

EDWARD S' VIEW OF NATURE

JONATHAN EDWARDS' UNDERSTANDING OF THE NATURAL
WORLD AND MAN'S RELATIONSHIP TO IT

by

George Arthur Tattrie

A thesis submitted to Faculty of Religious Studies,
McGill University, in partial fulfillment of the
requirements for the Degree of Doctor of Philosophy.

March 1973

© George Arthur Tattrie 1973

ABSTRACT

This thesis undertakes to discover whether Jonathan Edwards' interpretation of the natural world and man's relationship to it contributes significantly to the ecological debate which is now raging. Edwards' interpretation goes beyond the Biblical doctrine of creation and his approach is more helpful than other Christian alternatives to it. He asserts that man occupies the central place in the created order, that his activity should be more helpful to its life than that of any other creature, but that this activity is often the most destructive of all creaturely activity.

Edwards views the natural order as a community whose characteristics are purposiveness, unity, individuality and corporateness, obedience to external authority, order, consent and service. He is ambiguous in his attribution of morality to this community. He contends that man alone has the capacity for morality. He also maintains that because the natural community participates in Being, its activity reflects the divine will, which itself conforms to the divine wisdom. Therefore, he implies that the natural world is also characterized by a moral quality.

Edwards' approach to the natural world and man's relationship to it raises certain issues, which he treats fully. His thought has the characteristics of both the Inclusionist and Exclusionist view of the natural world but he cannot be classified exclusively as one or the other.

The final chapter assesses the uniqueness and significance of Edwards' understanding of the natural world and man's relationship to it. We dispute A. V. G. Allen's assertion that Edwards' thought does not treat this relationship. Edwards' understanding of the natural world can be criticized for its inconsistency and idealism. However, only an understanding such as his is sufficient to deal with the crisis in man's relationship with it, which is upon us.

SOMMAIRE

Le sujet de cette thèse est de savoir si Jonathan Edwards apporte une contribution notable au débat contemporain sur l'écologie, quant à son interprétation du milieu naturel. Edwards pousse ses recherches au delà de l'interprétation biblique de la cosmogénèse et sa façon d'envisager la question est plus valable que les autres tentatives chrétiennes. Il soutient que l'homme occupe le premier rang dans l'univers, que l'agir devrait être davantage bienfaisant à l'univers que ne l'est celui des autres créatures, bien que l'agir humain soit souvent le plus dévastateur parmi l'ordre créé.

L'univers lui apparaît comme étant une communauté dont les signes caractéristiques sont les suivants: détermination, unité, individualité, collectivité, obéissance à une autorité extérieure, ordre, assentiment et service. Edwards ne définit pas clairement l'activité morale de cette communauté. Selon lui, l'homme seul posséderait une activité morale. L'activité de l'univers refléterait la volonté divine, laquelle à son tour, obéirait à la sagesse divine, étant donné que l'univers est fondé sur l'être. A la suite de ce raisonnement, il attribue une certaine qualité morale à l'univers.

La position avancée par Edwards concernant le milieu environnant et les liens qui relient l'homme à ce milieu soulèvent des questions qu'il examine dans leurs moindres détails. Quoique l'on puisse rapporter sa vision de l'univers à une interprétation à la fois exclusive et inclusive. L'on ne peut, cependant, la classer dans l'une ou l'autre catégorie.

Le dernier chapitre analyse le rapport entre l'homme et son milieu naturel et fait ressortir l'importance et l'originalité de la position soutenue par Edwards. L'auteur de cette thèse s'inscrit en faux contre l'affirmation de A. V. G. Allen, à savoir qu'Edwards ne traite pas ce rapport entre l'homme et son milieu naturel. Certes, la façon dont Edwards aborde tout le problème écologique peut lui attirer des mauvaises critiques, en ce qui concerne les contradictions et l'idéalisme de sa pensée. Toutefois, ce n'est qu'en se basant sur les réflexions d'Edwards que l'on puisse espérer faire face à la crise qui se dessine dans le monde naturel.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS.	vi
PREFACE.	x
INTRODUCTION	1
Place of the Natural World in Edwards' Life.	2
The Intellectual Environment	8
CHAPTER I SOURCES OF EDWARDS' UNDERSTANDING OF	
THE NATURAL WORLD	15
Introduction	15
The Puritan Tradition.	15
Typology and the Natural World in Puritanism and in Edwards' Thought.	20
John Calvin.	26
The Cambridge Platonists.	35
Isaac Newton and John Locke.	42
Francis Hutcheson	55
Summary.	59
CHAPTER II THE DOCTRINE OF	
CREATION.	75
Introduction.	75
The Biblical Understanding of Creation.	75
Edwards' Understanding of Creation.	78
An Alternative Understanding of Creation.	86
Summary.	93

CHAPTER III MAN AND HIS ACTIVITY IN	
THE NATURAL WORLD. . . . .	.103
Introduction. . . . .	.103
Man and the Natural Order.	103
Faith and Man's Activity in the Natural World. . . .	110
The Nature of Secular Activity. . . . .	.113
Summary.	115
CHAPTER IV KNOWLEDGE AND THE NATURAL	
WORLD IN EDWARDS' THOUGHT.	121
Introduction. . . . .	.121
The Place of Knowledge in Edwards' Understanding of the Natural World. . . . .	.121
The Nature of Knowledge in Edwards' Understanding of the Natural World. . . . .	.126
Summary.	131
CHAPTER V THE CHARACTERISTICS OF THE	
NATURAL COMMUNITY. . . . .	.140
Introduction. . . . .	.140
The Natural Community is Characterized by Purposiveness.	140
The Natural Community is Characterized by Unity. . .	142
The Natural Community is Characterized by In- dividuality and Corporateness.	144
The Natural Community is Characterized by Obedience	

to External Authority. . . . .	.151
The Natural Community is Characterized	
by Order.	152
The Natural Community is Characterized	
by Consent.	154
The Natural Community is Characterized	
by Service.	154
Summary. . . . .	.155
CHAPTER VI THE MORALITY OF THE	
NATURAL WORLD. . . . .	.163
Introduction.	163
Morality in the Natural Community. . . . .	.163
Love and the Natural Community.	168
Summary. . . . .	.172
CHAPTER VII A CONCEPTION OF THE	
NATURAL WORLD.	180
Introduction.	180
The Natural Community as Divine Act. . . . .	.180
The Natural Community and the Divine Wisdom. . . . .	.183
The Natural Community and the Unity of the	
Godhead. . . . .	.185
Summary. . . . .	.191
CHAPTER VIII ISSUES.	199
Introduction.	199

