governmental Conference on Environmental Education was held two years later in Tbilisi. The main objective of this Conference, convened by UNESCO and UNEP, was to encourage participating Member States to initiate actions which would entrench EE in the educational landscape by adopting national policies promoting EE.

The importance of the Belgrade and Tbilisi Declarations in outlining the aims and objectives of EE has already been detailed in Section 3.1.1. However, in terms of dealing with the importance of ethics and values in EE, Tbilisi took one step further than Belgrade by acknowledging the importance of tapping into existing ethics rather than creating a new ethic, and recommending "that the positive and enriching influence of ethical values should be taken into account in developing environmental education programmes" (UNESCO and UNEP 1977, 30). The Conference further espoused the view that the

...formulation of curricula and reorientation of educational systems are not sufficient, but that there must be an appeal to the feelings of individuals and to their ethical and cultural awareness so as to lead them to protect, improve and enrich their natural environment on an enduring basis. (UNESCO and UNEP 1977, 49)

From these statements, it is clear that the importance of existing ethics and values had been acknowledged. However, the means of incorporating and unearthing these values remained elusive to most EE practitioners (Simmons 1988; Courtenay Hall 1996).

Two key international developments in the conservation arena hold particular value in the development of EE thinking on ethics. These strategy documents, the World Conservation Strategy (1980) and Caring for the Earth: A Strategy for Sustainable Living (1991), placed particular emphasis on the promotion of EE in achieving their stated objectives. Both these documents were jointly developed by the IUCN, WWF and UNEP. Conservationists were increasingly beginning to acknowledge the need to consider the realities of meeting the growing human need for housing, education, health, and employment with the global imperative of conserving biological diversity. Sustainable development, the development drawcard of the late 1980s, popularised by the Brundtland Report in 1987, provided further impetus for the rapprochement between conservation and development objectives.

With the publication of Our Common Future, also known as the Brundtland Report in 1987, the World Commission on Environment and Development (WCED) defined sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987). The central argument of this definition is that human needs should be met in such a way that neither the natural environment, nor the needs of future generations are compromised. While sustainable development has resulted in attempts to forge closer links between the objectives of economic growth, equity, justice, quality of life and environmental sustainability, the diaphanous quality of the concept has made it easy to portray many kinds of actions, with differing impacts on the environment, as sustainable. Also, Bonnett (2007, 719-720) asserts that "environmental education is much richer and more profound in its aspirations than the idea of sustainable development encourages. It is essentially concerned with an understanding and appreciation of the environment and the significance of the natural order, including our place in it." Nevertheless, the Brundtland Report was pivotal in entrenching the concept of sustainable development in the

environmental arena, including that of EE. According to Hattingh (2002), much still needs to be done to extend the conservative or minimalist model of sustainability which has been adopted thus far, to a radical interpretation which will assist us to confront critical questions related to the continuing unsustainability of our existing development trajectories. He maintains that, even within the sustainable development discourse, it is possible to establish links with the emancipatory agenda of critical ecologists, such as liberation ecotheologians.

The World Conservation Strategy (WCS), in response to the growing call to address human needs, stated that conservation was not the opposite of development but that human needs could be met through wise and sustainable use of natural resources. A central argument of the WCS was the need to develop a new ethic which could transform the "behaviour of entire societies." This new ethic, outlined in Section 13 suggests that

...embracing plants and animals as well as people, is required for human societies to live in harmony with the natural world on which they depend for survival and wellbeing. The long term task of environmental education is to foster or reinforce attitudes and behaviour compatible with this new ethic. (IUCN, UNEP and WWF 1980).

EE was regarded by the WCS as one of the key means of achieving the ethic needed to transform human behaviour. *Caring for the Earth* (1991) sought to build on the message of the WCS by securing a commitment to the new ethic, to outline the principles needed to achieve this ethic and finally, to set out strategies to put these principles into action. Among the nine principles for sustainable living, two in particular highlight the importance of ethics, personal attitudes and practices.

Within the first principle, 'Respect and care for the community of life', it is stated that "the respect and care we owe each other and the Earth be expressed in an ethic for sustainable living" (IUCN, UNEP and WWF 1991, 13). The important link between belief and action is emphasised since

Widely shared beliefs are often more powerful than government edicts. The transition to sustainable societies will require changes in how

people perceive each other, other life and the Earth; how they valuate their needs and priorities; and how they behave. (IUCN, UNEP and WWF 1991, 13).

In developing this "ethic of living sustainably", the support of world religions needs to be harnessed since they "have spoken for centuries about the individual's duty of care for fellow humans and reverence for divine creation" (IUCN, UNEP and WWF 1991, 13). Amongst the actions proposed to achieve this new ethic is closer involvement and alliances between those concerned with the principles of human conduct, such as religious leaders and thinkers, moral philosophers, and conservation and development organisations. In addition, the Strategy calls for a continuation of the "process by which major religions have begun to identify and emphasize the elements of their faiths and teachings that establish a duty of care for nature" (IUCN, UNEP and WWF 1991, 15). This is one of the first occasions in which the contribution of religion in the ecological project was made explicit. This is not surprising since the ecotheology movement was establishing itself as a voice of note during this period.

The second principle of relevance to the discussion of environmental education and ethics is Principle 6: 'Change personal attitudes and practices'. This principle stresses that in order to adopt the ethic for sustainable living, people must reexamine their values and alter their behaviour.

Environmental education deals with values. Many school systems regard this as dangerous ground, and many teachers (particularly in the natural sciences) are not trained to teach values...Yet no lifestyle or educational system is value-free. It is vital that schools teach the right skills for sustainable living. (IUCN, UNEP and WWF 1991, 55)

The following year, 1992, one of the biggest environmental conferences brought together a wide array of actors from world leaders to representatives of faith groups, trade unions and indigenous people. The UN Conference on Environment and Development (UNCED), known as the Earth Summit, was held in Rio de Janeiro in 1992. In tandem with the proceedings of UNCED, an International Forum of NGOs and Social Movements was convened. Both these events produced key documents which are of great significance to developments in the field of EE. While the UNCED

document, entitled Agenda 21, lays the foundation of education for sustainable development (ESD), the NGO Forum produced a set of principles which emphasised the centrality of values and ethics.

In the Agenda 21 Chapter entitled, 'Promoting Education, Public Awareness and Training', education is regarded as

critical for achieving environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making. (UNCED 1992)

The NGO Forum statements emphasises the "central role of education in shaping values and social action" and in relation to EE, it considers that

environmental education for equitable sustainability is a continuous learning process based on respect for all life. Such education affirms values and actions which contribute to human and social transformation and ecological preservation. (NGO Forum 1992)

The important link between thinking in EE and the broader environmental field can be seen in the way in which sustainable development became a central focus of policy, research and practice in these two areas. This link became even stronger after the United Nations conference held in South Africa in 2002, the World Summit on Sustainable Development (WSSD) when the decade of 2005 - 2014 was declared as the UN Decade of Education for Sustainable Development (DESD).

The WSSD largely served to reaffirm the centrality of sustainable development in the international agenda, and concentrated on actions aimed at poverty eradication and environmental protection. WSSD confirmed the Millennium Development Goals (MDGs), particularly related to issues of poverty eradication, water and sanitation and the provision of health services. Education was identified as one of the primary means of implementing the commitments entered into at the WSSD. The educational objectives identified at the WSSD reaffirmed those of the MDGs as well as the Dakar Framework for Action on Education for All. The WSSD also made the recommendation to the UN General Assembly to adopt a decade of

education for sustainable development, starting in 2005. This was proclaimed in December 2002.

The preceding environmental conferences such as Stockholm, the WCED, UNCED and the WSSD, all identified education as a central means of achieving the goals of human development and environmental protection. Since the popularization of the concept of sustainable development, it became a central concern in UN conferences. The proclamation of the DESD only affirmed the longstanding view that education and learning lie at the heart of approaches to sustainable development. As the lead agency of the UN on education, UNESCO co-ordinates the activities related to the DESD. UNESCO states that education for sustainable development (ESD) is fundamentally about values, with respect at the centre. The DESD promotes the integration of ethics and values to encourage behaviour that would create a more sustainable and just society for all.

The founding value of ESD is respect: respect for others, respect in the present and for future generations, respect for the planet and what it provides to us (resources, fauna and flora). ESD wants to challenge us all to adopt new behaviours and practices to secure our future. (UNESCO, 2009)

UNESCO also lends its support to the Earth Charter, an ethical framework which is built on shared fundamental ethical principles for building a just, sustainable and peaceful global society. Yet the initial lack of support for this framework was clearly indicative of the continued reluctance to centralise the ethical dimensions of sustainable development. While calls for the drafting of a charter of ethical principles were made as early as 1987 at the WCED and echoed at the Rio Summit in 1992, there was resistance to the idea of making an ethical commitment to sustainable development. Where the UN halted efforts at developing such a charter, civil society took over and the process of developing "a set of ethical principles for environmental conservation and sustainable development" (Blaze Corcoran 2003, 10) was set in motion again.

The Earth Charter, part of a worldwide process of developing a code of ethics for sustainable development has diverse origins which extends from the "global ethics

movement to sacred texts of the world's major religions, from international law documents to new thinking in the sciences of physics, cosmology and evolutionary biology" (Blaze Corcoran 2003,11). Meetings and consultations were held over a six-year period, until in March 2000, the final version of the Earth Charter was released with the following objectives:

- To promote a worldwide dialogue on shared values and global ethics;
- To set forth a succinct and inspiring vision of fundamental ethical principles for sustainable development;
- To circulate the Earth Charter throughout the world as a people's treaty, promoting awareness, commitment, and implementation of the Earth Charter values; and
- To seek endorsement of the Earth Charter by the United Nations General Assembly. (Blaze-Corcoran 2003)

While the latter objective has still not been achieved, the Charter has been widely shared and promoted as an educational tool throughout the world. Among the sixteen principles contained in the Charter, Principle 14 highlights the importance of education, including the contribution of moral and spiritual education in the quest for sustainable living:

Integrate into formal education and life-long learning the knowledge, values, and skills needed for a sustainable way of life.

- a. Provide all, especially children and youth, with educational opportunities that empower them to contribute actively to sustainable development.
- b. Promote the contribution of the arts and humanities as well as the sciences in sustainability education.
- c. Enhance the role of the mass media in raising awareness of ecological and social challenges.
- d. Recognize the importance of moral and spiritual education for sustainable living. (Earth Charter Initiative 2000)

Thirty years after Tbilisi, the Fourth International Conference on Environmental Education, co-sponsored by UNESCO and UNEP, was held in Ahmedabad, India. The Conference, held within the framework of the DESD, brought together more than 1500 participants from 97 countries. The Conference Declaration noted the importance of traditional wisdom as a source of values related to environmental concern:

We can learn from indigenous and traditional patterns of living that respect and honour the Earth and its life-support systems and we can adapt this wisdom to our fast-changing world.

(UNESCO 2008a)

It also recognised, in its final recommendations, the "need to search continuously for new paradigms and innovations" as well as "new development paths, networks, and social practices to achieve sustainability" (UNESCO 2008b). Ahmedabad's recommendations include changes in thinking about education and learning and the utilisation of "diverse methodologies"; the need to "cater to the various needs of learners in different cultures, contexts and nations"; and the incorporation of "ethical and critical reflection" in learning approaches.

A second area of transformation put forward at Ahmedabad relates to the way in which the environment-development relationship is conceptualised. The Conference acknowledged the "need for critical ethical reflection in education" and recommended that a philosophy of care, as espoused by the Earth Charter, be integrated into EE and ESD actions and practices. Thirdly, it suggested reviewing knowledge conceptions and accepting "a multiplicity of knowledge systems as legitimate in the educational process" (UNESCO 2008b). While this point is made largely in reference to the knowledge inherent in traditional and indigenous systems, religious ecological knowledge systems remain a rich source of values for millions the world over, as discussed in Chapters One and Two.

This overview of key EE statements and documents illustrates the importance of ethics in EE. While the Belgrade Charter and the *World Conservation Strategy* both called for the development of a new ethic governing human-nature interactions, Tbilisi and *Caring for the Earth* stressed the value of tapping into existing ethics, values and beliefs. This search for a "new ethic" might thus

...turn out to be rather old values - echoing classical philosophical and religious conceptions of human interdependency, of the limits of human capability, and of humankind's place in the scheme of things. (Grove-White 1994)

Yet the dominance of sustainable development thinking, couched within a neo-liberal discourse, constitute a point of concern since it limits the 'space' for the introduction of transformative approaches to EE, such as eco-justice, ecopedagogy and to my mind, liberation ecotheology. Even as the language of ethics is finding its way into EE, religion is being side-tracked in favour of traditional wisdom, local knowledge and cultural practices. The WSSD, following on from the Rio Summit in 1992, continued to emphasise the role of education in furthering the goals of sustainable development. Even though calls were made for an ethical statement regarding sustainable development as early as 1987, the Earth Charter emerged much later. Fundamentally a statement of shared principles related to sustainable development, the Charter was envisioned as a "document that would formulate the environmental concerns of education once and for all in both ethical and ecological (as opposed to merely technocratic and instrumentalist) terms" (Kahn 2008, 6).

Technocratic environmentalism and the hegemonising influence of sustainable development thinking have limited the space for transformative and socially critical orientations in EE. With the inception of the DESD, it remains to be seen whether "education for sustainable development is little more than the latest educational fad, or worse yet, that it turns out to be nothing other than a seductive pedagogical 'greenwash'" (Kahn 2008, 7). Räthzel and Uzzell (2009) have proposed the promotion of transformative EE through an openly ideological approach towards EE which involves choices in education, i.e. between transmissive versus transformative education (see Jickling and Wals 2008); and between environmental philosophies. While the DESD could be utilised to infuse sustainable development with meaning and highlight issues under-represented and under-researched in EE, such as ethics, the globalizing tendencies of ESD could also "strengthen the instrumental tendencies of environmental education to promote a certain kind of citizenship, particularly one that serves, or at least does not question, a neo-liberalist agenda" (Jickling and Wals 2008, 4). Thus, by drawing a sustainable development fence around environmental thinking, the DESD could result in

traditional (e.g. environmental education) and alternative (eco-justice) ways of engaging people in existential questions about the way human

beings and other species live on this Earth run the risk of being marginalized or excluded. (Jickling and Wals 2008, 18)

Ahmedabad engaged with the transformative voices in EE by calling for change in several areas including the need to acknowledge new ways of teaching and learning; to respect alternative notions of knowledge; and to incorporate critical thinking in EE. This bodes well for EE approaches which seek to integrate social and ecological justice, recognise the value of traditional ecological knowledges and institutions, including religious ones, and which develop ecologically-literate, aware and active citizens.

This overview has highlighted the centrality of ethics in EE. If the assumption of an environmental ethic is among the ultimate aims of EE, how have EE practitioners integrated ethics and values education into EE? What methodologies have they employed? And what philosophical approaches have they adopted, if as Palmer states, the ultimate aim of EE "...is for every citizen to have formulated for him or herself a responsible attitude towards the sustainable development of the Earth, an appreciation of its resources and beauty, and an assumption of an environmental ethic" (Palmer 2003, 143).

3.1.3. Ethics in Environmental Education Practice

Since its coinage in 1969, EE has paid considerable attention to the development of attitudes, values and beliefs focused on environmental care and concern. Values education, largely in the form of values clarification and values analysis was prevalent in the 1980s and had a profound influence on the way in which ethics education was approached by EE practitioners in this period.

Values are defined as "principles, fundamental convictions, ideals, standards or life stances which act as general guides to behaviour or as points of reference in decision-making" (Halstead 1996, 5). Values education has two components, the first being the identification of appropriate values (by schools, educationists or society) and the transmission of these values to children (Halstead 1996). The term values,

rather than ethics education, has been used in the EE field. Recent work, however, is seeking to reclaim the nomenclature and practice of ethics in EE research, postulating ethics as "a *process of inquiry* and *critical thinking*" (Jickling et al. 2006, 2).

Barriers and obstacles to the introduction of ethics education within EE have already been outlined earlier. These incorporate fear of indoctrinating students, a lack of teacher training and resource material and the belief that ethics or moral education should be the job of parents or priests. Simmons (1988) has outlined several ways in which environmental educators can lessen the dilemmas of ethics education: curriculum developers must be explicit in describing their own terms of reference; environmental educators need to define what ethical views exist and identify their consequences; teacher training should focus on equipping EE practitioners to examine resources with an 'ethical' lens; and most importantly the recognition that each person's beliefs and actions is rooted in a personal ethic, shaped by various influences, including religion.

If "education is how we learn to listen to each other, to value and accept multiple perspectives, and to pursue intelligent and caring dialogue across differences" (Cairns 2002, 85), then environmental educationists should be cautioned against indoctrinating students into Western dogma. Instead, they should strive to develop an educational landscape of pluralism which represents culture in totality—gender, race, ethnicity, religious background, class, and socioeconomic status—and recognize the "diversity of ways in which humans come to know and express their voices (voices of the past, present, and future) as equal stakeholders in democratic life and in the Earth's natural environments" (Mueller and Bentley 2006, 323).

Caduto (1985) argues that the development of values is essentially a socialization process which is driven by a range of actors including parents, teachers, religious authorities, peers and government. Yet, the 'fear of indoctrination' and the overt emphasis on 'objectivity' have led to the neglect of ethics education in most EE curricula. Yet, it "is not possible for any teacher to provide value-free instruction" since even "simple acts of setting an example that students will tend to follow

(modelling) and establishing rules for conduct that is considered right or wrong (moralizing), teachers are making implicit value statements" (Caduto 1985, 2). Thus,

...many teachers of environmental education need access to clear and concise discussion of the varieties of teaching strategies that can be used to enable students to explore value issues in ways that are inclusive, open-minded, critical, educative... (Courtenay Hall 1996, 142)

In a seminal study on Environmental Values Education (EVE), Caduto (1985) identified a range of values education strategies, divergent in their origins, aims and methods. The most common among these are values inculcation, behaviour modification, values clarification and values analysis. Values clarification and analysis have been particularly popular in their use by EE practitioners since they are considered less biased. After a discussion of the origins, merits and methodologies of various EVE strategies, Caduto (1985) concludes that the educator should, when choosing a particular strategy or combining various EVE strategies, take into consideration a range of variables. A learner's level of "cognitive development and moral reasoning", as well as his or her "emotional and spiritual orientation", play a part in the selection of a particular strategy (Caduto 1985, 3). In addition, issues such as class size, class setting, background of the teacher, subject under discussion and the availability of resource material, should be considered. Courtenay Hall (1996) outlines four approaches to values education (see Table 3.3.) and highlights the key aims and methodologies utilised by each strategy. She concurs with Caduto that these approaches are complementary, with each possessing distinctive features which can contribute to EE.

Ethics education, as it turns out, is central to EE and is also influenced by ideological positions in education, such as the vocational, liberal and socially critical varieties discussed earlier. The liberal stance promotes the development of "a personal worldview and its associated moral perspectives and values"; the vocational approach seeks to meet externally decided goals; while the socially critical variant develops both a personal ethic and delivers social goals (Scott and Oulton 1998, 212). Criticism against these orientations label the liberal approach as politically ineffectual and regard the latter stances as tending towards manipulation and

indoctrination. However, as Fien (1993, 37) argues, the values education agenda of socially critical education *for* the environment develops a personal environmental ethic based on "an appreciation of the impact of the currently dominant economic and social processes upon people and ecosystems", and in my view, encourages engagement with multiple knowledges and environmental philosophies. Ethical instruction, rooted in the environmental teachings of one of the great faith traditions of the world, Islam, strives to instil awareness of environmental and social injustice, develop a personal ethic, and enliven this ethic in society, through cultivating just relationships with the human and non-human worlds. It thus has much in common with socially critical orientations to environmental values education (EVE).

Table 3.3.: Approaches to Values Education (Adapted from Courtenay Hall, 1996)

The Approach	Aim	Methods
Values Clarification Approach	To clarify the values which learners hold.	Open-ended questions; exercises; and group discussions to elicit views and values.
Values Cultivation Approach	To learn the values, beliefs, and ways of behaving necessary as members of society.	Encouragement; praise; correction; questioning; community work; experiential education and role-modelling.
Reasoning / Values Analysis Approach	To learn to make and act on reflective and responsible decisions.	Debate; research; discussion and role-play to explore reasons behind differing views.
Perception Approach	To develop their capacities for moral perception, caring, and imaginative empathy.	Stories; artwork; fieldtrips; speakers; and small, supportive group discussions of life experiences.

Ethics research in EE is still in its embryonic phase. One of the ways of strengthening ethics research in EE is to interact with and build on the work done in the field of environmental ethics (Jickling 2005). Environmental ethics, located within the area of applied ethics, has produced immense scholarly output since its inception. One of the key features of environmental ethics is its consideration of

varied, often competing ideas and perspectives on the human-nature relationship (Yang, 2006). Environmental ethics has also undergone key shifts of interest to a discussion of religious ethics research in EE. These include the call for the practical application of environmental ethics; the need for communication between different schools of thought and approaches in environmental ethics; the incorporation of new, critical perspectives on environmental ethics such as those of post-modernism, feminism and pragmatism; recognition of the resources that different cultural traditions such as Buddhism, Islam and Judaism have to offer; and exploring the links between environmental ethics and environmental justice issues (Yang, 2006).

The promise of ethics research in EE is also a reconnection with one of the primary goals of environmental ethics, conceived as an applied philosophy, i.e. to move beyond the realm of philosophical debates towards the resolution of environmental problems. Ethics research in EE, as Jickling proposes below, should be about philosophical inquiry as well as action, of finding ways of knowing, being *and* interacting with the natural world. In this way, ethics and real life issues can be reconnected by identifying and accepting all opportunities to introduce discussions on ethics; to go beyond the classroom into the real world and to consider real issues and contemporary, global environmental concerns such as climate change, poverty, and war (Jickling 2004). Jickling has highlighted several areas of research possibilities in ethics and EE, including:

- Conceptualising environmental ethics within education;
- Experimenting with conceptual and theoretical problems within ethics; and
- Experimenting at the interface between theory and practice. (Jickling 2005)

In order to draw upon and maximise the potential of faith-based ecological visions, I would add the following:

- Recognising religious human-nature conceptions within the broad spectrum of environmental philosophies;
- Identifying and drawing upon the resources of traditional *and* religious ecoethics—beliefs, metaphors, knowledge, rituals, institutions—which relate to environmental care; and

• Building alliances between the socially critical and transformative stream of EE and liberation ecotheology which poses similar philosophical challenges to hegemonic worldviews and knowledges.

If ethics research in EE "should help in the developing and evolving of values and help individuals construct their own subjectivities and bases for actions" (Jickling 2005, 26), then the EE strategy which will be developed in this study, provides an opportunity to introduce an eco-justice ethic of Islam to Muslim children. Such a strategy will equip them with the knowledge and understanding of their own voice; and encourage them to reflect on the place and impact of an eco-justice ethic, composed of beliefs, ethics and practices, on righting ecological and social injustices. By aligning itself to the transformative currents in EE, this strategy draws upon an approach which challenges the intolerance towards alternative development and environmental imaginaries which originate outside the knowledge structures prevailing in the world today. Thus

...between education that is culturally relevant (Islamic education) [my insert] and education for conserving the earth's natural environment (environmental education) [my insert] a relationship exists that is reflective, reliant, and reciprocal of culture. (Mueller and Bentley 2006, 332)

Among the criticisms levelled at EE has in fact been its neglect of religious understandings and visions of the human-environment relationship (Ashley 2006). Religion has not been sufficiently recognised or harnessed to further the goals of EE. In fact, "most environmental educators would claim to hold 'ecological' and 'humane' values, but many are also suspicious of 'spiritual' values and cling to the 'confident scientific materialism' of the past" (Gough 1987, 52). Environmental education, like environmental ethics, "is sometimes based on a non-moral value of respect for (or love of) nature" (Brown 1987, 173), but this contains a weakness in motivating actions since EE fails to motivate students towards any personal moral and emotional involvement in conservation. Yet, when

pupils are encouraged to explore their personal response to and relationship *with* the environment and environmental issues, it is likely that this will help them develop a personal ethic *for* the world. (Palmer 2003, 144)

Increasingly, there has been encouragement to recognise "spiritual and religious forces in peoples' lives, as determiners of social and environmental values" and for "environmental values to be addressed by theologians and included in religious teaching" (Caduto 1985, 16). UNESCO, the lead agency for the implementation of the DESD, also states that "…religious discourse must not be abandoned in ethical language since most of the world's population speaks in the language of religions" (UNESCO 2001, 16). Hitzhusen also presents the argument that

Adding religious teachings to the environmental education mix greatly broadens the base of values available to support environmental citizenship - not by attempting to convert students to a new environmental belief system, but by empowering students to develop their environmental values within whatever pre-existing value system they already occupy. (Hitzhusen 2006, 13)

Similarly, in the field of environmental ethics, one of the key areas of future research is the recognition and utilisation of the 'ecological' resources of different religious traditions. It is increasingly being recognised that the metaphysical backdrop of environmental ethics is more than capable of inspiring environmental concern. The critical question is whether EE is ready to embrace and recognise the value of religious ethics in building environmental concern and if religion can respond to the reality of environmental degradation, fulfil its role as a moral guide, and lead people of faith to more just lives?

In the following section, I will discuss the position and place of ethics in Islamic education, including the conceptual underpinnings and aims of education in Islam. Firstly though, one has to develop an understanding of the nature and purpose of life according to the Islamic worldview given that the "centre-piece of a Muslim educational programme is the worldview of Islam and the place of Man in it" (Bleher 1996, 61).

3.2. Islamic Education and Ethics

Since the philosophy of education in Islam is firmly rooted in the Qur'an and Sunnah, it is prudent to revise some of the fundamental aspects of the Islamic

worldview here. *Tawhīd*, *the* distinguishing principle of the Islamic way of life, instils in the heart and mind of the Muslim that Allah is the Originator, Provider and Sustainer of the worlds. As the essence of the Islamic worldview, *tawhīd* constitutes the 'conceptual environment' of the world- and knowledge-structure of Islam (Acikgenc 1996). Humankind has been given the position of *khalīfah*, a steward or vicegerent on Earth, which carries the attendant responsibility of living in concordance with Divine laws, worshiping Him, and establishing the universal common good, justice and welfare of the entire Creation, *maṣālih al-khalq*. In this way, every Muslim man, woman and child, strives to be the best *khalīfah* (steward) and 'abd (servant) which he or she can be. *The* determining factor in fulfilling these roles successfully and achieving human destiny, i.e. to be the best steward and servant which she can be, requires knowledge and action. Knowledge brings understanding and wisdom, but action manifests in obedience to the Creator (Wan Daud 1989).

Living in accordance with the Divine Will requires affirmation in actions ('amāl), obedience to Allah's law—both in society and Nature—and the establishment of virtues such as justice ('adl), goodness (iḥṣān), and moderation ('itidāl). Just and virtuous conduct (a'māl ṣālihāt), which exists in the original, innate disposition of humankind, fiṭrah, should be the goal of human development. This includes justice in relation to the Creator, to the self, towards other human beings, and towards the natural world (Al-Attas 1985). In working towards the manifestation of fiṭrah in the universe, humankind must seek to know the original disposition within their selves, as well as the creative order upon which the universe has been established.

Fitrah is the pattern according to which God has created all things. It is God's manner of creating, sunnat Allah, and everything fits each into its patterns created for it and set in its proper place. It is the Law of God. Submission to it brings harmony, for it means realisation of what is inherent in one's true nature; opposition to it brings discord, for it means realisation of what is extraneous to one's true nature. It is cosmos as opposed to chaos; justice as opposed to injustice. (Al-Attas 1985, 57-58)

Knowledge which will guide humanity towards understanding their relationship with the Creator and Creation, their place in the universe, and which will assist

humanity in meeting and fulfilling its needs (within an ethical framework and in cognisance of the creative order), is required. The starting point in exercising human stewardship on earth is therefore knowledge of what this stewardship entails. As we will come to see below, this encompasses both revealed and non-revealed knowledge, or as Sardar (1985, 103) states, knowledge which is acquired "both from revelation as well as reason, from observation as well as intuition, from tradition as well as theoretical speculation". Knowledge should also lead to the "...actualization of *fitrah* in all its dimensions within a social context" and is "thus concerned with the development of the whole person...in and for society [and Nature]" (Mohamed 1991, 15). In the just fulfilment of the status of a *khalīfah*, knowledge and education play a pivotal role since

Reason, intelligence, language, and writing will grant people the qualities required to enable them to be God's khalifahs (vicegerents) on earth, and from the very beginning, Qur'anic Revelation allies recognition of the Creator to knowledge and science, thus echoing the origin of creation itself. (Ramadan 2007a, 31)

Through the revealed books, as well as the words and actions of prophets and messengers throughout the ages, humankind has been given the criteria to distinguish between right and wrong, tasked with the responsibility of enjoining what is good and forbidding what is evil, and establishing justice.

Very truly, We have sent Our messengers to humanity with clear and miraculous proofs that confirmed their messages. And We sent down with each of them a Heavenly Book to guide their people, along with the just balance, so that people might establish justice in the earth. (Iron 57: 25)

The word of Allah, the Qur'an, and the world of Creation, the cosmos, has been laid open to the human mind and heart – to understand, to contemplate, to reflect, to question and to respect. Knowledge acquisition is thus a central requirement of stewardship, the failure of which could result in $fas\bar{a}d$, corruption in the human and non-human realms as discussed in Chapter Two. Environmental destruction, for example, has been regarded as the deliberate disturbance and disrespect of $m\bar{z}a\bar{n}$, the balance and creative order manifest in the universe. As a responsible trustee,

humankind is charged with knowing and living in accordance with her fitrah, and establishing justice in the world. The worldview of Islam, encapsulated in belief $(\bar{l}m\bar{a}n)$ in Allah, His Angels, His Books, His Messengers, in the Last Day and in Divine Decree, forms the ontological basis of knowledge and education in Islam.

In the preceding Chapter, I outlined the foundations of ecological knowledge in Islam – the ethical precepts of the Qur'an and legal framework of the *Sharī'ah* which constitute the basis an eco-justice ethic. Below, I will begin to examine the knowledge structure emerging from this tradition in greater detail. I will also examine the educational landscape established to initiate Muslims into this tradition, with a view to identifying curriculum spaces to actualise the ecological ethic of Islam. Chapter Two demonstrated that the 'storylines and vocabularies' of Islam speak to ecological realities and is thus representative of tradition as a 'living, thriving conversation' which impresses and acts upon lived reality (Kazmi 2003, 283). In a similar vein, I wish to show here that the educational process in Islam is both a path towards understanding (knowledge) the signs of the Creator and endeavours to develop a human being who will be a true servant ('abd) and vicegerent (khalīfah) of the Creator in her actions (Hashim 2005).

3.2.1. An Understanding of Knowledge in Islam

The value accorded to knowledge in Islam is one of *the* features which nurtured and propelled the growth of the verdant Islamic civilisation in the Golden Age of Islamic civilisation. From the first verses revealed to Prophet Muhammad See The Clinging Clot 96: 1-5 the lofty status of seeking knowledge was established. The Arabic term which is generally used to denote knowledge, *'ilm* is mentioned in the Qur'an, in various formats, some 750 times. This precludes other words such as hikmah (wisdom) and ma'rifah (spiritual insight), which denote particular aspects of knowledge. Thus, the Qur'an, as a book of guidance, motivates and encourages humankind to seek knowledge, and to aspire towards achieving the high status of the knowledgeable:

And of His wondrous signs is the creation of the heavens and the earth and the variety of your tongues and your colours. Indeed, in all these there are sure signs for a people of knowledge. (The Byzantines 30: 22)

Are those who know and those who do not know Him equal? (The Companies 39: 9)

Prophet Muhammad , while himself unable to read or write, encouraged and even instructed his companions to acquire the tools of learning (reading and writing) and to exert great effort in acquiring knowledge. He enlisted all available opportunities to encourage learning and allowed prisoners of war to share their knowledge of reading and writing as their ransom. In this way, scores of Muslims attained the tools of learning. The Prophet also taught the following supplication to his companions:

My Lord, increase me in knowledge. (Ṭāhā 20: 114)

Seeking knowledge is therefore, first and foremost, as per the instruction of the Qur'an and Sunnah, a divine duty upon every Muslim male and female. Prophet Muhammad is reported to have said, "Seeking knowledge is obligatory for every Muslim" (Sunan Ibn Maajah n.d. 1(2241), 81). He is also the first teacher and exemplar of Qur'anic teachings and "the method which he adopted in imparting the knowledge of the Qur'an greatly influenced the course of Muslim education" (Haron and Mohamed 1991, 8) in its content and methodology. Bakar (n.d.) has suggested that Islam can therefore be regarded as a religion of knowledge for the following reasons:

- Knowledge is the distinguishing criterion of humankind over all of Creation, placing upon the shoulders of humanity the moral burden of accountability (See The Cow 2: 30-33);
- The first revelation concerns knowledge (See The Clinging Clot 96: 1-5);
- Humankind is commanded, throughout the Qur'an, to make use of all the instruments of knowledge—sensory, intellectual, and spiritual—and to be thankful for this blessed gift of being able to learn;
- Prophet Muhammad in his traditions recalls the importance of seeking knowledge, its obligatory nature, and its role in achieving success in the life of this world and the hereafter, and
- There are some 750 verses in the Qur'an that mention knowledge.

In recognition of the centrality of knowledge in the establishment of Muslim civilization, and in keeping with this "strong tradition of epistemological criticism in classical Islam—almost every renowned scholar...produced a classification of knowledge and elaborated the concept of value of ilm" (Sardar 1985, 91). While Islamic educational theory embraced elements of various cultures, such as the Persian and Greco-Hellenistic cultures, particularly in dealing with the stages in human development (Günther 2006), the distinctive 'tawhīdic' ontological framework and the eternal values of the Qur'an, such as khilāfah (trusteeship), 'adl (justice), istislāh (public welfare), raḥmah (mercy and compassion), and i'tidāl (moderation), provide the ethical framework or conceptual environment for the epistemology of Islam. In the same way, the Qur'anic ethical precepts which constitute the foundation of an Islamic eco-justice ethic are the basis of the ecological knowledge structure of Islam. The Qur'an, which is also known by the name, Al-Furqān (The Criterion), thus provides the basic configuration of meaning with which to make judgements on all other knowledge (Kazmi 1999), and is therefore the starting point for constructing the ecological ethic of Islam. Islam combines the religious, contemplative life and the material, practical life—the active and the passive—and presents an epistemology of holiness and wholeness which "...urges its followers to unify knowledge and action to create a synthesis of unitive knowledge and realize the Islamic worldview of tawḥīd" (Al Zeera 2001, 56).

Thus, consistent with the epistemology of Islam, which adopts an integral and holistic view of knowledge, the ecological knowledge of Islam draws upon all existing knowledge, revealed sciences (the Qur'an) as well as non-revealed sciences (the natural and social sciences), to understand and formulate a response to the ecological question of our time. However, revealed knowledge, to Muslims, occupies the highest knowledge since it is the Word of God and provides the ethical framework and foundation for all intellectual endeavours. An eco-justice ethic of Islam, as outlined in Chapter Two, therefore obtains its distinctive shape from Qur'anic ethical concepts. These two distinguishing features of knowledge in Islam, holism and hierarchy, are discussed briefly below. Thereafter, I will outline the inextricable connection between knowledge and ethics in Islam.

Islam upholds knowledge as the key to both individual and societal salvation. Amongst the guiding principles is the idea of the unity of knowledge and the recognition of various ways of 'knowing'. Most Muslim scholars writing on the subject of knowledge and education employ the method of classifying knowledge into revealed (al-'ilm an-naglī) and acquired knowledge (al-ilm al-'agli), exemplified in the writings of the twelfth century scholar, Abu Hāmid al-Ghazzāli (d. 1111). The knowledge classification of early Muslim scholars often revealed a lot about the 'knowledge culture' of the period, highlighting the particular characteristics and achievements of a particular epoch. Bakar (1998), in his comparison of the knowledge classification of al-Fārābī, al-Ghazzāli and Qutb al-Din al-Shīrāzī, shows how each scholar's classification, while based on Qur'anic concepts common to all Islamic intellectual thought, differs in tenor and emphasis. Most scholars however, regard revealed knowledge as comprising the immutable, timeless teachings enshrined in the Qur'an and Sunnah, and acquired knowledge as knowledge based on "reason, observation and experiment", subject to changes and variations. However, according to Douglass and Shaikh (2004, 13), while "revelation was assumed to be the paramount truth", the Qur'an in fact "exhorts believers to use reason to verify both the information provided by the senses, and knowledge based on revelation." Thus,

[s]ince human reasoning interprets these revealed truths, such truths are not interpreted without non-revealed metaphysical presuppositions, for the reason that human reason is shaped by social conventions and the historical context within which it operates. Hence, no knowledge is value-free. (Waghid 1996, 32)

Reason therefore has its place in Islamic epistemology, and the seeming incompatibility between faith and reason, which underscores the predominant Western epistemology, does not exist in Islam. Firstly, reason is not regarded as the only legitimate way of knowing, nor has it been elevated above other ways of knowing, such as spiritual knowledge, recognised as authentic and legitimate in many cultures, including Islam. While the labels of sacred and secular knowledge does apply in general to the categories of revealed and acquired knowledge, all knowledge has religious significance and should ultimately serve to make people aware of God and of their relationship with God, to inculcate goodness, and to

establish justice in society. Secondly, the bifurcation of knowledge (between faith and reason, and between heart and mind) in society today is based on the false assumption that revealed knowledge is not rational. Reason, as shown above, plays a central role in the religious sciences which were responsible, in large, for the scientific spirit which propelled the Islamic civilisation in the Golden Age of Islam. Lastly, the epistemology of Islam is holistic, integral and non-bifurcationist because throughout the Qur'an, humankind is exhorted to seek knowledge across a wide spectrum—from the Qur'an and from Nature—of benefit to individual and societal welfare, including the non-human realm. To take an environmental slant on the holistic view on knowledge, the Qur'an says that

...none is awakened to the wonders of creation and truly fears God among His servants but those filled with knowledge and the way of God. (Sole Originator 35: 28)

While a complementary and integral relationship exists between revealed and non-revealed knowledge, Muslim epistemologists have been unanimous in their hierarchic ordering of knowledge – the Qur'an, the Word of God, is regarded as the highest form of knowledge. The basis on which most epistemes have ordered the sciences are ontological (subject matter), methodological (modes of knowing), and ethical (aims and goals) (Bakar 1998). While the centrality of the Qur'an is a point in common, not all hierarchies were identical. As Nasr points out in reference to the natural world: "Each sphere of knowledge in Islam views nature in a particular light: for the jurists and theologians the earth is the backdrop for human action, for the philosopher and scientist a domain to be analyzed and understood and for the gnostics, an object of contemplation and the mirror reflecting supra-sensible realities" (Nasr 1994, 202). The overarching ontological framework, however, is tawhīd and

...Muslims—while encouraged to be critically minded—are called to an education built on the premise of faith in a divine order. Freedom to exercise one's intellect, on this understanding, must be restrained by an awareness of one's finitude. Furthermore, knowledge claims can only be predicated on the understanding that acquired knowledge is not likely to conflict with revealed knowledge as given in the Qur'an and Sunnah. (Merry 2007, 68)

Knowledge acquisition in Islam is also governed by, and inextricably linked to ethical development. The acquisition of knowledge, regarded as an obligation and an act of worship which garners reward, must also manifest itself in action ('amāl ṣalihāt). Wan Daud (1989, 74) defines 'amāl ṣalihāt as "all those actions that emerge out of and in conformity to, the Islamic world-view" and include "ritual obligations and other religious duties as well as efforts of personal or social significance", including, as discussed in Chapter Two, environmental care. In scores of verses in the Qur'an the link between knowledge and action is made explicit. In The Cow 2: 177, righteousness is said to include good action in all spheres of human activity, from prayer to almsgiving, from emancipating slaves to the fulfilment of oaths. In (The Prophet Muhammad 47:19), the Prophet & is exhorted to first seek knowledge and then to act. This verse also informed the naming of one of the chapters in the hadīth compilation of Bukhāri, 'Knowledge Before Speech and Action'. And in various instances in the Qur'an, Allah addresses humankind and gives glad tidings to "those who believe and do righteous deeds". As Izutsu (2007, 204) confirms, "Just as the shadow follows the form, wherever there is iman there are salihat, or 'good works'...the salihat are 'belief' fully expressed in outward conduct." Responsible and just action is not only inseparable from Islamic ethics but from Islamic education as well. While the very first verses revealed to Muhammad & started with knowledge, the revelation which followed spurred him towards action (See The Mantled Messenger 74: 1-5. True knowledge in Islam is thus a "balance between knowledge" ('ilm) and practice (a'māl), and its purpose is the cultivation of goodness" (Merry 2007, 52).

There are several characteristics of the Islamic knowledge structure which can be discerned from this discussion. Some of the central points which impact upon the development and actualisation of ecological knowledge in Islam include the purposive nature of seeking knowledge (knowledge and faith); the holistic and integrated nature of knowledge; and the link between knowledge and action. The ethical dimension of Islam's knowledge-structure 'runs through the fabric' of all knowledges and keeps them centred at the core of $tawh\bar{t}d$ (Kazmi 1999). Wan Daud's (1989) ideas on knowledge conceptions in Islam are particularly useful in drawing out the key features of an ecological knowledge conception in Islam. Ecological

knowledge should reflect the purposive nature of knowledge acquisition which seeks to know the Creator and by extension to understand the position of humanity in relation to the Creator as well as Creation. This nexus is further illustrated by the fact that the proper application of knowledge, in accordance with the teachings of the Creator, is in fact the foundation of tagwā, God-consciousness, the only criterion for human excellence in Islam since a muttaqī, one conscious of God, embodies "all the attributes of a knowledgeable servant and a responsible and just vicegerent of God on earth thereby fulfilling the purpose of man's creation" (Wan Daud 1989, 114). The holistic and integrated nature of knowledge in Islam; and the validity of revealed and non-revealed knowledge, encapsulated in Al Zeera's notion of holiness and wholeness, is affirmed in the Qur'an (See The Lucidly Distinct 41:53). The action-oriented epistemology and life-affirming spirituality of Islam necessitates the importance of being in history, concerned with securing the well-being of all Creation (Kazmi 2000). Finally, all knowledge in Islam is coloured by and inextricably linked to an ethical framework, embodied in the Qur'an and Sunnah, which is the 'soul' of Islamic education (Hashim 2005). The knowledge-structure of Islam thus gives rise to an ecological knowledge which embodies 'wholeness and holiness'; principles and practice; and knowledge and action.

Despite the rich epistemological heritage of Islam, few contemporary scholars have demonstrated its value as an alternative knowledge paradigm. Among the notable few is Seyyed Hossein Nasr who, in his seminal publication, *Man and Nature*, discusses the spiritual and intellectual underpinnings of the ecological crisis, identifies the epistemological crisis in Western civilization and throughout his life's work calls for the resacralization of knowledge (Nasr 1968). Another great thinker, Naquib Al-Attas has also written extensively on the epistemological challenge of secularism (Al-Attas 1985). More recent works by Ziauddin Sardar, Osman Bakar, and Nidhal Guessoum mark the slow, but growing response to the challenge of Western epistemology, particularly as it pertains to science. It is a response which recognises the ecological crisis as the misapplication of technology, developed and applied without ethical guidance and restraint; which regards the de-ontologising effect of the positivistic interpretation of science as incompatible with the Islamic worldview; and which bemoans the prevalence of scientism which has raised

"reason to a level where it became the sole arbitrator of all human thought and actions, values and norms" (Sardar 1985, 158). Muslims are not alone in their critique of Western epistemology. Calls for pursuing knowledge within an ethical framework, for recognising and acknowledging the authenticity of other forms of knowing, and for producing knowledge which "liberates, enlightens, empowers and emancipates the human individual" (Hussien 2007, 88) resonate amongst educational philosophers, particularly critical pedagogues. The epistemology of Islam, in my view, has much to contribute in this regard.

In keeping with the centrality of knowledge in the life of a Muslim, a range of institutional structures geared towards achieving the goals of Islamic education emerged. From the first place of learning, the house of the Prophet's companion Arqām (Dārul Arqām), where the fledgling Muslim community gathered to learn the teachings of Islam, the School of the Bench (Ahl al-Ṣuffah) which played a pivotal role in preserving the intellectual heritage of Islam, to the first masjid (place of prostration) or mosque, established upon the Prophet's emigration to Madinah, several institutions were expressly developed for the purposes of teaching and learning since the seventh century. The typology below is largely based on that of Makdisi (1981) and has been expanded to include contemporary institutions. The institutional landscape of Islam incorporates the:

- masjid (pl. masājid) which acted both as a place of prayer and learning. The masjid can be divided into the every day masjid in which the daily prayers are performed and the jāmi' in which the Friday congregational prayer is performed. The jāmi' is characterised with having a number of halaqāt (study circles) pertaining to the study of various religious sciences;
- *maktab* (pl. *makātib*) also called Qur'an or mosque schools provided elementary education and was often attached to the *masjid*;
- libaries and hospitals which served as centres of learning for 'foreign' sciences prior to the development of the *madrasah*;
- madrasah (pl. madāris), the colleges of Islam which provided education to adults from the post-elementary to the advanced level;
- Islamic schools, the recent phenomenon of faith schools, both primary and secondary, which largely adheres to national curricula, but aims to operate according to an Islamic ethos;
- A plethora of formal and informal learning opportunities such as conferences, workshops and seminars, often under the auspices of various

- Muslim organisations working towards reviving knowledge of the religious sciences, and
- Islamic universities, of the earlier variety such as Al-Azhar and the recentlyestablished International Islamic University of Malaysia, which offer a broad range of courses, from the religious sciences to the natural and social sciences.

(Leiser 1980; Makdisi 1981; Kadi 2006)

Douglass and Shaikh (2004) provide a typology of three categories of Islamic education: education of Muslims, provided by institutions such as the *madrasah* and *maktab*; education for Muslims in the guise of Muslim schools and universities; and education about Islam, primarily aimed at non-Muslims. In drawing out the pedagogical implications for implementing the eco-justice ethic constructed in Chapter Two, this thesis highlights the incorporation of ecoethics in the Muslim educational landscape and is therefore centred on education *of* and *for* Muslims. Below, I discuss key developments in Islamic education and, from there, delineate the aims and objectives which underscore education in general and environmental education above all.

3.2.2. Education in Islam: A Critical Perspective

From the foundational metaphysical principles and ethics of the Islamic worldview and its attendant epistemology, Muslim societies produced a vibrant literate tradition. This was evident in the memorisation of the Qur'an and hadīth; the formation of a range of educational institutions; and the burgeoning of knowledges, from the religious sciences to scientific disciplines. Educational endeavour sought to inspire within the Muslim "a consciousness of his obligations as the vicegerent of God and to teach him to treat the world as a great trust which must not be abused" (Husain and Ashraf 1979, 41).

Changes within the Islamic world as well as the onslaught of colonialism have impacted severely on the Islamic educational project. While the expulsion of Muslims from Spain some five centuries ago might have signalled the beginning of Muslim intellectual decline (Bugaje 1996), this intellectual retreat was worsened by the encounter with the Western intellectual tradition in the colonial era. Armed

with the tools of science and technology, the bearers of Enlightenment thinking forever changed the educational landscape of Islam. The Muslim world has, for the most part, been slow in rising to the challenges posed by this encounter, both on the cultural and educational levels (Cook 1999).

The post-colonial era saw most of the Muslim world, including educationists, reeling from the impact of colonialism. Not only was there a change in the hierarchy of education, with European-style education regarded as "a better road to upward mobility than Islamic education" (Hefner 2007, 18), but the holism of the Islamic epistemology was fractured by the dominance of the Western dualistic epistemology which separated the sacred from the secular, reason from faith, and knowledge from values. Throughout the Muslim world, the nature of knowledge and its attendant institutional support base, such as the madaris and makatib, underwent immense changes. The informal and networked quality of religious education was largely lost, the role of religious leaders diminished in the political sphere (with notable exceptions), and the marginalization of philosophy and science in both the madāris and Muslim scholarship left Muslim scholars with few resources to critically engage Western philosophy and science (Hefner 2007). Thus, for the most part "the traditional Islamic sciences have to a large extent remained static and insular" Dangor (2005, 519), with few Muslim scholars operating at the frontiers of knowledge today, a position which they occupied for centuries. What worsened matters further was that Muslim states, in awe of the 'power' which scientism unleashed, blindly emulated and blatantly promoted secular models of education, regarded education as "one more weapon in the arsenal of governance" (Hefner 2007, 30). While this dichotomy between Islamic and secular education has weakened the foundations of Muslim society, it has also led to a range of educational reform initiatives aimed at revitalising Islamic education.

Early reform efforts in the Muslim world, from the late 19th to early 20th century, were centred on developing ways of dealing with this educational dualism. However, these efforts, exemplified in the efforts of Shaykh Muhammad 'Abdu in Egypt and Sir Seyyed Ahmad Khan in India, were largely "overwhelmed by western civilization" and "openly apologetic in their attempt to seek compatibility with the

West" (Mohamed 1991, 25). Such educational reform uncritically incorporated western education and attempted to integrate modern and traditional disciplines without recognising the conceptual and philosophical barriers which existed between the two. Islamic revivalism in the 1970s, as evidenced in the efforts of such great thinkers as Naquib al-Attas and Isma'il Farūqi, has on the other hand, paved the way for an immense scholarly project which has brought together educationists from across the world to restructure and revive the educational system of Islam – the Islamization of education. Six international conferences, spanning three decades and dealing with various aspects of the Islamization process, have been convened thus far.

Since the First World Conference on Muslim Education, held from 31 March to 7 April 1977 in Makkah, Saudi Arabia five world conferences have been convened on Islamic education: Pakistan (1980); Bangladesh (1981); Indonesia (1982); Egypt (1987) and South Africa (1996). These initiatives fulfilled an important role in the on-going discourse on the conceptualisation of knowledge in Islam, and have provided the impetus for debate, discussion and research on the epistemology and methodology of Islamic education.

According to the International Institute for Islamic Thought (IIIT) (1987, 25), one of the organisations at the helm of this project, Islamization entails subjecting the "theory and method, principles and goals of all disciplines to the Unity of Allah (tawḥūd)". It has, for the most part, focused largely on Islamization of the social sciences, ignoring the fact that "[i]t is science and technology that maintains the social, economic and political structures that dominate the globe" and which are "the prime tools of Western epistemological imperialism" (Sardar 1985, 100). By failing to deconstruct the meaning and impact of secular thought on contemporary knowledge systems, Islamization also falls short in providing a truly alternative knowledge paradigm to the secular epistemology dominating Western thought today. Finally, it has not succeeded in incorporating the ideas of contemporary scholars who have provided credible critiques of Western epistemology and secularism: such as Sayyed Hossein Nasr's masterful critique of Western epistemology and construction of Islam's unified epistemology; Naquib Al-Attas's

assessment of the impact of secularism on Islamic thought and his calls for restoring $ad\bar{a}b$ in society, the true and right order of all things in the universe; and Ziauddin Sardar's efforts in highlighting the diversity and interconnectedness of Islamic epistemology. All three, in promoting the holistic epistemology of Islam, underscore the fact that

[i]t is not Islam that needs to be made relevant to modern knowledge; it is modern knowledge that needs to be made relevant to Islam. Islam is *a priori* relevant to all times. (Sardar 1985, 101)

In the context of the knowledge culture in the world today, Muslim scholars need to critically address the philosophical foundations (and weaknesses) of the secular epistemology and demonstrate the ways in which the Islamic conceptual framework addresses the challenges of modern society, such as the neo-liberal agenda evident in most mainstream education; the blatant neglect of social and ecological justice; the missing ethical dimension of education; and the marketization of schooling (Memon and Ahmad 2006). They need to present the knowledge paradigms of their distinct intellectual framework and share the development *and* environmental imaginaries of Islam which provides "not only a philosophy of existence but also an interpretive cloak for the discoveries of science and for the meaning of the cosmos and nature" (Guessom 2009, 55). They have to present the action-oriented, lived and liberatory spirituality of Islam which centralises ethics in all human actions. In short, Muslim thinkers have to present the knowledge culture of Islam from various angles - ontological, epistemological and ethical. It is here that I would like to echo the proposal that

Muslim educators need to join together with those who are articulating both a critique and possibilities for the reframing of educational practices and to add to the discourse by articulating what the Islamic tradition has to offer. (Memon and Ahmad 2006)

The remaining discussion will delineate the emergence of this critical pedagogy strand in Islamic education which highlights the transformative objectives inherent in the Islamic epistemology and which will be drawn upon to put an eco-justice ethic of Islam, constructed in the previous chapter, into motion. It is this approach,

rather than that of Islamization, which presents greater opportunities for revitalising the liberation ecotheology of Islam in the educational process. The growing engagement between Muslim educationists and critical pedagogues is based on common assumptions, objectives and concerns between the two educational philosophies, such as the role of human beings as agents of social change (Memon and Ahmad 2006; Hussien 2007; Waghid 2008). Table 3.4. below highlights commonalities in relation to several key concepts (Hussien 2007).

Table 3.4. Common Assumptions Between the Philosophies of Critical Pedagogy and Islamic Education (Adapted from Hussien 2007)

PHILOSOPHICAL ASSUMPTIONS	PHILOSOPHY OF CRITICAL PEDAGOGY	PHILOSOPHY OF ISLAMIC EDUCATION
View of human nature	Human beings are situated in the world. They are historical, rational and social beings, and active meaning-makers.	Vicegerents are representatives of God, and are historical, rational and social beings, and active meaning-makers.
View of society and social change	Human beings are part of society and are agents of social change.	Vicegerents are responsible for the betterment of society and the world, hence are agents of social change.
Category of knowledge	Reflection and self- interpretation; emancipatory knowledge.	Critical reading and understanding of the words and works of God.
View of education	Social transformation.	Personal and social development and transformation.
The "good" in education	To prepare individuals to lead a good life and establish social justice.	To prepare individuals to lead a good life by fulfilling the responsibility of God's vicegerents.

While there are areas of concurrence between the philosophies underlying critical pedagogy and Islamic education, I would concur that it is "imperative to reconstruct critical pedagogy from an Islamic worldview because Islamic education is based on a different worldview and vision than that of Western pedagogy" (Hussien 2007, 101). The Islamic worldview on human nature centres on the concept of vicegerency (khilāfah) with humanity being charged with the responsibility of actively seeking knowledge and cultivating the virtues enshrined in the Qur'an in "dealing with human beings, other creatures and all natural objects, in modern terms, the environment" (Ashraf 1991, 23). Humans are therefore active meaning makers in

society and should be agents of social change and justice seeking to fulfil God's Will on earth (Al-Attas 1979).

O you who believe! Be most upright in upholding justice, bearing true witness for the sake of God alone — even it is against your own selves, or your parents, or your nearest relatives— regardless of whether one party is rich and the other is poor, for God is most regardful of what is good for them both. 《Women 4: 135》

In relation to the Islamic view of knowledge, it has already been stated in Section 3.2.1., that Islam adopts a holistic and integrated view of knowledge, and recognises that there are diverse ways of knowing such as reason, sensory perception, intuition, experimentation and observation. While the Word of God, the Qur'an, is treated with reverence and respect and regarded as the highest form of knowledge, its exegetes have accepted the invitation to think deeply about and investigate revealed knowledge. This gave rise to scholarship which incorporated *tafsīr* (exegetical analysis), *ta'wīl* (deep exploration) and *ijtihād* (rigorous mindful action) (Waghid 2008). Thus, a critical reading and understanding of knowledge (emancipatory knowledge) will enable Muslims to be better Muslims *and* better vicegerents, seeking to affirm justice in their relationship with their Creator and Creation. By justice here, I refer to Al-Attas's conception of justice, as "knowledge of the right and proper place for a thing or a being to be" (1979, 27).

This view of Islamic education is at once vertical, in establishing a just relation with the Creator, horizontal and outward-looking, in seeking to transform society and inward-bound, striving to transform the individual. Who better to illustrate this than Muhammad who was at once the prophet of God, a social reformer and liberator par excellence and a servant, humbled in gratitude before his Lord. Islamic education, in my mind, aims to bring "an individual back toward their *fitra* (natural state of purity)" (Memon and Ahmad 2006) and to "provide the basis from which we may find the guidance to submit to God's Will and hence come to know ourselves, our place in the universe and our relationship to God [and Creation]" (Mohamed 1991, 15). It is thus expressly transformative in its intent to achieve harmony and justice in human society and in the earth, in working towards the common good of all Creation (*maṣāliḥ al-khalq*), and in making liberation a priority for all times.

I will now consider how the aims and objectives of Islamic education, encapsulated in three key concepts $ta'l\bar{\imath}m$, tarbiyyah and $ta'd\bar{\imath}b$, are conceptualised in relation to knowledge in general and to ecological knowledge in particular. Several scholars writing on Islamic education have identified these three terms as summarizing the various dimensions of the educational process in Islam (Cook 1999; Hussain, A. 2004; Waghid 2010).

Ta'līm is derived from the Arabic word 'ilm, and encompasses several meanings including knowledge, learning, and intellection. As described in the Qur'an, 'ilm delineates a broad spectrum of knowledge, revealed and non-revealed. The Qur'an also uses a variety of terms to denote the various methods of knowing such as "listening (in the sense of understanding), observing, contemplating, reasoning, considering, reflecting" (Guessom 2009, 64). Islamic thinker, Al-Farābi (d. 950), suggests that ta'līm incorporates student-centred learning and is an interactive process that involves both the teacher and the student, in which the teacher facilitates the student's journey towards knowing, comprehension and conceptualization (Günther 2006). This approach is vividly illustrated in the Prophet's approach towards developing the intellectual capacities of his companions. By asking questions, by formulating paradoxical and/or seemingly contradicting statements, and by arousing their interest, Muhammad "evolved a genuine pedagogy through which he allowed the Muslims to develop their critical faculties, express their talents, and mature in his presence" (Ramadan 2007a, 102).

Taʻlīm thus conceptualises education as 'deliberative and reflective engagement' and entails socialising the learner into an inherited body of knowledge, revealed and non-revealed (Waghid 2010). However, it also requires, of necessity, the cultivation of critical thinking, independence and courage as demonstrated in the Prophetic pedagogy in which women and men possessed the confidence to question and even contradict his opinions. The implications of taʻlīm, in constructing the ecological knowledge paradigm of Islam thus requires that Muslims reflect and deliberate upon the inherited body of knowledge of Islam, the ecoethical principles in the Qur'an (such as tawḥīd, khilāfah, khalq, fasād and fiṭrah) and the legal instruments and institutions (the Sharīʿah) oriented towards environmental care, and also critically

engage with contemporary ecological knowledge in constructing an ecological ethic which responds to the social and ecological injustices of our times.

The second concept, *tarbiyyah*, is derived from the Arabic root *rabā* which means to make or let grow, to raise or rear up, or to educate and teach a child. The derivative term *tarbiyyah* is said to refer to pedagogy, instruction, and education (Cowan 1974). Muslim educational scholars are at variance as to the whether this term adequately denotes the aims of Islamic education (Al-Attas 1985; Bagheri and Kosravi 2006). A. Hussain (2004) has linked *tarbiyyah* to the Qur'anic use of the term in which humankind is enjoined to show kindness and mercy to their aged parents who raised them up when they were little (See The Night Journey 17: 23-24). *Tarbiyyah*, in the educational sense is frequently used in reference to 'nurturing and caring for children' and teaching them, not *about* Islam, but what it means to *be* Muslim – the beliefs, values, principles, rights and responsibilities and attitudes which a Muslim should uphold (Tauhidi 2001). The importance of *tarbiyyah*, seen as the social and moral development of the Muslim personality is echoed by K. Hussain (2007, 300) who regards the "quintessential goal of moral education the awakening and proper situating of the inner being within a person".

The meaning of *tarbiyyah* is extended considerably by other authors. Bagheri and Kosravi (2006) postulate that the usage of the word '*rabb*' (a derivative of *tarbiyyah*) in the Qur'an, both in (The Forgiver 40: 7) and in (Tāhā 20: 114), denotes the link between *tarbiyyah* and '*ilm* (knowledge). Waghid (2010) goes further by interpreting one of the names of God, '*Rabb*' to mean not only Lord, but also Educator. He also assigns to *tarbiyyah* the meaning of responsible action (Waghid 2008) which I would take to mean raising children to be responsible in their interaction with others, reflecting upon the body of inherited knowledge and values of Islam, and thereby "achieving what the Qur'an requires of every human being - to enjoin what is good, and prevent what is evil" (Douglass and Shaikh 2004, 15). As it relates to the ecological knowledge of Islam, *tarbiyyah* extends the process of engaging with the ecoethic of Islam (*ta'līm*) towards actualisation of this ethic, or in other words, understanding the 'why' of being a good human being.

The concept of *ta'dib*, as elaborated by Al-Attas, denotes the final and critical aspect of Islamic education - social activism (Waghid 2008). The vital link between knowledge ('ilm) and action, as evidenced in good actions ('amāl ṣalihāt), has been highlighted throughout this chapter. This concept further entrenches the transformative objectives of Islamic education which is not about equipping students to survive financially and take their place in society as useful, contributing players in the market economy (Memon and Ahmad 2006), but about personal and societal transformation. Ta'dīb is drawn from the concept of adab, meaning "a custom or norm of conduct passed through generations" (Douglass and Shaikh 2004, 14). It also refers to the recognition and acknowledgement of the right and proper place of all things and beings - manifested in the condition of justice (Al-Attas 1979). What Al-Attas means here is that ta'dib entails not only having the knowledge of the right and proper place of all beings in the universe, its fitrah and mīzān in other words, but to strive to be in harmony with the entire cosmos – to not only live in a state of justice but to be active and willing participants in achieving this state. Waghid (2010, 246) argues that ta'dīb, as social activism or good action, has "emancipatory interests in mind, which can be made possible through a just striving which takes into account [and assures] the rights of others", human and non-human.

This study builds on critical Islamic pedagogy to support the claim for a justice-oriented slant in Islam's ecoethic. The above-mentioned concepts, derived from the Qur'an and Sunnah, constitute the basic objectives of Islamic education, i.e. critical and reflective engagement with knowledge (ta'līm); questioning and understanding the impact of knowledge in cultivating the qualities required to undertake responsible action (tarbiyyah); and effecting meaningful and positive social change in one's self and in society (ta'dīb). This approach towards Islamic education, underscored by the tawḥīdic (monotheistic) worldview and holistic and hierarchic epistemology of Islam, aims to develop a good and just person, in her relation with God, humankind and the non-human world. In awe of the signs of Allah, can a khalīfatullāh fil arḍ (steward of Allah on earth) be anything but merciful, compassionate and just in her interaction with Creation? Amid the ethical framework of the Qur'anic teachings, can she develop and unleash a science which

ravages the earth, the abode of all Creation? In living according to the Will of God, the Most-Just, can she walk upon this earth with arrogance and pride, unmindful of the rights of this living planet which will speak her news to her Lord (See The Quaking 99: 4-5)?

The knowledge culture of Islam—its ontology, epistemology and ethics—can contribute to the transformative aims of critical pedagogy. As an educational tradition, critical Islamic pedagogy, requires that Muslims engage with the theory, content and methods which are being used to achieve the true purpose of knowledge and schooling, which is to ennoble the human being. It can also, as I will argue later, shape an EE strategy which will not only instil a personal ethic for the earth, but extend this concern into the realm of action. Islam, as a living and transformative educational force in the lives of its adherents, thus needs to return to the Prophetic model of education which raised a generation of ordinary women and men whose lofty minds and characters tower above humanity today. Furthermore, the ethics and principles of Islam needs to take its place among liberatory traditions, such as liberation theology, critical ecology and critical pedagogy, in meeting the manifold challenges facing humanity in the twenty-first century. In the following section, I will focus on the position and place of ethics and ethics instruction in Islamic education, with a view to identifying opportunities for introducing an eco-justice ethic of Islam.

3.2.3. The Place of Ethics in Islamic Education

Islamic Education is an education which trains the sensibility of pupils in such a manner that in their attitude to life, their actions, decisions, and approach to all kinds of knowledge, they are governed by the spiritual and deeply felt ethical values of Islam. (Husain and Ashraf 1979, 1)

Just as the nature of Islamic education has to be understood in light of its theology, similarly, a discussion of ethics has to ensue from the foundational principles of Islam. The Qur'an and Sunnah is the basis of Islamic ethics and Muslims strive towards inculcating the virtues detailed in these two sources. The *Sharī'ah* (Sacred Islamic Law) has translated the ethical principles of the Qur'an and Sunnah into

practical injunctions and legal maxims which seek to establish the welfare of the entire Creation, as displayed in Chapter Two. Faith, in the life of a Muslim, must be accompanied by action. The Qur'an states that Allah created the heavens and earth in order for humankind to prove themselves ethically worthy by their deeds (See Hūd 11:7). It is therefore inconceivable to the Muslim mind and heart to 'say that which they do not do'. Prophet Muhammad , is *the* exemplar of Qur'anic ethical teachings and his life is regarded as the perfect expression of the moral values of Islam. His mission, as stated in his own words, is to perfect moral character: "I have only been sent to perfect good character" (Bukhāri 1989, 104).

Morality in Islam has three dimensions: obligations as set out in the *Shari'ah*; the ethical framework of the Qur'an and Sunnah which govern these; and the reflection of these actions and ethics in everyday life. Prophet Muhammad is upheld as the perfect example of *al-insān al-kāmil*, i.e. the complete or holistic human being reflecting the lived (and transformative) spirituality of Islam. The Prophet is addressed in the Qur'an as one who is "of outstanding character" (The Pen 68: 4) and his sayings further attests to the centrality of character formation in the life of a Muslim:

'Abdullah ibn 'Amr narrated that Allah's Messenger never talked in an insulting manner and that he never spoke evil. It is also narrated that he used to say, "The most beloved to me among you is the one who has the best character and manners." (Ṣaḥīḥ Bukhāri 1987 3(3549), 1372)

The Arabic word for character is *khulq*, the plural form of which, *akhlāq*, is commonly used to denote ethics in Islam. *Akhlāq* is defined by Al-Shirwāni as "the science of virtues and how to acquire them, of vices and the way to guard against them" (Halstead 2007, 285). Contemporary Islamic scholar, Yusuf Al-Qaradawi, classifies *akhlāq* (Islamic ethics) into six categories incorporating a range of moral values expected in the life of a Muslim: (1) *akhlāq* relating to the self, (2) relating to family, (3) to society, (4) to the animal world, (5) to the physical environment and most importantly, (6) *akhlāq* related to the Creator (Al-Qaradawi 1981). This categorisation illustrates the division into human and divine ethics as outlined by Izutsu (2007). Writings on Islamic ethics are scattered across various fields of Islamic

scholarship, such as philosophical works; theological treatises; jurisprudential writings which deal with the structure and objectives of the *Sharī'ah*; Sufi writings which provide a deeper spiritual understanding of ethics; and political and economic writings which focus on principles of economic and political justice in Islam (Ansari 1989).

The task of ethics instruction in Islam is to expound and provide an understanding of the ethos of Islam as enshrined in the Qur'an and Sunnah (Ansari 1989). In Chapter Two, the ecological ethic of Islam, which constitutes a substantial part of Islamic ethics according to Al-Qaradawi's categorisation, was constructed from the foundational sources of Islam. Similarly, Muslim scholars have devoted a great deal of effort to delineating the content, method and approach towards ethical development and instruction in Islam.

Siddiqui (1997) develops a categorisation of ethics in Islam, which highlights the progression of ethics from the realm of belief to that of action. His categorisation shows that "the inner conviction of Imān and the practice of Islam are intertwined in that faith and righteous conduct go hand in hand" (Siddiqui 1997, 424). He regards the key terms encapsulating ethical development in Islam as:

- *Īmān* or belief which acts like an anchor by setting out the fundamental beliefs of a Muslim;
- *Islam* as the practical demonstration of *Īmān*;
- Taqwā or God-consciousness which encourages human beings to be vigilant against moral peril and to be aware of the Creator's presence at all times, and
- *Iḥsān*, the pinnacle of Islamic ethics, where good actions ('amāl ṣālihāt) are performed not only with a sense of duty and obligation towards establishing justice, but with a sense of love for God.

Another term, commonly associated with ethics is adab, an Arabic term meaning culture, refinement, or humaneness (Cowan 1974) and which "denotes a habit, an etiquette, a manner of conduct derived from people considered as models" (Al-Kaysi 1986, 13). Adab in this sense does refer to the manners and morals derived from Islamic teachings and exemplified in the character of Muhammad 3a, but it also incorporates $ta'd\bar{t}b$ as in Section 3.2.2.. Muhammad 3a is the embodiment of $ta'd\bar{t}b$, an

agent of social change - standing up against all forms of oppression (The Heights 7: 33), establishing justice (Consultation 42: 15), and doing good works (The Decline of Time 103: 3). He persevered, amid all the opposition which he faced, to seek not only personal transformation and enlightenment, but societal change as well. He was truly heeding the Qur'anic dictum that 'God does not change a people's condition of grace until they change what is in their souls' (The Thunder 13: 11).

Muslim scholars have noted that centrality of ethics in shaping Islamic epistemology. In building on this tradition, Sardar (1985, 166) calls for a contemporary style of knowledge production which "incorporates the ethical dictates of Islam and is an embodiment of Islamic culture and tradition". Bakar (n.d.), in outlining the spiritual and ethical foundation of science and technology in Islamic civilization, describes an epistemology which is not only holistic but which is regulated and guided by the ethical dictates of the Sharī'ah. Jurisprudents have invested their hearts and minds into operationalizing the moral distinctions of actions on the basis of the ethical values in Islam, classifying all actions which are "destructive, physically, emotionally, culturally, environmentally and spiritually" as harām (forbidden); and acts which promote "social justice and considers public interest" - the common good and welfare of society and nature, as halāl (permissible) (Sardar 1985, 176). As humankind face the ethical challenges of the 21st century—political, technological, educational—they need to revisit the treasure chest of Islamic ethical wisdom which is of increasing relevance to a world beset by moral relativism.

Muslim educationists face the task of developing reflective and critical engagement with the values of the Qur'an $(ta'l\bar{\imath}m)$; growing minds and hearts which recognise the value of responsible action (tarbiyyah); and inculcating the spirit of social activism $(ta'd\bar{\imath}b)$ which epitomises the action-oriented flavour of critical Islamic pedagogy. Moral education should not be crammed into forty minutes of RE (religious instruction), but should colour the entire domain of Islamic education - from the rituals of ablution to creation theory, since the epistemology of Islam openly embeds all knowledge within ethics. Below, I will consider the conceptualisation of ethics instruction in Islamic education.

Within Islamic educational efforts, in the maktab, madrassah or Muslim school, the subject dealing with ethics or moral education is termed either Akhlāg or Ādāb, drawn from the Arabic terms denoting ethical development. However, since the ethical values of Islam, as discussed above, is inextricably linked to the socialisation process in Islam, efforts at cultivating praiseworthy qualities, such as kindness, mercy and love for all Creation, start in the Muslim home. From the first moments after birth when the words of the call to prayer (adhān) are softly recited in the ears of the new-born babe, the Muslim child is reminded of the Oneness of God and the seeds of the love of God and His Creation are implanted. Muslim children are taught, from a young age, the fundamental ethical values of Islam, with a particular focus on belief (īmān) in the Oneness of God and the relationship which humans should have with the Creator, which include obedience to His Laws, love for Him and His Creation, and the virtue of speaking the truth, kindness to Creation, and the importance of being helpful. The home thus provides the first and most important school for the Muslim child and Muslim parents are encouraged to instil good habits in their young children and to nurture them into developing responsible action. As many educationist advocate today, the primary means of educating the young Muslim child is through play.

Parents are tasked with raising their children for at least the first seven years of their life with formal schooling starting at about age six or seven. Throughout these first years of her life, the Muslim child will learn about God and Creation from her parents, thus by the time when she attends elementary school, she already has some knowledge of Creation as well as the basic ethical principles of Islam. The practical demonstration of Islamic belief, incorporating the ritual obligations such as prayer and fasting, is encouraged from the age of discernment between right and wrong, termed <code>tamyīz</code>. Most scholars place this age at seven years old.

The 'age of discernment' is the best time to instil the basic theological concepts, for example, in the hope that they will become clear later. Introduced at an early age, such concepts become rooted in the consciousness of the child. (Gil'adi 1992, 54)

At the onset of puberty (takalluf), the Muslim child becomes accountable for his or her actions. This time, when the young adult accepts the Divine trust of becoming God's trustee on earth and living according to the Divine law, is thus preceded by a period of preparation, to inculcate the moral motivation and love for the way of life of Islam. Now, the young adult is faced with the choice of accepting *khilāfah* (vicegerency) and embodying all the qualities of a just, compassionate and responsible trustee of her Creator, emulating His qualities of love and mercy to all of Creation.

Childhood development and curriculum content, as it relates to a range of knowledge systems, occupied a central place in the writings of early Islamic scholars. In an exposition on the concept of childhood in Islam, Gil'adi (1992, 30) says that one of the remarkable features of "Islamic paediatric and childrearing treatises is their wholeness in the sense that they deal, side by side, with physicalmedical and psychological-pedagogical questions". Many scholars consider the elementary phase of education as essential in guiding the child towards his propensity towards goodness, his fitrah. While children are encouraged to attend the elementary educational institution, the maktab, it is important that they be mentally and physically ready for education. The curriculum at this level, according to Al-Ghazzāli, is generally focused on Qur'anic memorisation and learning the fundamentals of faith and moral behaviour (Alavi, 2007). Others have included basic literacy such as reading, writing and poetry as well as physical activity (Günther, 2006). The integrated view of knowledge is present even at this early age when children begin to understand their religion, religious obligations and their identity, thereby building their personality in a holistic way by focusing on belief, morality and intellectual development (Parker-Jenkins, 1995).

In a similar vein, the Prophet Muhammad \clubsuit , in his early teachings focused on inculcating belief in the Oneness of God ($tawh\bar{\imath}d$) and the status of the Qur'an, particularly the ethical demand to live according to Qur'anic teachings and to remind humankind of these teachings. Belief in the hereafter and life after death impressed upon the hearts of the first Muslims that this life has meaning, that they would account for all their actions, and that their ultimate return was to their

Creator. They were also informed how "the organs of ethical and moral conduct" - eyes, tongue, hands and feet - would testify against its acts of injustice to itself on the Day of Resurrection (Al-Attas 1979, 26). These preliminary teachings concretised the link between faith and morals, and between belief and action. This initiatory educational phase which raised up a community of believers regarded as the best community on earth, is essential in laying the foundation of ethics education in Islam. According to Ramadan (2007a), this phase which taught the first believers the meaning of life and the requirement to behave ethically, is only the moral demand which leads towards the ultimate goal of the believer - the intimate and loving presence of God.

The emphasis on instilling good character in the child and introducing the basic tenets of Islamic belief is affirmed in the thinking of Islamic scholar Al-Ghazzāli. The educational philosophy of Al-Ghazzāli is said to form "the bedrock of Islamic educational thought for generations" (Reagan 2005, 231) and echoes the central Islamic belief that since all children are born in state of purity with a natural inclination to worship One God (fitrah), education should be about guidance. The curriculum for the elementary phase of Islamic education should thus develop a basic understanding of that knowledge which is essentially the personal obligation of every Muslim; being the tenets of faith (timan), the ways of the performing the commandments (Islam); and the principles of correct behaviour (timan) (Gil'adi, 1992). This has informed the curriculum and approach to moral education from the Middle Ages to the present-day. While Islamic Studies curricula have, in general, retained these fundamental teachings, there is increasing recognition that curricula need to be socially-relevant since

...Islamic education is neither timelessly traditional nor medieval, but an evolving institution visibly marked by world-transforming forces of our age: religious reform, the ascent of the West, nationalism, the developmentalist state, mass education, among other. (Hefner 2007, 28)

The study of moral values or *Akhlāq* forms one of the standard components of Islamic education at all levels, from elementary to tertiary education; from the *maktab* to the *madrasah*. The moral education curriculum increases in complexity as

learners progress towards primary and secondary education. This is illustrated in a series on moral education, developed by the Jamiatul Ulema in South Africa, aimed at children aged six to fifteen years and addressing basic ethical precepts and providing moral guidance (Mogra, 2007). The series initially focuses on basic moral instructions such as truthfulness, supplemented with traditional stories to illustrate the particular virtue being imparted. The content increases in complexity to include reasons for the required behaviour thereby developing intellectual conviction and subsequently includes definitions of virtues and vices. The main aim of this series is to provide a "clear exposition of traditional values and expectations in relation to the way of life of the believer" (Mogra 2007, 391) and to inculcate these values into the hearts and lives of the young Muslim. The principle method used in this series on values education in Islam is that of values cultivation.

Mogra's (2007) study of the series on moral education being implemented in *makātib* in Britain, a review of teaching *akhlāq* in Malaysian secondary schools (Tamuri 2007); and insights from the experience of Muslim schools in the US (Memon and Ahmad 2006), provide useful insights into the content, teachings techniques, as well as outcomes of moral education in Islam. Their findings include the need to

- Review *Akhlāq* teaching programmes in light of changing circumstances, both at the societal and classroom level;
- Employ diverse teaching methods;
- Relate content to current and relevant issues in order to illustrate the significance of Islamic moral teachings in daily life;
- Allocate time for the teaching of Akhlāq amid an already crowded curriculum;
- Develop teaching aids on Akhlāq education;
- Avail opportunities for teacher training on ethics instruction, and
- Evaluate the Islamic worldview in light of the dominating and prevailing secular paradigms which stress individualism, careerism and consumerism.

Among the areas worth singling out is the role of the teacher as a role model, and the concerns relating to the teaching methods employed in moral education. While the actors exerting an influence on the moral education of a child include her parents, peers and teachers, the teacher occupies a central role since "educators...bear great responsibility for the shaping of the young child's

dispositions and habits" (Gil'adi 1992, 31). Thus, Muslim scholars have produced extensive works dealing with the requirements of a teacher (Günther 2006). The Malaysian study also found that the methods, such as the 'lecturing' method used in *akhlāq* teaching, is proving ineffective. Little holds Muslim teachers back from being good role models and employing a variety of teaching methods such as group work, stories, role-play and debate, other than lack of teacher training and a lack of an awareness of the Prophetic pedagogy. The primary example of a teacher is the Prophet Muhammad has who through his personality and character and use of a variety of educational methodologies set the standard for teaching. The Qur'an confirms the role of the Prophet Muhammad has as well as all other prophets, as teachers:

Truly, God has conferred favour upon the believers in sending forth to them a messenger from among themselves, one who recites to them His verses revealed in the Qur'an, and who purifies them, and teaches them the Heavenly Book and the wisdom of prophethood. Indeed, before this they were utterly lost in clear misguidance. (The Family of 'Imrān 3: 164)

Prophet Muhammad was 'a born teacher' and his greatest teaching methodology was his character, a human and thus replicable portrayal of the Qur'anic message (Abu Ghuddah 2003). There are several qualities which he displayed which are regarded as essential in teaching, such as wisdom, gentleness, patience, brevity, accessibility and attentiveness. He employed a variety of methodologies which included interactive methods such as questioning and the use of suspense to arouse interest and hold the attention of his companions; aids to assist memorisation such as listing and repetition; and literary devices including stories, rhyming statements and parables (Abdel Haleem, 2002). The Prophet's qualities as a teacher and his teachings methods continue to be regarded as the standard to which teachers aspire, encapsulating all aspects of Islamic education: as mu'allim in facilitating reflective engagement with knowledge (ta'līm); as murabbī in developing responsible action (tarbiyyah); and as mu'addib in encouraging social activism (ta'dīb).

This prophetic pedagogy extends beyond the prevailing method of values cultivation and is an amalgamation of various approaches. He spromoted values

clarification by making paradoxical, even contradictory statement to stimulate understanding of complex ethical questions. Muhammad sencouraged values analysis through reflection, debate and discussion and spurred his companions to probe their perception of the deeper realities by sharing stories, journeys, and life histories. Yes, values cultivation, through role-modeling, praise and encouragement towards good, had its place in the prophetic pedagogy, but it was by no means the sole method of ethics instruction. At present, Muslims are in need of deep, insightful and reflective deliberation on the misunderstood and much-maligned teachings of the Islamic faith; of undertaking responsible action; and of taking their rightful place as standard-bearers of justice for all Creation.

The other two issues which I will address, by considering developments in ecoethical instruction efforts, is the social relevance of ethics instruction and the need for appropriate educational resources. In returning to the central objective of this discussion, the place and position of ethics in Islamic education, it is obvious that, "for the majority of Muslims, values are a 'given'; their primary sources being Qur'anic revelation, including the Divine Attributes, and the Prophetic model" (Dangor 2007, 525). Ethics thus holds a central place in the Islamic epistemology and Muslims can draw upon a treasure chest of ethical teachings related to all facets of life, including human-environmental relations as shown in Chapter Two. As active meaning-makers in society, tasked with standing up for truth and justice and combating oppression of all kinds—economic, racial, ecological—Islamic education needs to be able to respond to contemporary challenges in order for Muslims to draw upon this rich intellectual tradition. This is already happening as evidenced in the formulation of the ecological ethic of Islam and the growing Muslim response to challenging ecological questions of our time - it needs to extend across the full spectrum of knowledge. Islam, as we have seen in the growing spectre of Muslim environmental activism, is not a religion relegated to the inner sanctum of the soul, but should manifest in everyday actions and relationships, including human interaction with the natural world. It should thus address all questions of relevance to life in twenty-first century, from the streets of Birmingham and Washington DC to the forests of Sumatra and the coral reefs of Misali.

Supporting teachers with resources, such as training and teaching aids, could go a far way in revitalising Islamic ethics education. The intellectual project, aimed at presenting the epistemology of Islam as an alternative knowledge paradigm is on the march, spurred on by the works of Al-Attas, Nasr, Bakar, Sardar and others. But it needs to be supported practically, in the classrooms of the madāris, makātib and Muslim schools. In terms of imparting the ecoethics of Islam and thereby 'greening' the curriculum of Islamic education, EE programmes premised on this ecoethic, is being developed across the Muslim world. From the Misali Environmental Ethics Project, implemented in Zanzibar, comes the Teachers Guide Book for Islamic Environmental Education (Khalid and Thani 2008). 'Al Khalīfa' (The Steward), available in the local language as well as English, seeks to apply Islam ecoethics to local environmental problems in Mindanao, Philippines and to mobilize educational institutions by building environmental awareness (USAID, 2007). Indonesia, the most populous Muslim country, is the site of a range of EE programmes, explicitly aimed at involving traditional Islamic institutions such as the Islamic boarding school (pesantren) in showcasing Islamic forms of conservation institutions, raising environmental awareness, and conducting research on the viability of faith-based community conservation (Mangunjaya 2009; Durrell Institute of Conservation and Ecology 2010). Muslim Hands, an international relief and development agency, has embarked on developing an ecological curriculum for all its schools around the world (Muslim Hands 2009). These endeavours exemplify the diverse efforts of 'contemporising' Islamic knowledge, making knowledge derived from the Islamic legacy relevant to contemporary concerns and supporting this project with resources, both human and financial.

Current trends in ethics education, within the environmental sphere as well, are imbued with secularism, moral relativism, and/or ecospiritualty. The push of modern culture toward "secular religious attitudes, and its 'selective multiculturalism', erodes the distinctiveness of particular religious traditions upon which many cultures are founded" and thereby ignores the wealth of religious principles which have "stood the test of time and developed complex metaphysical, ethical and moral systems and understandings to deal with challenges which humans confront in their individual and communal lives" (Valk 2007, 280). In

addition, the prevalence of earth spirituality tendencies within the environmental movement, critical ecologists included, run the danger of marginalizing theists and thereby losing the valuable earth-centred ethics which many faiths possess. But they could also lose out on an "alternative pedagogical vision to the materialist, secularist and careerist impulses that generally permeate Western society" (Merry 2007, 49) and forfeit the opportunity of working with Muslim liberation ecotheologians who are in search of the very same reforms which critical ecologists, pedagogues and social activists desire – to secure human dignity, establish social and ecological justice, and live as good human beings. The remainder of this chapter will focus on comparing and contrasting the place and position of ethics in environmental and Islamic education with a view to identifying opportunities for rapprochement.

3.3. Introducing Islamic Ecoethics by way of Environmental Education?

Both the philosophies of environmental and Islamic education focus on developing particular attitudes and values. Yet, as we have seen, within each philosophy there exists a myriad of approaches towards achieving broadly-stated aims. In terms of environmental education (EE), Fien (1993) has outlined how neo-classical, liberal and socially critical orientations toward education align with different environmental philosophies, from techno- to ecocentric environmentalism, in producing distinct orientations to EE. Opportunities for engagement with transformative voices, such as liberation ecotheologians, were most likely identified to occur within socially critical approaches to EE which are broadly ecocentric; integrate social and ecological justice concerns; and incorporate personal and structural transformation. Moreover, these approaches interact with, and recognise the validity of alternative knowledge paradigms in ecological ethics.

Critical approaches to Islamic education, outlined in Section 3.2., align with developments in critical pedagogy and question the very knowledge structure underlying contemporary educational philosophies. This approach also introduces an epistemology which challenges and seeks to transform unjust economic and social processes through "upright living and making moral decisions based on the

goal of being noble in...everyday activities" (Profeit-Leblanc 1996, 14). The selection of this approach to Islamic education, as opposed to that of Islamization, in my view opens up the doors for engagement with all knowledges, of the past, present and emerging future, while at the same time being cognisant and critical of the philosophical foundations of the secular knowledge culture which underpins mainstream education. It also enables Muslims to come to know and understand the distinctive features of Islam's knowledge paradigm which plays a pivotal role in shaping its environmental narrative and eco-justice ethic.

The centrality of ethics in both Islamic education and EE is indicative of the 'space' available to impart faith-based environmental ethics within EE; and to introduce ecological ethics into the Islamic educational landscape. One qualification sets these two spheres of education apart, the one rests unequivocally on a worldview based on revelatory knowledge, while the other is developed through the voices of naturalists, philosophers, civil society, governments and educationists. However, just as there are common philosophical assumptions and areas of concern between Islamic education and critical pedagogy (See Table 3.4.), similarly, there is room for rapprochement between Islamic education and transformative EE in particular since both seek to achieve action and positive environmental behaviour and employ ethics education in achieving this. This is the first commonality between the two spheres of education.