The Interpretation of the Fall.	200
The Relationship Between Creation and Redemption. . .	213
Secularization and Man's Responsibility for the Natural Order.	221
The Interpretation of Natural Law.	229
The Presence of Estrangement in the Natural Order. .	234
Technology and Man's Use of the Natural Order. . . .	237
Man's Relationship to his Environment.	243
The Relationship Between Reason and Revelation. . . .	254
The Relationship of the Holy Spirit to the Natural Order.	259
Summary.	263
CHAPTER IX EDWARDS AS INCLUSIONIST AND EXCLUSIONIST.	
Introduction.	292
The Exclusionist Understanding of Man's Relation- ship to the Natural World.	293
The Inclusionist Understanding of Man's Relation- ship to the Natural World.	298
Edwards as Inclusionist and Exclusionist.	304
Summary.	310
CHAPTER X THE UNIQUENESS AND SIGNIFICANCE OF EDWARDS' UNDERSTANDING OF THE NATURAL WORLD AND MAN'S RELATION-	

SHIP TO IT.	318
Introduction.	318
Edwards' Understanding of Man's Relationship to the Natural World.	318
The Uniqueness of Edwards' Understanding of the Natural World and Man's Relationship to it. .	326
The Significance of Edwards' Understanding of the Natural World and Man's Relationship to it. .	332
Concluding Remarks.	339
Evaluation.	342
BIBLIOGRAPHY.	355

LIST OF ABBREVIATIONS

The following references to Works are to The Works of President Edwards, a reprint of a London edition of 1817, 10 volumes, New York: Burt Franklin. Research and Source Work Series No. 271, 1968. In the cases of the Miscellanies and the Notes on the Mind the citations refer to number rather than page.

Code	Title and Source
C.C.	<u>Christian Charity. Works, 5,</u> 397-429.
C.F.	<u>Charity and its Fruit. Ed. Tryon</u> <u>Edwards. New York: Robert Carter</u> <u>and Brothers. 1856.</u>
C.K.	<u>Christian Knowledge. Works, 5,</u> 375-394.
D.L.	<u>A Divine and Supernatural Light</u> <u>Immediately Imparted to the Soul</u> <u>by the Spirit of God, Shown to be</u> <u>both a Scriptural and Rational</u> <u>Doctrine. Works, 8, 3-20.</u>
D.M.	<u>The Distinguishing Marks of a Work</u> <u>of the Spirit of God. Works, 8,</u> 541-594.
D.S.	<u>Divine Sovereignty. Works, 6,</u> 477-487.
E.C.	<u>A Dissertation Concerning the End</u> <u>For Which God Created the World.</u> <u>Works, 1, 443-535.</u>
E.T.	<u>An Unpublished Essay of Edwards</u> <u>on the Trinity. Ed. G. P. Fisher,</u> <u>New York: 1903.</u>
F.W.	<u>Freedom of the Will. Ed. Paul Ram-</u> <u>sey, New Haven: Yale University</u> <u>Press, 1957.</u>
G.G.	<u>God Glorified in Man's Dependence.</u> <u>Works, 5, 435-449.</u>

- H.A. An Humble Attempt to Promote Explicit Agreement and Visible Union of God's People in Extraordinary Prayer. Works, 2, 431-541.
- H.R. A History of the Work of Redemption. Works, 5, 11-282.
- J.G. The Justice of God in the Damnation of Sinners. Works, 6, 360-398.
- Mind Notes on the Mind. Ed. Harvey G. Townsend, The Philosophy of Jonathan Edwards From His Private Notebooks. Eugene: University of Oregon Press, 1955.
- M.O. Miscellaneous Observations. Works, 10, 1-107.
Miscellaneous Observations on Important Theological Subjects. Works, 8, 133-300.
- M.R. Miscellaneous Remarks on Important Doctrines. Works, 8, 303-529.
- O.A. Of Atoms and Perfectly Solid Bodies. Ed. Harvey G. Townsend, The Philosophy of Jonathan Edwards From His Private Notebooks. Eugene: University of Oregon Press, 1955.
- O.B. Of Being. Ed. Harvey G. Townsend, The Philosophy of Jonathan Edwards From His Private Notebooks. Eugene: University of Oregon Press, 1955.
- O.I. Of Insects. Eds. Clarence H. Faust and Thomas H. Johnson, Jonathan Edwards: Representative Selections, with Introduction, Bibliography, and Notes. New York: American Book Company, 1935.
- O.S. Original Sin. Ed. Clyde A. Holbrook. New Haven: Yale University Press, 1970.

P.N.	<u>Personal Narrative.</u> Eds. Clarence H. Faust and Thomas H. Johnson, Jonathan Edwards: Representative Selections with Introduction, Bibliography and Notes. New York: American Book Company, 1935.
S.H.	<u>Sinners in the Hands of an Angry God.</u> Works, 6, 450-464.
T.G.	<u>A Treatise on Grace. Selections From the Unpublished Writings of Jonathan Edwards of America.</u> Ed. A. B. Grosart, Edinburgh: 1865.
T.V.	<u>A Dissertation Concerning the Nature of True Virtue.</u> Works, 2, 7-78.
W.U.	<u>The Wicked Useful in Their Destruction Only.</u> Works, 6, 535-550.
R.A.	see p. ix

Occasional references to Works are to The Works of President Edwards, 10 volumes, New York: G. & C. & H. Carvill, 1830. These references, listed below, are indicated in the text by the letter c.

Code	Title and Source
C.K.	<u>Christian Knowledge.</u> Works, 6, 265-283.
D.S.	<u>Divine Sovereignty.</u> Works, 6, 293-303.
E.C.	<u>A Dissertation Concerning the End For Which God Created the World.</u> Works, 3, 5-89.
H.R.	<u>A History of the Work of Redemption.</u> Works, 3, 165-436.
M.R.	<u>Miscellaneous Remarks on Important Doctrines.</u> Works, 7, 360-572.
N.S.	<u>Notes on Natural Science.</u> Works, 1,

702-761.

T.V.

A Dissertation Concerning the Nature
of True Virtue. Works, 3, 93-157.

R.A.

A Treatise Concerning Religious
Affections In Three Parts. Ed.
John E. Smith, New Haven : Yale
University Press, 1959.

PREFACE

The thesis of this work is that Jonathan Edwards had an understanding of the natural world and man's relationship to it that contributes to a contemporary approach to this issue. In expounding this thesis we shall examine the following:

1) The sources of Edwards' understanding of the natural world.

2) How Edwards understood the natural world and man's relationship to it. In this regard we shall take issue with the view expressed by Alexander V. G. Allen.

It is one of the characteristics of (Edwards') system that he makes no attempt to trace an organic relationship between man and nature. The external world existed only mentally and in the mind of God. The purpose of nature in relation to man, its necessity to his spiritual existence, the conflict of man with nature, the victory which is reached through perpetual struggle, and is manifested in the ever-increasing transmutation of the natural into the spiritual--these are thoughts that find no expression in his works.¹

3) Edwards' treatment of the issues implied in his understanding of the natural world and man's relationship to it.

4) The elements Edwards attempted to balance in his treatment of the natural world. Perry Miller states,

If nature. . .is an image in which men may perceive what for them is divine, sooner or later the veneration of nature will become secularized; the way will be opened

for an uninhibited enjoyment of it--and also for an unrestrained exploitation. Within three generations of Edwards, a child of the puritan tradition. . . was to find warrant for an unqualified naturalism in the certainty that the 'ethical character so penetrates the bone and marrow of nature, as to seem the end for which it was made.' Emerson signalized the destruction of the balance of the factors which Edwards strove to maintain and there seems little prospect of its being restored in New England or in America.²

How does this balance of factors, which Edwards sought to retain, either support or restrain "an unqualified naturalism" and the "unrestrained exploitation" of the natural world?

5) The inclusionist-exclusionist understanding of the natural world and the extent to which Edwards can be classified as one or the other.

6) The uniqueness, significance and adequacy of Edwards' understanding of the natural world and man's relationship to it.

NOTES

¹Alexander V. G. Allen, Jonathan Edwards, p. 196.

²Perry Miller, Images, Editor's Introduction, p. 37.

INTRODUCTION

Jonathan Edwards was born into a primitive, agricultural frontier society that was pragmatic in temper, increasingly commercial in spirit and parochial in outlook and experience.¹ The dominant physical fact with which this society lived was the omnipresence of the natural world, in the face of which man must have seemed insignificant.²

This wilderness environment affected not only social institutions³ but provided the very basis of the economic life of the people at the beginning of the eighteenth century.⁴ The fur trade, fishing, farming, logging and ship building were all more important in the life of New England than was manufacturing, which was still very much on a small scale.⁵ New England society was dependent upon the natural world for its very life and exploited it ruthlessly and destructively, especially following the peace of Utrecht.⁶

As the century wore on a commercial spirit and activity began to dominate New England life.⁷ Growth in iron manufacturing, the brewing industry, the steel industry, land speculation, inflation and population were all features of this period. The social and economic life was becoming characterized by an increase and concentration of wealth, a more distinct difference between rich and poor, and the growth of economic and social

grievances, especially among "the depressed agriculturists and the befooled frontier settlers" of the north.⁸

In all of this the natural world continued to exert its influence and, at least for the first half of the eighteenth century, was the dominant force shaping the life and molding the thought both of the people with whom Edwards lived and of Edwards himself.⁹

PLACE OF THE NATURAL WORLD IN EDWARDS' LIFE

For the first thirteen years of his life Edwards lived in the parish house of East Windsor, a remote frontier village, where conflict with Indians was still a reality and where the town limits were the boundaries of life.¹⁰ It is not surprising that in this situation both the beauty and majesty of the natural world should have stamped themselves ineradicably upon one as sensitive and observant¹¹ as the young Edwards.

In such a setting nature would have been the most important daily fact to a sensitive child. With a horizon in all four directions he could hardly have escaped impressions of a spacious world; a world of meadows, unending forests, the river; a world of ever changing beauty, not a world of man's making.¹²

From his earliest days Edwards had a feeling for beauty, space,¹³ and magnitude which was never to leave him and which was continually reflected in all his works.

Edwards was evidently more than a keen observer. He had an eye for nature's loveliness as well as for its facts. Astonishing as was his capacity for observation, his power of appreciation kept pace with it. Detached he could be, and analytical in recording what his eyes reported to him, fresh and untrammelled by tradition in his first-hand acquaintance with the actual behaviors and characteristics of the world of nature. But his eye was also fresh and sensitive to loveliness, to 'beauties of nature in the air and on the face of the earth'. . . a relentless curiosity was the root of his devotion to science. A love of beauty made him an artist. These two approaches to the world were permanent highways along which his mind constantly traveled.¹⁴

Winslow suggests that much of this training in strict accuracy, which characterized his thought, was instilled in Edwards by his father who, as Edwards' sole teacher, managed to provide him and his sisters with the equivalent of a college-preparatory course before he left for Yale. Timothy Edwards, we are told, "made thoroughness one of the Ten Commandments"¹⁵ and when Edwards came to investigate the natural world, thoroughness, above all else, characterized his work. Edwards, we know, spent "multitudes of times" in the fields and woods behind the parsonage, beholding with "wonderment and pleasure," the spiders marching in the air from one tree to another, "their shining little webs and Glistening Strings of a Great Length and at such a height as that one would think they were tack'd to the Sky by one end were it not that they were moving and floating."¹⁶

Edwards' essay on spiders and others similar have been

used to illustrate Edwards' precocity in physical science.¹⁷ Some have disputed this characterization, stating that "Edwards was never very deeply or exclusively interested in natural science" and was not really "a remarkable scientific observer."¹⁸ But attempts to demonstrate the inadequacies of Edwards' scientific observations and hypotheses merely strengthen the conviction, supported by a majority of commentators, that Edwards' interest in the natural world was both abiding and, to the limit of his resources, thoroughly scientific.¹⁹ Concerned that his experiments would survive the scrutiny of those who would repeat them, he "repeated the triall Over and Over again till I was fully satisfied of his (the spider's) way of working."²⁰ Nor did Edwards consider all spiders indiscriminately but rather "made a rude division of various tribes of spiders, which so far as it goes, is at least sufficiently accurate for all popular purposes."²¹ Thus, Winslow can state that when Edwards wrote of spiders

he wrote not of something which transiently caught his eye, but of a world which belonged to him by right of long and deep intimacy. . .

The fact is that Jonathan Edwards' observation of flying spiders is accurate so far as it goes, even when tested by the findings of mature observers in a later day. As the findings of a boy who had no training in scientific observation, no microscope, no body of specialized knowledge by which to test his own observations or his conclusions from them, this juvenile effort is indeed arresting. . .

The deductions leading from his observations are even more arresting: the basis for classification, the theory of equilibrium by which he explains the spider's navigation of the air, the character of the web, even his naive justification of nature in providing creatures with just such an equipment.

The essay (offers) a glimpse into the world he lived in, a world of speculative thought reached through objective fact. It is illuminating also as a personal document out of his East Windsor boyhood, testifying to long afternoons in the meadow when as a little boy he lay on his back, apparently idle, but his mind and eye intent on the life of the fields.²²

The prevailing judgment that Edwards spent much of his early life in the fields and woods is supported by his own testimony:

I had particular secret places of my own in the woods, where I used to retire by myself. . . I often used to sit and view the moon for continuance; and in the day, spent much time in viewing the clouds and the sky. . .²³

Edwards was never gregarious. By choice and temperament he was almost a recluse.²⁴ Having never learned to socialize he was aware of his deficiency,²⁵ but left it to his wife to assume the major responsibilities in this area.²⁶ We can only speculate on the extent to which his relative isolation reinforced these tendencies in Edwards. However we can agree with Winslow, that the ubiquitousness of disease and accident, the exigencies and dangers of a frontier existence and its inherent isolation combined to impress upon Edwards from his earliest days, the real-

ity of death, the transitoriness of life, and man's impotence in the face of the forces of nature and the will of God.