Environmental education is directly and overtly concerned with influencing (some suggest fundamentally changing) learners' attitudes and behaviours and it is widely held that values education is central to this process. (Scott and Oulton 1998, 211)

Socially critical orientations to EE which incorporate both personal and structural transformation have an overt agenda of ethics education and social change. This resonates with the ecological ethic of Islam, encapsulated in the conception of humans as steward and partner with nature, at once *khalīfah* (trustee) and *khalq* (Creation), seeking to establish the common welfare of all Creation upon principles of justice, mercy and moderation, within the unified epistemology of Islam, which recognises that "man has a spirit and that spiritual and moral aspects of his

personality cannot be separated from any form of human activity whether individual or social (Husain and Ashraf 1979, 77). Thus, faith and action or as one writer on Islamic ethics puts it, $\bar{l}m\bar{a}n$ (belief) and Islam (the practical manifestation of this belief), are inextricably linked. No action, no matter how small, is deemed as insignificant in the life of a Muslim. Through the inculcation of Islamic values and principles, the Muslim develops the awareness, knowledge, attitude, skills and motivation to live and act as a good human being, at once a *khalīfah* (trustee) and partner of *khalq* (Creation) in worshiping the Creator. Through a similar process, albeit with a different goal in mind, socially-critical orientations to EE seek to develop an environmentally-aware, literate and responsible individual who wants to effect social change.

Ethical concerns in EE are centred upon the creation of a positive attitude towards nature, building environmental concern and ultimately engendering proenvironmental behaviour and sustainable living. In Islam, ethics infiltrates the entire gamut of the Muslim's life, from the ethics governing the individual's daily life, to her interaction with other humans and the natural world. Care and concern for the environment forms one of the key aspects of the Islamic ethic as encapsulated in the term <code>khalīfah</code> or trustee. Thus, Islamic education should seek to advance in the student

...the creative impulse to rule himself and the universe as a true servant of Allah not by opposing and coming into conflict with Nature but by understanding its laws and harnessing its forces for the growth of a personality that is in harmony with it. (Al-Attas 1979, 159)

The second area of commonality between EE and Islamic education is the centrality of environmental care and concern. While the importance of education for the environment permeates EE philosophies and practices, it is only upon closer inspection that the ecological ethic of Islam, and the holistic and transformative epistemology of Islam, comes to the fore. This is as much a consequence of neglect by Muslim scholars as it is a natural outcome of intellectual imperialism. Furthermore, education in Islam must achieve two things - enable humankind to know their Creator, observe and reflect on the requirements of the Sharī'ah, and

understand the workings of the earth - contemplating the Signs of the Creator in the universe, appreciating its bounties and expressing gratitude (Husain and Ashraf, 1979). Sarwar states that among the objectives of Islamic education is that it has to "develop a sense of social responsibility for the efficient use of resources to eliminate wastage, avoid ecological damage, and safeguard the well-being of all created beings" (1996, 13-14). While the ecoethic of Islam is avowedly theocentric, it clearly has ecocentric tendencies as discussed in Chapter Two. It is also a rich repository of action-oriented ecoethics, akin to that which socially critical EE approaches seek to engender in society.

A third area of convergence between EE and Islamic education is the emphasis which both educational systems place on holism and the critique of the western concept of knowledge which has impacted on the separation of humans and nature. In the field of EE, this would require a complete re-evaluation of the paradigm which underlies the Western educational system and requires addressing the pervasiveness of the materialistic worldview which "replaced intrinsic values with instrumental values" and "sees the human species apart from nature and having the right to manipulate nature for its own purposes" (Palmer 2003, 101). It would also entail recognition of the multiplicity of knowledge systems and ways of knowing the world. Enlightenment-based thinking, which has contributed to the separation of "science and social sciences, body and mind, and knowledge and values mirror and contribute heavily to the artificial separation between humans and nature" (Cairns 2002, 83). Thus, calls have been made to develop a new paradigm that would increase awareness of the interdependency between humans and nature within the dynamic web of life and provide alternatives to the core lessons being taught in our schools today - such as individualism, consumerism, careerism and anthropocentrism (Cairns 2002; Lefay 2006). This ecological paradigm would resurrect intrinsic values, reunite knowledge with values and revive notions of stewardship.

Education can and must be redefined and transformed to become itself a transformative process, such that we learn and see the world holistically and act to protect, respect and restore the Earth, our living home. (LeFay 2006, 36)

Likewise, Islamic education is not merely utilitarian with career planning as its basic methodology, but recognises the sicknesses of materialist philosophies which rest on limitless consumerism and has resulted in "the consequent fouling and polluting of air and water, shortages of energy and exhaustion of exhaustible materials" (Husain and Ashraf 1979, 46). Many Muslim scholars argue that it is the very nature of the knowledge system, conceived and disseminated by Western civilisation, which has caused a crisis in the world (Al-Attas 1979; Nasr 2005; Guessoum 2009). As it moved further away from "the almost universally held view of the sacredness of nature", Western philosophy and science, has, from the sixteenth century onwards "divorced, in a manner not to be seen in any other civilisation, the laws of nature from moral laws and human ethics from the workings of the cosmos" (Nasr 1996, 4).

This critique highlights the fourth area of common concern to environmental and Islamic educationists, a concern with the nature of the knowledge system and the philosophical underpinnings of education. Bonnett (2000, 591) shows how all learning is grounded in "fundamental concepts which are deeply metaphysical". As discussed in this chapter, the metaphysics underscoring human conceptions of the environment also results in particular educational models. Jickling and Wals (2008), for example, consider how transmissive versus transactional or transformative approaches to education influence and shape EE initiatives differently. In a similar vein, Muslim scholars have highlighted the underlying philosophy of education today - its promotion of the neo-liberal economic agenda and market-driven ideology which equates knowledge with that which is of marketable value (Memon and Ahmad 2006); the separation of knowledge and values into watertight compartments (Sardar 1985); and the general disregard for revealed knowledge as an explanatory framework for reality (Guessoum 2010). Muslim scholars, I would argue, have produced credible critiques of the shortcomings in Western epistemology, both scientism and humanism, and have charted the way forward for a unified and hierarchic epistemology which seeks to reunite civilisation's head and heart within the Islamic worldview.

The final commonality which I will consider here is the engagement which both educational spheres, EE and Islamic education, have initiated with critical pedagogy.

Fien's (1993) ideological basis of orientations in EE draws upon critical theory to flesh out the transformative objectives of EE. Sauvé (2005), in mapping the pedagogical landscape of EE, highlights the importance of critical pedagogy in shaping recent trends in EE such as the praxic, socially critical, ethnographic, feminist, and eco-education currents in EE. Kahn (2008), an ecopedagogue, is explicit in drawing upon critical pedagogues such as Paolo Freire in formulating an ecopedagogy which "seeks to interpolate quintessentially Freirean aims of humanization and social justice with a future-oriented ecological politics that radically opposes the globalization of neo-liberalism and imperialism". Thinkers in Islamic education have also started identifying common philosophical assumptions between Islamic education and critical pedagogy (Hussien 2007); delineating the objectives of Islamic education in terms of "transformative, liberatory politics" in which "teaching and learning have, in the first place, to be empowering, liberatory and deliberately engaging" (Waghid 2008, 2); and have urged Muslim educators to contribute to the debate on the purpose and concept of education which seek to develop 'socially active, ethically aware, compassionate, transformative human beings' (Memon and Ahmad 2006).

In spite of the existence of several opportunities for rapprochement between Islamic education and EE—a love and concern for the natural world, a recognition of multiple ways of knowing, and the integration between social and ecological justice—progress towards integrating the religious ecoethic into EE programmes has been slow. There have been some notable exceptions: Hitzhausen (2006) who has shown how religious elements can be incorporated into the EE process by focusing on one of the enduring theoretical models in EE, that of Hungerford and Volk. Williams (1990), in *Green Beliefs - Valued World*, who presents an EE resource which highlights the beliefs of various faith traditions on the natural environment. Bratton (1990) and Jacobus (2004), who, taking a theological slant on EE, consider the challenge of teaching environmental ethics from a theological perspective and present an introduction to environmental theology for environmental educators respectively. Ashley (2006) who shows how theocentric ecological ethics presents an alternative, non-anthropocentric philosophy to the anthropocentrism inherent in both technocentric and ecocentric environmentalism. The Yale-based Forum on

Religion and Ecology (FORE), which has produced an online resource for educators including a range of classroom resources such as syllabi, audio-visual resources and educational links (FORE 2010). And Beringer (2000, 2006), who looks at religion, both as a source of ethics and an important resource for EE, and who points out some of the commonalities discussed here.

Environmental education can [therefore] actively push this spiritual worldview forward by arguing against and rejecting the monopoly enjoyed by modern and postmodern worldviews in the education system...instead placing them alongside teachings about traditional metaphysics, the limitations of modern science, and cultural analyses of the ecological crisis. (Beringer 2006, 37)

With growing evidence of a green movement amongst Muslims, many scholars have started looking at developing EE strategies to revive Islam's environmental teachings and practices. This has involved the articulation of the ecological ethic of Islam; the production of educational materials; teacher training; as well as the creation of spaces for introducing this ethic into the rich educational landscape of the Muslim world, the *masjid*, *madāris*, *makātib* and Muslim schools.

Examples of EE programmes, premised on the Islamic teachings on the environment can be found in Pakistan (Ayaz et al. 2003; Sheikh 2006), in the Philippines (USAID 2007), in Zanzibar (Khalid and Thani 2008), in Indonesia (Conservational International Indonesia 2005) and in the United Kingdom (Islam & Citizenship Education 2009). Sourcebooks, teaching modules, classroom materials, videos, posters and pamphlets and outdoor educational experiences have been developed to relay the environmental ethic of Islam. Coupled to this has been the intellectual output of Muslim researchers such as the introductory work of Subbarini on the ecocentric of Islam as a determiner of EE (Subbarini 1993); Al-Naki's (2004, 128) pioneering study on communicating environmental ethics in Kuwait which shows how it is possible to "learn and select from concepts and teaching techniques derived in the West...to help put in place an Islamic environmental ethic appropriate to an Islamic context"; and the recent work of Haddad (2006) who develops an Islamic environmental education framework centred upon faith, knowledge and manifestation.

The ecotheology movement, Muslims included, is making its mark on the environmental landscape and is now an established 'interested and affected party' areas of commonality environmental deliberations. Three environmentalists and religious leaders have been identified by Gardner (2002). These could easily be applied to environmental educationists. Firstly, both see the world "from a moral perspective, stressing obligations that extend beyond the individual to other people, distant places, and future generations"; both regard the "natural world as having value that transcends economics" and both "oppose the excessive consumption that drives industrial economies" (Gardner 2002, 8). Religions also possess five sources of power: It shapes people's worldview; wields moral authority; influences and holds the attention of its adherents; possesses financial and institutional assets; and generates social capital - all of which could be used to build a socially just and sustainable world. Furthermore, a religious view of nature is indispensable since it serves as a rich source of environmental ethics and also knowledge of the order of Nature (Beringer, 2006) and "generates strong beliefs which can lead to high levels of commitment in certain individuals or social groups...[offering] the nearest hope to certainty of action in terms of proenvironmental behaviour" (Ashley 2000, 142). EE needs to harness and take advantage of these religious resources. While concerns exist regarding the introduction of religious insights and dogma into public education,

...the formal, authorized environmental dogma of religious communities—represented by hundreds of denominational environmental policy statements—is one of the more important resources religions can contribute to environmental education. (Hitzhusen 2006, 12)

A strong convergence exists between the educational priorities of environmental educationists and eco-Islamic activists and organisations. EE employs a range of philosophical approaches and methodological tools to develop engaged, environmentally-literate citizens, and promotes and encourages responsible environmental behaviour. An educational strategy aimed at translating an Islamic eco-justice ethic into action today could therefore draw upon socially critical orientations in EE to build environmental awareness amongst Muslims. It should, however, reflect the theocentric worldview of Islam as displayed in the liberation

ecotheology outlined in Chapter Two; and display the transformative intent of Islamic education delineated in the critical pedagogical approach and learning objectives discussed in this chapter – key features of Islam's holistic and action-oriented ecological knowledge paradigm.

In this chapter, I have demonstrated that both environmental and Islamic education affords a central role to the development of ecoethics. Initiatives imparting the ecoethical teachings of Islam by way of environmental education are on the increase. This study seeks to contribute towards this arena by considering the ways in which Islamic ecoethics are manifested in the educational landscape of Muslims and from theoretical and practical insights on Islam, ecology and education, distil the central components of an EE strategy aimed at Muslims (Chapter Four). It will then home in on the curriculum of the *maktab* by reviewing the incorporation of environmental teachings in the curriculum of the South African *madrasah* (as the *maktab* is known in South Africa), to find ways of strengthening the EE intent of this vital institution which is aimed at elementary Islamic education (Chapter Five).





ISLAM AND ENVIRONMENTAL EDUCATION: INTERNATIONAL AND SOUTH AFRICAN PERSPECTIVES

By the decline of Time!
Indeed, humankind is in a condition of utter loss
Except for those who believe and do righteous deeds
And exhort one another to uphold the truth,
and exhort one another to persevere in faith with patience.

(Al-'Asr 103: 1-3)

The key question in this study, restated here, is centred on the nexus of religion, ecology and education, i.e. What are the key features of an eco-justice ethic of Islam, and what are the pedagogical implications for implementing such an ethic in the educational landscape of Islam broadly, and the maktab curriculum in particular? In Chapter Two, an eco-justice ethic of Islam, comprised of coherent ecoethical precepts and a legal system which seeks to establish the welfare of all Creation, maṣāliḥ al-khalq, was constructed. This eco-justice ethic presents an ethic of just, responsible and respectful interaction between humans and nature. While nature is afforded intrinsic value, in line with ecocentric approaches, this theocentric ethic regards humankind as both a steward of God on earth (khalīfah) and a partner of Creation (khalq), worshipping the Creator of all the Worlds. Caring for Creation is regarded as a virtuous act ('amāl ṣālihāt) and a religious duty and education about, in and for the earth is earmarked as one of the primary conduits for translating this ecoethic into action.

Chapter Three began to address the implications for introducing this eco-justice ethic by way of environmental education (EE). It showed several areas of convergence between the philosophical underpinnings and educational priorities of Islamic and environmental education. While both centralise ethics in engendering respect and care for nature and in achieving positive environmental action, socially critical variants of EE which recognise multiple knowledges, agitate for social

change, and reunite knowledge with values, is the most likely conduit for interaction between environmental and Islamic educationists since it is committed to goals of social transformation, continuous learning and respect for all life, all central goals of Islamic education. The action-orientation to environmental education in Islam is encapsulated in a holistic knowledge-structure and the educational objectives reflected of *ta'lim* as deliberate and reflective engagement with ecological knowledge (revealed and non-revealed); *tarbiyyah* as responsible environmental action; and *ta'dib* as social activism. Chapter Three also affirmed that ecological literacy is vital in equipping Muslims with the knowledge to fulfil an essential religious obligation – environmental care.

This chapter builds on the argument that the educational approaches, methods, and tools within EE can be drawn upon to revitalise the ecoethics of Islam and thereby constitute a valuable resource in achieving ecological literacy and action amongst Muslims (Al-Naki 2004; Abu-Hola 2009). Achieving ecological literacy, the development of "a rich knowledge base and multifaceted beliefs and/or philosophies about the environment" (Cutter-McKenzie and Smith 2003, 502), is one of the primary objectives of EE. It is suggested that EE should, as an ultimate goal, develop operational ecological literacy, the ability to not only be aware of, concerned about, and cognisant of environmental issues, but to undertake positive environmental action. In this chapter, I will investigate the ways in which Muslims all over the world are beginning to utilise the curriculum spaces or learning opportunities within their educational landscape to broadcast the environmental message of Islam. From the pulpits of the masājid in Canada to the pesantren in Indonesia, the institutional landscape of Islam is being drawn upon to broadcast this message and promote action for the earth. This discussion will differ from Chapter Two which outlined the growth of environmental activism and was essentially broad in intent. Instead, it will home in ecoIslamic activities located within the traditional and evolving educational landscape of Islam and extract the broad pedagogical implications for implementing the eco-justice ethic constructed in this study.

By way of a content analysis of theoretical and practical works on Islam and environmental education, this chapter will delineate the key elements of an EE strategy aimed at building ecological literacy and action amongst Muslims. The rationale for this methodological approach, outlined in Chapter One, rests upon the need to understand the varied practices which have been employed to enliven the environmental narratives of Islam in the educational sphere. It is thus about building a connection 'between thought and action, between ideas and practices'. While this analysis revealed that there is a dearth of scholarly work on Islam and environmental education in particular; accounts of practical ecoIslamic initiatives abound in the media, print and on-line. This overview highlights educational activities which span the entire institutional establishment of Islam and is one of the first efforts, to my knowledge, to do this. It also extracts, from the interplay between ethics, ecology and education in the Muslim educational landscape, some of the salient features of EE in the Islamic context.

4.1. Islam, Education and Ecology: Theoretical Perspectives

By introducing a spiritual dimension to the educational experience of the learner, an educational curriculum under the framework of an Islamic ethos could make a long-lasting contribution to values and lifestyle changes in learners holding the Islamic faith. (Al-Naki 2004, 139)

While few contemporary scholars within EE have engaged with religion, a few brave souls have included religious ecological knowledge within the ambit of ecological knowledge constructions. Beringer (2006, 37) argues for the recovery of a "religious understanding of nature" which will benefit humanity on a global scale since it possesses "an environmental ethics rooted in and intertwined with spiritual understandings which can give guidance and regulate behaviour". Ashley (2006) focuses on the fact that religion poses a serious and viable challenge to destructive consumerism and identifies common ground between the ecocentric ecological thought underlying much of EE and that of religion - an opposition to anthropocentrism. Hitzhusen (2006, 21) reflects on the ways in which "thoughtful inclusion of religious teachings can offer students a richer range of perspectives from which to examine environmental values" by locating religious environmental

resources within the classical citizenship behaviour flow chart of Hungerford and Volk (1990) – the basis of many EE curricula. In assessing the major and minor factors influencing environmental citizenship behaviour, he suggests that religion can play a determining role in advancing many of the values which EE seeks to promote such as care and concern for the earth as well as a personal ethic linked to the ecological teachings of learners' faith traditions. Religion also emphasises personal and social action, all essential to achieving environmental citizenship.

Voices calling for the consideration of culture in EE have also noted the importance of valuing alternative environmental imaginaries and criticise the dominance of Western scientific approaches, metaphors and concepts within EE curricula. Gough (2002, 1224) for instance, cautions against EE which privileges "Western scientists' representations of 'reality' and reproduce the conceit that the knowledge Western science produces is universal", excluding and marginalizing other knowledge systems, such as Islam, which present varied understandings and responses to the environmental question. Since knowledge is culturally-situated, Saul (2000) argues that culture should influence not only content areas, but the entire EE curriculum, leading to the design of context-specific EE. While discussions on multiculturalism and EE show many commonalities between these two spheres (Marouli 2002; Nordström 2008), the "valued principle of multiculturalism may not prevent the dominant culture from inadvertently imposing its dominant values and beliefs on others" (Mueller and Bentley 2007, 324). Environmental educationists thus have a responsibility to recognise that religion is pivotal in shaping ethics, a key concern of EE, and also plays an active role in the production of environmental knowledge. Moreover, they need to resist the pull of globalizing forces which are leading to the exclusion and marginalization of rich sources of ecological knowledge, religion included.

Nasr (1992) rightly regards the role of religion in the environmental crisis as both ethical and intellectual since it not only provides and ethical reference system governing human interaction with Creation (an ecocosmology), but also presents a critique *and* alternative to the monopolising influence of modern science as the only valid form of knowledge about the natural environment. Whether these knowledge

trajectories would lead to different physical realities to the one we are facing now will only be known if we create the spaces for these knowledges to be actualised. In Chapter Two I initiated the construction of an eco-justice ethic of Islam. Chapter Three set out the educational ideologies of Islamic and environmental education, and began to extract pedagogical implications for implementing environmental education programmes in the educational landscape of Islam. Opportunities for rapprochement and partnership between Islamic and environmental education, were also identified. Below, I will consider perspectives, theoretical and practical, on Islam and EE.

Aming the definitive purposes of the educational process in Islam is to facilitate the trusteeship of humankind on earth (khalīfatullah fil-ard), who are charged with living in accordance with Divine laws and securing the common good, justice and welfare of the entire Creation, maṣāliḥ al-khalq. Knowledge, which will assist humankind in exercising this vicegerency, is therefore required. Underscored by the tawhīdic (monotheistic) worldview and holistic and hierarchic epistemology of Islam, EE in Islam, in line with the Islamic educational ideology presented in this study, aims to develop a good and just person, in relation to the human and non-human worlds. Islamic education thus aims at the balanced growth of the total human personality, as well as the dissemination of both knowledge and values. As a khalīfah of the Most-High, the Muslim exhibits mercy, compassion and justice in her interaction with Creation. As a partner of Creation (khalq), worshiping and praising the Creator, she is mindful of the rights of this living planet. The ecoethic of Islam seeks to develop this person, 'who walks softly upon the earth', who 'gives thanks' for the bounties which have been placed on earth for all Creation, and who does 'not cause corruption on the earth after it has been set in order'.

Muslim thinkers and activists have articulated the ecoethics of Islam by actively retrieving the ecological knowledge of the Qur'an and Sunnah, cultivating the ecological virtues enshrined therein, and striving towards becoming active meaning makers in society and agents for social and ecological justice. Theoretical insights on Islam and EE, drawn from both general texts and the handful of writings on Islam and EE, will be considered here.

In general, most ecoIslamic texts have emphasised the central place of education in spreading the ecological message of Islam. They have, for the most part, followed the standard methodological route of ecotheological research by retrieving, reevaluating, and reconstructing the Islamic teachings on nature. Jenkins (2005) regards the two central tasks of religious environmentalism as displaying its normative resources and highlighting their novel use in the face of contemporary environmental challenges. Most ecoIslamic texts focus on the former. This is not surprising since the initial phase of "ecological awakening" amongst Muslim scholars was directed at raising awareness of the Islamic ecoethic. Present-day initiatives, however, are extending this engagement from the theoretical to the practical level, including EE. The few writings which focus on EE in Islam mainly reiterate the message of most ecoIslamic works - that Islam has several determiners for an ecological ethic. For the most part, they fail to provide comprehensive strategies and approaches for building ecological literacy amongst Muslims and tend to focus on building the case for EE (See Subbarini 1993; Al-Naki 2004; Abu Hola 2009). Where attempts to construct theoretical models on EE do exist, they are not framed within the existing knowledge on environmental ethics in Islam (Uddin 1986; Haddad 2006). There is thus a need to construct an EE strategy for Muslims and to develop curriculum materials, based on Islamic ecoethics, to facilitate the achievement of ecological literacy.

From the first report detailing with environmental protection in Islam (Bagader et al. 1994) to the scores of works published thereafter, general ecoIslamic works have played a key role in opening "people's eyes to Islam's potential for education and promotion of sustainable living and its ability to serve as the building block for regulations in a modern legal system" (Arensberg 2005, 13). Most ecoIslamic works provide substantive input on the following aspects of the EE process: why Muslims should be educated about the environment (why EE); the content such an educational programme should include (what EE); and the target audience of EE (EE for whom). Very few deal with the other ingredients of an EE strategy in any depth: by whom, where, how to teach and how to assess and evaluate – all essential parts of the EE process. Nevertheless, they have provided convincing arguments for environmental care in Islam and have constructed ecological ethics of Islam, largely

ignored in mainstream environmental ethics, as a plausible basis for environmental education and action. According to Abu-Hola

...environmental literacy is a must in Islamic religion and a crucial and vital activity for all Muslims to engage in. Environmental literacy is the gate leading to a clean and healthy environment. All Muslims must develop environmental literacy in accord with the Holy Qur'an, its commandments, and the Prophet's (pbuh) traditions. Achieving this literacy will surely help to protect the environment from damages and promote the right feeling among humans towards their environment. (Abu-Hola 2009, 209)

Why is EE important in Islam? Muslim concern for the environment is supported by the Qur'anic conceptual framework on the human-nature relationship as well as a dynamic legal system, the Sharī'ah, which seeks to rectify humanity's relationship with the Creator, inculcate just and moral behaviour in society, and mitigate all creaturely harm. EcoIslamic scholars have drawn upon both ethical and legal reasoning to construct the argument that caring for the environment is a religious duty (Bagader et al. 1994; Izzi Dien 2000; Özdemir 2003). Foundational ecoethical principles of the Qur'an, such as tawhīd, khilāfah and fiṭrah, have been drawn upon to construct a theocentric ecological ethic which recognises that all Creation has one origin, is purposive, and functions in accordance with Divine Will (See Chapter Two). Humans, as vicegerents on earth, are answerable for the just and responsible discharge of this trusteeship in accordance with Divine Laws while all Creation (khalq), a reflection of divinely-arranged structure and order, is deserving of care and respect. Nature possesses inherent value as the signs of the Creator, ecological value as part of the integrated system which He designed, and utilitarian value in sustaining both humans and the rest of Creation. The Sharī'ah, the roadmap defining the limits and conditions of human trusteeship, possesses methodological tools, laws, and institutional mechanisms aimed at securing the universal common good and welfare of the entire Creation.

Writing on the ecoethic of Islam, Muslim scholars have been unanimous in asserting that educational interventions are pivotal in expanding the awareness of Islamic teachings concerning the environment and that education needs to be remodelled "to nurture an understanding of the natural world and our place in it" (Khalid 2005, 111).

Working alongside environmental scholars, Muslim educationists have reiterated the centrality of EE in furthering the educational goals of Islam which is concerned with understanding the Words and Works of the Creator. Ecological knowledge, related to the human-nature relationship as well as the workings of the earth contemplating and understanding the Signs of the Creator, appreciating its bounties and expressing gratitude, is thus central to the Islamic educational project. Consistent with the Islamic view of knowledge, ecological knowledge is holistic and integrated - acknowledging diverse ways of knowing. It is also hierarchic, regarding revealed knowledge as the highest form of knowledge. In keeping with this epistemology, ecological knowledge in Islam draws upon all existing knowledges, revealed sciences as well as non-revealed sciences, to understand and formulate a response to the ecological questions of our time. It does centralise, as Chapter Two illustrates, the Qur'an and Sunnah (revealed knowledge) as the ethical reference system for the interaction between humans and nature.

The link between faith, knowledge and action is illustrated in the educational ideology of Islam as encapsulated in ta'lim, reflective and critical engagement with the values of the Qur'an; in tarbiyyah, the recognition of the value of responsible action; and in ta'dib, working towards social change. When viewed through an environmental lens, ta'lim entails socialising the learner into an inherited body of knowledge, the ecoethical principles in the Qur'an and Sunnah, as well the existing ecological knowledge found within the non-revealed sciences. Critical engagement with both knowledge structures leads to the construction of an eco-justice ethic, true to the tenets of Islam and responsive to the ecological questions of our times. The ecological knowledge of Islam, viewed from an ontological, epistemological or ethical angle also provides a coherent critique of the cultural paradigm which has given rise to the ecological crisis. Tarbiyyah extends the process of engaging with the ecological knowledge of Islam ($ta'l\bar{t}m$) towards actualisation of this ethic, or in other words, understanding the 'why' of being a 'green' Muslim. Finally, $tad\bar{t}b$

transports the ecoethic of Islam, as all other social values, into the realm of social action – 'amāl ṣāliḥāt which encompasses both individual and societal change.

EE, which assists in the actualisation of the ethical mandate of trusteeship, is a necessary component of Islamic education since it equips Muslims with the knowledge required to fulfil a religious obligation, environmental care. It also promotes awareness of the environmental teachings of Islam, instilling an attitude of respect, justice and care towards the natural world; the knowledge and skills to understand the workings of the earth and the patterns of human use and abuse which impact upon people and nature; and the motivation to act for both personal and societal transformation striving to be the best *khalīfah* which he or she can be.

What should be taught in EE? The content of any EE programme aimed at Muslims needs to be grounded within the sources of the Muslim faith, the Qur'an and Sunnah. While there are divergent approaches towards the ecological question in Islam—traditional and orthodox, Sufi, modernist—there is widespread agreement that the "authentic or fundamental Islamic traditions and values is a requisite foundation for the Muslim world's development of ethical environmental practices" (Wersal 1995, 458). Setia (2007), in his articulation of an Islamic Deep Ecology, argues for a radical ethico-spiritual shift grounded in authentic Islamic ecoethical principles, and cautions against the adoption of secular philosophical categories and metaphors, such as Gaianism and ecospirituality, which are incompatible with, and alien to the ecocosmology of Islam. Authentic precepts, metaphors, and stories of the Islamic legacy, which constitute the foundation of the environmental narrative of Islam, should therefore be utilised in the construction of Islamic ecoethics. Others, such as Al-Naki (2004) and Hussain (2004), seek to highlight similarities between the ecological knowledge of Islam and ecocentric ideologies such as Deep Ecology with a view to create opportunities of learning, partnering and working towards finding solutions to ecological questions.

The importance of developing the discipline of Islamic environmental law has been illustrated in the works of Abu Sway (1998), Llwellyn (2003), and Roughton (2007). Abu Sway's (1998) influential paper, *Towards an Islamic Jurisprudence of the*

Environment, is comprehensive in delineating the laws, institutions and enforcement mechanisms of the Sharī'ah which can be drawn upon to develop an environmental figh (jurisprudence). He advocates for the adoption of a jurisprudential approach since figh is "accepted and associated in Islamic consciousness with the lawful and the prohibited in human behaviour" and "is more capable of modifying behaviour" (Abu Sway 1998). He also suggests that once environmental figh is sufficiently developed, it can easily be incorporated into books of jurisprudence, as well as school curricula. Llwellyn (1992, 2003) details the necessity of law as a basis for the Islamic response to contemporary ecological issues for which Islamic rulings are required, as well as a tool to ground Islamic ecoethics in authentic religious sources. Roughton (2007, 101) builds his argument for Islamic environmental governance on the fact that the Sharī'ah is recognised by many Muslim countries as a source of law and its principles continue to "govern the daily lives of many Muslims regardless of government legislation". Despite the dismal state of political (un)freedom in many Muslim countries and the loss of much of the Shari'ah, there have been moves to investigate the revival of environmental figh in promoting environmental care and protection - water conservation programmes (Atallah, Ali Khan and Malkawi 1999; Gilli 2006), community conservation programmes (Gari 2006; Verde 2008) and cleanup campaigns based on Islamic environmental law (Todorova 2010) are cases in point.

A third area of relevance to the environmental knowledge-structure of Islam is the cogent critique of Western knowledge systems. Sardar (1985), Nasr (2005) and Bakar (n.d.) are among the foremost Muslim scholars who regard the present ecological crisis as a manifestation of a science and technology applied without any ethical guidance and restraint. They are particularly critical of the de-ontologising effect of the positivistic interpretation of science which is bound to a worldview which has affected human understanding — of ourselves, of our Creator, and of the world around us (Nasr 2005). Modern science, as the physical expression of a particular worldview, is therefore far from neutral, value-free and objective and has been criticized, both on ethical grounds for the misapplication of technology, and epistemologically for its impoverished view of knowledge (Bakar n.d). Scientific activity is critical, though not exclusive, in providing an understanding of the

natural world and is therefore an essential component of any EE curriculum. It is thus imperative that educators distinguish between science which advances the concepts, beliefs, and ethics of Western secular thought and science which "incorporates the ethical dictates of Islam" (Sardar 1985, 166), is in tune with the Islamic conceptual framework such as the unity of God (tawhīd) and human trusteeship on earth (khilāfah), and adopts a holistic approach to knowledge systems.

Seyyed Hossein Nasr, through his corpus of ecoIslamic writings, reiterates the call for formulating and presenting the ecological ethic of Islam in contemporary language (Nasr 1997, 2003). This concurs with the view of both Sardar (1985) and Mohamed (1991) who argue that knowledge, derived from Islamic sources, needs to be made relevant to contemporary concerns. For example, the corpus of Prophetic traditions (aḥādīth), which is replete with instances of environmental care and responsibility, "can be of significant value in environmental education, which is much needed in Muslim societies, many of which are developing rapidly without an inbuilt cultural awareness of the environment" (Izzi Dien 2000, 32). Mabud (1991) summarises the content of a science (and EE) curriculum for Muslims as one based on principles of balance, harmony, order and sustenance in the natural world; human responsibility for their use of the environment; the interdependence of human beings and nature; the impact of human misuse and misapplication of technology on nature; and the necessity of maintaining a healthy ecological environment.

Ecological knowledge in Islam, which constitutes the foundation of the content in EE for Muslims, must therefore be grounded in the conceptual and legal framework of Islam which provides ethical precepts, metaphors, laws, institutions and stories which promote environmental care. It should also draw upon a range of knowledge systems—revealed and non-revealed—to construct an understanding of the interplay between society and nature in the world today. Even though ecoIslamic scholars emphasise different aspects of the Qur'anic ecocosmology and vary in their interpretation of these, there is widespread agreement on the central ethical precepts which structure the ecological ethics of Islam. These precepts also

informed the construction of an eco-justice ethic of Islam which links faith, knowledge and action and shows that in discharging the religious obligation of environmental care, Muslims must observe justice and respect in their relationship with all of Creation.

Who should EE programmes target? A fitting starting point for this question is to examine the locus of environmental responsibility in Islam. Bagader et al. (1994) delineate environmental responsibility as an individual mandate and a responsibility of the governing authority. However, they maintain that since the ultimate responsibility for right action lies with the individual, irrespective of whether the governing authorities discharged its environmental responsibility, every Muslim should be committed to environmental care as a religious duty. The state, charged with securing the common welfare of society as a whole, has to protect and conserve natural resources. Akhtar (1996) concurs and proposes that Islam maintains environmental balance in two ways – through individuals living an Islamic lifestyle of environmental consciousness, simplicity and fellow-feeling with humanity and the natural world; and through the state, which has the mandate of legislating and planning for the welfare of all. Today, standards of Islamic behaviour, related to politics, economics, and the environment, is largely enforced through individual conscience and while this might be a point of concern for those wanting to institutionalise Islamic teachings on the environment, it should be seen as the first step in building environmental concern.

Khalid (2005), in his search for environmentalism amongst Muslims, found that the ecoethics of Islam expressed itself in the daily lives of Muslims - through language and metaphors related to Creation (*khalq*) and trusteeship (*khilāfah*), as well as personal behaviour. It was only later in Muslim history that states and institutions evolved, and that laws, included those related to the environment, were codified. While solutions to the environmental question involves both a return to *Sharī'ah* and education on the ecoethics of Islam, at present, the solution lies, for the most part with "individuals and small groups which can perhaps expand in the future" (Nasr 2003, 104). This incorporates engagement at the communal level, as outlined below.

M. Hussain (2007), an ecoIslamic activist operating in the West, delineates three paths of engagement with the environmental question – individual, communal and economic. Individual engagement incorporates spiritual practice, reflection on the natural world, and embodiment of the values of Islam moving Muslims closer towards their *fitrah* and towards simplicity, harmony and love for Creation. Communal action, tied to individual change, will enable Muslims to actualise the ecological teachings of Islam in the broader community, partnering with voices opposing corporations and regimes destroying nature; demanding social, economic and environmental justice for all; and fighting the usurious economic system which has trapped and indebted millions (Ouis 2003). An economic response is required to "undermine the existing system" while at the same time "building an alternative one rooted in a valuation of the real world" (Hussain, M. 2007, 32). In 199 Ways to Please God, ten Veen (2009) outlines a range of economic strategies for environmental change such as participating in ethical investments, giving charitable endowments, and careful selection of banking institutions.

EE programmes in Islam should thus incorporate education of and for Muslims, utilising a range of Islamic institutions, as well as education about the Islamic ecoethic, primarily aimed at non-Muslims. Haywood (1980) outlines a tri-partite approach to EE in the Muslim world, suggesting that the target audience constitute the general public; professionals such as architects and planners; and politicians. To this, Shah Haneef (2002) adds Muslim scientists who are duty-bound to frame all scientific endeavours in an ethical framework and Muslim academics who should formulate Islamic environmental law. Nasr (2003, 101) makes special mention of the training of religious leaders who play a crucial role in creating awareness of the environmental crisis and Islam's answers to it since they "are much more effective than government officials in turning the attention of the populace to a particular issue". Izzi Dien (1992b, 197) highlights the need to "supplement the scientific approach to environmental education with serious attention to Islamic belief and environmental awareness" in Muslim countries where most educational curricula have been 'secularised'. Finally, the importance of imparting Islam's environmental teachings to Muslim children is imperative since they are "future citizens, professionals and decision makers of our world and it is obviously vital that they

develop both an awareness of the problem and a commitment to contribute to the improvement of the environment" (Haywood 1980, 435).

The environmental teachings of Islam thus need to be incorporated at all levels of education and within all types of education — traditional and modern. EE programmes should, as a priority, be directed at broadening the understanding of the ecoethics of Islam amongst Muslim audiences, young and old, and at the same time build an awareness of the ecological ethic of Islam in the broader environmental movement. While this study, as mentioned earlier, will focus on EE of and for Muslims by identifying the curriculum spaces available to green the Muslim educational landscape, partnership, networking and engagement with movements working for the establishment of social and ecological justice is an essential part of ecoIslamic work — this requires education about the ecoethic of Islam.

Who should teach EE and how should they teach? The importance of wellqualified teachers, presenting information in an exciting and interesting way, is a key factor in any EE programme. Both Islamic and environmental education systems place value on the position of the teacher. Within EE, it is recognised that "teachers...can be a critical factor not only in developing the knowledge, but also in shaping the behaviour of young children" (Basile and White, 2000, 57) while in Islam, "teachers play a pivotal role as role models, and their character, beliefs, integrity and personal lives, are as important as their expertise" (Halstead 2004, 525). In terms of developing ecological literacy amongst Muslims, Abu-Hola confirms the need for "well trained, dedicated religious, socially and environmentally literate teachers" (2009, 196). Islamic pedagogy, as outlined in Chapter Three, draws extensively from the teaching methodologies employed by the Prophet Muhammad . There is, however, nothing preventing the Muslim teacher from employing diverse methodologies, strategies and aids to facilitate students' learning. An educational strategy aimed at translating Islamic ecoethics into action today could easily draw upon and utilize EE approaches, methodological tools, activities and learning styles to build environmental awareness amongst Muslims. Environmental values education in particular offers a range of teaching approaches and methods which can be utilised to introduce the ecological ethics of Islam to Muslim audiences. Drawing upon, and partnering with environmental educationists in building ecological literacy is another way in which Muslim teachers can complement and enrich the ecological knowledge of Islam.

The importance of education *in* the environment is neglected in ecoIslamic works. Ball (2008) alludes briefly to the importance of developing a connection with nature and showcases some efforts of Muslim environmental organisations which involve outdoor experiences such as gardening and camping. Outdoor education resources also provide a rich resource for the Muslim teacher wanting to develop not only an awareness of, but also a deep love for the natural world.

Learners and communities, through a conscious reconstruction of attitudes, mind-sets and behavioural patterns must learn that their local knowledge is important, that they need to be aware of their surroundings. Every chance that they learn to get outdoors, they will learn to recognise species of plant and animal life, to understand that need for wild space, and the need to appreciate nature, about life cycles, the interdependence among living things and the interconnectivity between our lives, nature and Allah. (Karodia 2004, 179)

Environmental activists in the Muslim world have been at the forefront of efforts to re-awaken environmental teachings of Islam and to increase the exposure of Muslims to the natural world. While the importance of religious institutions, such as the masājid, madāris, and makātib as an untapped an invaluable conduit for imparting the ecoethics of Islam is undisputed, outdoor education—direct and intimate experiences with the natural world—should be an integral element of EE in Islam. It offers opportunities to marvel at the Works of the Creator; to witness His artistry in Nature; to build love and fellow-feeling for Creation; to pray, alongside all the worlds, to the One Creator; and to express gratitude at the gift of life. Both the teachings methodologies employed in EE, as well as the role of the environmental educator thus needs to be explored in much greater depth by Muslim environmental scholars. This is vital in assembling an EE strategy for Muslims since questions such as 'who should teach' and 'how to teach' are as important as the content of curricula.

Very little has been said or done on the assessment and evaluation of EE programmes in the Muslim world. Since most EE initiatives in the Muslim world, especially those based on the ecoethics of Islam, are still in their infancy, this is understandable. There are two points, related to the Islamic educational ideology presented in this study, which must be considered here. Firstly, Islamic education stresses the development of ethics and knowledge, not only knowledge acquisition. This includes, for example, some of the essential ethical precepts of an Islamic society such as the realization of justice for all; a sense of social responsibility; the observance of moderation; fellow-feeling; and calling towards good and forbidding evil (Golshani 2002). Evaluation procedures should thus take into consideration that ecological literacy in Islam entails nurturing students towards good character, in this case an environmental morality, which is not only about the transmission of ecological knowledge, but about personal and societal transformation. It is thus about instilling the 'unmeasurables' like the degree of humility and respect with which students approach the natural world; the ability to understand, articulate and implement the environmental traditions of Islam; and the motivation to address social and environmental injustice.

Secondly, any evaluation of EE in Islam must take into consideration the emancipatory intent of Islamic education which actively seeks to make human beings better vicegerents, responsible for their actions and deeds in this world, and "critical and active meaning-makers for the betterment of their world, nature and society" (Hussien 2007, 99). Here we can recall Waghid's emphasis on social activism (ta'dīb) in Islamic education which requires that "what a Muslim learns must be enacted in the broader society with the aim of transforming a distressing situation – a matter of recognising a societal ill and actually doing something about it" (Waghid 2008, 4). Thus, evaluating the achievement of ecological literacy initiatives based on an Islamic eco-justice of responsible, reflective action for the earth, requires careful consideration of the ultimate aim of EE in Islam – to develop vicegerents who will live on the fitrah, in justice and harmony with all of Creation.

Most theoretical works articulating the environmental concerns of Muslims continue to raise awareness of Islam's ecoethics through copious quotes from the

Qur'an and hadīth. This is only the beginning. It is also "a sign that there is growing awareness of the moral foundations offered by Islam in relation to human interaction with the natural order" (Khalid 2005, 100). The commonalities between ecoIslamic and EE philosophies are sufficient to suggest that Muslim environmentalists need to draw upon EE to develop engaged, ecologically-literate Muslims. EE can be used to increase knowledge and awareness of the environmental teachings of Islam; build the environmental values and attitudes of Muslims; and develop the necessary skills to act upon these values and participate in the resolution of environmental problems. It is also useful, as illustrated above, in delineating the essential ingredients for an EE strategy aimed at Muslim. Yet any educational strategy is, of necessity, linked to a worldview (or tradition) and an attendant knowledge-structure. The final section of this chapter will explore the extent to which the ecoIslamic movement, in words and actions, reflect the ontology, epistemology and pedagogy outlined in earlier chapters.