Edwards never once escaped this environment in which he seemed to be at home. The town of Northampton "far within the land, at a distance from seaports and in a corner of the country"²⁷ was termed by the Boston newspapers as "our Western frontier."²⁸ Here, where Edwards spent the great part of his professional life, "roads were merely paths, made for horseback travel only, and lost to view at the edge of the clearing. On all sides deep forests blotted out the horizon. Only the river led out."²⁹ And when Edwards moved to Stockbridge he moved to the hills and the Indians.³⁰ It was the extreme edge of civilized America, beyond the line of the frontier and a mere dot in the wilderness. Its population consisted of twelve white and two hundred and fifty Indian families.³¹

It was in the world of the commonplace that Edwards experienced the reality of God; in the objective fact of the spider and its web, in the dew on the fields, in the motion of the wind, the flights of insects. The natural world was thus the medium through which Edwards most naturally conceived of himself as conversing or communing with Him. Year after year, he states, "I spend most of my time in thinking of divine things, often walking alone in the woods and solitary places for meditations . . . and converse with God."³² In the midst of fields, woods, water and solitary places Edwards found the spiritual refreshment without which he could not live.³³

In the natural world Edwards found sustenance because through it he experienced a non-physical reality that for him was requisite to sustain all physical reality. This experience, however, was unique in that it could not be communicated to another. "I know not how to express the glorious majesty and grace of God" and the "sense of divine things" which was experienced while among "the works of nature."³⁴

Edwards had to experience these "divine things" alone. Again and again he stressed the solitary nature of his religious experience. "I walked abroad alone, in a solitary place in my father's pasture, for contemplation." "I very frequently used to retire into a solitary place, on the banks of Hudson's River, at some distance from the city, for. . .secret converse with God; and had many sweet hours there." "I had a sweet and refreshing season, walking alone in the fields" etc.³⁵ The natural world was indispensable for Edwards not only because it provided the medium through which he perceived the reality of God, but also because it was the physical context in which this perception became possible.

Hence, the natural world played many roles in Edwards' life. It was the dominant feature of his environment. It was a medium through which the Creator made visible his reality while at the same time it was one through which the creature could gain a knowledge of the Creator. Furthermore, it provided a context in which the reality of the Creator's presence

could be personally experienced. Finally, its beauty provided Edwards with an appreciation and understanding of the nature of beauty, which was to provide a key element in his understanding of the natural world and of man's relationship to it.

THE INTELLECTUAL ENVIRONMENT

Against this social, economic and physical background a vigorous intellectual and cultural life was springing up in New England. Between 1690 and 1713 the cultural orientation and direction in New England changed from European to colonial,³⁶ although the European influence never ceased to be felt. Intellectual resources were not great, yet relatively large libraries were not infrequent. The largest library in the colonies during this period was that of Cotton Mather, which numbered about three thousand volumes.³⁷ There was a widespread importation of books, a practice in which Edwards himself frequently indulged.³⁸ Thus the New Englander who trafficked in ideas was linked with the ferment in European thought. The effect of this thought was especially noticeable in the increasing rationalism of New England society, and the decline of its theological and religious undergirding. It was also seen in an advance over the extreme parochialism of earlier generations and in the increasing conflict between science and religion.³⁹ This latter conflict was not to be easily resolved. The foundations for scientific exploration and investigation in America were being laid in this

period "and in all the principal colonies there were now men who were in close touch by correspondence with the foremost men in Europe and who were contributors to a number of the leading scientific societies of the Old World."⁴⁰

Advances in the arts and various artistic forms, the rise of political consciousness, the growth of a natural law tradition, increasing secularization and the disintegration of religious tradition also characterized this period.⁴¹ These features of the native culture developed mainly during the period 1713-1745 and remained throughout his lifetime the dominant characteristics of the society into which Edwards was born.⁴² That he was a product of this culture is shown not only by his interest in such matters as electricity⁴³ but also in his acceptance of the social conventions of his day such as slavery,⁴⁴ as well as by his expression of the prevailing nationalistic sentiment.⁴⁵

NOTES

¹James T. Adams, Provincial Society, 1690-1763, Chapter I.

²"The forest covered the entire land and if one could have looked down upon the Atlantic Coast from the air, he would have seen an almost unbroken sweep of tree tops from the sparkling waves of ocean westward, showing only here and there the glint of river and stream and the clearings of occasional solitary farms or, more seldom, the larger ones of village or town." (ibid., p. 93)

³ibid., p. 14 ff.

⁴ibid., Chapter II.

⁵ibid., p. 39.

⁶ibid., p. 32 ff.

⁷ibid., Chapter IX.

⁸ibid., p. 256.

⁹Elisabeth Dodds states that travelling to Northampton following their marriage Edwards and his bride were surrounded by "the smell of wilderness. . . coming from tangles of wild grapes, raspberries, plums, bayberries and currants on hills where panthers, lynx, bobcat and bear still padded through the woods." (Elisabeth D. Dodds, Marriage to a Difficult Man, p. 26)

As for Northampton itself, "a frontier mood still lingered in that area of mountainous western Massachusetts when the Edwardses first arrived in the settlement. At Northfield, on its breathtaking site up the river a bit, was a fort. Only a few canoes carrying trappers and soldiers had ventured much beyond." (ibid., p. 27)

¹⁰Ola Elizabeth Winslow, Jonathan Edwards, p. 36.

¹¹Edwards had an admitted penchant for detailed observation and logical precision. He writes: "One reason why, at first, before I knew other logic, I used to be mightily pleased with the study of the old logic was because it was very pleasant to see

my thoughts, that before lay in my mind jumbled without any distinction, ranged into order and distributed into classes and subdivisions, so that I could tell where they all belonged and run them up to their general heads." (Mind, p. 17)

¹²Winslow, op. cit., p. 39.

¹³Edwards received his impression of space in large part from his geographical location. He attempted to use this concept for his own purposes in his earliest works.

"Space is the very thing that we can never remove and conceive of its not being. . . . And it is indeed clear to me that all the space there is, not proper to body, all the space there is without the bounds of the creation, all the space there was before the creation, is God himself." (O.B., p. 1, 2)

¹⁴A. C. McGiffert, Jr., Jonathan Edwards, p. 16. Dodds also reports that "both Edwards and Sarah enjoyed tramping on beaches and through woods. Sarah discovered that the young man who had at first appeared pallidly bookish was an observant naturalist and a stimulating guide to nature." (op. cit., p. 22)

¹⁵Winslow, op. cit., p. 45.

¹⁶O.I., p. 3.