EcoIslamic discourse is poised to take its places alongside other liberatory traditions in providing alternative environmental imaginaries of the human-nature relation. Ignorance of this discourse will result in a continuation of the monocultural dialogue which drowns out alternative knowledges, beliefs, and voices which speak about the earth. Fortunately, Muslim thinkers and activists are beginning to articulate the environmental message of Islam, and are developing EE strategies which bring to light the moral and spiritual imperative to care for Creation and provide practical direction in "returning to the environmentally conscious traditions and lifestyles of Islam" (Manzoor 2005). I will now turn to some of the foremost EE initiatives drawn from across the Muslim educational landscape.

4.2. Environmental Education Initiatives in the Muslim World

...the rising army of eco-warriors and the awakening Muslim Ummah will carry the green banners of Islam and environmentalism to every corner of the planet, creating the basis for a sustainable, balanced harmonious society of the future. (O'Barrett 2005, 35)

Keeping up with the activities of Muslim environmental activists, found in all corners of the globe today, is becoming a daunting task. In the Philippines, *imāms* are being enlisted by the local branch of the Muslim Association for Climate Change (MACCA) to deliver Friday sermons on environmental care (Alave 2010); in the United Kingdom, Wisdom in Nature (WIN) is organising an Islamic Community Food Project to show how grassroots, community-based food initiatives empowers and offers an alternative to the globalised food system (WIN 2010a); and in Abu Dhabi, scholars are educating *for* the environment by highlighting Qur'anic concepts and Prophetic traditions related to pollution (Todorova 2010). While Muslim environmental activists are demonstrating the practical manifestation of Islam's ecoethics through diverse means, one of their primary strategies relates to the use of Islam's rich educational landscape. This will form the focal point of this discussion.

One of the shortcomings of this study has been the difficulty in accessing EE material written in other languages—Arabic, Farsi, Bahasa Indonesian—to assess the extent to which EE initiatives, premised on the ecoethics of Islam, have been introduced in the Muslim world. The majority of initiatives which will be discussed below are thus drawn from material published in English. However, opinions expressed by several Muslim scholars detailing the political and institutional challenges for implementing the environmental teachings of Islam in the Arab World for example (Hamed 2003; Llwellyn 2003; Gari 2006) suggest that Muslims in the Far East and the West are indeed leading the revival of 'environmental' Islam. Gelling (2009), for instance, has dubbed Indonesia the home of green Islam since environmental teachings have been imparted in pesantren (Muslim boarding schools) since the 19th century. It is surprising that despite the recognition of the important role of religious institutions in promoting environmental care in a number of Muslim majority countries such as Brunei (Odihi 2000), Kuwait (Al-Naki 2004) and Pakistan (Ayaz et al. 2003; Sheikh 2006), there are still indications that the dichotomy between traditional (Islamic) and modern (secular) educational institutions, at least at the official level, continues to prevail. It is religious and environmental NGOs in the West and Far East who are in fact driving the ecoIslamic movement, engaging Islam's ecotheological resources in environmental initiatives

and showing that "[t]he embodiment of Islamic principles in the form of Islamic educational institutions is one method to instil and disseminate an ethic of environmental literacy and sustainability" (Abu-Hola 2009, 210).

The discussion below will centre on a brief outline of the educational role of key Islamic institutions following the structure outlined in Chapter Three, i.e. *masjid*, *maktab*, Muslim schools, *madrasah* and Islamic universities, and then detail at least three ecoIslamic initiatives being implemented at each institution at the international level. It will also consider how Muslim activists and organisations are using other mechanisms such as the print and electronic media, conferences, and social movements to spread the green message of Islam. It will then delve into the burgeoning ecoIslamic scene on South African shores.

4.2.1. A World of Green Muslims: A Global View

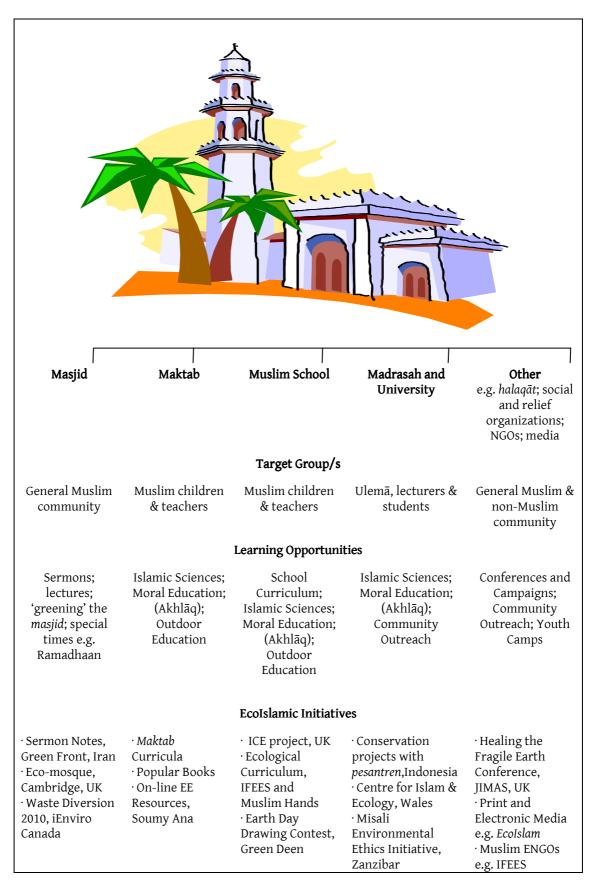
The initiatives outlined below illustrate a range of approaches towards the revival of Islam's ecological teachings. The enduring network of Islamic institutions, the *masjid*, *maktab* and *madrasah* have been harnessed to impart the ecological teachings of Islam. New learning opportunities, such as the internet, have increased prospects for demonstrating the ecoethics of Islam. EcoIslamic NGOs have formed alliances with social movements, such as the fair trade, climate change and environmental justice movements, displaying the importance of putting an eco-justice ethic of Islam into action in society. These ecoIslamic initiatives (Figure 4.1.), as we will see, have employed a range of methodologies to enliven the ecoethics of Islam. The *masjid*, in particular, has played a pivotal role as an environmental education centre in the world of green Muslims.

The **masjid** (pl. *masājid*) or mosque is one of the most visible symbols of Islam and has acted as both a place of prayer and learning throughout Muslim history. It fulfils a multifaceted role in the life of a Muslim – a place of prayer and meditation, a centre of religious instruction and political discussion, and a place of safety and refuge (Waardenburg 1965; Zaimeche 2002). From the earliest days of Islam, the *masjid* has been the centre of the Muslim community. In spite of the development of

an array of institutions focusing on elementary and higher Islamic education, mosques retained their role as centres of scholarship throughout Muslim history, attracting thousands of students to mosque study circles. The masjid remains a vital instrument of public communication in Muslim society today (Fathi 1981) and despite the impact of colonialism on Islamic education (See Chapter Three), there are many indications that this concrete symbol of Islam continues to be one of the most important centres of learning for the Muslim (Zaimeche 2002). Several scholars have highlighted the important role of masājid as community education centres and as "perfectly appropriate locations for conducting informational sessions and community discussions on environmental issues" (Foltz 2000, 70). Siddiq (2003) describes how the Baitulmal Prokolpo microcredit scheme in Bengal has successfully used local masājid as centres of activity in its environmental awareness programmes. He suggests that in addition to training imams and mu'adhdhins (callers to prayer) in environmental matters, "[m]osques, whose number far exceed even the total number of primary schools in many Muslim countries, should be used as centres for mass education and for creating environmental awareness" (Siddiq 2003, 461).

This is precisely what the Green Front of Iran (Jabheh-ye Sabz-e-Iran), a secular environmental NGO (ENGEO) seeks to achieve when it compiles and circulates Qur'anic verses and hadīth to religious leaders and organisations (Foltz 2000). Muslim environmentalists are capitalising on the Friday sermon, which reaches millions of Muslim men and women, as an ideal opportunity to raise environmental awareness. Workshops aimed at increasing environmental knowledge among imāms, and making the necessary links with their religious knowledge, have already been initiated by several organisations. For instance, the Islamic Foundation for Ecology & Environmental Sciences (IFEES) conducted a workshop entitled 'Qur'an, Creation and Conservation' with community and religious leaders in Zanzibar (Arensberg 2005); WWF held environmental workshops with Malaysian imāms who subsequently conducted Friday sermons related to wildlife conservation and poaching (WWF 2009); and in Turkey an intergovernmental programme offers environmental training to religious leaders (Özdemir 2005). By training religious leaders and equipping them to respond to one of the most challenging social issues

Figure 4.1.: EcoIslamic Activities across the Muslim Educational Landscape: Global Perspectives



of our times, ecoIslamic activists can ensure that environmental concerns become a central issue in Muslim community.

Another opportunity to introduce the ecological teachings of Islam via the masjid relates to the construction and upkeep of masājid. In this respect, the historic university city of Cambridge is in the process of developing Europe's first ecomosque by using heat pumps, conservation technology and green roofs which will yield an almost zero carbon footprint (Aburawa 2010). The eco-mosque will not only demonstrate and raise awareness of Islam's ecological teachings, but also signals a return to the "simpler and ecologically sound construction of the first mosque built for prophet Muhammad &" (Aburawa 2010) which used mud bricks for walls, a palm trunk for the minbar (pulpit), and palm leaves for the roof. South Woodford mosque, through its participation in carbon trading, has offset its carbon emissions through a tree planting programme in Peru (Reynolds 2007). On the other side of the Atlantic, the Cordoba House project, a community centre and masjid (known as Park 51) located in Downtown Manhattan, a few blocks from the site of 9/11, is set to be the country's first certified "green mosque" and has been lauded as an exciting development in green Islam by Williams (2010). An initiative by iEnviro Canada, 'Waste Diversion 2010', seeks to introduce recycling programmes at major masājid across Canada with the aim of reducing waste in mosques by 50%. Raising awareness of water usage for ablution has been undertaken by many masājid who attract scores of worshippers for the daily prayers, as well as the Friday congregational prayer. UK-based IFEES will be launching a competition for the world's greenest mosque, taking into consideration various eco-friendly technologies which can be employed such as installing water- and energy-saving devices, using sustainable construction technologies, and implementing recycling programmes (Haleem 2010).

The *masjid* thus has a vital role to play in any EE strategy. It fulfilled a key role in the 'Green Ramadan' programme in Chicago where Muslims were urged to harness this special month to "live up to their responsibility to be the true stewards on earth" and to "tackle global issues like overconsumption, materialism, hunger, wars and yes, global warming" (The Council of Islamic Organisations of Greater Chicago 2010). Therefore, any programme which sets out to build Muslims' ecological literacy must

recognise and exploit the pivotal role of the *masjid* as an instrument of lifelong education in Muslim society.

The **maktab** (pl. makātib) also called Qur'an or mosque schools as well as kuttāb, provides elementary education to Muslims and is often attached to the masjid. Zaimeche (2002, 3) report that "the first school connected to a mosque was set up at Medina in 653, and by 900 nearly every mosque had an elementary school for the education of both boys and girls". While Makdisi (1981) suggests that historically there might have been a difference between the *maktab* and *kuttāb*, both provided elementary education. The *maktab* curriculum, which varied from place to place, covered a range of subjects such as writing, Qur'an reading and memorisation, the fundamentals of Islamic belief, moral teachings, arithmetic, poetry and physical education. Muslim learners, from across the social stratum, would enter the maktab at approximately ages seven to ten where they would remain under the tutelage of a mu'allim or mu'addib (the terminology most often used for elementary school teachers) for a period of about five years (Makdisi 1981; Kadi 2006). Ibn Sahnun, a ninth-century jurist, in his book entitled Rules of Conduct for Teachers, deals with a variety of issues which teachers may encounter at elementary schools—curriculum content, the organization of teaching time, the just treatment of pupils—and in this pioneering work stresses the importance of "modesty, patience and passion for working with children" as "indispensable qualifications for teachers" (Günther 2006, 370-371).

According to Kadi (2006, 313), "[i]n modern times, the need for *kuttabs* as a means for elementary education has been severely eclipsed by public and other schools" but these institutions continue to survive due to the generosity of philanthropists and the concerns which religious leaders and Muslim parents have with inculcating and imparting the teachings of Islam to Muslim children. The *maktab*, which is known by different names across the world, hence still fulfils an important role in Muslim society and has evolved, in most instances, into supplementary schooling which students attend in addition to secular studies. Worldwide, *makātib* are not only under-researched but under-resourced and face many educational challenges.

In my view, it is one of the most neglected institutions yet presents untold learning opportunities for introducing the ecoethics of Islam.

Makātib "contribute to the preservation and promotion of Islamic values, Islamic epistemology and Islamic spirituality and they have an important role to play in the nurture of Muslim children in a society that operates on the basis of a different set of values" (Mogra 2007, 389). The various Islamic sciences, including moral education; outdoor education; and special days and times such as the month of fasting, the pilgrimage, or the festivals of 'Eid, could easily be used to highlight particular aspects of Islam's green teachings. Makātib, which have immense potential as seedbeds for introducing the ecoethics of Islam are thus an underutilised EE resource. Mogra (2007), in his review of makātib curriculum materials in Britain found that efforts to improve the quality of education at makātib include staff training, utilising up-to-date teaching aids and methods, and increasing parent involvement. He notes, however, that curriculum development has "generally taken a back seat, though there is growing awareness of the need to make the curriculum relevant to Muslim children living in the west and to produce more child-friendly texts" (Mogra 2007, 390). Where the curricula might be lagging behind, Muslim writers and educationists have started to produce a rich resource base which could be used by makātib teachers to introduce Islam's ecoethics to the Muslim child.

Popular children's books and magazines which focus on the environmental teachings of Islam are widely available from Islamic bookstores, libraries and the internet – these can be used to supplement the *maktab* curriculum. *Love all Creatures* (Murad and Gamiet 1981), a collection of eight stories from the life and teachings of Prophet Muhammad illustrates his mercy and concern for all Creation. Goodword Publishers, a leader in Muslim children's literature, has published *The Path that Allah Made* (Jafri 2003), an illustrated poem about nature's bounties; as well as *Birds* (Khan and Al-Marwani 2004a) and *Flowers* (Khan and Al-Marwani 2004b) for first readers. *Zaynab and Zakariya Learn to Recycle* (Ibrahim Shah n.d.) is the first in a series of books covering social and ethical issues.

Another rich source of EE curriculum materials, written from the Islamic perspective, is found in the writings of Soumy Ana who has made an entire series, 'Ecology, Recycling, Our Environment', available for free download (Ana 2010). She has completed four of the six workbooks, these are: Ecology and Islam: Workbook (59 pages); Recycling: Workbook (43 pages); Recognize Trees: Workbook (37 pages); and The Never-Ending Water Cycle (33 pages). Two other workbooks, Islam and Life: Workbook and Trees and Plants in Islam are still in preparation. The completed workbooks draw on Islamic teachings (Qur'an and hadīth), scientific facts, stories, poems and activities to construct the Muslim relationship to the natural world. The resources are directed at intermediate phase learners. Two additional resources, Al Khalifa (The Steward) (USAID 2007), produced in the Philippines and a Teachers Guide Book for Islamic Environmental Education (Khalid and Thani 2008), generated from the Misali Ethics Pilot Project, detail the ecological teachings of Islam and are valuable EE resources. It was envisioned that both makātib and madāris teachers would base their lesson plans on the various ecological themes and concepts outlined in these resources. Muslim educators need to be made aware of this resource base which is accessible in electronic format.

The review of EE elements in *makātib* curriculum materials, to be undertaken in Chapter Five is aimed at addressing the need to introduce the ecoethics of Islam to the Muslim child. This review will assess the extent to which *makātib* curricula highlight the environmental message of Islam, in Islamic sciences (such as *fiqh*, 'aqīdah, history) as well as moral education lessons (akhlāq). In addition to EE curriculum materials, based on the ecological teachings of Islam and appropriate for *maktab* learners, teacher training and outdoor education opportunities are also essential to greening *makātib* curricula.

Muslim schools, the recent phenomenon of faith schools, both primary and secondary, aim to operate according to an Islamic ethos and fulfil and important function in the Islamic educational landscape. In addition to the learning opportunities in Islamic sciences, faith schools adhere to national curricula, many of which incorporate EE. Since the 1980s, there has been an upsurge in the number of Muslim schools in the Western world and organisations, such as the Council of

Islamic Schools in the US and the Association of Muslim Schools in the UK and South Africa, have been established to coordinate the activities of Muslim schools. These privately-run, yet state-approved schools are seen as alternatives to the public system. However, in practice, "most Islamic schools continue to borrow heavily from surrounding public and private schools for ideas on the school charter, lesson plans, textbooks and pedagogical concepts" (Merry and Driesen 2005, 419).

Muslim scholars are engaged in an on-going process to evaluate the content of educational curricula at Muslim schools; to employ critical pedagogical tools to question the very purpose of Islamic schooling (Memon and Ahmad 2006); and to prepare Muslim children to live as citizens in a multicultural society (Castelli and Trevathan 2008). In the UK, one such project, Islam and Citizenship Education (ICE), has developed a citizenship curriculum for Muslim schools by adding Islamic guidance to the national citizenship programmes of study. Their approach is to teach citizenship values through the Islamic perspective since citizenship values and Islamic values are, according to them, broadly compatible. The Association of Muslim Schools (UK) has posted a link to ICE's project resources and lesson plans. The resources include a lesson plan entitled 'Islam and the Environment' with the following lesson objective: to learn that as Muslims and as citizens we have a responsibility for the environment. The lesson plans link citizenship learning objectives to a corresponding Islamic value e.g. linking the environmental citizenship value of protecting the environment to the Islamic value of environmental care, both as a trust and gift from God. Curriculum materials include guidance notes for teachers as well as activities and follow-up work on the various themes (ICE 2009).

Another ecoIslamic project in the UK involves Muslim Hands, an international relief and development agency, which will partner with IFEES to develop an ecological curriculum for its schools around the world. Muslim Hands run a number of schools, many of which are attended by orphans sponsored by the organisation. The intent of the green curriculum project is to combine the experience of local experts with innovative teaching materials on environmental care (Muslim Hands 2009). Muslim Hands is already utilising sustainable construction and energy efficiency

technologies in the construction of schools, for instance adding insulation to reduce heat loss in winter and to make air conditioning more effective where in use. In future, all building proposals for schools will seek to utilise to environment-friendly technologies ranging from architectural designs that maximise natural light to installing solar panels on rooftops (Muslim Hands 2010).

Green Deen, an ecoIslamic group from Southern California, initiated an Earth Day Drawing Contest in April 2010 (Green Deen 2010), inviting entries from across the world. Entries had to illustrate what being environmentally friendly or "living green" meant to young Muslim children. The contest catered for various categories which extended from pre-school to a general category. While the competition was open to Muslims across the world and scanned drawings were accepted, Green Deen utilised various Muslim schools in their district as drop-off points for competition entries. Green Deen, which raises environmental awareness and aims to promote healthier, greener and more environmentally conscious lifestyles amongst Muslims, has shown how Islamic institutions, such as Muslim schools, play an important role in ecoIslamic work.

Muslim schools are on the increase, especially in the Western world where Muslims seek to maintain and strengthen their Islamic identity and understand their faith amid the need to participate as active citizens in their societies. In the process, Muslim schools have to strive towards providing comprehensive Islamic education and not replicate the compartmentalisation of religious and secular knowledge (Sanjakdar 2001). They have to move away from efforts at integrating snapshots of Islam into standardized curricula and find ways in which the knowledge of mainstream curricula can be integrated within an Islamic pedagogy. The ecoethics of Islam needs to be a visible and central part of the curriculum of Muslim schools which are vital conduits in preparing Muslims for active participation in society.

The *madrasah* (pl. *madāris*), in addition to the *masjid* and *maktab*, is one of the enduring institutions of Islam. Established in the tenth century, these colleges of Islam, centred on the teaching of Islamic law, were similar to the *masjid* in offering post-elementary education, but differed in several other aspects. The *madrasah* was

created expressly for education and "had an administrative structure, a defined body of residents, and a distinct curriculum" (Kadi 2006, 316). Established through charitable endowments (waqf), staff and students were housed at the madrasah which often had an attendant mosque or prayer hall. The curriculum at the madrasah consisted of standard texts in various Islamic sciences, as well as other sciences such as mathematics, logic, and philosophy. Madāris produced some of the greatest scholars in Islamic history – the famed Muslim scholar Al-Ghazzāli, for instance, was professor at the Madrasah an-Nizāmiyyah in Baghdad. Madāris offered a curriculum dedicated to the promotion of knowledge and learning unparalleled by educational systems of that time (Shamsavary, Saqeb and Halstead 1993) – discussion and debate sought to build students' knowledge and characters; develop their understanding and ability to solve problems; and prepare them to engage in ijtihād, independent reasoning. Makdisi (1981) regards the madrasah as the institution of learning par excellence in Islam. Unfortunately, the survival of this institution is facing immense challenges — political, educational and financial.

A shift from the personal transmission of knowledge, intimate teacher-student relationships, and informality in classrooms to fixed curricula, quick-read textbooks and depersonalized settings has impacted negatively on the madrasah institutional culture (Hefner 2007). The impact of colonialism and the imposition of Western pedagogy in particular altered the function and philosophy of madāris all over the world. While the structure and operation of madāris, even the name by which they are known, vary considerably in the Muslim world, today, most function solely as centres of religious instruction (Anzar 2003). The madrasah has also been the subject of bad press after 9/11 since it is seen as places which foster extreme views. There are indications though, that the jāmi'ah of the Middle East, the dārul 'ulūm of the Indian sub-continent, the pesantren of Indonesia, the pondok of Malaysia and the medersas of West Africa can once again rise to the intellectual challenge of adapting "the norms of the Qur'an and the Sunna to modern life" (Merry 2007, 63). Other tertiary educational institutions of note are the Islamic universities, such as the historic Al-Azhar and Zaytuna, as well as the universities established in the last few decades such as the International Islamic University of Malaysia. These institutions now offer both Islamic sciences and selected programmes in other fields such as

medicine, agriculture, and education. Arabic and Islamic Studies programmes at secular universities present another avenue which could be harnessed to develop, refine and apply the ecological teachings of Islam to contemporary environmental questions. Below, we will look at the ways in which various learning opportunities at the *madrasah* and university can be drawn upon to broadcast the green message of Islam.

Pesantren, Islamic boarding schools in Indonesia, are independent self-governing schools which "exist as a community with a compound, mosque and boarding system where students and teachers eat, sleep, learn and generally interact throughout the day" (Anzar 2003). In this populous Muslim country, teeming with ecoIslamic activities, Islamic institutions such as the estimated 17 000 pesantren are seen as pivotal in propelling Muslims to become more practically involved in environmental action. Gelling (2009) has dubbed Indonesia the home of green Islam since environmental teachings have been imparted in pesantren since the 19th century when Pesantren Guluk-Gulul, on the Island of Madura in East Java, started teaching villagers, with the help of the Qur'an, about conservation. Today, one pesantren near Bogor, Java is showcasing the use of an Islamic environmental management institution, the harīm, as a model for river conservation (Mangunjaya 2009). This 'Shari'ah conservation model' lays down codes of behaviour for those living in or near threatened habitats through the establishment of buffer zones to conserve and protect the resource. By creating a harīm zone in a river, "half of the width of the river on each side of the river bank is designated as a pristine area where all human activity is prohibited" (Mangunjaya 2009, 4). Conservation International Indonesia, which has a pivotal role in this project, generally occupies an active role in the Indonesian ecoIslamic scene. It has also published a report, Islamic Boarding Schools and Conservation, detailing how pesantren were involved in reforestation efforts aimed at raising the awareness and profile of religious arguments for conservation and stewardship (Conservation International Indonesia 2005).

The Durrell Institute of Conservation and Ecology (DICE) in the UK has recently launched a three-year faith-based community conservation outreach programme in

West Sumatra which seeks to highlight the potential for faith-based teachings and institutional mechanisms as catalysts for conservation initiatives (McKay 2010). The project will work with state and Islamic boarding schools (pesantren) in West Sumatra, and will develop teachings materials to strengthen and integrate religious environmental management systems in educational curricula. The Greening Indonesia initiative, a reforestation programme to restore some of the devastated habitats destroyed by two decades of intensive logging, will also involve the wellestablished network of pesantren in tree-planting initiatives (King and Heath 2010). Environmental projects in Indonesia are thus actively engaging the extensive network of pesantren in conservation initiatives premised on Islamic principles. Amid the burgeoning ecoIslamic movement, the proposed Centre for Islam and Ecology, a much-needed institution, is still in the pipeline. ARC and the University of Wales, Lampeter want to set up a centre to further the theological and practical work on Islam and ecology. It is envisioned that this initiative will produce theological and legal handbooks; educational resources; training programmes in practical ecology; and raise the profile of ecoIslam (ARC 2010). Some universitylevel courses in religion and ecology are also offering students a taste of Islam's green message through their religion and ecology courses.

Perhaps the most publicised and celebrated ecoIslamic initiative is that of the Misali Environmental Ethics project, Zanzibar (Barclay 2007; Ooko 2008). The project is a partnership between international ENGOs Care International (Tanzania) and IFEES and aimed to address the use of destructive and illegal fishing techniques through religious ethics. It made extensive use of a range of EE methods and approaches, targeted at fishers, religious leaders and teachers, and students at schools and *madāris* (Arensberg 2005). The *Teachers Guide Book for Islamic Environmental Education* (Khalid and Thani 2008), one of the outcomes of this project, is intended as a resource to be used by religious schools in teaching environmental ethics to Muslim children. This resource is only one of many initiatives which intended to build marine conservation awareness — others include posters, a video and *madrasah* competition. The *Teachers Guide Book* presents six *Qur'anic* themes which encapsulate the environmental message of Islam, and also provides important information related to the EE objectives of Islam. It is an invaluable resource for an *imām*

preparing a Friday sermon; for a *mu'allim* preparing a lesson plan for *madrasah*; and for an ecoIslamic activist designing EE materials. The Misali project, accepted as the only submission from Africa at the Sacred Gifts for a Living Planet Programme in Kathmandu in 2000, has undoubtedly adopted the most broad-based approach to achieving ecological literacy amongst Muslims, capturing curriculum spaces across the spectrum of Islamic institutions.

Other learning opportunities, formal and informal, such as conferences and study circles (ḥalaqāt); lectures, workshops and seminars; relief efforts; media and social movements have also been utilised to great effect by ecoIslamic activists. It was a daunting task selecting initiatives which would represent the plethora of activities undertaken in this sphere. One of the main features which these initiatives have in common is that they are located, for the most part, in the West where Muslims, have moved from "integration - simply becoming a member of a society - to contribution - to being proactive and offering something to the society" (Ramadan 2007b). Muslim scholar Ramadan aptly describes how Western Muslims, by virtue of their environments, exposure to new understandings, and participation in new initiatives, are even beginning to have an influence on traditional Muslim societies. In the case of environmental Islam, they are in fact leading the way by applying the ecoethics of Islam in a context of concrete circumstances — the environmental question, and extending these ecoethics to the public sphere.

A national campaign in the UK, 'Inspired by Muhammad', is designed to improve public understanding of Islam and Muslims. It shows how Muhammad inspires Britons to contribute to society by focusing on women's rights, social justice and the environment. The campaign consists of info-ads displayed in central locations as well as a website which provides online support (Inspired by Muhammad 2010). The environment section on the website contains a video interview on the establishment of the eco-mosque in Cambridge (discussed earlier), as well as an indepth interview with German Muslim Kristiane Backer who explains how she draws inspiration from the environmental teachings of Islam and the model of Muhammad to find ways of living in harmony with nature. Backer's info-ad, one of the public advertisements of the campaign, reads as follows: 'I believe in

protecting the environment. So did Muhammad. Kristiane Backer, an ecoMuslim and former MTV presenter.'

Muslim organisations are joining environmental activists in highlighting the environmental message of Islam. In 2007, a UK-based charity organisation convened an Islamic conference entitled 'Healing the Fragile Earth: Fulfilling Our Heavenly Trust'. JIMAS, the Association to Revive the Way of the Messenger, brought some of the leading scholars in the Muslim world to speak about the environmental message of Islam. The topics ranged from contemporary issues such as climate change, 'Global Warming - God's Warning' and economic development, 'Drowning in Debt -Reeling from Interest' to practical implementation of Islam's green teachings -'From the Green Dome to the Green Home'. Audio versions of the conference presentations are available for download from the organisation's website and constitute a valuable EE resource (JIMAS 2010). Muslim organisations are also showcasing the 'green' objectives of special times such as the month of fasting, Ramadan, in which Muslims are meant to refrain not only from food and drink, but all unbecoming behaviour, including environmental degradation. These include for example, the 'Green Ramadan Campaigns' of Muslim organizations in Chicago (The Council of Islamic Organisations of Greater Chicago 2010); the Ramadan Compact, a blog dedicated to reducing consumption during Ramadan (Ramadan Compact 2010); and the campaign entitled 'Green your Deen in 30 Days', by the author of Green Deen, Ibrahim Abdul-Matin (Abdul-Matin 2010b).

Print and electronic media such as the *EcoIslam* newsletter, now in its eight edition, have been invaluable in providing up-to-date news on ecoIslamic initiatives around the world. *EcoIslam*, published online by IFEES, is the first of its kind and carries environmental stories from across the Muslim world. Blogs fulfil another essential role in broadcasting information and raising awareness of Islam's ecological message and are replacing e-mail listervers through regular e-mail updates. 'A World of Green Muslims' (2010) is a blog which seeks to highlight Islam's green message and posts messages from across the blogosphere covering everything from eco-fashion to greening Hajj and solar power. It is also accessible on Facebook

where other ecoIslamic groups, such as Green Deen, EcoIslam, Muslims for the Environment, Green Islam, and Go Green Muslims can be found.

Muslim ENGOs, spearheaded by IFEES, are being established all over the world. In the UK alone, there are several local groups such as Reading Islamic Trustees for the Environment (RITE), Sheffield Islamic Network for the Environment (SHINE) and Midlands Islamic Network for the Environment (MINE). These organisations are building partnerships with the broader environmental movement around a range of green issues. Wisdom in Nature (WIN), previously known as the London Islamic Network for the Environment (LINE), has often put its weight behind national environmental campaigns and produced a booklet, 'Islam and Climate Change - A Call to Heal' (WIN 2010b) which builds on an earlier publication 'Climate Change and the Muslim World' (World Development Movement and London Islamic Network for the Environment n.d.). This is the second resource, in booklet format, which seeks to present an understanding of climate change from an Islamic perspective – the first being the Muslim Green Guide to Reducing Climate Change, published jointly by Lifemakers UK and IFEES in 2008. These resources are all available online and are of relevance to the Muslim World. At a conference held on Islam and the Environment in Istanbul, Turkey, between 6 and 7 July 2009, the establishment of an umbrella body which would monitor and oversee the implementation of the Muslim 7 Year Action Plan (M7YAP) on Climate Change marked another feat in Muslim efforts to understand and combat climate change. The action plan, drawn up by Earth Mates Dialogue Centre, an ENGO based in the UK, and supported by the Alliance of Religion and Conservation (ARC) is a part of the UN/ARC Seven Year Plan Initiative and proposes to investigate "every level of Muslim activity from daily life to annual pilgrimages, from holy cities to the future training of Imams" (Al-Hassani 2009). In Canada, iEnviro Canada is working towards revitalizing the ecoethics of Islam through a range of educational initiatives and projects such as the introduction of recycling programmes in mosques; tree-planting at community centres, mosques and residential areas; organic iftārs during the month of Ramadhaan; and an Islamic Environmental Education Week and Green Hijab day which are still in the pipeline.

How do these ecoIslamic initiatives fare in building ecological literacy, comprised of a rich knowledge base and multifaceted beliefs and philosophies about the environment? Do they improve and enhance Muslim capacity to understand the environmental question and to take action to maintain, restore, or improve the health of the earth? Do they question dominant worldviews and agitate for the intellectual and practical space for expressing Islam's environmental knowledge?

Achieving ecological literacy, one of the driving forces of EE, occurs in stages. Roth (1992) outlines these as awareness, concern, understanding and action from which he has developed his categorisation of ecological literacy stages: nominal, functional and operational. Cutter-McKenzie and Smith's (2003) classification of ecological literacy highlights the importance of the beliefs and ecoethical philosophies underlying various ecological literacy levels. Ecological literacy levels are arranged across an ecosophical spectrum, from technocentric ecological literacy characterised by a crude understanding of environmental issues and the belief that the environment is a resource to be used by human beings to eco-socialist and ecocentric perspectives which adopt holistic approaches to interpret the humanenvironment relationship and believe in the intrinsic value of nature. The theocentric ecoethic of Islam, as outlined in Chapter Two, has much more in common with the latter which seek to build operational and highly-evolved ecological literacy — an understanding of "how people and societies relate to each other and to natural systems"; "of the dynamics of the environmental crisis which includes a thorough understanding of how people (and societies) have become so destructive"; and the ability to not only synthesize information but to act upon it, both in their own lives and in society (Cutter-McKenzie and Smith 2003, 503).

EcoIslamic initiatives are, for the most part, still at the stage of nominal ecological literacy — increasing knowledge and awareness of the environmental teachings of Islam and building the environmental knowledge of Muslims. An increasing number are now active in building the skills to act upon these values and to participate in the resolution of environmental problems such as the Misali Environmental Ethics Programme. The objective of EE in Islam, in line with the Islamic worldview and its educational philosophy, is action. The benchmark for

evaluating the success of ecoIslamic programmes would thus lie not only in understanding and adhering to the ecological teachings of Islam, but in manifesting this ecological 'morality' in practice – in just, responsible use and interaction with the natural world.

The rich institutional landscape of Islam, the *masjid*, *maktab* and *madrasah*, as well as the Muslim schools and universities, undoubtedly fulfil an indispensable role in developing engaged, ecologically-literate Muslims. What have South African Muslims been saying and doing about the environment?

4.2.2. EcoIslamic Activities in South Africa

Islam arrived in southern Africa as a coincidence of geography, colonization, slavery and the geopolitics of mercantile commerce. (Shell 2000, 327)

While there are no recorded meetings between Muslims and the indigenous people of South Africa in the pre-colonial era, Arab navigators and traders met and interacted with communities on the East African coast, including Mozambique, and established trading posts and communities a century before European colonial powers landed at the Cape (Nkrumah 1991; Pouwels 2000). It is Dutch colonial activity at the southern tip of Africa in the mid-seventeenth century, however, which marks the beginning of the written story of South African Muslims. Before turning to the ecoIslamic movement in South Africa, I will first outline the history of Muslims in South Africa, particularly the establishment of educational institutions, and thereafter consider their participation in the South African ecotheology movement.

Islam and Muslims in South Africa: Muslims who 'settled' at the Cape, were taken from their homes, families, and countries by the "colonial barbarism that swept Africa and Asia between the fifteenth and the nineteenth century" (da Costa 1994, 17). From the first phase of 'immigration', stretching from 1652 to 1838, political prisoners, slaves, convicts, and Amboyan Mardyckers, soldiers who defended the new settlement, bandied together to form the first Muslim community

who were instrumental in establishing Islam in South Africa. While the Cape Muslim community had diverse origins—hailing from the Indonesian archipelago, Africa, and south Asia—Islam spread rapidly among the slave population a result, Shell (2000) suggests, of the powerful appeal of Islam's authentic universalism. With the abolition of slavery in 1838, the British, who were then in power, brought indentured labourers from India to work in the sugar cane plantations on the east coast of South Africa. This was the second phase of Muslim immigration which also included the migration of Indian traders, the majority of whom were Muslim. Muslims residing in the Western Cape province herald from mixed ancestry, while the majority of Muslims residing in Gauteng and Kwazulu Natal provinces trace their origins to India. Conversions to Islam, mainly from the indigenous communities of South Africa, now constitute a growing constituency among South Africa's Muslims (Omar 2004). Their numbers are being bolstered by a steady (and continuing) influx of refugees, among them Muslims, fleeing conflict and oppression on the African continent. Indian, Pakistani and Arab traders seeking work opportunities are also joining the rainbow nation of South Africa. At less than 2% of the South African population, Muslims, who have been living in South Africa for more than three centuries, form a 'very visible minority'.

South African Muslim participation in the anti-apartheid movement is tainted by periods of political quietude, yet "[h]istorically Muslims in South Africa, fortified by a very distinct Islamic ideology, responded commendably to the challenges presented by slavery, indenturing and apartheid oppression" (Patel 2010, 105). In the search for an ideological basis for resistance, South African Muslims departed from the "traditional focus on religious exclusivity" to "the overarching value of social justice for all human beings" (Sonn 2002, 257), drawing upon the teachings of Islam and key Muslim liberation theologians, such as Sayyid Qutb, Abul A'la Maududi and Ali Shariati. Islamic resistance to apartheid formed the foundation of liberation theology thinking amongst South African Muslims, and is exemplified in the life and death of religious leader, activist and liberationist, Abdullah Haron. This liberatory tradition (with its various theological orientations) is now in the maelstrom of identity formation in the post-apartheid era where South Africans,

Muslims included, are grappling with notions of identity, citizenship and nation-building (Vahed 2007).

During the era of slavery at the Cape, for a period of over 150 years, Muslims were not allowed to practice their religion openly. Homes of free Muslims were used as places of learning. Whereas early Muslim educational efforts were conducted in private, confined to the langars (homes of free Muslims), the establishment of a masjid in 1795 brought with it the first mosque school or madrasah which, by 1807, was attended by 375 slave children (Davids 1994). These madāris, which acted as "institutions of assimilation and as vehicles for the transmission of religious and cultural ideas" (Davids 1994, 48), continue to play a vital role in South African Muslim society. Most Muslims remained in the urban areas and, wherever they settled, established a masjid and madrasah. In the period when religious practices were restricted in public, i.e. up till 1804, Muslims instituted a range of practices, such as the hājāt (need) and hadath (an event), which were Sufi practices of Qur'an reading and salutations upon Prophet Muhammad &, to create opportunities for Islamic learning (Haron and Mohamed 1991). Many of these early practices survive, along with the following institutions which structure the South African Muslim educational landscape, the:

- *Masjid* which fulfils an important social, political and educational function in Muslim society. Several *masājid* are active in community outreach and education programmes, offer Islamic education opportunities for children and adults, and play a pivotal role in debate and discussion on pertinent issues in South African society (Tayob 1999);
- Madrasah (the terminology used to describe the maktab in South Africa) which is usually attached to the masjid, or exists as an independent institution provides mainly foundation and intermediate phase education on Qur'an reading, basic practices and beliefs of Islam, as well as moral education. These institutions fulfil an important role in establishing religious identity in Muslim children;
- Muslim mission schools established in 1912, which were state-aided and incorporated Islamic studies in their curricula. Most of these have since closed or have become secular institutions;
- Dārul 'Ulūm (i.e. madrasah or Islamic colleges) and Universities which offer tertiary education opportunities. In the KwaZulu-Natal and Gauteng provinces, the dārul 'ulūm are predominantly modelled on the madāris of the Indo-Pak region, while the theological seminaries in the Western Cape, with its local and Middle-Eastern trained scholars, follow different teaching

- models (Haron and Mohamed 1991). Arabic and Islamic studies programmes at South African universities offer a further avenue for pursuing theological study;
- Muslim schools, established in the 1980s, aim to provide an "academic education which provides learners with the skills to cope with the demands of a globalized world, but within a distinct Islamic environment" (Niehaus 2008, 20). These are registered as independent schools, receive limited state funding and adhere, on the whole, to the national curriculum.

Today, over 500 masājid, 400 educational institutions, incorporating madāris, dārul-ulūm (colleges), and private schools, constitute the impressive educational landscape of South African Muslims (Dadoo 2003). As they negotiate the terrain of post-apartheid South Africa, Muslims, who are drawn from various classes, are striving to transcend linguistic, ethnic, and theological differences (Mandivenga 2000; Dangor 2003; Vahed and Jeppie 2005) to find ways of moving beyond the private space of engendering personal piety towards actively demonstrating Islam's commitment to justice which incorporates the well-being of all Creation.

Ecotheology in South Africa: The diverse landscapes of South Africa, which incorporate many biomes, languages and cultures, is also home to many religions. This secular democracy has adopted a course of active interaction between the state and religious organisations resulting in a culture of religious pluralism and increased inter-religious interaction (Omar 2002; Haron 2007). Though the contemporary ecotheological movement in South Africa reflects this diversity, it was initially dominated by Christian scholars and theologians (Cock 1992; Daneel 1995; Conradie and Field 2000) which is not surprising since the majority of South Africans, more than 70% in fact, are Christian.

The involvement of other faith traditions can be traced to interfaith ecotheological activities, such as the Faith and Earthkeeping project, established at the University of South Africa in 1995 (Faith and Earthkeeping Project. n.d.). The project, which promoted religious engagement in ecological issues, conducted research on environmental philosophy, ethics, and theology; produced a newsletter, *Faith and Earthkeeping*; and endeavoured to implement community-based environmental projects such as tree planting. In its seven-year run, it made a notable impact in linking religion and ecology and in laying the foundation for the emergence of an

interfaith network, SAFCEI, the Southern African Faith Communities Environment Institute, which gathers faith communities around inter-religious dialogue and action on the environment. Established at the 'National Conference for Faith Communities' in 2005, SAFCEI plays a leading role in mobilising faith communities around environmental issues today. In 2009, in conjunction with Indalo Yethu, a national campaign promoting environmental awareness, SAFCEI convened a summit, *Religious Leaders for a Sustainable Future* which gathered participants from a wide variety of faiths. The summit culminated in the drafting and signing of a declaration, as well as resolutions and commitments on key environmental themes. The declaration also served to reinforce the alignment of the South African ecotheological movement with ecological and economic justice, which promotes the wellbeing of all in society as well as all on earth:

We believe that faith-based communities have a significant role to play in the nurturing and protection of God's creation. We call on religious leaders to place environmental justice at the forefront of their agenda, to promote an ethically based economic system and to take steps to safeguard the future of our children and planet earth. (Indalo Yethu and SAFCEI 2009, 23)

This alignment with the environmental justice strand of environmentalism in South Africa can also be discerned in the activities of organisations such as the Network of Earthkeeping Christian Communities in South Africa (NECCSA), which aims to stimulate concern for the environment and, more specifically, environmental justice amongst Christian churches in South Africa (NECCSA 2010). Field (1999, 46), expressed the need for a theology of eco-justice which "involves the protection and conservation of natural resources vital to the well-being of the human community as well as the establishment of equal access to these resources". The emancipatory orientation to South African ecotheology will also ensure that, "in our attempt to reconstruct and develop our broken society we will not simply adopt the deeply flawed models of modernity with all their devastating ecological consequences", but instead, establish a "just, egalitarian and peaceful community in relationship with a flourishing non-human creation" (Field 1999, 47). Christian scholars, such as Daneel (1995), Ackerman (1997) and Conradie (2003, 2005, 2008, 2009) have contributed greatly towards developing a place-based, justice-oriented Christian ecological

theology in South Africa since politics, after all, is central to the environmental question in South Africa.