¹⁷See for example Henry C. McCook, "Jonathan Edwards as a Naturalist", Presbyterian and Reformed Review, Vol. 1, July 1890, pp. 393-402.

"This review of Natural History studies by young Edwards will suffice to justify (the assertion) that the observations recorded by him present a very curious and interesting proof of philosophic attention in a boy of twelve years, and evince that the rudiments of his great mind were even at that immature age more than beginning to be developed. . . . Had he devoted himself to physical science, he might have added another Newton to the extraordinary age in which he commenced his career, for his star was just rising, as Newton's was going down." (p. 400)

¹⁸Clarence Faust, "Jonathan Edwards as a Scientist", American Literature 1:1929-30, p. 394, 401.

¹⁹For example Rufus Suter, "Jonathan Edwards: An American Pascal", Scientific Monthly, 68:May 1949, 338-342. The thesis

of this article is that Edwards "showed in his boyhood signs of an aptitude (for science) that might have flowered if a religion as lugubrious as that of his French predecessor (Pascal) had not nipped it in the bud. Like Pascal a precocious early insight into the problems of physical science was sacrificed to the religious passion." (p. 338)

Suter goes on to state that Edwards' observations on physics, meteorology and astronomy still have validity today, that he attempted to express the identity of lightening and electricity a generation before Franklin's kite experiment, and that he understood correctly the nature of clouds and rain.

²⁰O.I., p. 4.

²¹McCook, op. cit., p. 394.

²²Ola Winslow, op. cit., pp. 40-43.

²³P.N., p. 57, 61.

²⁴We are told that Edwards spent up to thirteen hours per day in his study and that "his wife so managed that he was as free as he cared to be to devote himself to the work he was most fitted to do." (McGiffert, op. cit., p. 92) And according to Edwards' own testimony, this was to study.

²⁵"To the end of his life he was not socialized. This first experience in group living (at Yale) had served to isolate him still more in a world to which he could never belong." (Winslow, op. cit., p. 75) Yet McGiffert suggests that Edwards could never find permanent satisfaction in the world of speculation and that he had a "deep-seated craving for social reinforcement" as evidenced by the fact that he chose to become a leader in the church (p. 25). This view is strengthened by Winslow's account of Edwards' hospitality in the wilderness of Stockbridge. (op. cit., p. 263-264)

²⁶McGiffert, op. cit., p. 168.

²⁷"Narrative of Surprising Conversions", quoted in McGiffert, op. cit., p. 37.

²⁸Winslow, op. cit., p. 108.

²⁹ibid.

³⁰McGiffert, op. cit., p. 139.

³¹Winslow, op. cit., p. 248.

³²P.N., p. 61.

³³P.N., pp. 64-66.

³⁴P.N., p. 60.

³⁵P.N., p. 57 ff.

³⁶James T. Adams, op. cit., Chapter V.

³⁷ibid., p. 115.

³⁸Winslow, op. cit., p. 115. Dodds reports that the interior of Edwards' house "was most of all distinctive because it was full of books." (op. cit., p. 31) In order to get the books he wanted, Edwards, "scrounged shamelessly. Once he persuaded the parish to give him a salary increase for books. He was a chronic borrower, and when books were the game, he forgot his shyness and went after the trophies he wanted. . . . When he died he left 336 volumes and 536 pamphlets, a considerable library for that era." (ibid.)

³⁹Adams, op. cit., p. 269-270.

⁴⁰ibid., p. 272.

⁴¹ibid., pp. 273-279.

⁴²ibid., Chapter X.

⁴³Thomas H. Johnson, "Jonathan Edwards' Background of Reading", Publications of the Colonial Society of Massachusetts, 28:Dec., 1931, p. 213.

⁴⁴Winslow, op. cit., p. 203.

⁴⁵ibid., pp. 212-214.

CHAPTER I

SOURCES OF EDWARDS' UNDERSTANDING OF THE NATURAL WORLD

INTRODUCTION

In this chapter we will investigate sources of Edwards' understanding of the natural world. We find the following to be especially significant for this aspect of his thought: the Puritan tradition, John Calvin, the Cambridge Platonists, Isaac Newton, John Locke and Francis Hutcheson. This discussion will establish that there was present, in Edwards' background of reading, a concern to understand the natural world, its purpose and significance and that this concern was reflected in his own thought. We shall then summarize our discussion. Having established that Edwards did have a definite understanding of the natural world, we shall turn, in the subsequent chapters, to an investigation of this understanding as such.

THE PURITAN TRADITION

Edwards, said Perry Miller, was a Puritan and a Calvinist.¹ The Puritan tradition² surrounded Edwards from his ear-

liest days and sustained him until their end. Among the elements that constitute this tradition are the following:³

- 1) The belief that the visible universe is under God's direct and continuous guidance.
- 2) Although God governs the world, He is not the world itself.
- 3) His will is to be studied in the operation of His providence as exhibited in the workings of the natural world.
- 4) It is the will of God that man seek and maintain a complete harmony of reason and faith, science and religion, earthly dominion and the government of God.

These axioms, it is safe to assume, were well known by Edwards as he contemplated the wonders of the natural world which everywhere surrounded him. His natural piety would also, we suggest, support the Puritans' tendency to conceive of religion as a stimulus to science.⁴ They were "concerned with absorbing the scientific discoveries of the 'century of genius'

and passing them on to the people in such a form and manner as to enhance love of God through knowledge of his wonderful works. . . ."⁵

In 1686 there arrived in New England two English dissenters, Charles Morton and Samuel Lee, who were strongly committed to this point of view.⁶ Both were influential in promoting interest in the latest scientific discoveries. Lee attempted this through the publication of a number of treatises such as "Joy of Faith" and "Day of Judgment" in which the new scientific discoveries were improved to the glory of God.⁷ Morton compiled, for the use of his pupils at his academy near London, a science textbook entitled Compendium Physical or Natural Philosophy. This work was adopted at Harvard and continued to be used as the scientific text both there and at Yale until 1725. Every student was expected to have his own copy.⁸

By 1663 Robert Boyle had published his Usefulness of Experimental Natural Philosophy. In 1691 John Ray's The Wisdom of God Manifested in the Works of Creation appeared. These two were the first writers to give new impetus to natural theology in England through their efforts to turn to the use of religion the new discoveries of seventeenth century science. Enthusiasm for the facts being established by the new science and wonder at the complexity and immensity of the world revealed by it mark their work.⁹ To these writers were added the interest and work of Cotton Mather, who, in his The Wonderful Works of God Commemor-

ated speaks at length of the mysteries revealed by the microscope:

There is not a Fly, but what would confute an Atheist. And the little things which our Naked Eyes cannot penetrate into, have in them a Greatness not to be seen without Astonishment. By the Assistance of Microscopes, have I seen Animals of which many Hundreds would not equal a Grain of Sand. How Exquisite, How Stupendous must the Structure of them be.¹⁰