South African environmentalism reflects the diversity of the global green movement and is aligned along two powerful discourses — sustainable development and environmental justice (Cock 2004). While sustainable development generally reflects a technocentric approach to environmentalism, the environmental justice movement represents a shift from the wildlife and conservation-oriented environmentalism of the past to one which is responsive to the need for environmental redress. Conradie (2003), in outlining a role for churches in raising environmental awareness contends that in the South African context, environmental concerns can only be addressed within the context of justice. Thus, for the budding South African ecotheology movement, "the concepts of social and environmental justice are compelling, with their focus on ensuring that redistribution does not result in further marginalisation, whilst simultaneously redressing previous [and existing] imbalances" (Patel 2009, 98). Even as the South African legal framework, from the constitution to environmental laws and policies reflect a commitment to social and environmental justice, it is becoming clear that while

[a]partheid was environmental racism writ large, and not withstanding recent changes in South Africa, inequalities remain among the worst in the world. In fact, black people suffer worsening and widespread social inequities—unemployment, mass violence, and urban decay. Millions lack safe water and adequate shelter and sanitation. (Ruiters 2001, 98)

Cock (1994) suggests that the Christian church, with its grassroots connections, ethical tradition of respect and care for Creation and holistic vision of justice, is the only existing institution which can rebuild the fractured human-environment relationship. This is equally true of many other faith traditions which live in the hearts, minds and lives of South Africans. In harnessing its resources for the earth, faith communities are integral to the spectrum of South Africa's "rainbow environmental alliance" which congregates conservationists (greens), critical ecologists (browns), and peoples movements (reds) (Cock and Koch 1991). In this alliance, the varied knowledges, goals, and imaginaries of cultural and religious

groups, which reflect holistic understandings of the interrelationship between nature, human beings and the supernatural, can be harnessed in the counter-hegemonic struggle for ecological and social justice in South Africa (Ruiters 2001; Breidlid 2009).

Muslim liberation theologians in South African not only played an active role in the liberation struggle, but also reflected upon the environmental teachings of Islam (Naude 1992). An alliance between Muslims and environmental groups who partnered in protest against a proposed luxury township development on the lower slopes of Table Mountain, where Muslim grave sites and shrines are located signalled, according to Khan (2002), one of the only instances of mass environmental action based on environmental and social justice objectives. While the protests presented an ideal opportunity to articulate the green teachings of Islam, South African Muslims still need to articulate "the powerful ecological message inherent in Islam" (Mohamed 2002a, 51). At present, Muslim concern and articulation of the environmental teachings of Islam is still in its infancy in South Africa. Although there is now a handful of unpublished academic works on the topic, the vibrant Muslim network of religious and educational institutions has been slow in responding to this issue. Muslim NGOs, oriented towards providing development and emergency relief services, locally and abroad, have initiated projects with an environmental flavour. Many of these organisations, however, operate at the global level and the environmental projects are, in my opinion, most likely reflective of their international foundations. While Muslims participate in interfaith environmental initiatives, such as SAFCEI, the immense environmental and human resource base, of Muslim environmental professionals for example, has not yet been successfully harnessed to initiate a broad-based revival of the green teachings of Islam in South Africa. The interest exists, as we will come to see, but the movement has been slow in coming to fruition, yet

[t]here is no better time than the present moment for South African Muslim leaders to beckon the call towards developing a sustainable society in the wake of globalisation which threatens our very fibre of existence. The only way in which this can be done is via the inculcation of Environmental ideas (care and love for the environment) through Environmental Education. (Karodia 2004, 172)

EcoIslamic Activities in South Africa: Academic writings on Islam and ecology are mainly confined to theses, for example the Islamic perspective on sustainable development (Makwemba 2004; Gallant 2009); Muslims and environmental education (Karodia 2004); and a comparison of Muslim and Christian perspectives on ecotheology (Abdull 2004). While the position adopted in this study does not centralise sustainable development conceptually, two of the key ecotheological works by South African scholars unpack the concept of sustainable development from an Islamic perspective. Based on the primary resources of the Islamic tradition, the Qur'an and Sunnah, Makwemba (2004) generates an Islamic perspective on sustainable development. He suggests that since the key principles of sustainable development are present in Islam's primary sources, Muslims should be 'torchbearers of sustainable development'. Gallant (2009) begins his study, Sustainable Development: A Challenge to Muslim Countries, by considering the indicators of sustainable development, as formulated by the United Nations, and thereafter identifies these indicators in the primary sources of Islam. He contends that achieving sustainable development objectives, such as the elimination of poverty, environmental conservation, just governance, education, and the promotion of harmony with the natural world, was a feature of early development in the Muslim World, which now suffers from socio-political and ecological malaise. He concludes by suggesting that ecoIslamic scholarly work, as well as official government declarations on sustainable development, "could form the basis of a new paradigm of development in the Muslim world based on Islamic principles and values" (Gallant 2009, iv).

The works of Abdull (2004) and Karodia (2004) provide critical insights into the development of an ecoIslamic paradigm in South Africa. Akin to Wellman's (2004) thesis of using sustainable diplomacy as a vehicle for rapprochement between Moroccan Muslim and Christian Spaniards, Abdull (2004) identifies commonalities between the green sentiments of Islam and Christianity and argues for a process of interfaith dialogue, as well as a practical environmental agenda which will see the ecological message of the respective faiths being incorporated into the Sunday schools and *madrasah* curricula, in sacralizing special days (Arbor Day), and in environmental campaigns. Karodia's (2004) contribution, *Islam and the Environment*

within the Context of Globalisation and South Africa, is by far the most significant for this study. He endeavours to gauge the level of environmental awareness amongst Muslims in South Africa through an empirical study of Muslim schools and religious bodies in South Africa since these "provide fertile ground to lodge the seeds for conscientising both Muslim learners at schools and the Muslim public at large on the value of the environment" (Karodia 2004, 22). His study is one of the first to evaluate the level of environmental awareness amongst South African Muslims and his insights into the environmental awareness and actions of religious bodies, Muslim schools, and Muslim radio in South Africa have been pertinent for this thesis.

Other writings which highlight the environmental message of Islam include *Islam, the Environment & Health* (Abu-Sway and Sachedina 1999), published by the Islamic Medical Association (IMA) of South Africa, which analyses the current environmental crisis, and provides an Islamic framework of response. Another IMA publication, *Islamic Guidelines on Animal Experimentation* (Ebrahim and Vawda 1992), seeks guidance from Islamic jurisprudence to formulate a position on animal experimentation. The booklet contains a wealth of information on animal care in Islam, and is unequivocal about the need to maintain the high standard of animal care as espoused by Prophet Muhammad . Research on potable water reuse in Durban, South Africa (Wilson and Pfaff 2008), investigates whether Muslims, who constitute a vital constituency in Durban, hold religious beliefs antithetical to wastewater reuse. It was found, through a literature review and local interviews that there were no 'theological, religious, or ethical' objections to wastewater recycling amongst Muslims and that local Muslim organisations were, in fact, supportive of environmental programmes.

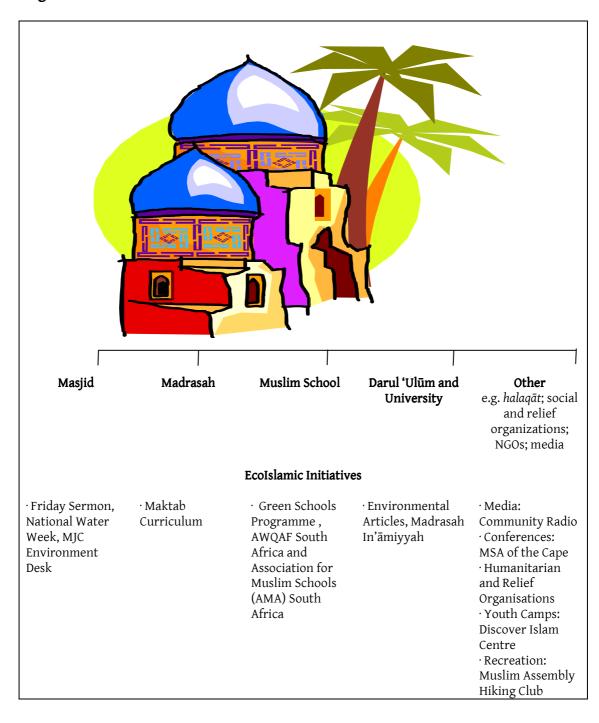
These publications, however, are not widely available and it remains the task of South African scholars and environmental activists to actively campaign for the environment, not only in their writings, but through their involvement and participation in community-based environmental programmes, religious institutions, and schools. Popular media outlets — magazines, Muslim newspapers, and community radio, have a greater reach and present another avenue by which

Muslims have started to raise environmental awareness. Magazines, such as *Treasure* (Mohamed 2002b, 2003) and *Pleaiades* (Safodien 1997), have carried environmental stories, but while the former is now available as an e-magazine, the latter has folded. Long-standing Muslim newspapers, such as *Muslim Views*, have included environmental stories on various topics such as Muslims and climate change (Muslim Views 2010), Qur'anic environmental ethics (Khan 2008), and the environmental aspects of the *hajj* (Mohamed 2004). Another newspaper, which has ceased production, *Muslim Mirror*, ran a two-part series entitled 'Islam and the Natural Environment' (Fredericks 1996a, 1996b). More is needed. Muslim community radio, which has capitalised on the democratisation of communication spaces in the post-apartheid era, has burgeoned. The role of established and evolving Muslim institutions, such as the *madrasah* and community radio, in broadcasting the environmental message of Islam in South Africa, is outlined in Figure 4.2., and discussed below.

One of the first institutions utilised to spread the ecoIslamic message in South Africa has been the **masjid**. Here, I will consider the efforts, according to my knowledge, of the first Muslim environmental NGO (ENGEO), the Muslim Judicial Council's (MJC) Environment Desk. The first meeting of the Environment Desk, initiated by the MJC, a faith-based organisation which is one of the most influential religious organs in South African Muslim society, first gathered Muslim environmentalists in late 2006. Several meetings, held mainly in 2007 and 2008, sought to formulate a mission statement, as well as chart a programme of action for the Environment Desk. Activities of the Desk have included Muslim involvement and representation in SAFCEI activities and meetings; presenting the Muslim perspective on environmental concerns such as climate change; and an introductory seminar to test the waters for 'ulemā environmental training. The latter was poorly attended (and advertised) within the MJC and confirmed my initial concern that this body was not the appropriate location for a Muslim ENGO. One of the most successful outputs has been the production and widespread dissemination of khutbah notes (Friday sermon) which focused on the Islamic teachings pertaining to water use and conservation during National Water Week in South Africa (19 - 24 March 2007), and to climate change on World Environment Day (5 June 2007). The

MJC played an important role in distributing the notes, which led to *imāms* of MJC-affiliated *masājid* in the Western Cape, delivering environment-themed Friday sermons. The MJC Environment Desk has not met since 2008 though sporadic e-mail communication, largely related to Muslim participation in interfaith initiatives, continues.

Figure 4.2.: EcoIslamic Initiatives in South Africa



In his consideration of environmental awareness amongst three of the main theological bodies in South Africa, Karodia (2004) extracted key insights into the environmental activities at masājid. While theological institutions largely endorse the importance of environmental concerns, they agreed that green issues did not yet feature prominently in masjid sermons or lectures. Most masājid try to raise awareness of water use and conservation by placing posters, such as Water is a Gift from Allah, Do not Waste this Precious Resource! in ablution areas. In Cape Town, South Africa, one organisation Youth Engineering the Future (YEF), has won a commendation in the Mail and Guardian's 2010 Greening the Future Awards for its Green Masjid programme, a water auditing initiative at mosques which aims "to create awareness of the scarcity and sacredness of water, to reduce wastage and to develop sustainable mechanisms to preserve and recycle water" (Steyn 2010). The organisation is a community-based organisation targeting youth between the ages of 14 and 20 focused on reviving the central role of the masjid as a community-centred institution.

The dearth of ecoIslamic initiatives at the *madrasah* institutions in South Africa relates to both the lack of research into the environmental content of *madāris* curricula, as well as the absence of a unified *madrasah* system or '*madrasah* community' (Waghid 1994) which would regulate the philosophy, content, and pedagogical practices of these religious schools. The organisation of the *madrasah* differs from one area to another, but in general these institutions supplement secular education and form the primary avenue for instruction in the foundational teachings of Islam. Chapter Five will highlight and unearth the environmental elements in the *madrasah* curriculum by focusing on the curriculum produced by Madrasatul Quds and Jamiatul Ulema's Tasheel series, which are structured and graded; widely used; and representative of the curriculum content of *madāris* in South Africa.

The Association of Muslim Schools – South Africa (AMA) and Awqaf South Africa co-hosts an annual greening competition amongst *Muslim schools*. This forms part of a greening project which encourages schools and learners to engage in tree planting and food gardening in needy communities and neighbouring schools. It is

hoped that the project can find support and be extended to more schools, including madāris and masājid (Awqaf South Africa 2010b). The AMA, established in 1989, provides a range of services to Muslim schools such as professional development and training for teachers; inter-school activities such as sports tournaments; and curriculum development opportunities. According to Karodia (2004, 160), the AMA needs to play "a pivotal role in developing and sustaining Environmental Education as an integral component of the Islamic school curriculum". Muslim schools, such as Islamia College in the Western Cape, have actively encouraged learners' involvement in environmental initiatives, such as the participation in the Youth Environment Schools (YES) programme, a City of Cape Town capacity-building programme which seeks to achieve the goals of environmental education and awareness through a variety of projects, activities, and resources. Annual school camps which provide outdoor education opportunities and utilise the services of environmental centres; attendance of annual youth environmental conferences organised by the City; as well as learner participation in science and environment competitions also encourage awareness of and participation in environmental programmes (Islamedia 2009/2010). Engagement with wider educational initiatives, such as the YES programme, is an important avenue for Muslim schools to equip learners to address the challenges of a multicultural society, while the Greening Competition by AMA and AWQAF South Africa offers an opportunity for Muslim educators, frustrated at the lack of conceptual guidance and support on Islamization of the curriculum (Fataar 2005), to highlight the Islamic perspective on faith, ecology, and action.

In his study of environmental awareness and practice at Muslim schools in South Africa, Karodia (2004) shows that, in keeping with the dictates of the national curriculum, EE has been integrated into the curriculum of Muslim schools. However, while participation in environmental projects, such as tree planting, exists at many Muslim schools, EE is still not fully integrated across the curriculum. Karodia (2004) suggests that EE, based on the environmental teachings of the Qur'an and Sunnah, could be an important catalyst in Islamizing the curriculum. He also presents an outcomes-driven approach towards EE in Muslim schools which incorporate suggestions on greening the curriculum in Muslim schools such as environmental

audits; gardening and greening projects; and school environmental mission statements.

One dārul 'ulūm in KwaZulu-Natal, Madrassah 'In'āmiyyah Camperdown, an institute of higher learning, has, while maintaining the tradition of the madrasah as an institution focused on traditional Islamic sciences, extended its engagement with broader societal issues, including the environment. The institute's website contains articles on the environment such as Natural Resources - Blessing of Allah and Water Conservation, produced by the Madrassah Arabia Islamia in Azaadville; as well as a piece entitled Ritual Islamic Slaughter (Madrassah 'In'āmiyyah 2010). These articles adopt a jurisprudential approach to the above-mentioned questions, but also provide guidelines on environmental best practice. Another institution, based in the Western Cape, Dār al-'Ulūm al-'Arabiyyah al-Islamiyyah (DUAI), which uses Arabic and English as the medium of instruction as opposed to Urdu which predominates in Gauteng and Kwa-Zulu Natal provinces, sees its mission as advancing knowledge and developing the Islamic scholarly tradition beyond its present scope in order to meet the challenges of our age. These are promising times for the Islamic colleges in South Africa, which are adopting topical research interests and are setting themselves the task of demonstrating how the 'dynamism inherent within the legacy of knowledge in Islam' is able to meet contemporary challenges.

A range of ecoIslamic initiatives can be located amongst *other* new, and rapidly evolving Muslim institutions. The role of the print media, such as *Muslim Views*, was discussed already, but Muslim community radio is now playing a pivotal role in consolidating Islam in post-apartheid South Africa. In addition to the radio stations which target local and regional audiences, Channel Islam International (Cii), a Johannesburg-based station, broadcasts globally (Vahed 2007). In 2005 and 2006, I was interviewed on Cii in my capacity as an environmental researcher and discussed the following topics: 'Environmental Protection according to the *Sharī'ah*' and 'Islam and Ecology'. Some community radio stations have dedicated environmental programmes, such as EnviroWise (discontinued) and Nature's Tapestry, aired by Cape Town community radio station, Radio 786. From 1999-2002, for example, I was actively involved in producing and presenting a community radio

programme, EnviroWise on Radio 786 that aimed to broadcast environmental issues in the Western Cape. During my stint on EnviroWise, I produced a seven-part series, 'Islam and the Environment', which has seen several re-runs. One of my copresenters also covered the World Summit on Sustainable Development (WSSD), held in Johannesburg, South Africa in 2002. Community radio programmes on gardening, hiking and the environment have become topical on Muslim radio, and will hopefully continue to play a role in the development and promotion of an ecoIslamic movement amongst Muslims in South Africa.

The hosting of the WSSD in South Africa in 2002 also served as a catalyst for promoting environmental issues amongst South African Muslims. Awqaf South Africa hosted the First Muslim Convention on Sustainable Development which brought together 900 participants from across the world. Both local and international speakers delivered papers on various aspects of Islam, the environment, and sustainable development; and further deliberations at the convention resulted in the production of the Draft Principles on Muslim Commitment to Sustainable Living and Development (Awqaf South Africa 2002). While the Draft is not as widely distributed (or known) as the Islamic Declaration on Sustainable Development submitted at the WSSD (First Islamic Conference of Environment Ministers 2002), it is an important resource for Muslims wishing to launch a response to the environmental question. The Draft focuses on the mandate of human trusteeship to achieve social and ecological justice, and sets out concrete pathways to fulfilling this trusteeship (Awqaf South Africa 2002). It also raises the importance of creating Muslims—communities, families and particularly awareness amongst children—concerning the responsibilities and trust placed in human hands by the Creator. This convention, I believe, has impacted upon Awgaf South Africa's thinking and practice since it has not only been involved in the Green Schools competition discussed above; but has also set up a special charitable endowment fund, the Tree-Food-Water Waqf, which is based on Islamic environmental teachings — more on this later.

Muslims in South Africa have, through conferences, workshops and symposia, been exposed to international leaders in Islamic ecotheology such as Turkey's Ibrahim

Özdemir, a philosopher who has written extensively on Islam and the environment. His comprehensive paper, 'An Islamic Approach to the Environment', was delivered at the Islamic Unity Convention's Winter University, held at the University of Cape Town in July 1998 (Özdemir 1998). In 2007, Cii radio personality and motivational speaker, Hafidha Rayhaanah Omar Mohammed, delivered a presentation at a Cape Town conference entitled, 'Rasoolullah &: The Custodian of the Environment' in which she discussed how Muhammad & was not only a staunch advocate of environmental protection, but a pioneer in the domain of conservation, sustainable development, and resource management (Mohamed 2007). The conference, organised by the Muslim Students Association (MSA) of the Cape, sought to highlight the importance of living Islam and was entitled, 'Reviving the Islamic Spirit: Living Islam, From the Inside, Out'. Events such as these play an important role in nurturing and developing the awareness of Islamic green teachings amongst Muslim students, many of whom are faced with constructing their identity as South African Muslims, and to whom the 'contemporaneity' of Islam is of special relevance. A recent workshop, Reflecting on Allah's Creation in the Midst of an Environmental Crisis, held in Cape Town, South Africa from December 6 to 8, 2010 was co-ordinated by the International Association of Muslim Scientists and Engineers (IMASE) and also targeted youth. IMASE, which is now active in South Africa, intends to initiate several environmental projects to promote understanding of and action for the environment (Mohamed 2011).

Relief Work presents another avenue where the green message of Islam has been brought to the fore. Muslim activity in the sphere of humanitarian aid, both at the local and international level, is spearheaded by local branches of international organisations such as Muslim Hands and Islamic Relief, while home-grown institutions such as the South African National Zakāh Fund (SANZAF), a sociowelfare and educational organisation, "strives to facilitate the empowerment of needy families through the efficient collection and effective distribution of Zakāh (compulsory annual poor tax) and other Sadaqāt (voluntary charity)" (SANZAF 2010a). Muslim Hands, an international relief organisation, centralises environmental sustainability in all their projects, such as agriculture, forestry and education, and contends that humanitarian projects need to start taking long-term

views which include the health of the environment (Muslim Hands 2010). Islamic Relief South Africa has initiated a charitable endowment (waqf), known as the Water Waqf Fund, to provide water through water supply systems, water purification projects, integrated sanitation programmes, and drilling and restoring wells in needy areas. The waqf institution has also been used to great effect by both Awqaf South Africa and SANZAF who have instituted a 'Trees, Food and Water' and 'Fruit Tree Waqf', respectively. The Trees, Food and Water waqf of Awqaf South Africa is a fund to "plant trees, grow food and provide water in poor and needy communities" (Awqaf South Africa 2010a) while SANZAF's Fruit Tree Waqf, launched end-September 2009, employs environment-friendly farming practices, permaculture, in their programmes (SANZAF 2010b). These initiatives are vital in translating the ecoethical principles of Islam into action and showing Muslims how Islamic practices and institutions, such as zakāh, ṣadaqah and waqf, can be used to promote the health and well-being of people and planet.

Recreation initiatives, such as those of the Muslim Assembly Hiking Group, established in 1999, though not exclusive to Muslims, attract mostly Muslim hikers who share a love and appreciation for the natural environment. These hikers not only present a source of knowledge on the local environment, but strive to present, through their activity, a high sense of environmental awareness and responsibility. Members of the Muslim hiking fraternity are in fact called upon frequently to guide hiking trips during leadership camps for Muslim youth. A range of Muslim institutions, such as the Surrey Estate Youth Group, Discover Islam Centre, and the Muslim Youth Movement (MYM) have convened youth and leadership activities which incorporated environmental activities, such as hikes. South Africa's rich natural environment, terrestrial and marine, offer untold opportunities and resources which beckon the Muslim to the "marvels of nature, and to their harmonious working together which testified to the Oneness of their Sole Originator" (Lings 1991, 49).

The voice of South Africa's green Muslims is slowly rising, but it is clear that much work is still needed. While a champion of the ecological message of Islam, such as the MJC Environment Desk is sorely needed, for now, religious institutions, relief

outfits and the media remain among the most fertile avenues for awakening the ecological consciousness of Muslims in South Africa. The global ecotheological movement, in the phase of internationalization and integration, is now actively participating in interfaith dialogue; highlighting the ecological message of non-Christian faith traditions; and allying itself, in some quarters, with critical ecologists. South African Muslims, while adhering to the ecoIslamic tradition as well as constitutional commitment to environmental health for all, must participate in this dialogue, learn about the environmental traditions of their faith, and join the broad movement for social and ecological justice. They have to question the social and political structures which perpetuate apartheid-era inequities by drawing on the ethical insights of their faith, and become an activist and transforming presence in South Africa society. In addition to new institutional structures, enduring Muslim institutions, the madrasah, masjid and dārul 'ulūm, must play a pivotal role in helping South African Muslims 'exercise responsible stewardship over our corner of Creation'. One such establishment, the madrasah, will be the focal point of Chapter Five.

4.3. Revitalising an Eco-Justice Ethic of Islam: The Role of Education

This chapter has illustrated the ways in which environmental learning or EE, rooted in the environmental teachings of Islam, has been enacted in the Muslim institutional landscape at the dawn of green Islam. Muslims from across the world are tapping into this educational establishment to enliven the ecoethics of Islam, and to demonstrate the link between faith, knowledge, and action in the life of a Muslim. This chapter has also affirmed that EE, premised on the green message of Islam, is essential in equipping Muslims to know, communicate and act upon the alternative environmental and development imaginaries presented by Islam.

Throughout this chapter, I have sought to highlight how Muslims from all over the world, and South Africa in particular, are beginning to utilise the curriculum spaces within the educational landscape of Islam to broaden engagement with the ecoethics of their faith. While certain institutions, such as the *masjid*, *madrasah* and Muslim school, have been used to greater effect, the utilisation of the *maktab*, a

foundational component in the educational repertoire of Islam, has been ineffective to date. This will hopefully change. Curriculum spaces available to Muslim educationists have also evolved considerably to include the print and electronic media; social media; conferences, workshops and seminars; the work of relief agencies; as well as the growing number of ENGOs which are expressly committed to spreading the green message of Islam.

I will now evaluate whether the ecoIslamic educational activities described above reflect the liberation ecotheology presented in Chapter Two, i.e. whether it seeks to develop a trustee and servant who is concerned with the welfare of *all* Creation; who strives to achieve social and ecological justice; and who embodies the 'lived spirituality' of the Islamic ecotheology presented in this study. I will also assess whether these activities reveal the transformative objectives of Islamic education outlined in Chapter Three, i.e. whether the holistic knowledge-structure of Islam is being displayed; if faith, knowledge, ethics and action are being linked; and whether the intent of Islamic education is being achieved. Finally, I will begin to distil, from what is being said *and* done about EE in Islam, key implications for environmental teaching and learning in the broader educational landscape of Islam.

The Liberation Ecotheology Underlying EE in Islam: The theocentric ethic of Islam which positions humankind as both a trustee on earth (khalīfah) and partner of Creation (khalq) has formed the bedrock of the ecoIslamic EE strategies described throughout this chapter. Key ecoethical principles, discussed in Chapter Two, such as khilāfah (responsible trusteeship), fasād (corruption manifested in environmental degradation), and fiṭrah (innate disposition), have been used to great effect by Muslim ecotheologians and ENGOs who seek to remind Muslims that "[t]he conservation of the natural environment in Islam is both an ethical and religious imperative" (Izzi Dien 2000, 165). The ecotheology of Islam has found an expression in the growing body of academic works detailing the ecoethics of Islam, and has reached an attentive audience, particularly in the Western world, through a range of educational initiatives ranging from conferences, workshops and seminars to clean-up campaigns, Green Ramaḍān programmes and the Friday sermon. Efforts at reviewing and integrating the corpus of environmental law which exist in this

religious tradition are slow, though notable progress is being made in highlighting the environmental elements of traditional land management institutions, the *himā* and *harīm*, in the Middle East and North Africa in particular. Throughout the Muslim world, relief agencies are playing a leading role in highlighting the application of a *waqf* (charitable endowment) to 'environmental' projects. Muslim environmental organisations are also becoming active role players in the environmental arena.

The ecotheology presented in this growing movement shows that Muslims have the responsibility of living in kindness, compassion and justice with all of Creation and caring for the gift of nature in accordance with the laws of its Bestower - in accordance with the Sharī'ah. In Chapter Two, it was shown that Creation (khalq) reflects the creative order of the Most-High and is deserving of care and respect since it possesses intrinsic value as His signs; ecological value as part of the integrated system which He designed; and utilitarian value in sustaining both humans and the rest of Creation. The entire universe is regarded as the Creation of the Owner, Originator and Sustainer, who has created the world purposefully and in accordance with Divine Will. Human trusteeship on earth and human use of natural resources is located within a moral framework which incorporates accountability, justice, goodness, moderation and respect. The ultimate aim of the EE process, according to this framework, is thus to facilitate humankind to be the representatives of Allah on earth, learning about (knowledge) and living (action) in harmony with the Divine laws which endeavour to secure the common good, justice and welfare of Creation.

Most EE programmes draw upon Islam's theocentric ecoethics to build the case for environmental learning and action amongst Muslims. Even though the ecoethical precepts outlined in this study shows an integration of all three ecological visions—theo-, anthropo- and ecocentric—the ecoethic of Islam is unequivocally theocentric, as evidenced in the centrality of <code>tawhīd</code>. Yet the anthropo- and ecocentric facets of this ecocosmology have been emphasised to various degrees in the ecoIslamic movement. Muslim environmentalists working towards instilling the importance of justice, for example in the fair trade movement, emphasise the social implications of this God-centred worldview and frame environmental problems in

relation to the establishment of just economic relationships between humankind. This is equally true of those who have worked on issues related to climate justice and genetic engineering. Ecocentric visions are expressed most vividly amongst Muslim environmentalists seeking to affirm the place and position of Creation in the cosmos, positing both the human and non-human world as part of an integrated whole; and affirming that Creation possesses sanctity as signs of God.

Albeit all these efforts, it is the theocentric worldview of Islam which anchors the human-environment conception of Muslims and affirms environmental care as religious obligation and an act of spiritual obedience. The Sharī'ah guides humanity towards developing a right relationship with the Creator of all the Worlds, to be a true khalīfah (vicegerent) and 'abd (servant) on earth, one to whom environmental destruction is disobedience to the Divine command to caretake. Whatever shade of green they may be, the ecological philosophy of Muslim environmentalists is most likely to be embedded in the ethical precepts of the Qur'an and the Sunnah, the example of Prophet Muhammad . The liberative impulse of the eco-justice ethic presented in this study finds its expression in Muhammad &, a prophet who brought words like freedom, justice and equality to life. As he sought to oppose the tyrannical forces of his time, Muslims need to resist the political, social and economic tyranny which beset people and planet today. Muslim environmentalists still have a long way to go to demonstrate the socio-political application of the spiritual and ethical principles of Islam in the ecological sphere. If they do, Muslim liberation ecotheologians, inspired by Muhammad &, would make an immense contribution to the environmental movement by concretising the 'dynamic of salvation-as-liberation' and by participating in the liberation process which is central to the history of all Creation.

As the efforts of Muslim environmental thinkers increasingly start to move into the realm of action, it is coming closer to this liberative praxis which Islam seeks to instil. Calls to return to this dynamic, which liberates the human soul from all enslavement — economic, cultural, and political, are on the increase. These include: concerns with the extravagant and opulent lifestyles of some Muslims; disgruntlement with developments which are defacing the sacred environments of

Makkah and Madinah; efforts to disengage from the usurious and exploitative world economic system; community food initiatives which present alternatives to the globalised food system; and initiatives to contemporise institutions such as the himā (reserve) which were explicitly established on social justice objectives. The ecoIslamic movement thus needs to activate the higher objectives of the Sharī'ah in society. In the words of Ramadan (2009), this movement must secure the welfare of all Creation by immersing itself in the Islamic universe of reference and assessing its knowledges, instruments and methodologies; to look to the challenges of our time; and to formulate a response which is at once true to the religious traditions, values and ethics of Islam, while at the same time participating in resisting the aberrations in society. They must also build awareness of the ecoethics of Islam in the broader environmental movement, enabling understanding of the human-environment imaginaries of Islam and engage with movements working for the establishment of social and ecological justice. The liberation ecotheology of Islam, which centralised justice for all Creation, forms the bedrock of the EE strategy proposed here, and motivates Muslims to be in history, working for the well-being of the planet.

The Educational Foundations of EE in Islam: Education, as discussed in Chapter Three, is central to the development of the Islamic personality. The Islamic epistemology adopts a holistic approach to human development and knowledge acquisition is seen as vital in guiding humankind to fulfilling its position of stewards on Earth, living in accordance with the values, principles and laws of the Creator. Islamic education objectives and philosophies also promote a love and concern for the natural world, recognition of multiple ways of knowing, and the establishment of a just relationship between humankind and nature. EE, this study argues, is pivotal in articulating and activating an eco-justice ethic of Islam. It should also, in keeping with the liberation ecotheology presented here, rest upon an ecological knowledge paradigm which places environmental questions in an ethical framework; highlight the importance of justice in human relationships with all Creation; and reflect the action-oriented, lived and liberatory spirituality of Islam.

Knowledge of the human-environment relationship occupies a central place in the Islamic worldview. Critical engagement, with the ecological knowledge of Islam as

well as the knowledges within society, the sciences of Nature, experimental and human sciences, is required to build an awareness and understanding of contemporary environmental questions. The Islamic epistemology presented in this study, premised on the attainment of <code>maṣāliḥ</code> al-khalq - the welfare of all Creation, is holistic in that it regards (and accepts) diverse knowledge systems as legitimate in the educational process. Revealed knowledge, which provides the conceptual framework for the epistemology of Islam, is the foundation for the ecological knowledge structure of Islam. However, the holistic epistemology of Islam encourages humankind to seek knowledge across a wide spectrum—from the Qur'an and from Nature—of benefit to individual and societal welfare, including the non-human realm. It exhorts humankind to develop their intellectual faculties within the spiritual framework of Islam. Al Zeera's (2001) conceptualisation of Islamic education as 'holy' and 'whole' is thus an apt description of this epistemology.

Much ecoIslamic work has centred upon outlining the conceptual environment and foundation of ecological knowledge in Islam – the ecoethical precepts which are embodied in the Qur'an and Sunnah. This is a useful starting point and provides a configuration of the environmental narrative of Islam yet it must, by necessity, extend further into the realm of knowledge. In Chapter Three, I suggested that the environmental narrative of Islam is underscored by an integrated knowledge-structure which does not simply 'Islamise' terminologies of the sciences, but couches scientific endeavours within the philosophical and sociological framework of Islam. Ecological knowledge constructions in Islam thus require critical engagement with existing ecological knowledge, in the natural and social sciences – which is neither ethically nor culturally neutral (Nasr 2005).

The ecoIslamic movement, still in the early stages of retrieving and reconstructing the ecological message of Islam, does not yet reflect the holistic epistemology of Islam. Few initiatives extend towards critical engagement with contemporary ecological knowledge – equally relevant in understanding ecological realities today. The ecoIslamic movement is slowly stepping up its efforts to evaluate contemporary knowledge in formulating a response to environmental challenges such as energy

use, food production, and consumption patterns. Much more needs to be done to present the value of this alternative knowledge paradigm of Islam, an epistemology which is integral and holistic, drawing upon all existing knowledge, revealed and non-revealed, to understand and formulate a response to the ecological question of our time, an ethical question of universal proportions.

Much of the discussion throughout this thesis has centred upon revealing the interrelation between knowledge, ethics and action in Islam – a distinctive feature of the Islamic epistemology. The Islamic tradition, as we have seen, is deeply rooted in religious teachings and is focused on the development of the human being, nurturing inner power through the moral and ethical teachings of the Qur'an, and helping the human being to be the best trustee which he or she can be (Al Zeera 2001). The acquisition of knowledge is regarded as a religious obligation, an act of worship, and a way to earn reward. It must also, of necessity, manifest itself in righteous deeds (a'māl ṣalihāt), in relation to the Creator and to Creation. All knowledge in Islam must, of necessity, be associated with ethics since

[w]hat unifies knowledge and holds it together...is neither the laws of logic nor the principles of rationality but ethical and moral codes that like so many spokes running through the fabric of diverse bodies of knowledge keep all of them centred at the core. (Kadi 1999, 221)

The Qur'an, a source of knowledge and ethics, provides the foundation for the development of an eco-justice ethic of Islam. It is a powerful motivating force in both the acquisition and actualisation of knowledge which must have, "as their immediate consequence a behaviour, a way of acting, that respects an ethic and promotes good" (Ramadan 2007a, 32). This purposive intent of knowledge in Islam, i.e. to affect human ethical conduct, is amongst the primary objectives of education, and EE in Islam. EE, premised on the ecological teachings of Islam, thus adopts an approach which is upfront about the ideological basis of its ecological philosophy; forthright about the centrality of ethics and values in its epistemology; and committed to establishing just relationships between humankind and the natural world. EcoIslamic activists have been doing just this by presenting and designing educational initiatives and activities which concretely demonstrate the necessity of

acting upon the ecological knowledge and teachings of Islam. While they have made sterling efforts in relaying the ecoethical messages of Islam and in promoting responsible action, they can (and should) step up their efforts to engage with *all* knowledge systems which help us to make sense of the complex ecological questions we are facing.

Do the ecoIslamic initiatives discussed here fulfil the intent of Islamic education? Has it moved the nascent ecoIslamic movement towards an engagement with ecological knowledge and the values of Islam (ta'līm); towards the recognition of the pedagogy of responsible environmental action (tarbiyyah); and towards the importance of Muslim participation in achieving a socially- and ecologically just world (ta'dīb)? Critical engagement with environmental knowledge will assist Muslims to construct ecological ethics which are true to the tenets of Islam, responsive to the contemporary ecological questions, and critical of the worldview which has given rise to the ecological crisis. Muslim scholars, such as Kazmi (1999), have alerted educationists to the danger of utilising the same knowledge-structure which has produced the ecological problems of today to find solutions. Instead, educationists should question the nature of this knowledge-structure (and its attendant worldview) to present an ecological philosophy, couched within the worldview of Islam, as an alternative knowledge-structure within which to understand and frame environmental questions today. This has been demonstrated in the works of Nasr, Sardar, and Bakar who have drawn attention to the ecological malaise and have articulated an Islamic epistemology which is centred upon critical and reflective engagement with knowledge. EcoIslamic initiatives, such as that of Wisdom in Nature (WIN) reflect this well, but most have not effectively displayed the ecological knowledge of Islam as an alternative knowledge paradigm with an attendant ontology, epistemology and pedagogy. As this movement matures, it will hopefully begin to reflect the full implications of the Islamic view of humanity and nature in its educational endeavours - of human trustees who have the responsibility to comprehend the meaning of the natural order and who have a moral obligation, arising from the Qur'an, to maintain measure in society (Özdemir 2008). The moral obligation to undertake responsible action, in educational terms,

tarbiyyah, has been highlighted to greater effect than that of ta'līm as outlined above.

The educational process in Islam pays great attention to socialising its adherents into the importance of responsible action (tarbiyyah). This has been equally true of the ecoIslamic movement which has presented environmental care and conservation as an act of responsible action which will earn its doer reward. Two of the most recent works on Islam and Ecology, 199 Ways to Please God (ten Veen 2009) and Green Deen: What Islam Teaches About the Environment (Abdul-Matin 2010) both expound the fact that environmentally-responsible behaviour, in all spheres of life, are praiseworthy actions. ten Veen (2009) discusses environmental actions under four sections: belief, worship, transactions and moral character, and details ways in which a Muslim can, by virtue of her intent and action, implement a range of activities which will not only sustain the planet, but enable her to truly live Islam. Abdul-Matin (2010) shows the deep connections between Islamic teachings, such as prayer, fasting and charity and the objectives of the environmental movement. He zooms in on four areas: waste, watts (energy), water and food, showcasing dozens of examples of Muslims who have dedicated themselves to fulfilling humankind's collective role as stewards on earth. This impulse towards responsible action is a distinctive feature of ecoIslamic work and does succeed in bringing together "theory and practice, ideas and actions, worldview and lived religion" as "complementary and mutually informative" (Bauman, Bohannon and O'Brien 2011, 6).

Most ecoIslamic initiatives fall short, in my opinion, of centralising the most important feature of the liberation ecotheology of Islam formulated in this study – the social activism $(ta'd\bar{\imath}b)$ which underscores Islamic education and encapsulates the activist and transformative educational vision presented in this study. There are exceptions, such as Ammar (2003), Hussain (2004, 2007), and Ouis (2003) who link environmental degradation and human injustice and display that fact that "[b]alance, admonitions against excess, justice, and the sharing of resources are...found at the core of the Islamic attitude towards the environment" (Ammar 2003, 383). Striving to establish social justice $(ta'd\bar{\imath}b)$, as per the ethical dictates of

Islam, is a valued educational outcome based. Throughout this study, I have aimed to present the centrality of justice in the liberation ecotheology of Islam - in constructing an eco-justice ethic which is conceptualised in the Qur'an and Sunnah; in an educational process centred upon nurturing 'socially active, ethically aware, compassionate, transformative human beings'; and in an EE process which seeks to develop a *khalīfah* which is concerned with securing the common good, justice and welfare of the entire Creation (*maṣāliḥ al-khalq*). *Ta'dīb* affirms the importance of ethics and values in Islamic education and is one of the definitive characteristics the Islamic educational process presented here. If Muslim educationists fail to centralise *ta'dīb*, Islamic education could easily fall into commodifying knowledge, defining educational success as the marketability of students instead of the life-long, liberating and liberatory experience which it should strive to be. Here, I would suggest, the ecoIslamic movement should bring the liberative dynamic of this religious tradition to bear on the environmental question and align itself with those working for the establishment of social and ecological justice in society.

The educational foundations of EE in Islam, established upon a holistic knowledge-structure; oriented towards inculcating respectful, responsible and just interaction between humankind and the natural world; and constructing an educational process which guides humanity towards creative engagement with knowledge, is central to the ecoIslamic project. The ecoIslamic movement is beginning to engage with and share the environmental knowledge-structure of Islam in its effort to formulate the transformative ecological ethics much-needed in society today. What will this mean in practice?

Environmental Teaching and Learning in Islam: What are the repercussions of the liberation ecotheology and epistemology presented here for environmental teaching and learning in the educational landscape of Islam? In Section 4.1., I outlined the essential components of an EE strategy for Muslims, building upon and expanding theoretical and practical insights on EE in Islam. This framework provided useful insights into the implications for EE, for example what should be taught, who should be taught, and how and where EE should be taught. Here, I will revisit this question by employing a different analytical framework to summarise

the educational implications for environmental teaching and learning in the wider educational landscape of Islam. This framework will also be employed in Chapter Five where I will take a deeper look at the environmental elements of one particular educational institution, the *maktab* or *madrasah* as it is known in South Africa.

Waghid (1994) delineates Islamic education into two elements, the formal element of Islamic education, i.e. the ontology, epistemology and ethics which make Islamic education what it is and the material element which encompasses curricula, textbooks, teachers, learning environments, and resources. The discussion above dealt largely with the formal element of EE in Islam and concluded that while the ethical thrust of the ecological philosophies of Islam is prominent in the educational endeavours of the ecoIslamic movement, the radical departure, ontologically and epistemologically, which distinguishes the Islamic worldview from prevailing discourses, has not yet taken root. This is essential if EE is to incorporate the characteristics which distinguish the theocentric ecocosmology of Islam from ecoand anthropocentric ecological philosophies. It requires that educators firstly possess a sound understanding of the intent and practice of Islamic education i.e. the aims and objectives of Islamic education, and then extend this understanding into the realm of environmental teaching. This has significant implications for teacher training as we will discover in Chapter Five. One scholar has even suggested that the philosophy of education, Islamic ethics, and foundational knowledge of the natural sciences be compulsory components in Islamic educational training (Hashim 2005). This could ensure that educators are able to apply the broad aims of Islamic education to specific concerns such as the environment.

The *imām*, who stood on the pulpit during National Water Week in South Africa, speaking about the Islamic worldview regarding the sharing of common pool resources such as water, and the importance of wise and frugal water use in the life of a Muslim, was drawing attention first and foremost to the conceptual underpinnings of water rights in Islam. The animal rights activist who educates about the correct manner of ritual slaughter in Islam speaks about the wisdom, respect and concern which underpins the relationship between humans and animals in Islam, which includes the manner in which animals are raised, highlights

the distinctive features of this relationship. The German Muslim environmentalist who draws inspiration from Muhammad in her efforts to live in harmony with the natural world is expressing the foundational elements of her ecological philosophy. Muslim environmental educationists should expound the conceptual underpinning of the ecoIslamic philosophy, the *tawhīdic* ontology and holistic epistemology which underscores an eco-justice ethic of Islam. It is not enough to speak about *khilāfah* as trusteeship of the natural environment without situating it in the Islamic worldview and its attendant epistemology. The eco-justice ethic which has been touted in this study draws upon a treasure trove of ethical teachings and an educational framework which sets Islam apart from other philosophies – it is also the starting point for constructing the material elements of EE in Islam.

In light of the widespread need for introducing the ecological knowledges of Islam to Muslims, young and old, environmental educators need to undertake a wide range of actions related to the material elements of EE: curriculum organisation and development, curriculum materials, teacher training, educational facilities, and teaching resources. The material elements outlined here are vital in building awareness of the religious obligation of environmental stewardship through both traditional and modern educational institutions (the madrasah and the university). Curricula should, while centralising the Qur'an and Sunnah, engage with all knowledges to build understanding of the human-environment relationship, motivate learners towards active participation in society, and work towards social and ecological justice. Curriculum materials which enliven the Qur'an and Sunnah in the lives of Muslim learners; build reasoning and analytical skills; and motivate learners towards responsible environmental action should be developed to initiate learners into the environmental tradition of Islam. Teacher training, focused on religious leaders (imāms), madrasah teachers and Muslim school educators and other role payers in the EE process is a necessity. Islamic educationists, while drawing upon the repertoire of educational methodologies in the lives of the prophets and messengers, must prioritise the importance of making the learning process an enjoyable, engaging experience which facilitates student learning. The Muslim teacher is therefore encouraged to adopt diverse approaches and methodologies, learning styles, and activities in the educational process. In this regard, the

methodological toolkit of EE presents a resource base which can be utilised to build environmental awareness amongst Muslims. Environmental educationists use a variety of instructional methods accommodating assorted learning styles which are often, but not always, based on hands-on observation and discovery in the environment. Place-based approaches to EE, which focus on local environmental concerns, can greatly increase the relevance of EE lessons in my opinion.

Islamic education, noted for its philosophy of education, original teaching methods, and consistency with ethical principles, should "impart knowledge and awaken pupils' consciences, shape their critical minds, lead them toward autonomy, and awaken them to personal and collective responsibility" (Ramadan 2009, 280). Ecological literacy in Islam entails building awareness of the environmental knowledge of Islam with the intent of impacting upon behaviour and the way in which the Muslim discharges her responsibility in the Universe – towards her Creator, humankind and the natural world. In this way, the success factors in any EE strategy would rest on whether it has enabled the Muslim to become a better vicegerent, aware of and responsible for her interaction with the natural world, and whether it has motivated her towards effecting a positive change in her own life and that of the broader society.

EE has become one of the central concerns and tools of organisations, activists and scholars involved in the ecoIslamic movement. Religious leaders are voicing concerns about climate change, pollution and water conservation. Conservationists are alert to the value of employing religion to increase the relevance and effectiveness of community-based environmental projects. Writers are displaying their concerns for nature by highlighting Islam's green message in their works. Environmental educationists are taking their first stabs at producing EE materials for Muslims, putting forward the ecological principles underlying Islamic ecoethics and highlighting the Islamic position on climate change, fair trade and sustainable mosque construction. Activists are embarking on environmental campaigns to win the hearts and minds of Muslims. The sheer diversity of actors, which reflect differences in areas of emphasis, target audiences, and priorities, suggests that EE is already an integral part of Islamic education.

The human-environmental imaginaries of Islam are being presented to Muslims through a variety of curriculum spaces in the educational landscape of Islam. EcoIslamic initiatives are presenting both the ethical and intellectual resources of their religious tradition as an ecological narrative which possesses a distinctive worldview, epistemology, and pedagogy. From eco-masjid programmes to clean-up campaigns, curriculum spaces, actual and virtual, incorporate traditional institutions such as the *masjid* and *maktab* and extend into new civil spaces such as social media. While media and civil society institutions are key role players in the manifestation of ecoIslamic initiatives, traditional institutions continue to play a vibrant role in providing lifelong education to Muslims, young and old, urban and rural, Arab and non-Arab, and therefore possesses untapped potential as centres of environmental education.

Many Muslims continue to know and understand their place in the world, including their relationship with the natural world, through the educational landscape of Islam. These institutions, to varying degrees of success, all seek to build awareness, understanding and practice of Islam's ecoethics which aspire to make the world a better place for all Creation. They are also vital conduits for introducing an action-oriented eco-juctice ethic which presents convincing arguments to understanding and remedying the social and ecological ills plaguing the planet. The *maktab*, which provides foundational Islamic knowledge, will be surveyed in greater detail in Chapter Five through a curriculum review which will examine two sets of curriculum materials, widely used in South African *makātib*. This review will look at the ways in which the environmental teachings of Islam have been included in curriculum materials, how it positions the reader in relation to the natural world, and how it motivates the Muslim child to act *for* the environment. It will also delineate the key implications for environmental teaching and learning within the *maktab*, one of the long-standing institutions in the educational landscape of Islam.





A CURRICULUM REVIEW OF SOUTH AFRICAN MADĀRIS: IMPLICATIONS FOR GREENING MAKTAB EDUCATION

He is the One who made the sun radiant and the moon a light and measured out for it heavenly mansions through which it traverses, so that you may know the number of years and their calculation.

God did not create this, except with the very essence of truth.

He makes distinct the signs in creation for a people who would reflect on them and know God.

The Prophet Jonah 10: 5

The nascent engagement of Muslims with environmental issues in South Africa is indicative of the growing efforts of religious traditions to present a contemporary understanding and experience of nature. The vibrant and visible Muslim community at the southern tip of Africa is writing, teaching, and learning about the environmental message of their faith. As we have seen in Chapter Four, several Muslim organizations have initiated community-based environmental projects - greening and food gardening schemes, humanitarian relief projects, and water conservation initiatives premised on the ecological teachings of Islam. Others are working in the educational and environmental sectors, seeking to enliven the religious *and* constitutional mandate of environmental care. While the articulation of the environmental teachings of Islam is still in its infancy, there are ample indications of an interest in the revival of the green teachings of Islam amongst Muslims in South Africa.

Islam in South Africa has been consolidated through various avenues: the religious establishment; an active network of educational institutions; health, relief and social welfare organisations; a burgeoning media; and Muslim women and men who continue to nurture an enduring love for their country and its people. The secular democracy of South Africa demonstrates active interaction between the state and religious organisations resulting in a culture of religious pluralism. South Africa, a signatory to UNESCO's Convention on the Rights of the Child, also affirms the right

of all children to a cultural heritage, identity and specificity, which includes religion. Muslims in South Africa, in the maelstrom of citizenship and identity building of their young democracy are looking afresh at religious institutions, both as a means of developing and establishing religious identity within a democratic society, as well as places where learners can be taught the importance of right living within society. Religious institutions have already started to play a pivotal role in awakening the ecological consciousness of Muslims in South Africa.

The madrasah in South Africa, historically known as the maktab, will be the focal point of this chapter in which I will assess the extent to which environmental elements have been incorporated into the curriculum. The maktab, particularly in Western societies, has evolved into an institution which provides supplementary schooling, and focuses on imparting 'religious' teachings with most learners also attending 'secular' studies. This is clearly a departure from the holistic, integrated and comprehensive educational philosophy and epistemology outlined in this study. Historically, the maktab provided elementary education and its curriculum incorporated a range of subjects such as writing, Qur'an reading and memorisation, the fundamentals of Islam belief, moral teachings, arithmetic, poetry and physical education. The bifurcation of knowledge and education which led to the dual system of education in the Muslim world has also impacted upon elementary Islamic education: today secular education is provided by government schools and religious education by makātib. Most Muslim parents, when faced with the need to prepare their children for living and working in society, enrol them in secular schools while the maktab, today, primarily focuses on imparting knowledge of the religious sciences. The high cost of Muslim schools also precludes most Muslim parents from sending their children to these institutions which, theoretically, should embody the Islamic educational ethic. Many parents thus opt to send their children to a maktab, like the madrasah in South Africa, where they receive instruction in the foundational teachings and values of Islam.

There are, however, real concerns that what passes as Islamic education in the *maktab* today has transformed the lived and liberatory spirit of Islamic education into rote learning and rituals. Islamic education shapes Muslim character within the

Islamic worldview and provides guidance towards fulfilling human trusteeship (khilāfah) on earth. In doing this, Muslim educators should expose learners to all knowledges as a means for understanding the Qur'anic message which seeks to build a constructive relationship with God, other human beings, and nature (Barazangi 1998). While makātib continue to thrive amid the continuing demand to socialize Muslim learners into the beliefs, values and practices of their religious tradition, it is clear that these institutions are in need of reform if they are to be consonant with the Islamic approach to education outlined in this study.

Several names are used to denote elementary religious education, such as madrasah awlawiyyah (primary religious school), maktab or madrasah, the term which is used in South Africa. The madrasah, in South Africa, refers to the supplementary Islamic education which most Muslim children at primary school, i.e. from ages six to twelve (Foundation to Intermediate Phase), attend. The phases of education, as set out by the Education Department of South Africa, spans 13 years or grades: Foundation phase from Grades R to 3; Intermediate phase from grades 4 to 6; Senior phase incorporates grades 7 to 9; and Further Education and Training incorporates grades 10 to 12. Madrasah education in South Africa is organised according to these educational phases and most primary school children attend madrasah from Grades R through to 7. Only a few madāris cater for higher grades. After school, Muslim children head off to the madrasah, based at a mosque, home or community centre, where they receive instruction in the foundations of Islamic beliefs and morals, as well as Qur'an reading and memorisation. For children who are unable to attend the madrasah after school, religious instruction would take place over the weekends or evening.

Worldwide, *makātib* are not only under-researched but under-resourced and face many educational challenges. In my view, it is one of the most neglected institutions yet presents untold learning opportunities for introducing the ecological ethics of Islam to the Muslim child. Ecological literacy initiatives among Muslims incorporate children as key agents in environmental learning, and also acknowledge the need to nurture love, connection and attachment to nature as a precursor to cultivating future Muslim environmentalists. The *madrasah* in South Africa, which emphasises

values education, can inadvertently educate "for sustainability and a sustainable way of life" (Hossain-Rhaman 2006, 94) thereby fulfilling an important role in the ecological awakening of South African Muslims. Curriculum materials for Islamic education, particularly designed for the *madrasah*, have been in use for several years in South African *madāris*. These institutions provide a fertile, yet underutilised arena for introducing the ecoethic of Islam. The *madrasah* was also selected for the following reasons: it is well-established in South Africa; is relatively inexpensive and well-attended; and targets Muslim children at an age where, according to Islamic pedagogy, ethical reasoning is beginning to develop.

The remainder of this chapter will present the findings of a curriculum review exercise which looked at the ways in which the *madrasah* curriculum builds the ecological literacy of the Muslim child. It will assess the extent to which *madāris* curricula highlight the environmental message of Islam, and also show where and how they have failed to draw attention to Islam's environmental tradition. It will focus on two sets of curriculum materials, the Madrasatul Quds and Tasheel curricula, widely used in South African *madāris*, to evaluate the ways in which curriculum materials incorporate the environmental teachings of Islam, position the reader in relation to the natural world, and motivate the Muslim child to act *for* the environment. Thereafter, it will extract the pedagogical implications of introducing environmental education (EE) in the *maktab*. First though, I will provide an explanation of what is meant by curriculum here.

5.1. Curriculum in this Study

From a basic conceptualisation of curriculum as that which schools teach, curriculum theorists have delineated the curriculum into three broad categories: the explicit, implicit and null curriculum (Eisner 1979; Posner 1992; Hoadley and Jansen 2009). The explicit curriculum is also referred to as the visible curriculum, the curriculum-as-plan and the official curriculum. It refers to that which is planned and prescribed to learners and involves the selection, standardization and organization of knowledge. The explicit curriculum incorporates broad educational aims and objectives reflective of the educational ideology underscoring the

curriculum, but also expresses objectives relating to desired learning outcomes, such as the attainment of literacy and numeracy. Shaping the explicit curriculum is an educational ideology, "a system of beliefs that gives general direction to the educational policies and activities of those who hold those beliefs" (Hoadley and Jansen 2009, 145). For instance, in Chapter Three, it was seen that the educational ideology of Islam, centred upon belief in One God (tawḥīd), had far-reaching consequences for the conception of knowledge and education. The explicit curriculum thus reflects particular ideological orientations which impacts upon the goals, content and methods of curricula.

The implicit curriculum refers to the socialization process, both intentional and 'hidden', whereby students are introduced to "a set of expectations that some argue are profoundly more powerful and longer-lasting than what is intentionally taught or what the explicit curriculum of the school publicly provides" (Eisner 1979, 75). The intentional or covert aspect of this curriculum refers to those characteristics which are identified as desirable, such as punctuality, team-work, co-operation, and which are introduced, by design, in a variety of ways. The hidden curriculum refers to the values, norms and messages which schools (and teachers) embody in relation to issues such as gender, race, class, knowledge and authority (Posner 1992) – these are often transmitted unintentionally (Hoadley and Jansen 2009). The third categorization is the null curriculum which refers to that which schools do not teach.

This section, which will incorporate a review of specific curriculum materials, will draw on the first and third conceptualisation of curriculum by identifying the environmental elements which are included (explicit) and omitted (null) in the *madrasah* curricula being reviewed here. Broader conceptions of curriculum, as "the collective story we tell our children about the past, our present and our future" (Grumet 1981, 115) and a process which contains "assumptions about teachers and teaching, learners and learning, knowledge, resources, evaluation, and social change" (Hoadley and Jansen 2009, 90) are without a doubt more apt in describing educational curricula and will also be drawn upon. However, in the section which follows, I will focus on one aspect of the curriculum, curriculum materials or

documents, regarded as an important vehicle in structuring knowledge and facilitating learning within the educational process.

Curriculum materials are defined as "physical entities, representational in nature, used to facilitate the learning process" (Gall 1981, 4). Textbooks, workbooks, pamphlets, games, films and other electronic resources can be considered as curriculum materials – these play a determining role in what students learn and how well they learn it. Curriculum evaluation or review fulfils many goals, most often assessing the educational significance of the content with an intent to adapt, improve, question or improve curricula since a "curriculum should never be considered a final draft" but is "an interim document awaiting further improvement" (Pratt 1994, 339). Eisner (1979) identifies several other functions of curriculum evaluation: to diagnose sources of difficulty in the learning process; to revise curricula; to compare; to anticipate educational needs; and to determine if objectives have been met.

Waghid (1994) suggests that a madrasah community, which would provide structure and rigour to curricula, plays an important part in growing this institution. Madāris curricula, such as the Madrasatul Quds and Tasheel series which will be considered here, are therefore central to creating this madrasah 'community' since both these curricula are widely used, not only in South African madāris, but internationally as well. In the curriculum review to be undertaken here, I will thus focus on the review of the curriculum documents produced by two leading religious bodies in South Africa, Madrasatul Quds and Jamiatul Ulema Taalimi Board. In particular, I will assess the ways in which the environmental ethics of Islam are included or omitted from the curriculum content. Both theoretical as well as practical insights from around the world will be drawn upon to review the environmental elements within the explicit and null curricula of South African madāris. I will focus on a series of textbooks, structurally organised in grades and covering the core subject areas in the Islamic studies curriculum. This process is centred on evaluating the quality and effectiveness of curriculum materials in communicating the environmental teachings of Islam, and in the process locating environmental learning spaces within the madrasah curriculum.

The written word continues to play a pivotal role in education and contemporary educational practice (Freebody 2004), as they do in South African *madāris* which are saturated by texts as resources for learners. The particular approach adopted here will draw on the curriculum criticism and textual analysis ideas of Doerre Ross (1990) and Freebody (2004) respectively. It will also enlist Wagner's (1993) notion of blank spots and blind spots to reduce ignorance about the green teachings of Islam. Blank spots refers to filling in 'gaps' in existing knowledge, whereas blind spots refers to questions which have been ignored and which requires further research. In this particular context, a blank spot in the *madrasah* curriculum will refer to existing knowledge which has not been interpreted or looked at in an environmental sense, while blind spots will involve undertaking research to generate new environmental knowledge. The curriculum review process, which is centred on identifying the environmental elements within the *madāris* curricula, will

- Describe the essential qualities of the curriculum documents e.g. organisation, grammar, writing style;
- Interpret and identify environmental teachings by locating references to the ecoethical principles and institutional framework of Islam (outlined in Chapter Two) which are supportive of environmental care; study patterns of word usage as well as the emotional or expressive attribute attached to these words (e.g. earth, ecology, environment, nature, Creation, steward); and deduce the way in which the text positions the reader in relation to the environment, and
- Appraise the curriculum document by providing judgements about the significance and value of the phenomenon i.e. the environmental elements within the curricula; and identify the blank and blind 'environmental' spots in the *madāris* curricula.

This undertaking is intended to spark dialogue, raise new questions, and identify fresh directions for research into Islam and EE.

5.2. Environmental Education in the Masjidul Quds and Tasheel Madrasah Curricula, South Africa

The afternoon *madrasa* has been the most important institution for educating Muslim children in the tenets of Islam. (Adam 1993, 46)

Amongst the foremost Muslim educational institutions in South Africa, the madrasah exists as both a home- and mosque-based institution which focuses on imparting the basic beliefs of Islam (tawhīd), ritual worship (figh), moral values (akhlāq), Qur'anic recitation, history and Arabic, to Muslim children. It is provided in tandem to secular education and is explicitly oriented towards education of the religious sciences. While the madrasah syllabus is broadly structured around the subjects outlined above, the quality and rigour of instruction vary considerably. By the 1960s, efforts at uniting madāris in South Africa were initiated with various degrees of success (Adam 1993). These efforts, which would enhance curriculum content and structure, were impeded both by poor organization and a lack of co-operation (Haron and Mohamed 1991). To date, a unified madrasah system has still not been achieved, though Muslims in KwaZulu Natal and Gauteng provinces are further down the road than their co-religionists in the rest of the country. Despite the importance of the madrasah as a socio-religious educational institution, there is not much research available on this establishment. A few notable works have sought to identify key challenges facing the madāris in South Africa. In 2004, a panel of experts consisting of madrasah principals and teachers also identified some of the key problems impeding madrasah education in South Africa: a lack of parental involvement, non-payment of madrasah fees, and a lack of professional skills among teaching staff (Voice of the Cape 2004).

The *madrasah* in South Africa faces several challenges at the functional level which most *makātib* across the world encounter such as dated curriculum content, a lack of textbooks, and inadequate teacher training. It is at the conceptual level or formal element of *madrasah* education where some of the greatest concerns lie. According to Waghid (1994), many of the problems evident in South African *madāris* can be traced back to a neglect of the formal element of *madrasah* education, i.e. the principles which distinguish it from other types of education. He contends that while *madrasah* education, centred on the principle of creative order, should emphasize "coherence and congruence with revealed teachings" (1994, 15), it should also allow for creativity and flexibility. Conformity with Islamic teachings has resulted in a rigid approach to learning in which "*only* Islamic knowledge is regarded as worthwhile, and the *way* in which pupils are taught allows no space to

ask questions or to develop a critical outlook" (Waghid 1994, 16). Amid the climate of political and cultural domination during colonial rule, the response by Islamic scholars was by and large to 'protect' the Islamic tradition by limiting intellectual experimentation (Waghid 1994). This resulted in curricula which left little space for independent inquiry; presented rote learning in a way which stifled critical thinking; and created a separation between secular and religious knowledge systems. This thinking has impacted upon the philosophy, pedagogy and content of the *madrasah* in South Africa.

Among the elements related to the functioning of the madrasah or the material elements of madrasah education, there are also several areas of disquiet. Muslim learners, who attend public school in the morning and madrasah thereafter, have to cope with very full days, limiting the time available for play as well as extra-mural activities, important in holistic education (Haron and Mohamed 1991). Shifts in madrasah education, which now includes evening and weekend classes, as well as increased opportunities for socialisation and play at madrasah could help ameliorate this. A second factor involves the madrasah teacher. While initial criticisms centred largely on the lack of training, many tertiary Islamic institutions now fulfil an important role in training madrasah teachers. This will hopefully begin to transform the pedagogy of the madāris, and create an openness to ideas and methods which will facilitate student learning and participation. While rote learning and memorisation plays an important role in the Islamic pedagogy as a means for imbibing the tradition and a precursor to deep reflection and discussion (Boyle 2006), teachers need to facilitate learning and elicit the enthusiasm of learners through diverse means which will stimulate lively and creative instruction in the living traditions of Islam. The madrasah curriculum has also been criticised for being 'restrictive, arcane and unengaging' (Patel 2010) making it more difficult for these institutions to capture the attention of learners.

While the lack of funding, poor facilities and dated curricula are major stumbling blocks in the development of a vibrant *madrasah* system in South Africa, the final issue that I will consider here relates to the possibility of introducing contemporary social issues, such as the environmental question, into the *madrasah*. Waghid (2009),

in a study which looked at the introduction of democratic citizenship education in the *madrasah*, found that *madrasah* schooling in South Africa is mainly concerned with inculcating the tenets of Islam; reflects a bifurcation of knowledges (antithethical to the holistic Islamic educational epistemology outlined in Chapter Three); operates largely as an insulated activity; and still relies mostly on rote learning despite the importance of "public deliberation (*shūrā*), so highly regarded in normative Islamic education" (Waghid 2009, 122). However, in engaging *madrasah* teachers around questions related to the purpose of *madrasah* schooling, and in particular, whether learners are taught to deliberate, respect others, and take responsibility, it was found that *madāris* do cultivate a minimalist view of democratic citizenship

...whereby learners are taught to respect the life-worlds of others, the rule of law and the protection of others' rights — that is, madrassah schooling does focus on teaching learners to be good Muslims, in particular what it means to respect human and non-human life. (Waghid 2009, 123)

The notion of extending being a good Muslim to ideas which involve being a good citizen is also shared by Karodia (2004) who suggests that EE for Muslim children will not only develop their character, but also contribute towards building environmental citizenship in South Africa. The space for introducing the environmental teachings of Islam, concerned with securing the welfare of all Creation, exists in the *madrasah*. The need for Muslims to participate in the environmental movement, preventing injustices against people and planet and joining in transforming their neighbourhoods and communities is real. The interest in, and awareness of environmental issues is present among South African religious bodies. Do South African $mad\bar{a}ris$ reflect engagement with environmental knowledge $(ta'l\bar{u}m)$; do they cultivate the qualities required to undertake responsible environmental action (tarbiyyah); and do they seek to effect meaningful and positive change in self and society $(ta'd\bar{t}b)$? Below, I will consider the extent to which $mad\bar{a}ris$, which continue to play a vital role in shaping the hearts and minds of Muslim children, integrate EE in their curricula.

Both international and South African experience reveal the absence of ecoIslamic initiatives aimed at the *maktab* level while this institution, with its emphasis on building the character and value system of Muslim children, can inadvertently instil care, concern and justice towards all Creation and should, in my view, also expressly highlight the environmental teachings of Islam. This can be done in a variety of ways. The core curriculum at the South African *madrasah*, in addition to Qur'anic recitation and Arabic instruction, generally consists of the following: the Islamic belief system (*Tawḥīd* or *Aqīdah*), ritual worship (*Fiqh*), Islamic history (*Tārīkh*); and Morals (*Akhlāq* or *Ādāb*). The 'environmental' sentiments of key Qur'anic ethical principles and laws, institutions and enforcement mechanisms which promote the welfare of all Creation (outlined in Chapter Two), can be infused across these subject areas. It could also be introduced as a stand-alone subject which purposely seeks to introduce the Muslim learner to the Islamic perspective on environmental care.

Most madāris opt for the former model and environmental teachings are integrated in curriculum content. Thus, in teaching the Muslim child about the Islamic belief system, the mu'allimah (madrasah teacher) can elucidate the relationship between humankind, the Creator and Creation – here, she can draw out the environmental implications of tawhīd, for example, God as the Originator, Sustainer and Owner of All the Worlds. In demonstrating the various acts of ritual worship in Islam, such as the prayer, fasting, and pilgrimage (hajj), she can home in respectively on the importance of cleanliness of the environment, the distribution of wealth in society, and the importance of not harming any person, plant or animal during hajj. She can recall the countless incidents in the life of Muhammad &, which displays the environmental philosophy which earned him the title 'pioneer of the environment', in Islamic history lessons. And in the sphere of moral education, Akhlāq, she can emphasise the implications of core values, such as respect, justice, truthfulness, patience, personal responsibility, and mercy, for human interaction with the natural world. The values taught at madrasah evolve as students' understanding mature. According to Hossain-Rhaman (2006), who studied the potential of values education to promote environmental awareness and action in a Bangladeshi madrasah, Muslim learners are unconsciously educated for sustainability through the spiritual development intent of values education which aims to nurture right

action, with the Creator, with humankind, and with the natural environment. Is this true of *madrasah* education in South Africa?

The Madrasatul Quds Curriculum: The golden dome of the Masjidul Quds Islamic Centre looms large in Athlone, Cape Town. Established in 1985, the complex draws scores of Muslims to the masjid, the fulcrum around which the centre's activities revolve. The centre also houses a library and auditorium and is actively involved in providing support services to needy communities. The attendant madrasah, Madrasatul Quds, which has been running since 1992, forms an integral part of this centre and is amongst the leading institutions providing Islamic education to young children in Cape Town. The Madrasatul Quds syllabus, which covers the standard subject areas taught at madāris, is not only in use locally, but internationally as well. Published in 1997, the syllabus which comprises textbooks, activity books and workbooks, caters for the primary school child and is graded according to the school system in South Africa, i.e. Grades 1 to 7. Comprised of 17 books, the syllabus covers the following subject areas: Figh (ritual worship), Tawhīd (belief), History, Akhlāg (moral education), Hifdh (Qur'an memorisation) and Arabic (See Appendix). The syllabus was compiled by the Madrasatul Quds Textbook Committee, Human Resource Team and various madrasah teachers. Each book contains an introduction (Foreword) with important guidelines for teachers and also an overview of the book(s) for the particular grade. Each textbook also outlines the didactic principles of Islamic teaching and learning which the institution seeks to uphold:

- Teach with love, respect and honour of the Holy Prophet &;
- Remember: The pupil is the V.I.P. of the system;
- Approach every person and everything with the consciousness of amānah sacred trust:
- Remember: You can teach and every child can learn, and
- Finally learning and teaching is the noblest of all occupations: 'The best of you is that person who learns the Qur'an and then teaches it'.

The textbooks are clearly written and organised into various grades. An increase in complexity can be noted in various aspects such as language use as well as the occurrence of Arabic script, Qur'anic verses and prophetic sayings. Language use in

the foundation phase textbooks is simple and makes limited use of Arabic terms and script - these are more common in higher grades when learners have gained proficiency in Arabic reading and writing. The foundation phase textbooks (for Grades 1 and 2) are complemented with activity books which one reviewer called a playbook since it makes extensive use of illustrations, puzzles, word searches, and matching and colouring activities with the express purpose of making learning fun for young children. For higher grades, where learners have honed their reading and writing skills, including Arabic, content matter is introduced through stories (e.g. moral training), illustrated by maps and diagrams (e.g. history), and opportunities for active discussion and dialogue exists - Arabic script and terms are also in common use. Higher grades' textbooks contain extensive references to Qur'anic verses and prophetic sayings. The Madrasatul Quds textbook series has been designed to be used as a whole, with each textbook building upon, and adding to the content of earlier grades. To ensure that learners are up-to-speed with the required knowledge for each grade, each workbook, particularly in the ritual worship section (Figh), revises the content of the previous workbook. The textbook series is designed to be pupil-centred and encourages parental involvement in madrasah education through home-based tutorship.

The review of the Madrasatul Quds curriculum focused on the 17 textbooks for Grades 1 to 7 which incorporate the following subjects: Fiqh, Tawhīd, History, Moral Training, Hifdh and Arabic (See Appendix). The latter two subjects generally focus on the memorisation of Qur'anic chapters and introduce the Arabic language respectively. In Grades 1 and 2, Hifdh lessons are incorporated in Activity Books and display both the Arabic script and meaning of the Qur'anic chapters being memorised, an important step for young learners who are embarking on their journey of engagement with the Qur'an. Arabic is also taught from Grades 1 through to 7 and supplements Qur'anic recitation with lessons in the Arabic language, building learners' vocabulary and equipping them with basic phrases and terms which will enable them to converse in Arabic. While the 'environmental' elements within these two subject areas might appear to be limited, Qur'an recitation and Hifdh play a foundational role in building the relationship which the Muslim child will have with the Qur'an. An understanding of Arabic, once a standard requirement

in the Islamic education curriculum, greatly enhances engagement and understanding of the Qur'an, revealed in Arabic. The Arabic which is taught within the madrasah curriculum, however, does not prepare the learner for engagement with the Our'an, rather it can be viewed as an introduction to conversational Arabic. One lesson, targeted at Grade 4, introduces learners to a range of environmental terms in Arabic - this will enable the recognition of these environmental terms in the Qur'an, prophetic sayings and supplications. In evaluating the environmental elements within the Madrasatul Quds series, I focused on the following subject areas - Figh, Tawhīd, History, and Moral Training, since these provided the most learning opportunities for introducing the environmental teachings of Islam. I studied lessons and patterns of word usage, for example words which relate to Qur'anic ecoethical principles (e.g. Creation), institutions supportive of environmental care ($him\bar{a}$), as well as the inclusion of words and terms related to the environment (e.g. pollution). Figure 5.1. highlights the words which relate to the environment and which have been used throughout the textbook series. I also considered the emotive attribute attached to these terms and ideas to highlight the way in which the curriculum documents position the reader in relation to the environment.

Figure 5.1. Environmental Terms in Madrasatul Quds Textbooks

Creator Earth Surroundings Water Cleanliness Animals Creation Environment Universe Order Sacred Trust (Amānah) Littering Trees Wasting Deputy (Khalīfah) Nature Conservation Pollution Vicegerent Representative Signs Gratitude (Shukr) Balance

In general, opportunities for highlighting the environmental philosophy of Islam abound in the Madrasatul Quds curriculum. The subject area in which environmental elements are located in the highest frequency is *Tawhīd* which deals with the fundamentals of Islamic belief. Foundation phase textbooks focus particularly on the following aspects: Allah as the Creator of the Universe; the attributes of Allah (e.g. The Sustainer, The Originator of the Worlds, The Fashioner);

and the Creation of Allah, which includes humanity. The activity books which accompany the textbooks are replete with exercises which stress the relationship between humans, the Creator and the natural world. The Activity Book for Grade 2, for example includes an exercise which discussed the role of Allah as the Creator of everything in the universe and reads as follows:

Allah has created the sun and the moon. He has created the heavens and the earth, He has created you and me, for Allah is our Creator and we are His creation. (Madrasatul Quds Activity Book 2 n.d., 17)

 $Tawh\bar{\imath}d$ lessons also include discussions on the creation of the universe and expand the understanding of humankind's role, purpose and position on earth. While the human being is described as the 'ruler of the world' in one instance, the ecophilosophy expounded in the series is undoubtedly theocentric and human trusteeship is qualified by the attendant requirements of accountability, justice, gratitude, frugality and mercy which every Muslim is urged to acquire. The intimate link between belief ($im\bar{\alpha}n$) and good actions (' $am\bar{\alpha}l$ salihat) is also stressed and is explained as follows:

The Muslim when performing any action has to be conscious of the Existence and Omni-presence of Allah. He will then act in accordance with *shariah* (Islamic Law) and be obedient to its teaching. This will enable a person to attain closeness to Allah. Thus, the individual will be an ideal being and a true representative and vicegerent of Allah on earth. (Madrasatul Quds Workbook 5 Part 2 n.d., 53)

The second subject area in which the environmental teachings of Islam can be discerned is *Fiqh*, which deals with various aspects of ritual worship in Islam. Several references to environmental concerns can be found, mainly in relation to water usage and cleanliness of the surroundings. In discussing the use of water in ritual purification, particularly the compulsory ablution before prayers (wuḍu) as well as the ceremonial bath (ghusl), it is emphasised that wastefulness in water use is expressly prohibited. Learners are encouraged to find ways to prevent wastefulness during the wuḍu and ghusl. Discussions on purification also include the dry ablution (tayammum) which is performed with dust from the earth, regarded as pure, in cases when water is not available or cannot be used (due to illness for

instance). The second area in which environmental issues has been highlighted in Figh is the importance of cleanliness of the surroundings, including places of prayer, homes, neighbourhoods, and the environment in general. The Activity Book for Grade 1 includes a Figh assignment on cleanliness entitled, 'Care for the Environment'. The importance of cleanliness of the environment is reiterated throughout the series and learners are required to formulate a response to questions which delve into the practical manifestation of belief, such as 'Is a Muslim allowed to litter?' and 'Why is it so important to keep our homes, schools and mosques clean?' In Grade 4 learners are given an assignment in which they discuss the earth as a sacred trust (amānah). They are then required to provide instances of environmental abuse and destruction and suggest ways in which they can save the earth and fulfil their sacred trust of caring for the earth. The remainder of Figh lessons focus on the prayer, but little mention is made of environmental teachings within the prayer, such as the virtue of walking to prayer, nor are other aspects of ritual worship in Islam, for instance fasting, the pilgrimage or charity, discussed in any depth.

Environmental teachings and concerns are virtually absent in History lessons even though there are countless incidents in the life of Muhammad & which illustrate the importance of caring for the natural world in Islam. There is some detailed discussion on the construction of the mosque of the Prophet & in Madinah in which learners are required to draw the mosque as they imagine it to have been - this can easily be extended to compare mosque construction and upkeep in modern times. Stories of earlier prophets such as Noah, David, and Solomon (peace be upon them all) which show their love and care for animals, are not utilised to highlight the environmental teachings of Islam though the series reiterates the importance of taking the prophets and messengers as examples in life. The instruction of the first khalīfah (used here in the political sense), Abu Bakr, who instructed the Muslim army to protect the environment during military expeditions; the simplicity and justice of the second khalifah, 'Umar; and the generosity of the third khalifah, 'Uthmān, who purchased a well and then made it available for public use, are notable learning areas which show the practical illustration of Islam's ecological ethics in later generations.

While one would expect the section on Moral Training to pay greater attention to environmental concerns, references to environmental care are approached indirectly. The textbooks instead emphasise core values which aim to inculcate right action, with the Creator and Creation, and in this way introduce some of the vital elements for transformative environmental action. Many of the lessons in this subject area use stories and parables to illustrate the centrality of ādāb or good behaviour to all Creation. There are various lessons which hold immense potential for the development of a theocentric environmental ethic which is based on the sovereignty of God (tawhīd), the responsible trusteeship of humankind (khilāfah) and the value of all Creation (khalq). The importance of modelling Prophet Muhammad 🎄 - his kindness and justice to all Creation; gratitude for the bounties on the Earth; conservation of natural resources; and compassion to animals in particular, are key talking points for introducing the green message of Islam. A discussion on the dietary laws of Muslims in Grade 6, which emphasise the importance of consuming healthy food could also be extended to discussions of the ethical concerns related to the farming and manufacturing of food today. Grade 7 learners begin to venture into the realm of scientific theories through an introductory lesson into the theory of evolution – this is vital to bridge the artificial separation between the knowledge of the madrasah and school which continue to prevail.

While close reading of the Madrasatul Quds series does bring to light the key elements of the environmental philosophy of Islam, as evidenced in discussions of key ecoethical principles, there is still room to improve the understanding of the human-environmental relationship espoused by the Islamic worldview. While the series contains a broad discussion on the importance of justice in Islam, the extension of justice to the natural world is not made explicit. Environmental destruction and pollution is regarded as blameworthy and even though Qur'anic terms like fasād or fiṭrah, which can denote environmental destruction and harmonious living respectively, are not used, wastefulness, littering and pollution are maligned. Conservation of the natural world, the maintenance of the balance and order of Creation, and cleanliness of the environment are viewed positively. While the discussions, assignments, and lessons in Fiqh provide several inroads into the green message of Islam, these remain underutilised. There are several areas in

which the environmental elements in *Fiqh* lessons can be enhanced, such as citing prophetic sayings which relate to water use during ablution or which explain that the entire earth is a place of prayer (*masjid*). The focus on ritual purification and the rituals of prayer also excludes many aspects of ritual worship in Islam which could convey and expand the Islamic ecophilosophy such as fasting, pilgrimage and the wealth tax. While there is some discussion of animal slaughter, this does not include any reference to the manner of raising, caring for and slaughtering animals, as prescribed by Prophet Muhammad .

Another glaring omission is the fact that institutions, supportive of environmental care, are hardly mentioned. For instance, laws related to the protection of water, plants and animals; the sanctity of the environments of Makkah and Madinah (the haramayn); or the institution of waaf which is increasingly being applied to environmental projects in South Africa, are not mentioned at all. There is also room for engagement with contemporary environmental concerns which Muslim learners encounter within the school environment e.g. climate change, greening and treeplanting, energy and water conservation. This will provide learners with an environmental perspective which they, in all likelihood, do not know about and could also expand the notion of ta'dīb to incorporate right action in all spheres of human activity. In summary, the importance of environmental awareness, concern and action, couched within the theocentric worldview of Islam, is most vividly expressed in Tawhīd lessons while the environmental references in Figh, History and Moral Training need to increase. Below, I will consider some of the blank and blind 'environmental' spots in the Madrasatul Quds curriculum, with particular emphasis on these subject areas.

The Madrasatul Quds series, in emphasising the <code>tawhidic</code> framework of the Islamic worldview, showcases the importance of belief in the Oneness of the Creator and the implications which this has for human interaction with the natural world. If one were to assess the environmental philosophy which this series espouses, one would concur that it shows that environmental care is a religious duty. It also focuses on the inextricable link between belief and action. The blank spots which I have identified, i.e. the environmental knowledge which exists but which is not

adequately covered, include the following: a deeper exploration of trusteeship $(khil\bar{a}fah)$ as well as the intrinsic nature of humankind (fitrah) in $Tawh\bar{\imath}d$ lessons; an extension of the acts of ritual worship (e.g. fasting and hajj) as well as an inclusion of laws and institutions supportive of environmental care in Fiqh; an emphasis on stories and incidents highlighting the environmental care of the prophets and messengers in History; and an accent on the environmental implications of core values such as kindness, justice, respect, gratitude, and preservation as well as an action orientation in values education (i.e. Moral Training). The development of the personality and character of the Muslim child, which Moral Training lessons seek to achieve, is essential to madrasah education and could play a pivotal role in developing responsible action (tarbiyyah) and encouraging social activism $(ta'd\bar{\imath}b)$.

The Madrasatul Quds curriculum, which intends to guide learners through the foundations of belief, worship and action in Islam employs various learning strategies to engage the Muslim child in reflective engagement with knowledge (ta'līm), but it still needs to concretise the human-environment imaginary of Islam and show how this impacts on action in the world today. This requires an exploration of the environmental blind spots in the madrasah curriculum, i.e. knowledge areas which require further research. An analysis of the role of the madrasah in EE needs to be undertaken. In addition, the environmental implications of monotheism (tawhīd), human trusteeship (khilāfah) and the natural world as signs, Creation (khalq) and bounties of God, need to teased out to present a concrete environmental imaginary which will form the basis of environmental action. The contemporary role and value of laws and institutions which promote environmental care also needs further investigation. In general, the curriculum materials reviewed here increase and build awareness of the environmental implications of Muslim belief and worship, and position the environment as an area of Muslim concern and action.

The Tasheel Series: Developed by the Jamiatul Ulema Taalimi (JUT) Board in 1998, revised in 2004 and reprinted in 2008, this Series forms the second set of curriculum materials which will be reviewed here. The JUT Board is affiliated to Jamiatul Ulema Johannesburg (Council of Muslim Theologians) which was

established in 1923 and is one of the key religious bodies in South Africa. The madrasah textbook series, the Tasheel Series, which means 'to make easy', is produced under the auspices of the Curriculum Development Committee of the JUT Board and is distributed worldwide through JUT Publishing. The JUT Board also plays an active role in facilitating the adoption of the Tasheel Series by hosting training programmes on the curriculum; providing workshops on teaching methodologies for madrasah teachers; and visiting madāris which are implementing the curriculum. While the Tasheel Series covers Grades 1 through to 12 (primary to high school), only textbooks aimed at Grades 1 to 7 were reviewed here and included the following subject areas: Tasheelul Agaa-id (Beliefs Made Easy), Tasheelul Figh (Ritual Worship Made Easy), Tasheelut Taareekh (History Made Easy), Tasheelul Akhlaaq wal Aadaab (Morals and Manners Made Easy), and Tasheelul Ahaadeeth (Hadīth Made Easy). There are two points of note here, the textbooks on Figh have been produced to reflect the predominant schools of thought (madhāhib) in South Africa, i.e. Hanafī and Shafi'ī and I selected to review the Shafi'ī textbooks since this will allow for easier comparison with the Madrasatul Quds series which is based on Shafi'ī figh. A recent review of JUT's textbooks on moral education, which are used in British makātib, also provided useful insights into the Tasheel series (Mogra 2007).

In total, 35 textbooks were reviewed, covering the above-mentioned subject areas from Grades 1 to 7 (See Appendix). The books for Grades 1 and 2 were all accompanied by flashcards, as well as a Teacher's Guide which outlined lesson plans, suggested teaching methodologies, and delineated key learning outcomes. The introduction of $a\hbar\bar{a}d\bar{a}th$ (prophetic sayings) from Grade 1 onwards demonstrates how the series employs both prophetic sayings and Qur'anic verses from lower grades and across all subject areas. While not all the textbooks have been reprinted as yet (Grades 6 and 7 still use older versions), the 2008 print which was reviewed here shows a madrasah series which is well-written and clearly demarcated into various grades and subject areas. Virtually all the textbooks have an introduction to the subject being taught and seek to explain the importance of gaining knowledge of the particular subject. Lesson notes, keywords, poems, questions for discussion and a range of activities (colouring, mazes, word searches) are widely used. The textbooks for Grades 1 and 2 already incorporate simple Arabic script, e.g. when

teaching the attributes of God and <code>hadīth</code>, textbooks for these grades come with flashcards as well as pedagogical notes for the teacher. Colour illustrations accompany the lessons, stories and activities in Grades 1 and 2, which contain many opportunities to stimulate environmental learning. The review of the Tasheel Series here, however, will focus primarily on lessons and patterns of word usage, such as Qur'anic ecoethical principles (e.g. The Creator), institutions supportive of environmental care (waqf), as well as words and terms related to the environment (e.g. nature). Figure 5.2. illustrates the words which relate to the environment and which have been used throughout the Tasheel Series.