The similarities between Mather's work and that of Boyle and Ray has been demonstrated by Hornberger.¹¹ In all three the point of view is that the world is well planned and well ordered, that it is beautiful, that to study nature is to realize God's goodness, and therefore, that man can appreciate God by the exercise of observation and reason.¹²

We know that Edwards knew Mather and his works, and possibly through him the works of Boyle and Ray.¹³ Mather's works were published between 1702 and 1721 at the time when Edwards' interest in the new science and the natural world was intensifying. Given the influence of the Mathers in the intellectual and ecclesiastical affairs of New England at the turn of the century and given the fact that Edwards was an omnivorous reader, who was "starved for reading," it would seem logical that Edwards would be well acquainted with Mather's thought. In addition we are told that the Copernican system or the "new science" was being widely disseminated in the universities when Edwards was

a student¹⁴ and among the texts being studied was Boyle's Usefulness of Experimental Natural Philosophy.¹⁵

Mather, Boyle and Ray reflect the new scientific discoveries and questions with which Edwards grew up. Each new discovery was a further manifestation of God's nature. Each new discovery also raised the question of how it was to be applied to man's spiritual condition. Therefore "the Works of Nature are not in vain", wrote John Preston.¹⁶ Traces of the divine nature are to be found in the material universe as well as in the human soul. The study of nature was therefore to be pressed into the service of theology. Hence it was the duty of the Christian to discover the order of nature, which was God's order, and to formulate this order into the "laws of nature."¹⁷ These laws, then, were God's laws, by which he abided. For the Puritan, God worked within the framework of the natural world which was "God's Providence in operation."¹⁸

The facts of nature were a clue to the divine purpose and order, to God's self communication. Hence the facts of the natural world had to be interpreted so as to make this purpose clear. And unless this interpretation could be drawn from the facts as they presented themselves upon investigation, the facts themselves were useless. In the Puritan tradition, faith and reason were as far as possible reconciled. Both come from God.¹⁹ It will be seen that this was also Edwards' position.

TPOLOGY AND THE NATURAL WORLD IN PURITANISM AND IN EDWARDS'
THOUGHT

Edwards, by temperament and training, was a thoroughgoing rationalist.

Rationalism is not the whole of Edwards' philosophy but it is the basis of it. By temperament and early training he was already a rationalist. It seems to have been natural to his mind to suppose that the world is a completely rational system, plan, scheme, purpose. The absolute reign of universal law was the presupposition of all his speculations and the object of his most ecstatic religious devotions.²⁰

Rationalism was also a central feature of Edwards' tradition. According to Miller the person who was most influential in developing this aspect of the tradition was Petrus Ramus.²¹

His textbook Dialecticae Libri Duo was used continuously in seventeenth century New England and was supplemented by his other works.²² By Edwards' time, however, the influence of Ramean logic was not great.²³ Yet Edwards knew Ramus well and was thoroughly instructed in his method.

His (Edwards') sophomore year laid that foundation of logic on which his later fame was to rest. Four days a week were devoted to the study of it. . . . The logic that he learned in the sophomore year was employed constantly, for all undergraduates disputed syllogistically five times a week, using as textbooks Ramus. . .²⁴

Traces of the Ramean system can be seen in such works as The Mind and Images or Shadows of Divine Things. Miller has

outlined the elements of this system.²⁵

1) The world is a copy or material counterpart of an ordered hierarchy of ideas existing in the divine mind.

2) All that logic need do, therefore, is to draw up an account of how things follow one another in nature. If the account corresponds to the way things actually are, men can safely act upon it.

3) The generalized concepts of the mind are eternal ideas, the authentic realities upon which the world is constructed.

4) Truth is perception of immutable essences. Virtue is conformity to them and beauty is correspondence to them.

5) We discover these essences in nature and in human intelligence or the mind, since the soul contains an intuitive knowledge of the eternal truths which govern the world.

The Ramean logic thus became a systematized grouping of all the ideas, sensations, causes and perceptions in the world so that a diagram of the logic was practically a blueprint of the universe.²⁶ This method implied the assumption of a natural reason in man which can discern an inherent rationality in things, in the mind and in the order of the universe. And this rationality or intelligibility is given by God.

This is not to suggest that it was because of Ramus that the Puritans adopted the concept of a world built upon ideas in the mind of God. This has always been integral to the Christian

tradition and the Puritans were indebted to Augustine as much as to Ramus for it. However Ramus emphasized what was already central in the Puritan tradition and congenial to the Puritan temperament and he was, therefore, easily and widely accepted. Hence Ramus remained a primary influence on Edwards both because of Edwards' intense academic exposure to him and because his methodology and assumptions were congenial to Edwards' temperament, experience and outlook. Therefore it is not surprising to find Edwards suggesting, as Ramus suggested, that in no respect has the world a being except in the divine consciousness.²⁷

Edwards did not accept the Ramean concept of essences.²⁸ Yet, his own understanding of beauty, as that is revealed in The Mind is suggestive of Ramus, who conceived of beauty as correspondence to immutable essences.²⁹ For Edwards, that which is considered beautiful only with respect to itself and not with respect to the universe which contains all things is a false and confined beauty. "That which is beautiful with respect to the university of things has a generally extended excellence and a true beauty; and the more extended or limited its system is, the more confined or extended its beauty."³⁰

Whatever his differences with Ramus, Edwards was very much concerned to investigate the natural world and as far as possible arrange its features so that they too could be read or seen as "a blueprint of the universe" which mirrored or imaged the creative activity and purpose of God. Hence his attempt to

set forth the various types of nature by which the seeing man could perceive the harmony "between the methods of God's providence in (the) natural and religious world."³¹ Above all, Edwards turned to nature "in order that he might find the supernatural scheme of redemption articulated in terms compatible with the natural order."³²

Referring to this attempt, Miller suggests that Edwards wanted to set forth the principles of the spiritual universe, just as the Principia had set forth the material. "A catalogue of the language and lessons of nature would be more than a handbook of rhetoric; if done objectively, humbly, it would be a dictionary of the divine discourse."³³ As Edwards himself put it, he was concerned to show that "the immense magnificence of the visible world. . .is but a type of. . .the most incomprehensible expression of (God's) power, wisdom, holiness and love."³⁴

This is not to suggest that Edwards took over without criticism the tendency, common in the seventeenth and early eighteenth centuries, to spiritualize the world of nature. This rhetorical technique consisted in treating some facet of experience or some observed fact of contemporary life and "spiritualizing" it into a doctrine and a homiletic exhortation. The success of the new method was reflected in New England in the 1690's, especially by Cotton Mather who, with his contemporaries, produced a series of tracts which took as their starting points the common experiences of life, and spiritualized them.³⁵ Edwards, however,

could not indulge in what he considered such "pious spiritualizing" because he was both too much a Calvinist and too much a man of the eighteenth century, and as such an adherent of the new science.