Figure 5.2. Environmental Terms in the Tasheel Series

Creator Creation Animals Rain Water Wasting
Surroundings Litter Plants Rubbish River Dam Nature
Earth Creature Dirty Pets Tree Tidy Jungle Sea Stars
Moon Valleys Mountains Elephant Fish Bird Camels Dog
Cat Whale Ant Frogs Giraffe Desert Wind Air World

The Tasheel Series presents many insights into the environmental philosophy of Islam, not only through particular lessons but through the use of illustrations, stories and prophetic sayings which denote kindness to Creation. Elements of Islamic ecoethics are scattered throughout the series, e.g. the Oneness and Unity of God, the Creator and Sustainer of the Universe; the equality of Creation; and the importance of showing kindness and mercy to all Creation. The books on belief, Tasheelul Agaa-id, contain countless references to the natural world. In Grades 1 and 2 Muslim learners are introduced to some of the attributes of God. In virtually all lesson plans, discussion of these attributes show how God's beneficence extends to all Creation. In Grade 1 for example, The All-Knowing knows the number of fish in the sea, The All-Seeing sees an ant walking in the darkness of the night and The All-Hearing hears the buzzing of the bee. The story which is used to illustrate God as the All-Loving describes how the Prophet & commanded one of his companions who had removed chicks from a nest to return them to their distressed mother, he then told his companion that God's love for His creation is greater than that of the mother bird for her 'children' (Tasheelul Aqaa-id 1 2008, 30-31). While the elements

of Muslim belief are slowly expanded in Grade 2 lessons, the attributes of God still form the focal point. The Creator of the mountains, seas and trees, The Provider who sends down rain, and The Protector of 'the bird and its nest' and 'the kitten in its basket' cares for, and also protects humankind. One key learning point reads as follows:

This world and everything in it was created by Allaah. The huge mountains, the beautiful flowers, and the shining stars are some of the signs that show us the greatness, beauty and power of Allah. A Muslim was once asked about Allaah. He replied: "A house requires a builder, our clothes require a maker and bread requires a baker. In the same way, the heavens, the earth and seas require a Creator, who is Allaah. Allaah was not created, but he is the Creator of all things. (Tasheelul-Aqaaid 2 2008, 6)

In higher grades, lessons in belief continue to expand the relationship between humans, the Creator and the rest of Creation stressing that the 'foundation of Islam is built on fulfilling the rights of the Creator and the rights of Creation'. While the central aspects of Islamic belief, such as the Oneness of God, belief in the books and messengers of God, and belief in the afterlife are discussed extensively, the textbooks on belief provide key insights into the ecoethics of Islam by discussing the purpose of creation, the importance of following Qur'anic teachings and the example of the Prophet Muhammad &, as well as the link between faith and action in the life of a Muslim. The purpose of Creation is described as obeying the commands of God and living according to the teachings of Islam which includes caring for nature, protecting water, and being kind to animals. The Qur'an, which teaches humankind how to obey God and how to treat and respect the Creation of God, along with the Sunnah, guides the Muslim towards a life of good action which includes showing kindness to animals. Human vicegerency and accountability is also reiterated. The equality of Creation is mentioned in the foundation phase, 'Allaah Loves all His Creation, All are Equal Before Him' but in higher grades it is declared that the earth was created solely for human use – this must be clarified and can easily be reconciled when considering the multifaceted role of the natural world as signs of the Creator, worshiping and glorifying Him; as part of an ecological system, created in measure and balance for use by all living beings; and as the blessings of God, subjected by Him for the benefit of Creation.

The textbooks on *Figh* contain numerous references to environmental care, chiefly within the content dealing with cleanliness and ritual purification for prayer and other acts of worship. In lower grades, cleanliness of the surroundings, the classroom, school, mosque, home, and madrasah is stressed through lesson notes, activities and poems. The hadīth, in which the Prophet speaks of the earth as a masjid, is also mentioned in Figh textbooks. The careful use of water, a gift and blessing of Allah, is also emphasized throughout the series. In particular, learners are instructed that there should be no wastage of water in ablution (wudu) and the purificatory bath (ghusl) - in fact wastefulness is tabled as a disliked act (makrūh). While references to environmental care is largely restricted to cleanliness and ritual purification, Grade 7 learners begin to engage with other figh issues, such as the virtues and rules of fasting and the lesser pilgrimage ('umrah); the rationale for and manner of animal slaughtering; and hunting regulations in Islam — all these present opportunities for expounding the environmental philosophy of Islam. However, it is only in the latter two areas where efforts are made to highlight the ethical precepts of Islam in relation to the non-human world.

History lessons, which cover the life stories of earlier prophets as well, generally focus on the life of Prophet Muhammad & who is regarded as the best example and 'the most excellent and noble personality ever to tread the earth'. The environmental elements within the stories of earlier prophets are brought to light by references to the animals on the ark of Prophet Noah and the wisdom of Prophet Solomon (peace be upon them) who was gifted with the ability to communicate with animals. The life story of Muhammad & is the focus area from Grades 3 to 6 and many elements such as his upbringing in a desert environment; kindness to animals; just and fair treatment of all people; meditation in and of nature; and various incidents after his inception into prophethood, are highlighted. The miraculous way in which a spider's web and bird's nest covered the mouth of the cave where the Prophet & and his companion Abu Bakr were hiding during their emigration to Madinah; and the simple construction of the mosque of Madinah, also provide insights into the green philosophy of Islam. Grade 7 learners begin to delve into the life stories of the two leaders who ruled after the death of the Prophet &, Abu Bakr and 'Umar. While the different personalities and characteristics of these

two men are discussed at length, it is their actions with regard to the implementation of Islam's environmental teachings which are of note here. Abu Bakr, for example advised the armies to take care not to destroy and pollute the natural environment and continued the Prophet's tradition of setting aside pastures ($him\bar{a}$) for horses and camels used in battle. 'Umar consolidated the Muslim state and concretised many of the laws and institutions which relate to the environment, such as the office of the hisbah; institutions related to landholdings; and laws pertaining to agriculture, irrigation and water use. He is also reported to have said, while washing the wound of a camel, "I fear that Allaah, Most High, will question me about the rights of this animal" (Tasheelut Taareekh 7 1998, 204).

A review of the Tasheel textbooks on morals and manners in Islam concluded that kindness to all Creation and to animals in particular is an oft-repeated message of the entire series (Mogra 2007). The textbooks on morals and manners all carry an introduction which stresses the importance of good conduct and behaviour to all. They are structured around a particular characteristic or moral, for example justice, truthfulness, sincerity - the virtue of which is then displayed through Qur'anic verses, hadīth and stories. While stories centre on incidents in the lives of Prophet Muhammad &, his companions, as well as pious Muslims throughout the ages, stories about the behaviour of 'ordinary' Muslim girls and boys are also used to draw out lessons. The environmental values emphasised in lower grades reflect the focus areas and themes of cleanliness of the environment as well as the careful use of water. In Grade 2, an entire lesson is devoted to the importance of taking care of pets and use is made of well-known sayings and incidents in the life of the Prophet 👼 to illustrate his kindness to animals. Grade 3 lessons extend the notion of caring for animals towards the protection and conservation of natural habitats. It carries lesson points which read like a 'Bill of Rights' for animals and includes the story of a person rewarded for giving water to a thirsty dog. The lesson thereafter focuses on kindness to all Creation. In Grade 4, wastefulness is discussed and learners are made aware of the need to be aware of and grateful for all the bounties of God which they will have to account for. The story used to illustrate the moral deals with the wasting of paper. In Grades 5 and 6, lessons highlight the importance of removing obstacles, such as litter, from the road; keeping the environment clean from all

pollution; and the importance of self-respect which entails eating healthy foods, keeping our surroundings clean, and not being wasteful. Grades 6 and 7 textbooks, which have not been revised and updated, distinguish between the daily manners and etiquette of life $(\bar{a}d\bar{a}b)$, and the principles on which these are based $(akhl\bar{a}q)$ (Mogra 2007). Thus, in Grade 7, among the general moral conduct which should be evident in the daily life of a Muslim is protecting nature, feeding and caring for animals, and giving water to all. While Mogra's (2007) review of an earlier version of this series (1998) cautioned that obscure language and dated teaching strategies and stories could impede the way in which Muslim children in the West engage with the text, the 2008 series draws on both traditional and modern stories to illustrate core values and seeks to develop the Muslim child's understanding of Islam's moral teachings and principles related to the family, mosque, community, society and environment.

The books on <code>aḥādīth</code> aim to encourage memorisation and practice. Each grade is given about ten <code>ḥadīth</code> to memorise – these cover diverse topics and are structured as follows: the <code>ḥadīth</code> in Arabic, its English meaning, and key points related to the lessons within the <code>ḥadīth</code>. Some of the <code>aḥādīth</code> which contain environmental learning and talking points are: 'Allah Is Beautiful and He loves Beauty' (keeping our surroundings clean and beautiful); 'Every good deed is a Charity' (caring for animals is a charity); and 'The Most-Merciful shows Kindness to Those who Show Mercy, so Show Mercy to Whoever is on Earth, then He (Allah) Who is in Heaven will Show Mercy to You' (mercy to all Creation). The books on <code>aḥādīth</code> contain important lessons pertaining to mercy, compassion and kindness to Creation.

In general, the Tasheel Series builds a strong case for environmental care as partand-parcel of Muslim belief, worship and character. It also equips the Muslim child to recognise that environmental care is a religious obligation and an act which earns reward. Even though the ecoethical principles outlined in Chapter Two are not mentioned by name, they are found in numerous instances where the humanenvironment construction of Islam is outlined. Links between humankind and nature are made explicit when it is explained that the beneficence of the Creator extends to all Creation. Social and environmental justice is intertwined when discussions on mercy and compassion are extended to the non-human world. Institutions of concern to environmental care and protection, though not mentioned by name, are mentioned in history lessons. Even though the environmental philosophy of Islam comes out clearly in the texts and through various subject areas, there needs to be more engagement with contemporary issues which Muslim learners in South Africa, who attend both secular school and the *madrasah*, certainly encounter. While the role of the prophets and messengers in establishing a just social order is called to mind, the Tasheel Series could do more to stress the need to actualise Islamic teachings not only in the personal lives of learners, but also in the wider society. Here, I am in agreement with Mogra that in the Tasheel Series "attempts to make the content relevant to children's lives in the contemporary western world take very much second place to the clear exposition of traditional values and expectations" (Mogra 2007, 391).

The three subject areas in which the environmental teachings of Islam are most vividly illustrated are belief (Aqaa-id), worship (Fiqh), and morals and manners (Akhlaaq wal Aadaab) – History (Taareekh) and Ahaadeeth textbooks are weaker in this aspect. The Series does succeed in providing an understanding of the theocentric environmental ethic of Islam which positions humankind as a vicegerent of God on earth, responsible for and accountable for her use and interaction with the natural world. An engagement with contemporary concerns could assist in the actualisation of this ethic. While Grade 1 learners are encouraged in one lesson to bring objects from nature to class for discussion, higher grades could be guided towards discussing critical environmental concerns and formulating action for the protection of the natural world, for the just treatment of humans and nature, and for the liberation of all life from oppression and tyranny. The blank spots of the Tasheel Series, for which environmental knowledge exists though it remains unexplored are: a clearer exposition of the position of Creation in the ecocosmology of Islam in higher grades; broadening the rituals under consideration and including discussions on contemporary environmental concerns in Figh lessons; including the history of early and contemporary Muslim figures as role models in History lessons; plus adding more prophetic sayings on the protection and care of nature in aḥādīth. The major areas of weakness in this Series which point to environmental blank

spots which require further research incorporate the need to consider the EE potential and intent of *madrasah* education in general, and stressing the link between faith, knowledge and environmental action in the daily lives and actions of learners.

The revised Tasheel Series displays a willingness to engage with trends in learning and child development. Whether this could be translated into an engagement with contemporary concerns, such as climate change, urban decay and pollution, and conspicuous consumption, and result in an actualisation of Islam's ecoethics in the home, the *masjid*, in neighbourhoods, society and in nature, remains to be seen. The textbooks do not yet provide enough opportunities, particularly in higher grades, to engage with the transformative intent of Islamic principles, teachings, and values. An exploration of the *raison d'être* of *madrasah* schooling, and in this instance, the environmental educative intent and potential of the *madrasah*, is also required.

The curriculum documents of Madrasatul Quds and Jamiatul Ulema's Tasheel Series, produced and designed as a series of textbooks aimed at introducing the fundamentals of Muslim belief, worship and values, both provide an accurate, though cursory, conception of the relationship between human beings, the Creator and Creation. While they spell out the theocentric ethic of Islam, highlighting many of the environmental aspects of $tawh\bar{u}d$ (monotheism), the holistic construction of the place and position of the natural world in the web of Creation (khalq); outline the checks on human vicegerency ($khil\bar{u}fah$); and discuss the impact of human abuse and misuse of natural resources ($fas\bar{u}d$) — the ecoethical principles of Islam, needs to be elucidated. The ecosophy presented also does not succeed in presenting the holistic and dynamic ecological ethic of Islam in a clear way, showing how it differs from eco- and anthropocentric ideologies.

While the Tasheel Series does a better job at portraying the ecoethics of Islam, the Madrasatul Quds series extends this ethic further into the realm of action by eliciting learners to identify ways of caring for nature, saving water, and taking care of their local environments. However, neither of the two curricula bring out the liberatory dynamic of an Islamic eco-justice ethic which promotes just, responsible

and respectful interaction between humans and nature and highlights the importance of religion as a vehicle for change in society. While both these curricula include a cursory introduction into the laws and institutions which promote environmental care, primarily related to water use in ritual purification, there is scope to broaden this considerably. Finally, even though both curricula contain the essential ingredients of an EE programme based on the teachings of Islam, reflect an engagement with the environmental teachings of Islam (ta'līm) and stress many of the qualities required to undertake responsible environmental action (tarbiyyah), they fall short, in my view, of achieving purposive and positive change in self and society (ta'dīb). This could be remedied by re-examining the very intent of madrasah education which should demonstrate that, while remaining faithful to the Islamic tradition, ethical principles specifically, the Muslim child must take her place in combating the injustice, oppression and tyranny which threatens society and nature. She must act in accordance with these teachings by reflecting these principles in her environmental 'action space' and in her lifestyle decisions, be it at home, school, or on the playground; by voicing her protest at environmental abuse; and by recognising that the ethical horizons of Islam extend to all Creation.

Below, I will employ a broader conceptualisation of curriculum which encompasses the narrative or 'story we tell our children about the past, our present and our future' – a process which has profound implications for knowledge; teaching and learning; and social change. Insights from this curriculum review exercise, as well as the interplay between Islam, ecology and education in this study, will be drawn upon to extricate some educational implications for EE at the *maktab* level, the central institution in the transmission of Islamic environmental teachings at the foundational level.

5.3. Environmental Education in the *Maktab*: Implications for Teaching and Learning

The absence of a praxis-oriented ecoIslamic approach at the *maktab*, the central institution in the transmission of the Islamic tradition at the foundational level, was clearly demonstrated in the curriculum review undertaken here. While the *masjid*,

madrasah and now Muslim school, have become focal points for the efforts and activities of the ecoIslamic movement, the maktab, despite its importance, remains underutilised. The curriculum review also provides valuable insights into strengthening the EE potential of the maktab. I will now extract some of the key implications and recommendations for environmental teaching and learning in the maktab by firstly unpacking the intent of EE in maktab education.

5.3.1. The Formal Elements of Environmental Education in the Maktab

Environmental education at the maktab is located within a worldview which should guide the educational process. In this study, it has been contended that the intent of knowledge acquisition and education in Islam is to guide humankind to fulfil its position as stewards of the Creator on Earth, to live in accordance with Divine values, principles and laws and thereby, to achieve the pleasure of the Creator. In Chapter Four, the formal elements of EE were seen to consist of a distinctive ontology, epistemology and pedagogy which build a particular understanding of the environmental narrative of Islam as a liberation ecotheology. Muslims are required to engage with both the revealed text (the Qur'an) and the revelation of Nature, keeping in mind the ultimate objective of the Divine Law (the Sharī'ah), the attainment of maṣāliḥ al-khalq - the welfare of all Creation. Critical and reflective engagement with all knowledge (ta'līm); responsible action (tarbiyyah); and meaningful and positive change in one's self and in society (ta'dīb) is driven by the tawhīdic (monotheistic) worldview of Islam, the sin qua non of the Islamic religious tradition, and put into action by the integrated knowledge-structure of Islam. This is encapsulated in the following statement:

By adopting and practising $tawh\bar{l}d$ as a worldview, a Muslim is trained to be one whole integrated self, which has an ultimate aim, that of reaching the highest level of perfection through the struggle for ideal knowledge and action. (Al Zeera 2001, 59)

In the ensuing discussion, the formal element of EE in the *maktab* will be outlined in terms of the distinctive ecotheology, knowledge-structure and learning objectives which characterise the eco-justice ethic of Islam constructed in this study.

The *liberation ecotheology* of Islam which shapes the intent of EE in the *maktab*, seeks to enable the Muslim child to become a better vicegerent, aware of and responsible for her interaction with the natural world, and striving towards positive environmental action in society. Glimpses of this theocentric eco-justice ethic of Islam do emerge in the maktab curricula reviewed here, particularly within the subject areas which deal with the principles of belief in Islam (Tawhīd or 'Aqīdah), for example belief in the Oneness, Unity and creative power of God which is manifest in the creation of humankind and the natural world. The Oneness of God not only infuses the entire environmental worldview of Islam but also emphasizes the fact that all of Creation originates from Him, is purposive, and functions in accordance with His Will. The curricula reviewed here also consider the position of humans as responsible trustees on earth, who will be called to account for the just and responsible discharge of this trusteeship in accordance with the Divine Laws. Yet they fail to elaborate, for the most part, on the implications of the failure to discharge this trusteeship, particularly as it relates to the environment. In addition, the ethical horizons of this trusteeship, which extends to all Creation and speaks to the ultimate intent of the Shari'ah, the welfare of all Creation, maṣāliḥ al-khalq, needs to be explained. Even as the Muslim child is alerted to the importance of cleanliness of the environment, frugal water use, and the rights of animals, the position and place of the natural world as signs of the Creator, entitled to and deserving of care and protection, is not spelt out clearly.

The message which underscores environmental trusteeship in Islam is this: humans have the right to partake of the natural bounties of the earth within the boundaries set by the Creator, failure to do so is an act displeasing to the Creator. When the natural world is disrupted by evil human forces, such as misuse, destruction, extravagance and waste, corruption (fasād) will appear on the earth. Environmental degradation or fasād can only be reversed if humankind delves deep into their selves to uncover the innate goodness (fiṭrah) which they have been gifted with, to live in harmony with Creation. This message requires both an understanding of the ecoethical principles outlined in this study, such as tawḥād, khilāfah and khalq, as well as the application of these principles in daily life. It necessitates engagement with the rich corpus of environmental fiqh as it pertains to daily living, ritual worship, and

social interaction. And it requires engagement with *all* knowledges to understand the workings of the universe, the creative order upon which the world was established. It is thus imperative that the ecological philosophy of Islam, which shapes the relationship between humans and the natural world, be presented as a key facet of the Muslim belief structure. In this way the ecocosmology of Islam, which promotes social and ecological justice, is the springboard for the liberation ecotheology of Islam. It is a narrative which promotes just, responsible and respectful interaction between humans and nature. It shows that caring for the earth and humankind is a religious duty. It focuses upon action in the life of this world. And it presents an environmental imaginary, based on the sovereignty of God (*tawḥūd*), the responsible trusteeship of humankind (*khilāfah*) and the value of all Creation (*khalq*).

EE in the *maktab* should also engage with various spheres of knowledge to equip the Muslim learner with an understanding of the natural world. This would require either adopting a complementary approach to ecological knowledge, recognizing and incorporating the knowledge-structure which the learner engages in during school within the *maktab* EE curriculum; or, an integrated approach which couches all ecological knowledge, i.e. knowledge about the workings of the earth *and* how to live upon the earth, within the Islamic worldview. These two approaches will be discussed in greater detail when I will consider the structure and organization of EE in the *maktab* curriculum.

The holistic and hierarchic *knowledge-structure* of Islam is another crucial element which will impact upon EE in the *maktab*. Knowledge and learning in Islam is inextricably linked to ethics and is regarded as the doorway towards ennobling the human spirit. There are several points of note related to knowledge in Islam which have been discussed in Chapter Three and recalled in various places in this thesis, these include: the link between faith in God, knowledge and action; the moral dimensions of knowledge; and the centrality of the Qur'an and Sunnah in the knowledge-structure of Islam. Faith in God and knowledge is linked from the first verses of revelation. The knowledge-belief causal relationship is also concretised throughout the Qur'an. Humankind is invited to embrace the gift of intellect to discover the laws of God in the "books of Revelation and Creation", to submit to the

laws of God in their actions, and thereby to attain felicity with the Creator and all Creation (See The Ḥajj 22:53). The status of the knowledgeable is also extolled in the Qur'an and belief and knowledge, which guides humanity towards right living, is given a lofty position. The natural world occupies a central position in this knowledge-structure since it alerts the believer to the Greatness and Glory of the Creator. The verses below attest to this:

Indeed, in the creation of the heavens and the earth and in the alternation of the night and the daylight are signs of God's creative power for those who are endowed with discretion and understanding and so heed admonition: The ones who remember God with reverence while standing and while sitting and while lying on their sides; and who reflect on the creation of the heavens and the earth saying: Our Lord! You have not created all this in vain. Highly exalted are You far above all! (The Family of 'Imrān 3:190-193)

The ecological morality of Islam, rooted in knowledge, is life-affirming and situatedin-the-world. From the Qur'anic perspective, we are truly human when we are in history – recognising "the importance of the phenomenon of life on this earth and, having recognized to engage in life practices that help to perpetuate and preserve and improve life on earth" (Kazmi 2000, 389). Thus the central job of the khalīfatullah fil-ard (vicegerent of God on earth) is to live an ethical life which embodies the virtues of Islam. It is not about learning to make a living, but about learning how to live. The establishment of justice is central in this project. Finally ecological knowledge, in keeping with the holistic and hierarchic nature of knowledge in Islam, while affirming the mutual compatibility and integration between revealed and non-revealed knowledge, regards "revelational knowledge as the most important since it comes directly from God, is unique in certitude and has a fundamentally beneficial nature" (Wan Daud 1989, 68). The ethico-legal principles of the Qur'an, which finds expression in the Sharī'ah, thus forms the conceptual environment for the ecological philosophy of Islam and provides the lenses—world structure, ethico-legal concepts, and knowledge-structure—with which to view human interaction with the natural world. However, in formulating the ecological narrative of the Islamic tradition, revealed text, nature, the experimental and social sciences, are all drawn upon to formulate "the ethical finalities" of Islam's ecological message (Ramadan 2009). Makātib education needs to reflect this.

The learning objectives which arise from this liberation ecoethic and knowledge-structure produces an educational process which regards learning as an act of worship and a lifelong endeavour to know the Creator; to understand the Divine laws (in the Qur'an and in Nature); and to strive to live an ethical life. While there are different approaches towards Islamic education, the approach adopted in this study is that of learning as activism. Learning and education in Islam is purposive and can be delineated into deliberate and reflective engagement with knowledge (ta'līm); responsible action (tarbiyyah); and social activism (ta'dīb). The maktab, in its present form, engages primarily with revealed knowledge, as well as the knowledge relating to the beliefs, rituals and values of Islam. Most children, particularly in the West, receive instruction at public or private schools which they attend in addition to the maktab. The maktab curriculum, which historically included reading, writing, arithmetic, poetry and physical education, is therefore no longer in existence. The dual system of education, secular vis a vis religious education, perpetuates the present model of makātib education as centres of spiritual and religious education - institutions which primarily contribute to "the preservation and promotion of Islamic values, Islamic epistemology and Islamic spirituality" (Mogra 2007, 389).

The curriculum review undertaken here showed very little engagement with other knowledge-structures in equipping children to understand how the environmental narrative of Islam concurs with, and differs from other positions. While educational reform has been on the agenda of Muslim thinkers for decades, *maktab* education has not yet embodied the vision of learning encapsulated in *ta'līm*. The curriculum materials reviewed here echo the findings of Mogra (2007) which also showed that *maktab* curricula do not make explicit the theory underlying curriculum development, are largely instruction-based, and allot very little space for debate and discussion as well as engagement with other knowledges. *Ta'līm* requires that the EE process promotes 'deliberative and reflective engagement' into an inherited body of knowledge, revealed and non-revealed: the ecoethical principles in the Qur'an, legal instruments and institutions (the *Sharī'ah*) oriented towards environmental care, *and* knowledge which speaks about human interaction with the natural world. Critical thinking, independence and courage are exemplified in the

Prophetic pedagogy, an interactive learning process in which the teacher facilitates the student's journey towards knowing, comprehension and conceptualization. This learning approach is essential if Islamic schooling in the *maktab* is to embody the intent of $ta'l\bar{t}m$.

Makātib have achieved greater success in the realm of tarbiyyah, which, in the educational sense, means to nurture children to be responsible in their interaction with others, and teaching them what it means to be Muslim. Tarbiyyah thus begins to extend the process of knowledge acquisition into the realm of action. The maktab plays a pivotal role in the lived and life-affirming spirituality of Islam which attaches an ethical value to each and every action. It plays an important role in making the connections between knowledge, faith and action. It concretises the ultimate objective of the Shari'ah, the welfare of all Creation (maṣāliḥ al-khalq), and heightens awareness of the unity of human and non-human worlds. Tarbiyyah also requires a learning approach which encourages learners to reflect upon, and respond to social realities. Social and ecological concerns, such as widespread poverty, worsening environmental quality and xenophobia, need to be recognised as issues of concern, matters which require that Muslims, while remaining faithful to their religious tradition and its ethical principles, must respond to. From the home to the masjid, from the school to the neighbourhood, and from the sports ground to the seashore, a Muslim must at all times, undertake to live up to the ethical dictates of her belief system, to live in justice, harmony and respect with all Creation. Makātib education continues to play a key role in nurturing Muslim children towards undertaking responsible action.

The *maktab* not only aids the promotion of the core values, ethics and principles of Islam – the bedrock upon which the ecological ethic of Islam rests, it should also encourage the activation of these values in society. The concept of *ta'dīb*, elaborated in this study, denotes the final and critical aspect of EE in the *maktab* – social activism (Waghid 2008). *Ta'dīb* denotes the transformative objectives of Islamic education which is about personal *and* societal transformation, i.e. social activism. Learning is therefore not only about having the knowledge about the right and proper place of all beings in the universe, its *fiṭrah* and *mīzān*, but to be active and

willing participants in achieving this state. $Ta'd\bar{\imath}b$ is central to actualising an ecojustice ethic of Islam in the educational process since it affirms that just action, in all human relations, is an indispensable component of learning.

The intent of EE in *maktab* education, what it seeks to achieve educationally, has to engage, first and foremost, with the beliefs (ontology) and knowledge-structure (epistemology) which shapes EE in Islam. This requires an understanding of, and engagement with the cosmological and philosophical underpinnings which renders Islam a living and transformative educational force in the lives of its adherents. It is thus essential that educators be equipped with a deep understanding of the formal element of *maktab* education, i.e. what Islam says about human interaction with Creation and why it is important to teach Muslim children about their responsibilities and rights towards the natural world. The Qur'an and Sunnah shape the formal element of EE in *maktab* education which should bring into being a *khalīfah* who understands her role and position in relation to the Creator and Creation; strives to know and understand Divine Laws in the book of Revelation and in the book of Nature; and puts this knowledge into action by living in justice, respect and compassion with all Creation. The formal element of EE in *maktab* education should include knowledge and understanding of

- the theocentric liberation ecotheology of Islam which presents an environmental imaginary, based on the sovereignty of God (tawḥīd), the responsible trusteeship of humankind (khilāfah) and the value of all Creation (khala);
- the integrated knowledge-structure which is purposive, links revealed and non-revealed knowledges; and is grounded in an ethical framework which seeks to ennoble the human being; and
- the objectives of knowledge which incorporates reflective and critical engagement with environmental knowledges, especially the environmental values of the Qur'an $(ta'l\bar{\imath}m)$; responsible environmental action (tarbiyyah); and social activism $(ta'd\bar{\imath}b)$ aimed at righting social and ecological injustice.

The environmental tradition or narrative of Islam is a living and thriving conversation, coloured by Qur'anic teachings, and requires our creative and critical participation to continue to thrive and prosper (Kazmi 2003). In creating an environmental knowledge-structure, EE in the *maktab* should reflect an environmentalism which is not reactive, stemming from the foreboding of crises,

but "an ecology at the source in which humankind's relation to nature rests on an ethical bedrock linked to understanding the deepest spiritual teachings" (Ramadan 2009, 235) in the Qur'an and Sunnah. The EE process in the maktab should not only instil a personal ethic for the earth, but extend this concern into the realm of action. The maktab is in a position to bring out the environmental teachings of the various Islamic sciences being taught, demonstrating that the principles, ethics and teachings of Islam are not confined to belief or moral education lessons, but infuses the entire gamut of knowledge. Ritual worship, history lessons, Qur'an memorisation, all subject areas in the *maktab*, in fact possess learning opportunities for introducing the Islamic ecoethic. It can, and should also extend this engagement to all knowledges, opening student's hearts and minds to the Books of the Creator: the Qur'an and Nature. Though the importance of environmental concerns in society at large, and in educational institutions, such as schools in particular, can also motivate for greater engagement with the natural world, the *maktab* continues to play an important role in the educational life of Muslims. Important as the conceptual underpinnings of Islamic education are in activating the transformative intent of EE in the maktab, the material elements of Islamic education, outlined below, are vital in giving practical shape to a liberation ecotheology of Islam in the maktab.

5.3.2. The Material Elements of Environmental Education in the Maktab

The educational process in Islam, which is concerned with actualising human trusteeship on earth in accordance with the beliefs, ethics, and practices of Islam, is put into motion at the elementary level by the *maktab*. The material elements of EE in the *maktab*, which will be considered here, are curriculum content, curriculum materials, teaching methods and environments, and learning resources (see Waghid 1994) which play a key role in enlivening the ecological philosophy of Islam. In order to achieve the true purpose of knowledge and schooling in Islam, the material elements of Islamic education need to reflect the epistemology of Islam, especially the holistic knowledge-structure and transformative intents of Islamic education. This is equally true of EE in the *maktab*. Below, I will consider some of the key material elements which will facilitate environmental learning in this institution.

Curriculum Content: There is widespread agreement amongst Muslims that the conceptual and legal framework of Islam should constitute the foundation of the curriculum content in EE since it presents the basis for the ecological morality of Islam. The ethical precepts, metaphors, laws, institutions and stories which have been outlined in Chapter Two is thus the starting point for many EE initiatives aimed at Muslims. In the curriculum review exercise, many of these precepts, laws, and institutions were brought to light in both the Madrasatul Quds and Tasheel Series, albeit with key shortcomings. They failed, for instance, to provide a comprehensive view of Islam's ecological philosophy and also fell short of discussing the gamut of environmental figh which includes belief ('aqīdah), ritual worship ('ibādah), social transactions (mu'āmalāt), and moral character (akhlāq). This is vital in order to display the holism of the ecological teachings of Islam. An EE curriculum also needs to draw upon all ecological knowledge systems—the social and natural sciences—to critically construct an understanding of the interplay between society and nature in the world today. While the environmental values of Islam provides the hallmark for an environmental morality, an understanding of ecological knowledge systems which help shape human understanding of the workings of the earth, is necessary. According to Al Zeera (2001, 71):

The concept of nature finds its appropriate place in the overall context of Islamic cosmology, which acts as a bridge connecting pure metaphysics with the branches of science that deal with the physical world [and a] holistic curriculum built on the concept of nature is able to plant in the learner's mind and soul the seeds of the oneness and unity of the Divine Principle [$tawh\bar{n}d$].

The question now arises how to organise curriculum content in the *maktab*. Here, I will present two models of curriculum organization: a complementary model of EE which will introduce the environmental teachings of Islam as an independent subject area, akin to the models which introduce other social concerns such as citizenship education in the *maktab*; and an integrated model which inserts the environmental philosophy of Islam into the religious sciences being taught in the *maktab* at present. I will present an outline of what the content in these two models might look like and also look at the advantages and disadvantages of each approach.

The complementary approach to EE in the *maktab* has been the dominant approach in the ecoIslamic movement. Table 5.1. presents an outline of what the curriculum content of a complementary EE programme, introduced as an independent subject in the maktab, might look like. It also highlights some of the learning objectives which guide each theme. While maintaining the holistic approach of Islamic education, environmental scholars have presented the ecological message of Islam in a thematic fashion by discussing the ecoethical principles of Islam - the foundation of the human-environmental imaginary of Islam and drawing out the implications of these principles for environmental action. Khalid and Thani (2008) order these principles as follows: tawhīd, khalq, mīzān, insān, fasād and khalīfah, a sequence which begins by looking at God as the law-giver, works through an understanding of Creation, the purpose of human existence, human propensity for destructive behaviour and the roles and responsibilities of a trustee. Abdul-Matin (2010a, 5) adopts a similar approach by arranging the principles of a 'green deen' as understanding "the oneness of God and His Creation (tawhid), seeing signs of God (ayat) everywhere, being a steward (khalifah) of the Earth, honouring the covenant, or trust, we have with God (amana) to be protectors of the planet; moving towards justice (adl) and living in balance with nature (mizan)".

In this study, I have presented a similar ordering which centres upon the fundamental aspects of the environmental message of Islam: the position of God as the Creator, Owner and Sustainer of the whole universe (tawḥād); the role of humankind as trustees and representatives of God on earth adhering to a code of action reflecting the best social behaviour and highest ethical values towards all Creation (khilāfah); the place and position of Creation in Islam (khalq); the destructive impact of human environmental abuse on the earth and its people (fasād); and the call to return to a way of living, in accordance with the deepest human nature i.e. in harmony with all Creation (fiṭrah). In the complementary model, the ecological teachings of Islam are presented as an independent subject area, and are ordered according to these Qur'anic themes. Environmental wisdom and teachings, drawn from Qur'anic verses, prophetic sayings and the legal framework of Islam is then interwoven into these themes. Environmental action spaces in which learners could actualise these teachings are also presented in

Table 5.1.: A Complementary Model of Environmental Education in the Maktab Curriculum

Islam and Ecology: A Thematic Approach to EE in the Maktab	
Key Themes	Learning Objectives
The Earth - The Environment of Creation	To develop a basic understanding of earth science; To gauge level of learners environmental knowledge; To probe the depth of awareness of the environmental teachings of Islam.
Tawḥīd – Allah Created the Earth	To understand the impact which metaphysical aspects of monotheism has for human ecoethical conduct; To draw out the environmental implications of the tenets of Muslim belief, the foundations of Islam's ecocosmology.
Khilāfah - Becoming Trustees on Earth	To present an understanding of human trusteeship and servanthood which shows that humans are accountable for all their deeds and should discharge this trusteeship with justice, goodness, moderation, respect and gratitude.
Khalq – The Value of Nature	To show that the natural world is a reflection of divinely-arranged structure and order, and is deserving of care and respect since it possesses inherent value as the signs of God, ecological value as part of the integrated system which He designed, and utilitarian value in sustaining both humans and the rest of Creation.
Fasād on Earth – The Destruction of Nature	To illustrate that environmental destruction is a form of corruption (fasād) resulting from humankind's transgression of the balance and measure in Creation; To show the impact of evil human forces, such as environmental abuse; extravagance; and injustice on the earth and its people.
Fiṭrah – Living in Harmony with Creation	To demonstrate that a return to the natural state of humankind (fiṭrah) is among the key acts needed to remedy the environmental malaise since it requires that humans live in harmony with nature, deeply cognisant of the interconnectedness of all life.
Muslims Care for the Earth	To raise awareness of the environmental teachings of Islam drawing on the environmental actions of Muslims, both past and present, as models; To draw out the practical implications of Islam's environmental teachings for all spheres of human activity; To initiate actions, individual and collective, to put this message into action.

tandem. In Misali, Zanzibar, these Qur'anic themes were utilised to implement a marine conservation project (Khalid and Thani 2008); in Mindanao, the Philippines, the ecoethics of Islam were employed to strengthen local environmental governance particularly as it pertains to sustainable forest management, marine conservation and waste management (USAID 2007); while the environmental workbooks developed by Soumy Ana employ the environmental teachings of the Qur'an and Sunnah throughout (Ana 2010).

There are several advantages of this model which, in my view, would be easier to introduce since it does not entail curriculum revision, a process which is costly and, according to some, of minor consideration in makātib education today. In addition, many maktab curricula, as the ones reviewed here, do not yet provide a cogent conception of the ecological philosophy of Islam. A complementary approach could supplement the maktab curriculum by utilising ecoIslamic works, EE resources, and Islamic fiction focusing on the environmental teachings of Islam. Many children's books, which can easily be accessed from Islamic bookstores, libraries and the internet, constitute a valuable resource for the Islamic educationist concerned with imparting the importance of being merciful, just and compassionate to all Creation (See Chapter Four). Teachers could also tap into educational resources, such as Al Khalifa (The Steward) (USAID 2007); the Teachers Guide Book for Islamic Environmental Education (Khalid and Thani 2008); and the ecoIslamic workbooks on pollution, recycling and the water cycle (Ana 2010), available on-line. All these utilise the ecoethical precepts of Islam as a framework to introduce the environmental teachings of Islam. Other resources, which focus on specific issues, such as creation theories in Islam, animal rights, climate change, water conservation and fair trade, are also accessible and can be drawn upon to expand on environmental issues raised in the maktab. This thematic approach, which can be introduced over a specific period, could also better fit into an already crowded maktab curriculum while ensuring that *maktab* education continues to be socially relevant.

The complementary model of introducing EE in the *maktab* could, however, compromise the holistic intent of the Islamic epistemology if contemporary environmental knowledge is uncritically adopted. *Maktab* teachers therefore need to

possess an understanding of the philosophical underpinnings of the ecotheology of Islam and know how this differs from other ecological philosophies. This model also requires that *makātib* educators not only recognise the importance of introducing social concerns, such as the environment, in the *maktab* but are also provided with the necessary support—financial, intellectual and institutional, to develop EE programmes. Since financial concerns are already restricting the space for curriculum review in the *maktab*, environmental educators might need to explore civil society institutions such as international and Muslim ENGEOs, relief agencies, and academia as key role players in the development of EE in the Muslim educational landscape. This complementary model has the advantage of presenting the environmental tradition of Islam such that the ecoethics of Islam are impressed in the lived reality of Muslims - in different contexts, environments and cultures.

The second model of organising EE curriculum content in the maktab requires the integration of the environmental teachings of Islam-ethical precepts, laws and institutions, and stories—within the religious sciences being taught in the maktab today. This is essentially what is already happening in makātib education as the curriculum review exercise illustrated. Makātib are teaching Muslim children that environmental care is a religious obligation, drawing attention to the wise use and conservation of water in ritual purification, stressing cleanliness and preservation of the environment, and the virtue of caring for nature. However, it seems they do not yet draw out the full implications of the ecological message of Islam. In ritual worship, the virtue of walking to the prayer (earn reward and reduce your carbon footprint); the hajj, permeated with respect and reverence for Creation and the epitome of human ethical behaviour; the fast in the month of Ramadān which provides an annual opportunity for simple living, are not even touched upon. Makātib do display the fact that the Islamic tradition, "perhaps more so than any other, has much to say about the need to respect all parts of God's creation, even insects" (Foltz 2006, 4). The rights of animals, which are supported by many prophetic traditions, is emphasised in both curricula, the Madrasatul Quds and Tasheel Series, though neither extend this engagement to critically appraise animal slaughter and production in the Islamic world, nor do they mention the rapid rate

of species loss, which is obliterating and silencing integral components of Creation, which possess sacredness as signs of God.

The integration of the environmental teachings of Islam in religious sciences, delineated in Table 5.2., must present a holistic overview of the liberation ecotheology of Islam, and then illustrate its application in the legal framework of Islam (laws, institutions and enforcement) – the environmental fiqh, which is displayed in ritual worship, in daily life, and in social, political and economic interactions in society. While the subject areas of Arabic, Qur'an, Aḥādīth, Tawḥīd and History constructs a liberation ecotheology of Islam, Akhlāq and Fiqh show how this ethic can be actualised in a concern and care for the environment, in prayer and worship, and in societal transformation by striving to secure the welfare of all Creation. This model requires an integrated approach to knowledge which, upon understanding the purposeful nature of human existence as a responsible trustee of God on earth, draws upon all knowledges, revealed and non-revealed, to realise the ethical mandate inherent in this trusteeship: to live in justice with the human and non-human worlds.

The benefits of this curriculum model are that it shows that environmental care is integral and existent in the Islamic worldview. *Maktab* teachers primarily need to clarify the environmental philosophy of Islam and draw out the environmental elements within the various religious sciences. The educational process envisioned here is centred upon achieving $ta'd\bar{t}b$, social activism geared towards righting ecological injustices and thus requires engagement with the real world since "[I]earning becomes real and meaningful when it is related to real things in people's lives, when it enables learners to ask real questions about life" (Al Zeera 2001, 84)". It thus requires that the *maktab* recognises and occupies its rightful place, not as an insulated environment divorced from social concerns, but as a civil space which engenders "respect for others" and also "foregrounds deliberation and assuming responsibility for the rights of others" (Waghid 2009, 123).

Most *maktab* curricula are structured according to the subject areas outlined in Table 5.2. and *makātib* across the world provide all or most of these religious

sciences. EE can thus be presented within a framework which is known, in a language which is already spoken, and in a community which shares a common curriculum.

Table 5.2.: Environmental Education Integrated in the Religious Sciences

A Subject-Based Approach to EE in the Maktab	
Religious Sciences	Learning Objectives
Arabic	To provide learners with an understanding of the Arabic language, a vital step in facilitating engagement with the Qur'an, both as a book of guidance and a source of knowledge; To learn the Arabic terms for various elements in Creation.
Qur'an	To extend recitation and memorisation of the Qur'an towards comprehension of its teachings; To link natural phenomena and systems explained in the Qur'an to contemporary knowledge.
Tawḥīd / Aqīdah	To present the ecocosmology of Islam by elucidating the position, relationship and place of humankind in relation to the Creator and Creation; To draw out the environmental implications of the tenets of Muslim belief.
Fiqh	To extract the environmental implications of ritual worship (e.g. prayer, fasting, pilgrimage and charity), daily practices and social interaction which result from the Islamic ecoethic; To engage with and present a position on contemporary issues such as animal rights, climate change and sustainable living.
History/ Tārīkh (Islamic history)/ Seerah (Prophetic history)	To put an environmental lens to historical incidents in the lives of the prophets, messengers and companions of Prophet Muhammad & to present models of environmental action; To reflect upon the activities of Muslims who are undertaking environmental actions today.
Akhlāq / Adāb / Moral Training	To highlight the values of the Qur'an and show how Islam extends the ethical horizons of this value system to all Creation; To engage with contemporary issues, such as recycling, food production and animal slaughter with the intent of assessing contemporary practices in light of the spirit of Islam.
Aḥādīth	To present the model of Prophet Muhammad , whose life embodies Qur'anic teachings, and whose sayings reflect his choice of living simply and moderately; showing respect and concern for all Creation; and encouraging environmental care as an act of good.

On the downside, this model would require major restructuring: curriculum revision, teacher training and knowledge construction – all these require financial and intellectual outlays by an institution which is barely managing to pay teachers a living wage. While curriculum revision is essential to maintain the Islamic tradition as a vibrant, evolving and relevant factor in the lives of Muslims, most often, it is not undertaken on a regular basis. A much bigger task lies in convincing curriculum developers that the environment is an issue deserving of greater attention in the *maktab*. Even though Muslim educational philosophers on the whole have recognised the centrality of EE in the knowledge-structure of Islam (See Chapter Three), most curricula, in practice, only engage superficially with the environmental question. If the Madrasatul Quds and Tasheel Series reflect the state of *makātib* curricula today, then curriculum construction and review should aim to present a much clearer conception of the ecoethics of Islam and highlight its manifestation in ritual worship; values and principles; and the laws and institutions which govern human life.

Makātib rely extensively on curriculum materials in imparting religious knowledge. Essentially functioning as supplementary schooling today, they are beset by a number of challenges, the foremost being a crowded curriculum and limited time - curriculum materials are thus vital teaching resources. A complementary approach to introducing Islamic ecoethics in the *maktab* curriculum has been the route which most ecoIslamic educational initiatives have selected. It is also the model which I suggest is most likely to succeed, not only on pragmatic grounds as outlined above, but for philosophical reasons as well.

A complementary approach to curriculum organisation can present a cogent conception of the ecological philosophies of Islam. The thematic approach outlined in Table 5.1., centred on imparting the ecological narrative of Islam, does not stop at a discussion of key ecoethical principles, but draws out the practical implications of these ecoethics for belief ('aqīdah), ritual worship ('ibādah), social transactions (mu'āmalāt), and moral character (akhlāq). In this way, this model illustrates that environmental concern is integral to the Islamic worldview, and existent in the various religious sciences being taught in the maktab. The educational objectives of

an EE process in Islam has been outlined as follows: ta'lim as deliberate and reflective engagement with all ecological knowledge; tarbiyyah as responsible environmental action; and ta'dib as social activism. Since most makātib have yet to undertake the educational reforms necessary to foreground the dynamism of Islam's educational legacy, the objectives outlined above have a greater chance of entering the maktab via a complementary model. This model also accommodates the transformative educational approach outlined in Chapter Three, i.e. critical Islamic pedagogy, which can be considered an adapted form of Islamization. This educational approach addresses the philosophical foundations of secular epistemologies and demonstrates the ways in which the Islamic conceptual framework speaks to the challenges of modern society; it centralises social and ecological justice; and highlights the action-oriented, lived and liberatory spirituality of Islam in schooling. Couched within the Islamic worldview, it requires that learners enter into critical engagement with all knowledge; that they demonstrate the virtues enshrined in the Qur'an; and that they become agents of social change and justice seeking to fulfil God's Will on earth - essential factors in imparting an eco-justice ethic of Islam.

Whether EE is introduced in the *maktab* as a complementary module or integrated within the religious sciences depends on the particular institution: the human, physical and financial resources at its disposal. It is also linked to the recognition that *makātib* must produce relevant knowledge systems and adopt an activist learning process which is not only concerned with personal piety, but with the social activation of the teachings of Islam. EE in the *maktab* should, as has been argued throughout this thesis, reflect the *tawḥīdic* or theocentric worldview of Islam; reveal the integrated knowledge-structure of Islam; and demonstrate the transformative learning approach which integrates belief and action. A complementary approach to introducing the ecoethics of Islam into the *maktab* has a much greater chance of achieving this.

Curriculum Materials or documents, though only one aspect of *maktab* education, are likely to continue to play a pivotal role in introducing the teachings of Islam, including its ecological ethics, to the hearts, minds and lives of Muslim

children. *Maktab* instruction, as seen in the *madrasah* in South Africa, relies extensively on curriculum materials to facilitate the learning process in an institution which faces many constraints. *Maktab* teachers are often working against the clock to complete their syllabi and thus depend upon curriculum materials to supplement classroom learning. Curriculum materials are therefore a vital component of any EE strategy which seeks to introduce the environmental teachings of Islam to Muslim children. Here, I will focus on print materials while the discussion on EE resources further below will consider a broader range of teaching aids.

EcoIslamic curriculum materials aimed at children, such as workbooks, are few and far between. Ecology, Recycling, Our Environment, a series of ecoIslamic workbooks aimed at intermediate phase learners, is one of the few educational resources available for use by children (Ana 2010). EE resources aimed at younger learners have, to my knowledge, not been developed yet. Environmental ethics materials, which translate the scholarly work of ecoIslamic thinkers into texts which are contemporary, child-friendly and practically-oriented, are virtually non-existent. The exception being the educational resource produced by Khalid and Thani (2008) in the Misali environmental ethics programme. This educational resource, Teachers *Guide Book for Islamic Environmental Education* (Khalid and Thani 2008), was essentially produced as a resource for use by teachers. Fiction works, which provide colourful and engaging depictions of the environmental message of Islam are another EE source which can be used in the maktab – some of these were discussed in Chapter Four. Factsheets, booklets and posters on selected environmental issues, for example water conservation, climate change, and animal rights can also be used to introduce environmental issues in the maktab curriculum.

Maktab curricula provide many opportunities for learning about, engaging with, and activating the green teachings of Islam. However, in view of the shortcomings within existing maktab curricula, both an integrated and complementary approach to EE in the maktab (as outlined above), requires the production and/or revision of curriculum materials. Several important factors, which are critical in the

development of curriculum materials for EE in the *maktab* should be taken into consideration.

EE curriculum materials in the *maktab* should reflect the learning objectives of Islamic education; they must be appropriate to learners developmental stages; they should adopt different methods and learning approaches to incorporate varied ways of learning; they must draw upon *all* knowledges in constructing an understanding of the human-environment relationship; and they should be fair, usable and relevant. Materials should focus on local issues; access local and community resources; and encourage hands-on observation and discovery in the environment. The production of curriculum materials, which seek to reveal the environmental message of Islam, is a vital component in activating the ecological ethics of Islam. It is also one of the weak links in the ecoIslamic movement and requires that environmental scholars, activists and educationists step up their efforts to 'walk the talk' by showing how the ecological philosophies and ethics of Islam is manifest in practice, in the varying lives and contexts of Muslim children the world over.

Teachers play a central role in the transformative learning process which characterises Islamic education. The teacher, as a mu'allim, guides the learner, through a dialogical and interactive process, towards engagement with and reflection upon revealed and non-revealed knowledge; as a murabbī he embodies and imparts the need to undertake responsible action by integrating knowledge and practice; and as a mu'addib he strives, in line with the Prophetic model, to encourage social activism, acting upon and participating in righting injustices. Muslim teachers thus have to understand, reflect upon, and live by the objectives of education in Islam by being 'true ambassadors of the Prophet-teacher model'. Historical ideas and concepts, embodied by the prophets and messengers, who were all teachers of humankind, thus play a central role in the way that Muslim teachers construct their identity today.

Muslim educational philosophers, of today and of old, have all recognised the centrality of the teacher in the pedagogy of Islam. From the classical works of Ibn Sahnun, Rules of Conduct for Teachers (Adab al-Muʻallimin) and Al-Jahiz's The Book of

Teachers (Kitāb al-Muʻallimin) (Günther 2006) to contemporary writings (Kazmi 1999; Al-Fahad 1999; Abdel Haleem 2002; Mogra 2010), questions of learning and teaching such as the merits of teaching in Islam; the disposition of teachers; and teaching methods have been discussed. The basis of much of this discussion has been the principles of the Qur'an and the pedagogy of Muhammad since the business of knowledge, according to the worldview of Islam, is not only intellectual but also devotional. The educational process is thus neither purely self- nor market-oriented, but is directed primarily by the desire to please God, understanding and acting upon His signs, and thereby being the best vicegerent which she can be. Kazmi sums it up as follows:

Knowledge, for a Muslim, is nothing but an attempt to understand the signs of Allah in order to get close to Him. The signs of Allah are everywhere and they are of all kind. The rising and the setting of the sun is as much a sign of Allah as are the inner mysteries of sub-atomic particles. (Kazmi 1999, 220)

The exalted position of the teacher, who was traditionally "viewed as a role model and respected community leader" (Mogra 2010, 317), not only an instructor, is supported by the Qur'an and the Sunnah. As a mu'allim, the Muslim teacher is expected to possess a sound understanding of the worldview of Islam and be able to evaluate all knowledges pertaining to education, revealed and non-revealed, within this conceptual framework. The teacher should have an understanding of child development and psychology, be aware of the learner's capacity, and adopt a graduated approach to learning. She should employ diverse teaching methods which recognise that there are various ways in which children learn (Al-Fahad 1999). Respect for the learner, patience, and care are essential factors in this relationship - this was demonstrated countless times by Prophet Muhammad & of whom one of the companions said, "I have never seen a better teacher than him" (Ṣaḥīḥ Muslim n.d. 2(1227), 707). In his role as a murabbī, he must engender responsible action and illustrate the importance of action, in his life and in his conduct. Tarbiyyah is then a process by which children learn to evaluate knowledge through a personal encounter with a teacher who combines a life of learning with a life of virtue and who demonstrates that there is "far less distance between knowledge and practice, between knowing and acting, between theory and praxis"

(Kazmi 1999, 219). From this point, the role of the teacher as *mu'addib*, as a standard-bearer of universal justice, follows naturally.

Muslim teachers care about and teach about the environment because environmental care is not only a central teaching of Islam, it is also an issue of great relevance in the world today. As life-long learners, Muslim teachers have to "view the acquisition of knowledge as a continuous process" and should be "open to know and understand their immediate and wider community" (Mogra 2010, 327). They therefore need to be aware of, educated about and concerned for the well-being of the environment as an issue of social concern. Hashim's (2005) suggestion that the teachers of Islamic religious sciences receive basic instruction in environmental sciences in order to make teaching relevant, interesting and help learners better understand the signs of the Creator in the universe, is therefore echoed here. In addition to environmental training which is primarily oriented towards Muslim educators, here opportunities for learning from and with environmental educators in the broader green movement, as well a sharing the environmental message and teachings of Islam, should also be explored.

Within EE, there is also the recognition that teachers need to have compassion for, awareness of and respect for the environment, as well as encourage concerned action to right social and environmental injustices (Basile and While 2000; Cairns 2002; Tan 2009). From the perspective of teaching EE in the *maktab*, the Muslim teacher should thus present the ecoethics of Islam in a systematic and balanced way; encourage critical and creative evaluation of all environmental knowledge; and position responsible action and social activism as central tenets of Islam – this would be a true representation, in my view, of the transformative and emancipatory intent of a liberation ecotheology of Islam.

Learning Environments: EE in the maktab is envisioned here as a process which will encourage the Muslim child to know and act upon her own situationality. Most maktab learners are largely confined to the maktab, which is home-based; attached to a masjid; or exists as an independent institution. Outdoor education should play a crucial role in developing an awareness of, experience in, and hopefully love for the

natural world by bringing the Muslim in greater contact with the Works of her Creator. While outdoor learning opportunities will be explored in greater detail below, in reality few *makātib* are able to afford learners this opportunity – a consequence of financial constraints and limited knowledge of what is available. The approach suggested here, that of a critical pedagogy of place, is appropriate for the *maktab* since it ensures that education has a "direct bearing on the social and ecological places people actually inhabit" (Gruenewald 2003, 3), making *the environment* real. This approach contextualises environmental learning by promoting love and concern for local places, and also enables and encourages learners to act within their own environments. It can thus contribute greatly to making EE relevant in learners' lives. Wherever the Muslim learner is based, the home, *masjid* or community centre, the learning environment should be stimulating, inclusive and allow for flexible instruction; and should adopt a place-based approach which combines many of the critical factors in an eco-justice ethic of Islam.

Place-based approaches to EE, as exemplified in the ideas of Gruenewald (2003), combine the transformative intents of ecological place-based education and critical pedagogy. Ideas of cultural decolonization, i.e. confronting dominant systems of thought and presenting non-commodified, traditional (cultural and religious) ecological knowledges as alternative imaginaries of the human-environmental confluence, resonates with the objectives reiterated throughout this study. One of the main aims of the ecoIslamic movement is to present the environmental imaginary of Islam as an approach which speaks about "what it means to be human in connection with others and with the world of nature" (Gruenewald 2003, 6). Yet it also posits the importance of recognizing the sociological basis of the disruption and injury (fasād) in the natural world and presents an eco-justice ethic which, like place-based pedagogy, combines two important agendas: cultural decolonization and environmental reinhabitation. While reinhabitation, like fitrah, involves "learning to live well socially and ecologically", decolonisation requires the construction and presentation of an environmental imaginary which challenges dominant and homogenising ecological narratives. Schooling is therefore not only linked to place-based experiences of the landscape which the learner inhabits but

also encourages her to conserve, nurture, and restore the environment by acting upon social injustices which injure and exploit people and places. It thus focuses on how to live well, with *both* people and places. This is the value of a place-based approach to EE which is useful in making the learning environment of the *maktab*, in line with the Islamic pedagogy, a place which is interactive and one in which learners act upon their lived realities by coming to know, love and care about the human and natural worlds.

Resources: EcoIslamic educationists need to extend themselves towards engagement with the broader environmental sphere to benefit from, and contribute to the corpus of EE resources which have been developed. Resources which aid environmental teaching and learning can be found within both the governmental and non-governmental sector. Several mediums of environmental communication, active and passive, have been utilised to aid environmental communication in the classroom; these incorporate written materials such as lesson plans, fact sheets and games; audio-visual material; and practical environmental activities. School environments have become central players in community-based environmental initiatives such as water and energy auditing; food gardens; and recycling programmes. Art and drama programmes have also been used to great effect by environmental educationists - the rich tradition of Islamic art would be a welcome addition. The media, print and on-line, is another source which can promote environmental communication. Lastly, and most importantly, outdoor education opportunities need to be pursued as a vital tool to build an environmental morality amongst Muslim children. Nature reserves and botanical gardens; aquaria and museums; science and EE centres; parks and walkways; the oceans, forests, deserts, valleys and mountains - these should be drawn upon to awaken and instil love and care for God's Creation. Maktab teachers thus have to step up their efforts to facilitate access to these resources which will assist greatly in making EE in the maktab exciting and relevant.

In the development of the material elements of EE in the *maktab*, learning from and engaging with the broader EE community would greatly enhance environmental learning. In essence, all the component of the material elements of an EE

programme discussed here should reflect the aims and objectives of education in Islam nurturing Muslim children towards the fulfilment of human trusteeship on earth. To sum up, the material elements in the *maktab*, should encompass the following:

- Curriculum content, introduced in complement or integrated in the *maktab* curriculum, must highlight the environmental teachings of Islam and illustrates its application in ritual worship, daily life and all social interactions;
- Curriculum materials should present the ideas and actions implicit in the ecological philosophy of Islam in a manner which is engaging, instructionally sound and practically-oriented;
- Teachers, as role models, must enable children to evaluate knowledge in a critical and creative manner; to undertake responsible action; and to activate this knowledge in their lives;
- Learning environments should stimulate learners' understanding, concern and engagement with local environments and promote the application of the environmental imaginaries of Islam in society; and
- Resources, drawn from a range of environmental communication mediums, must aid environmental teaching and learning and expand engagement with the broader environmental movement.

The *maktab*, an important civil space, can provide Muslim children with opportunities to engage with knowledge, voice their opinions, and participate in public deliberation, striving to fulfil their duties as Muslims in advancing ecological and social justice. It is opined here, that both the formal and material elements of EE, i.e. the conceptual underpinnings and philosophy of environmental learning in Islam and the empirical factors which support and activate this philosophy, must reflect an eco-justice ethic of Islam – an ethic which enables Muslims to find their *own* voice, their *own* answers and their *own* response to the ecological question. Engagement with contemporary environmental concerns should strike at the roots of issues such as overconsumption, climate change, genetic engineering, modern farming methods, and species loss by returning to the higher objectives of Islam, the ethics, values and beliefs which underscore the relationship between humankind and the natural world.

For the *maktab* to take its place as a key instrument in making known and revitalising the liberation ecotheology of Islam, it needs to reflect the action-

oriented or lived spirituality which this theology embodies. It must represent the holistic knowledge-structure and objectives of Islamic education in relation to environmental learning: 'talīm, tarbiyyah and ta'dīb. And it must produce men and women, environmental educators, who can present the environmental message of Islam in a creative manner, showing the dynamism within this universal message of peace which strives to guide the human mind and heart towards a path in which all Creation, big and small, matters.

This chapter has shown that the *maktab*, one of the foundational institutions in the Muslim educational landscape, does not yet embody the liberatory ecological ethic of Islam. The recommendations presented above, drawn from theoretical and practical insights, can hopefully propel the environmental tradition of Islam into motion at *makātib*. In the long run, though, revitalising this liberation ecotheology will require a broad-based ecological literacy programme, which spans the entire educational landscape of Islam.



CHAPTER SIX

ISLAM AND ECOLOGY: CONCLUSIONS

The All-Merciful God! He alone has taught the Qur'an.

He alone has created man. He alone has taught him expression

The sun and the moon are in measured course, subjugated by Him to a fixed order.

And to Him alone do the stars and the trees bow themselves down.

And as to the sky—it is He alone who has raised it.

Thus it is He alone who has set the balance of all things,

so that you might not transgress the just balance.

Therefore, shall you establish weights and measures with justice.

And you shall not by fraud diminish the balance.

And as to the earth—it is He alone who has laid it down for all living creatures.

(The All-Merciful 55: 1-10)

Religious traditions such as Islam are emerging as vital players on the green scene, presenting a cogent argument against environmental degradation. Grounded within a theocentric worldview, the liberation ecotheology of Islam formulated in this thesis seeks to establish just, respectful and responsible interaction between humans and nature. This ecotheology rests upon an eco-justice ethic of Islam, a synthesis between environmental teachings contained in sacred texts, traditions and contemporary thought, and the lived religion, the actions and practices of Muslims. In particular, this thesis focused on environmental learning or education as a component of a transformative and activist Islamic education which enables Muslims to think about, understand and fundamentally change the conditions which have led to social and environmental injustice by taking action for the common good of all Creation. One action space which has been utilised by the ecoIslamic movement is the extensive network of educational institutions in Islam such as the masjid, madrasah and maktab. The environmental education (EE) potential of the latter, the foundational institute for religious and socio-ethical instruction in Islam, was found to be underused. This study essentially centred upon retrieving, reconstructing and reviving an eco-justice ethic of Islam by way of EE in the Muslim educational landscape, the maktab above all.

This study emanated from a long-standing commitment to, and interest in Islam and ecology, as well as the fact that the Islamic position on the natural environment is not well-represented in the ecotheology movement. Below, I will summarise the main ideas put forward in this ecotheological study; situate this research within the broader research field of Islam and ecology; and make recommendations for future research.

Summary: The growing rapprochement between the religion and environmental movements shows that religion has various sources of power which it brings to bear on the ecological question. These include worldviews which speak about the relationship between humankind and Creation and address the cosmological context of the human-environment relationship; ethics which present terms of reference and a vision for human action; and the moral authority and energy to inspire internal and societal change. Religious discourse remains intellectually persuasive and potent and also possesses human, financial and physical resources which can be used to advance environmental care. Amid the varieties of environmentalism discussed in Chapter One, the ecotheology of Islam was found to represent neither a techno- nor anthropocentric environmentalism, but a theocentric ecological philosophy in which humankind occupies the position of stewards of God on earth and partners of nature which has its own independent status as signs of God.

The ecotheology of Islam remains under-researched yet it presents an environmental imaginary which not only privileges a commitment to social and ecological justice, but shows how faith can be harnessed as a vehicle for social change. This study couches the beliefs, laws and ethics related to the environment within an emancipatory framework, hence the term liberation ecotheology. While it integrates theological, jurisprudential and spiritual understandings of the place and position of nature in Islam, the transformative intent of the Qur'an and Sunnah is brought to the fore by a liberatory approach which stresses the inextricable link between belief and action. The commitment to social and environmental justice espoused by Qur'anic teachings and in the life of Muhammad , is, to my mind, one of the outstanding features of the Islamic worldview on the environment. This study thus sought to give

voice to Islam's liberation ecotheology through the retrieval, reconstruction and revival of Islamic beliefs, ethics, and practices which relate to the earth.

In Chapter Two, it was established that an eco-justice of Islam, encapsulated in Qur'anic ethical precepts and the legal framework of the Sharī'ah, presents a rich and meaningful account of the relationship between God, humans and nature. The Oneness of God, tawhīd, infuses the entire environmental worldview of Islam with the recognition that nature originates from God, is purposive, and functions in accordance with the Will of God. Human trusteeship, khilāfah, should exemplify the 'lived spirituality' of Islam by imbuing the divine trust (amānah) of vicegerency with justice ('adl) and goodness (iḥsān), moderation (i'tidāl), and mercy (raḥmah) and gratitude (shukr). The wondrous world of nature holds inherent sanctity as the signs of God; ecological value as part of His creative order; and utilitarian value in sustaining Creation. The Shari'ah, the corpus of principles, laws, and institutions derived from the foundational teachings of Islam, is the roadmap which defines the limits and conditions of human trusteeship – the ultimate aim being to live in fiṭrah, securing the welfare of all Creation. Environmental degradation (fasād) has appeared on the land and on the sea due to evil human forces, such as greed and extravagance; waste and misuse; and disregard for the creative order in the natural world. The eco-justice ethic of Islam, educed from sacred texts and laws, seeks to rectify humanity's relationship with the earth, inculcate just and moral behaviour, and mitigate all creaturely harm.

In light of the Islamic message, environmental care is a religious obligation. The ecoIslamic movement, operating at various levels in society, is centred upon this message and is actively working towards building the ecological literacy of Muslims. EE is among the primary strategies being used to reinvigorate the environmental narrative of Islam, helping Muslims to be better representatives of God on the planet.

Chapter Three extends this eco-justice ethic of Islam from the realm of thought and ideas into practice, identifying the place of ethics in the educational arenas of environmental and Islamic education. Environmental morality occupies a central

position in the learning objectives of both EE and Islamic education. While the latter emanates from a theocentric worldview, both seek to formulate an ethical response to the environmental question. Environmental ethics, in the form of environmental values education, has always been an integral part of EE, yet environmental educationists have been slow in engaging with ecotheologians. Increasingly, they are beginning to accept religious understandings and visions of the human-environment relationship as legitimate in the EE process. Socially critical strands within EE in particular are vital conduits for rapprochement between the religion and ecology movement since they actively voice the need to recognise and accept alternative knowledge paradigms and to achieve both personal and societal transformation.

Islamic education(s), steeped within the monotheistic worldview of Islam, can draw upon the rich repository of ecological knowledge, pedagogical approaches, and learning resources of EE to build and strengthen the ecological literacy of Muslims. The knowledge-structure and educational vision of Islam put forward in Chapter Three embodies 'holiness and wholeness' - it aims to achieve harmony and justice in human society and in the earth as per the Divine Command; and adopts a holistic approach to knowledge as encapsulated in the learning objectives of Islamic education, i.e. ta'līm, tarbiyyah, and ta'dīb. EcoIslamic educationists are recognising that in order to fulfil human trusteeship successfully, they must facilitate ecological knowledge of the relationship between human beings and the natural world, of the creative order upon which the world was created, and of right living. This thesis postulates that reflective and critical engagement with all ecological knowledge (ta'līm), in the Qur'an and in Creation; responsible environmental action (tarbiyyah); and social activism (ta'dīb), should guide EE in Islam. In addition, it proposes that a transformative approach to environmental teaching and learning, while rooted in the belief structure of Islam, could fulfil a pivotal role in activating the environmental narrative and eco-justice ethic presented here. The formulations in Chapters Two and Three, i.e. the liberation ecotheology of Islam and transformative approach to education, constitute key features of the environmental narrative constructed in this thesis, and were vital in extracting the implications for environmental education in Islamic schooling.

International and South African perspectives on EE in the educational landscape of Islam display that it is not only viable, but vital to introduce the ecoethics of Islam by way of EE. Chapter Four shows how many ecoIslamic organisations are already doing so. While most of the ecoIslamic initiatives discussed were, for the most part, still at the stage of nominal ecological literacy - increasing knowledge and awareness of the environmental question, many are beginning to move towards a highly-evolved ecological literacy. This would require that Muslims understand the human-environment relationship as set out in the foundational sources of Islam as well as the dynamics of the environmental question; and develop the ability to not only synthesize this information but act upon it.

The educational manifestation of Islamic ecoethics, in the enduring network of Islamic institutions, such as the masjid, maktab and madrasah, as well as new institutions, was also illustrated in Chapter Four. These reveal how the ecoIslamic movement has employed a range of educational methodologies; exploited new communication technologies such as social media; and aligned itself with the broader environmental movement to impart the ecological teachings of Islam. It also confirmed that the maktab remains underutilised even though it plays a vital role in Muslim educational life. As the burgeoning ecoIslamic movement comes into being, it is moving closer to reflecting the liberation ecotheology of Islam which affirms that environmental care is a religious obligation, an act of spiritual obedience, and requires action to right environmental aberrations. It is beginning to evince the holistic epistemology which requires critical engagement with all existing knowledge, revealed and non-revealed, to understand and formulate a response to the ecological question of our time. And while it displays greater success in highlighting the need for responsible environmental action (tarbiyyah), it needs to improve both the knowledge acquisition (ta'līm) and social activism (ta'dīb) components of the environmental learning process. The activist and transformative EE process developed in this study, premised on a liberation ecotheology of Islam, can make an important contribution to this growing movement. This process, which strives to develop socially active, ethically aware, and compassionate human beings concerned with securing the common good, justice and welfare of Creation, accentuates the transformative intent of Islamic education presented here.

In Chapter Five, a curriculum review of the *maktab*, which centred on evaluating the environmental elements within two sets of curriculum documents, the Madrasatul Quds and Tasheel Series, was undertaken. While these curricula are produced and widely implemented in South Africa, it is also being used by many makātib across the world. The purpose of the curriculum review was to gain a better understanding of the current and future role of the *maktab* in EE. While this chapter concentrated on the ways in which the environmental teachings of Islam are incorporated in curriculum materials, broader implications for environmental teaching and learning within the maktab were also extracted. The South African madrasah (as the maktab is known in South Africa), which uses these curriculum documents, will undoubtedly be given an introduction into some of the fundamental environmental teachings of Islam, for example the tawhīdic framework and human-environmental conception which shape this ecotheology and the fact that environmental care and action is a religious obligation. Both series display different strengths in relation to EE: the Tasheel Series succeeds in portraying the ecoethics of Islam in greater depth, while the Madrasatul Quds series does a better job at extending Islam's ecoethics into the realm of action. Both curricula, however, fall short in bringing out the holistic knowledge-structure and liberatory dynamic inherent in the ecojustice ethic constructed in Chapter Two. In addition, they should extend and broaden the understanding of the gamut of principles, laws and institutions which promote environmental care in Islam.

In terms of the broader implications for environmental teaching and learning in the *maktab*, this study found that the environmental tradition of Islam remains a living and thriving narrative in *maktab* education. Undoubtedly, this institution itself is in need of reform as most *makātib*, on the whole, do not reflect the holistic, integrated and comprehensive educational philosophy and epistemology outlined earlier. The introduction of contemporary social concerns, such as the environmental question, can act as an impetus for the transformation of *maktab* education. Both formal and material elements of EE in the *maktab* need to be re-worked to provide an accurate and relevant portrayal of the ecological narratives of Islam. The eco-justice ethic constructed in this thesis is revealed in the maktab through a theocentric liberation ecotheology; a purposive and integrated knowledge-structure; and a pedagogy

which includes engagement with all environmental knowledges ($ta'l\bar{\imath}m$); responsible environmental action (tarbiyyah); and social activism ($ta'd\bar{\imath}b$). These elements of EE are put into motion by a myriad of material elements which animate the intent of environmental learning in the maktab, and include: curriculum content and structure; materials development; teacher training; learning environments and teaching resources.

Most makātib adopt an integrated approach to environmental learning in which the green teachings of Islam are weaved into the religious sciences. But a complementary or stand-alone approach to curriculum organisation, which requires the development of new curriculum materials, could expand and strengthen the EE potential of the maktab by contemporising ecoIslamic works. This model stands a greater chance of reviving the dynamic intent of the educational legacy of Islam since it can propel makātib teachers and learners to fulfil the ethical mandate inherent in trusteeship: to live in justice with the human and non-human worlds. Amid the slow pace of curriculum review, and more importantly educational reform, the complementary model of EE can act as an impetus for enlivening maktab education for the following reasons: It introduces a holistic approach to understand the environmental question, drawing on both revealed and non-revealed knowledge; it builds the environmental responsibility of Muslim learners by highlighting the relevance of religious understandings of nature for contemporary concerns; and it promotes social activism by encouraging learners to apply the transformative environmental teachings of their faith in their life and lifestyle decisions.

Contribution of this Study: The liberation theology presented throughout this study has sought to put forward an eco-justice ethic which shows that Islam presents an activist, transformative approach to environmental learning which seeks to right social and environmental injustices. This study differs from most ecoIslamic works which, by and large, merely reiterate the normative imperative of Islam to care for the earth. In contrast, this study has sought to present a synthesis of what this faith says and does about the environment, principally in the educational sphere. It has been explicit about contextualising the environmental

narrative of Islam within the liberatory intent of this faith tradition which seeks to secure the welfare of *all* Creation. And it has presented not only the ecoethical precepts which provide the conceptual environment of this eco-justice ethic, but the environmental intent of the *Sharī'ah*—the methodologies, laws, institutions—which enlivens this ethic. This theocentric ecological philosophy is then put forward as an alternative to anthropo- and ecocentric philosophies which shape most of the environmental narratives today.

As the ecoIslamic movement, both in its theoretical and practical efforts, actively seeks to implement the ecoethics of Islam across the Muslim world, only a handful of scholarly works expressly consider the potential of the educational institutions of Islam, both traditional and modern, as centres of environmental learning and teaching. The educational institutions of Islam are increasingly playing a role in revitalising the eco-justice ethic of Islam, however, the maktab, still widely attended by Muslim children, remains underutilised and under-researched despite its immense potential in building the ecological literacy of Muslim children. This study, after outlining a range of ecoIslamic activities being implemented across the Muslim educational landscape, also investigates the EE potential of the maktab through a curriculum review of this institution in South Africa. With the objective of improving the EE potential of the maktab, it makes several suggestions to strengthen the environmental elements within maktab education. To my knowledge, none of the ecoIslamic works produced thus far have dealt with EE in the maktab, nor have they considered the EE potential of the broader educational landscape of Islam to the extent which this study has.

The foremost contribution of this study is thus the way in which it has sought to synthesise a liberation ecotheology of Islam, from sacred texts, law and contemporary thought, and extract the implications for activating this ecotheology in the educational landscape of Islam today. Theoretical and practical insights were used to make the case for the introduction of an eco-justice ethic of Islam by way of EE. While the green message of Islam is already being imparted in the educational process, much more is needed to enhance this process which should concord with the ultimate intent of EE in Islam, i.e. to bring to life an ethic, by way of education,

which recognises that living in justice with people and with the planet is an obligation for every Muslim man, woman and child who accepts the mandate to live as a vicegerent of God on earth.

Recommendations for future research into both theoretical and practical aspects required to revitalise the environmental narratives of Islam, include the following:

- Theoretical work on Islam and ecology must broaden the ethical teachings of Islam to address contemporary environmental questions, and also develop the subject area of Islamic environmental law. Qur'anic exegesis, specifically as it pertains to environmental concerns, is also required. This necessitates engagement between scholars of the revealed text (i.e. the religious sciences) and scholars who are studying the social and natural sciences to develop and apply the ecoethics of Islam to the environmental questions facing society today.
- C Theocentric ecological philosophies, such as Islam, must be acknowledged as relevant, legitimate and potent representations of the human-nature relationship which continue to hold sway in the lives of millions the world over. The efforts of ecoIslamic scholars and activists are vital to counter the tendency to privilege local and traditional knowledge systems, while disregarding religion as a vital environmental discourse in the world today. It is thus critical that the growing ecoIslamic movement broadcasts the environmental tradition of Islam among the wider environmental movement.
- In light of the need for a broad-based ecological literacy programme aimed at both Muslim and non-Muslim audiences, much more theoretical insights into Islam and EE is required. This, and other studies, which have focused on environmental learning opportunities for Muslims is a beginning but an exposition of the environmental teachings of Islam, aimed at a wider audience, is also required. Practical EE initiatives, from the water and energy

conservation activities at *masājid* to the conservation of marine and coastal resources in Muslim communities, show how the ecoethics of Islam is being employed to build awareness of and action for the environment. A great deal of this still goes unnoticed in the green movement.

- Curriculum materials, based on the environmental teachings of Islam and incorporating contemporary ecological knowledge is required to develop an understanding of the environmental message of Islam and facilitate the ecological literacy programme envisioned above. These should be based on the authentic teachings of the religion which have been presented by several ecoIslamic scholars; address contemporary concerns; and display the praxis orientation inherent in the liberation ecotheology of Islam.
- While curriculum materials are a vital component of EE, an EE strategy requires a range of material elements from selecting, structuring and organizing curriculum content to providing environmental training opportunities for religious leaders, teachers and community leaders in this regard engagement with the broader environmental movement can be especially fruitful. The development of learning environments such as outdoor education centres which could focus exclusively on imparting the environmental message of Islam and expose Muslim children to the natural world, within the cities and countryside, is also required. Here, community-based environmental projects and place-based EE programmes could assist in bringing questions of the environment closer to home.
- The educational landscape of Islam, the *maktab* especially, is a vital resource in activating the belief system, knowledge-structure and lived spirituality of Islam. These institutions should reflect the theocentric ontology and holistic knowledge-structure of Islam, the bedrock of the educational process. As centres of learning and teaching, these institutions play a vital role in imparting the teachings of Islam and both the ecoIslamic and environmental movement must utilise all opportunities to engage with and involve these institutions in the environmental question.

Characteristic Characteristics Characteristic Chara

Islam plays a pivotal role in shaping the worldview of more than one billion people in the world today. Its teachings on nature present an understanding of the natural world - an eco-justice ethic which promotes just, respectful and responsible interaction between humans and nature. Education in Islam not only imparts knowledge about the workings of nature, but how to interact with the natural world - an ethic in which the well-being of all Creation is accorded value. As the world faces unimaginable environmental challenges which are wreaking havoc in lives, lands and seas, the need for developing an ecological ethic which directs humankind towards responsible environmental action is imperative. Religious environmental values and ethics *can* promote responsible and respectful interaction between humans and nature, it *can* inspire and motivate for change, and it *can* encourage positive social action. Religion remains, despite all the efforts to trivialise it, an inspiring force capable of directing humanity towards a way of living in harmony with people and planet.

As the human mind and heart come to realise the impact which human aggressions and transgressions is having on the earth and its people, we need to formulate a response which will remedy the suffering of the human and non-human worlds. The voice of Muslims who care for the earth and its people is rising. They present a way of seeing the world and understanding our place in it; a knowledge system which is viable, genuine and valid; and an educational philosophy and establishment which

is more than capable of responding to the questions of our time. The time is ripe for humanity to build a world in which all people count, in which all voices are heard, and in which the earth matters. Muslims must play their part in this endeavour and display the transformative force of their faith which propels them towards living in justice with Creation. For,

Indeed, God loves those who are just. (The Table-Spread 5: 42)



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APPENDIX

Madrasatul Quds Textbook Series. 1997. Gatesville: Madrasatul Quds.

GRADE 1:

Madrasatul Quds Textbook 1 Madrasatul Quds Activity Book (Part 1) Madrasatul Quds Activity Book (Part 2)

GRADE 2:

Madrasatul Quds Textbook 2 Madrasatul Quds Activity Book 2

GRADE 3:

Madrasatul Quds Notes & Worksheets (Part 1) Fiqh/Tawhid Madrasatul Quds Workbook (Part 2) History/Moral Training

GRADE 4:

Madrasatul Quds Notes & Worksheets (Part 1) Arabic/History Madrasatul Quds Workbook (Part 2) Tawhid/Fiqh/Moral Training

GRADE 5:

Madrasatul Quds Notes & Worksheets (Part 1) History/Moral Training Madrasatul Quds Workbook (Part 2) Figh/Tawhid

GRADE 6:

Madrasatul Quds Notes & Worksheets (Part 1) Fiqh Madrasatul Quds Notes & Worksheets (Part 2) Tawhid Madrasatul Quds Notes & Worksheets (Part 3) History/Moral Training

GRADE 7:

Madrasatul Quds Notes & Worksheets (Part 1) Fiqh Madrasatul Quds Notes & Worksheets (Part 2) History Madrasatul Quds Notes & Worksheets (Part 3) Moral Training/Tawhid

Jamiatul Ulema Taalimi Board Tasheel Series. 2008. Fordsburg: Jamiatul Ulema Taalimi Board.

GRADE 1:

Tasheelul Aqaa-id: Aqaa-id Made Easy

Tasheelul Figh: Figh Made Easy

Tasheelul Akhlaaq Wal Adaab: Akhlaaq and Aadaab Made Easy

Tasheelul Ahadeeth: Ahadeeth Made Easy Tasheelut Taareekh: History Made Easy

GRADE 2:

Tasheelul Aqaa-id: Aqaa-id Made Easy

Tasheelul Fiqh: Fiqh Made Easy

Tasheelul Akhlaaq Wal Adaab: Akhlaaq and Aadaab Made Easy

Tasheelul Ahaadeeth: Ahadeeth Made Easy Tasheelut Taareekh: History Made Easy

GRADE 3:

Tasheelul Aqaa-id: Aqaa-id Made Easy

Tasheelul Fiqh: Fiqh Made Easy

Tasheelul Akhlaaq Wal Adaab: Akhlaaq and Aadaab Made Easy

Tasheelul Ahaadeeth: Ahadeeth Made Easy Tasheelut Taareekh: History Made Easy

GRADE 4:

Tasheelul Aqaa-id: Aqaa-id Made Easy

Tasheelul Figh: Figh Made Easy

Tasheelul Akhlaaq Wal Adaab: Akhlaaq and Aadaab Made Easy

Tasheelul Ahaadeeth: Ahadeeth Made Easy Tasheelut Taareekh: History Made Easy

GRADE 5:

Tasheelul Aqaa-id: Aqaa-id Made Easy

Tasheelul Fiqh: Fiqh Made Easy

Tasheelul Akhlaaq Wal Adaab: Akhlaaq and Aadaab Made Easy

Tasheelul Ahaadeeth: Ahadeeth Made Easy Tasheelut Taareekh: History Made Easy

GRADE 6:

Tasheelul Aqaa-id: Aqaa-id Made Easy

Tasheelul Fiqh: Fiqh Made Easy

Tasheelul Akhlaaq Wal Adaab: Akhlaaq and Aadaab Made Easy

Tasheelul Ahaadeeth: Ahadeeth Made Easy

Tasheelut Taareekh: History Made Easy

GRADE 7:

Tasheelul Aqaa-id: Aqaa-id Made Easy

Tasheelul Fiqh: Fiqh Made Easy

Tasheelul Akhlaaq Wal Adaab: Akhlaaq and Aadaab Made Easy

Tasheelul Ahaadeeth: Ahadeeth Made Easy Tasheelut Taareekh: History Made Easy

GLOSSARY

This Glossary contains Arabic words and terms that have been in frequent use in this study. Words which were used once with its meaning provided have not been included here.

'abd: servant (of God).

adab (pl. ādāb): good manners or humaneness. In this study it was used to denote recognition and acknowledgement of the right and proper place of all things and beings - manifested in the condition of justice.

'adl: justice or equity.

ākhirah: the hereafter.

akhlāq: character or morals of a person. The term is also used to refer to a subject area in the religious sciences which deals with the ethical and moral principles of Islam.

'amāl: actions or deeds.

'amāl ṣālihāt: good actions or deeds which incorporate just and virtuous conduct.

amānah: trusteeship; it also refers to the Divine trust of vicegerency granted to, and accepted by humanity.

'aqīdah (pl. aqā'id): belief or doctrine.

ard: earth.

āyāh (pl. āyāt): sign of God or verse of the Qur'an.

bī'ah: environment.

fasād: corruption which incorporates, according to the interpretation of many scholars, immorality, social decay *and* environmental degradation.

figh: jurisprudence in Islam.

fitrah: the natural state or original disposition of humankind.

ghusl: the major ritual ablution which requires washing of the whole body.

ḥadīth (pl. aḥādith): a saying or tradition of Prophet Muhammad 🙈.

hajj: the pilgrimage to Makkah performed once a year during the Islamic month of Dhul Hijjah. It is one of the pillars of Islam and is performed once in a lifetime by a Muslim who is able to do so.

<code>harīm</code>: a sacred, inviolable place which in an institutional sense is used to denote inviolable zones surrounding water courses, roads and settlements.

hifdh: the memorisation of the Qur'an.

 $him\bar{a}$: a reserve or sanctuary established for the preservation of natural habitat and managed for either conservation or sustainable production. $Him\bar{a}$ are established for public purposes and have been in existence since the pre-Islamic era.

<code>hisbah</code>: an institution established under the authority of the Islamic State which is charged with encouraging people to carry out the responsibility of enjoining what is right and leaving what is wrong. Among its objectives, which are broadly concerned with public welfare, is environmental care and protection. The <code>muḥtasib</code> is in charge of the <code>office</code> of the <code>hisbah</code>.

'itidāl: moderation or temperance.

ihsān: goodness or beneficence.

'ilm: knowledge, learning or intellection.

īmān: faith or belief.

imām: a leader. It may also refer to the one who leads others in prayer and may be used as a title of respect for scholars of the religious sciences.

khalq: Creation.

khalīfah: successor or vicegerent. It can also be used to refer to the head of the Islamic state.

khalīfatullah fil-ard: vicegerent of God on earth.

khilāfah: vicegerency or trusteeship.

khutbah: A speech, address or sermon, especially that given at Fridays and 'Eid prayers.

madrasah (*pl. madāris*): an Islamic college which provides tertiary education, at times it is associated with a mosque and/or provides boarding to students. In the South African context, *madrasah* generally refers to an institution which provides education in the religious sciences at the elementary level.

maktab (pl. makātib): an elementary school which historically provided both secular and religious education but which focuses by and large on education in the religious sciences today.

maqāsid al-Sharī'ah: the objectives of the Sharī'ah.

maṣāliḥ al-khalq: the welfare of all Creation.

masjid (pl. masājid): mosque.

mīzān: balance, measure, justice and equity.

mu'addib: educator or teacher. This term has historically been used for elementary school teachers.

mu'allim: teacher or instructor.

murabbī: educator or pedagogue.

qist: justice, fairness or equity.

ṣadaqah: voluntary charity.

Sharīʻah: Islamic law.

ta'dīb: education. In this study it was used to denote one of the key objectives of Islamic education, social activism or good action.

ta'līm: instruction, teaching or education. In this study it was used to refer to knowledge acquisition as reflective and deliberate engagement with knowledge.

tarbiyyah: education, upbringing, instruction, breeding or pedagogy. In this study it was used to refer to the learning process as one of socialisation towards responsible action.

tārīkh: history but used in this study to refer to Islamic history in particular.

taskhīr: subjugation or subjection which refers to that fact that use of the earth's resources has been made easy for Creation – this use should be exercised according to God' Will.

tawḥīd: belief in the unity of God or monotheistic belief. The term tawḥīdic has also been been used in this study in relation to the monotheistic worldview which Islam evinces.

'ubudiyyah: slavery, serfdom and humble veneration towards the Creator.

'ulemā: scholars or people of knowledge.

ummah (pl. umam): community or nation, the body of Muslims as a distinct and integrated community.

waqf (pl. awqāf): a charitable endowment.

wuḍu: ablution which is required before performing certain acts of ritual worship such as the five daily prayers.

 $\it zak\bar ah$: the alms tax or poor tax which is one of the central institutions of Islam. It is essentially a financial responsibility in which a stipulated percentage of one's surplus wealth is given in charity to the needy.