Edwards shared Calvin's violent rejection of mediaeval scholastic typology and because of this understanding refused to countenance what he considered the flights of pious imagination indulged in by the local scholastics of his own generation. Indulging in such speculative flights of fancy can only give rise to confusion. "Observe the danger of being led by fancy: as he that looks on the fire or on the clouds, giving way to his fancy, easily imagines he sees images of men or beasts in those confused appearances."³⁶

That the imagination can be an enemy of the truth Edwards recognized early in his life. Thus he appended a footnote to his early essay Of Being entitled "Of the Prejudice of Imagination."

Of all prejudices no one so fights with natural philosophy and prevails more against it than that of imagination. . . And truly I hardly know of any other prejudices that are more powerful against truth of any kind than this. . . (For) imaginations. . . among the learned themselves, even of this learned age, hath a very powerful secret influence to cause them either to reject things really true as enormously false or to embrace things that are truly so. Thus some men are almost ready to fall back into antiquated Ptolemy, his system, merely to ease their imagination.³⁷

Edwards thus conceived of the imagination as a potential basis of self-justification, as a means of reading a meaning into things in conformity with what one sought to find and ultimately, of avoiding the standard and authority of the sovereign God. "Hence men come to make what they can actually perceive by their senses or by immediate reflection into their own souls the standard of possibility and impossibility... ."38

Edwards would not allow the mind of man to create in the natural world an image of God after his own fashion. Hence he was determined, insofar as he was able, to unlock the secrets of a world which he loved, because it was a manifestation of the divine love, and thus lay bare the purpose, nature and reality of the God who himself was immanent in the very beauty he created. For "God and real existence are the same."39 And to take seriously "real existence" one cannot deny the new advances in knowledge of the natural world. Therefore, Ptolemy's "Antiquated system" must be rejected, no matter how comfortable it might have become. The world of Newtonian physics and Lockean sensationalism must be accepted, as an act of faith. And if the old physics was dead, then so was the old way of expressing it. This meant the rejection of the "vulgar spiritualizations" of those who preceded Edwards and an attempt to perceive the reality and significance of the natural world as it revealed itself to the "eyes of faith."

From this brief survey of one aspect of Puritanism we

find the natural world was central to its concern and interest. This tradition was one of the mainstays of Edwards' intellectual milieu and reinforced his own interest in the natural world. Many of the questions relating to the natural world which were common in Edwards' day had their origin in the work and thought of seventeenth century Puritan thinkers. In particular Edwards was indebted to his tradition in three ways. First, for a predilection for seeing the will of the Creator revealed in the facts of nature. Secondly for his attempt to reconcile reason and revelation which, we will discover, is central to his understanding of man's relationship to the natural world. Thirdly, for his propensity for viewing the natural world as a "type" of the spiritual reality which constitutes it. The natural world, for Edwards as for his predecessors, was a vast theatre established to instruct man in the nature and will of God.

JOHN CALVIN

Edwards' acquaintance with Calvin has been noted by several scholars.⁴⁰ Douglas Elwood terms Edwards a "neo-Calvinist" whose "own reflection upon his profoundly mystical experience of God gave to eighteenth century Calvinism a dynamic not usually associated with that school of thought."⁴¹ Edwards himself admits his indebtedness to Calvin and his willingness to be associated with his school of thought "though I utterly

disclaim a dependence on Calvin, or believing the doctrines which I hold, because he believed and taught them, and cannot justly be charged with believing in everything just as he taught."⁴² However, while he reinterpreted Calvin, he also incorporated much of his thought into his own system. This is evident with respect to his understanding of the natural world.

For Calvin, the purpose of the natural order is to reveal the Creator. It is God's "second book" which is "open" for all to read and in which the sovereignty, wisdom and glory of God are manifest.⁴³ Above all it is God's providence or his continuous action in the midst of his creation⁴⁴ to which the works of nature witness. In fact "God's providence shows itself explicitly when one observes these."⁴⁵ The whole of the natural world shows forth his glory⁴⁶ and his presence is to be seen everywhere.⁴⁷ In short, God communicates himself to man through the works of nature.⁴⁸

The theme of the revelation of God in the natural world occupies a prominent place in Calvin's thought. It appears in his commentaries and sermons, in his treatise "Against the Libertines" (1545) and in the treatise on "Predestination" (1552). In the Institutes two complete chapters are devoted to it.⁴⁹ Indeed, one scholar has gone so far as to suggest that "Calvin's whole theological and moral enterprise was an endeavor to develop as best he could the specific connections between the natural world and the order of the gospel."⁵⁰

In Calvin's thought creation and providence are inseparably joined. He who is the Creator is also the preserver, "not only in that he drives the celestial frame as well as its several parts by a universal motion, but also in that he sustains, nourishes, and cares for everything he has made, even to the least sparrow."⁵¹ And God exercises this sovereignty and concern by conforming himself to the laws that he himself has imposed upon his creation. For all things "are moved by a secret impulse of nature as if they obeyed God's eternal command, and what God has once determined flows by itself."⁵²

The natural world, then, is a mirror in which God shows us our duty and "in which we can contemplate God who is otherwise invisible. . . . What men need to know concerning God has been disclosed to them. . .for one and all gaze upon his invisible nature, known from the creation of the world. . . ."⁵³

That which man contemplates in the created order, if he sees aright, is the glory of God. For man and the whole created order of which he is a part exist for the purpose of making this glory known. If this were not the goal or telos of the creation then it could not survive. For "the whole order of nature would be strangely subverted, were not God, who is the beginning of all things, the end also."⁵⁴

The glory of God is manifest in the natural world. "The heavens preach to all nations indiscriminately; they were established as witnesses to bear testimony to the glory of God."⁵⁵

But man is unable to see what is revealed. "Bright however, as are the manifestations which God gives both of himself and of his immortal kingdom in the mirror of his works, so great is our stupidity, so dull are we in regard to these bright manifestations, that we derive no benefit from them."⁵⁶

Yet, although man cannot come to God by means of a natural knowledge of his glory, manifest in the creation, there remain in him "sparks of knowledge" which render him inexcusable for his blindness. Thus it is that "first we conceive with ourselves there is a God; secondly, that the same, whosoever He be, is to be worshipped. But here our reason fails, before it can obtain either who is God or what He is."⁵⁷ Thus the glory of God, manifest in the natural world, has no other effect than "to render us inexcusable" for "the sin which lies within us and causes our perversity."⁵⁸

Calvin's purpose in attaining a knowledge of the natural world was to achieve a saving knowledge of God. This is not the knowledge of detached speculation which he considered mere intellectual indulgence.⁵⁹

Calvin had little use for the study of natural phenomena as an end in itself. He feared that disinterested investigation of the natural world would weaken the awareness of God's directing activity within it and that this in turn, while affirming his existence, would obscure the relationship he maintained with it. Such a development, he felt, would be destructive of a true

knowledge of God.⁶⁰

Calvin is always concerned with the reality of God, not with respect to what he is in himself but with respect to what he is in relation to his world and to man. Hence Calvin's theology has three major concerns, God, man and the created order. This was also the pattern of Edwards' thought.

When we turn to Edwards' understanding of the natural world we will discover many similarities between his understanding and that of Calvin. For both Calvin and Edwards God was the supreme and absorbing object of contemplation and study. Both saw the reality of his sovereignty and the manifestation of his perfections in the natural world. That is, both saw the natural world as the expression of the glory of the God who "delights in the proper expression and exercise of his creative impulse."⁶¹ The natural world is for Edwards, as for Calvin, a means of God's self-communication.

Both Edwards and Calvin view the good and happiness of the created order in terms of its participation in this glory which is "seated in the will of God." Both see this participation as being partial because of the reality of sin which manifests itself in the imperfection of the created order. Yet, like Calvin, Edwards will contend that the imperfection or estrangement or evil of the natural world is subordinate and subject to that which ~~maintains~~^{maintains} the created order in existence, i.e. the power of love. For both Calvin and Edwards, the most potent force in

existence is love.

Consequently, God demonstrates his sovereignty in the created order by using that which is inherently destructive for his own constructive purposes, which will be achieved.⁶² This means that the Creator not only has the power to achieve his ends but is faithful to do so. The promises of the Creator made to his creation cannot fail. Therefore, neither can his faithfulness toward it. For Edwards as^{for} Calvin it is "the governing influence" in all His works.⁶³ This understanding of the Creator's activity on Edwards' part is similar to Calvin's concept of Providence as both a general "order of nature" and a special providential ordering "through which God works in his creatures and makes them of service to his goodness."⁶⁴ Edwards will maintain that God uses the world to sustain man and provide him with the means whereby he might respond to this "special providence." In this way the Creator glorifies himself. The "sustaining resource" of the world therefore is an evidence of God's providence. It is also an evidence of God's concern for man.

Both Calvin and Edwards viewed the natural world in a Christological perspective. They saw in him alone the possibility of overcoming disorder with order, disunity with unity, destruction with love. In him is God's supreme self-communication, the supreme revelation of his purpose for the world. This is, in the resurrection, to restore it from its ruin, to deliver it from its destruction, futility and chaos, and to restore its unity

"in making it like unto Christ's glorious body." This plan was begun "soon after the fall, and is carried on through all ages, and shall be finished at the end of the world."⁶⁵ Edwards, like Calvin, saw Christ's atonement as the key to overcoming nature's disorder.⁶⁶

To some extent, Edwards viewed the created order within a mediaeval framework. This view was largely an inheritance from Calvin who evinced a strong belief in angels and the devil. The former he called "God's ministers, ordained to carry out his commands." They are his creatures, an "illustrious and noble example" of his works. God's glory "resides in them," although it does not "belong" to them and therefore they are not to be worshipped. They are the "protectors and helpers of believers" who "lift up believers by their hands and carry their souls. . .to see the face of the Father." As such they are not mere ideas but actuality, "spirits having a real existence."⁶⁷

The devil was also created by God and is therefore likewise real. The fact that he is now "utterly alien" to God stems from his revolt and not from his creation. Yet, because he is God's creature, he stands under God's power. And because the "bridle" of this power restrains and controls him, "he carries out only those things which have been divinely permitted him. And so he obeys his creator whether he will or not, because he is compelled to yield him service wherever God impels him." Because like angels, devils are God's creation, they too are not

thoughts but actualities, not "evil emotions or perturbations which come upon us from our flesh" but realities who are now tormented and tortured by Christ's glory."⁶⁸

Like Calvin, Edwards had a strong belief in angels and devils. The angels he characterizes as "a superior order of beings" established to minister to the elect, "who are much less than they, of inferior nature and degree."⁶⁹ Devils are those angels who rebelled against the almighty, when faced with the prospect of ministering to mankind. Their leader is Satan, "the grand enemy of God and mankind, the grand adversary, the accuser of the brethren and the great destroyer."⁷⁰ Both angels and devils are God's creation and are subject to his power.

The devil. . . is so entirely under the government of malice, that although he never attempted any thing against God but he was disappointed, yet he cannot bear to be quiet and refrain from exercising himself with all his might and subtilty against the increase of holiness; though, if he considered, he might know that it will turn to its advantage.⁷¹

In contrast to this futility, God rewards the faithful angels "with a great exaltation of their nature."⁷² For Edwards, reality was spiritual and angels and devils were cosmic dimensions of this reality.

The natural world was of importance because of what it revealed of the Creator's nature. What Edwards wanted was a knowledge of God that would reveal the meaning of existence. Hence, like Calvin, he saw that the study of science could never

be an end in itself. It could never, in itself, provide an answer as to why God created the universe. It could not in itself show forth the "innermost nature of things." What a study of the natural world did reveal was the way in which these spiritual truths were set forth to instruct man and set him in the way of happiness.⁷³

In summary, Calvin and Edwards are in many respects similar although not identical in their understanding of the natural order. Specifically, this similarity will be evident at the following points.

- 1) The revelation of the Creator in his creation.
- 2) The relationship between creation and providence.
- 3) The manifestation of the divine glory in the natural world.
- 4) The insensitivity of man to this manifestation.
- 5) The affirmation that the natural world represents the Creator's concern for his creation.
- 6) The inability of the natural reason alone to perceive this.
- 7) The centrality of Christ for an understanding of the natural world.
- 8) The belief that an understanding of the natural world will yield an understanding of the nature of the Creator.
- 9) The self-communication of the Creator through his

creation.

THE CAMBRIDGE PLATONISTS

Douglas Elwood holds that Edwards was influenced by "the two mainstreams of Christian thought - the one represented in his day by Puritan Calvinism, the other by Cambridge Platonism."⁷⁴ We have considered the influence of the Puritan tradition and Calvin on Edwards' understanding of the created order. We shall now examine the influence of the Cambridge Platonists, and in particular, the influence of Ralph Cudworth.

The Cambridge Platonists were a group of seventeenth century scholars who sought to adopt a mediating and reconciling position between inflexible Calvinism and rigid Laudianism.

Against the Laudians they declared that morality was more important than polity; against the Calvinists they insisted that reason must not be fettered, against both they maintained that the legitimate seat of authority in religion was the individual conscience, governed by reason and illuminated by a revelation which could not be inconsistent with reason itself.⁷⁵

In this statement we find one of the basic tenets of the Platonists, viz. that reason and revelation were not only compatible with one another, but in harmony with the moral law and should be united in any Christian understanding of nature, man and God. For them, the dominant characteristic of life was its unity. This unity could be established and maintained

only on the basis of a synthesis of reason and revelation.

Faith was thus the highest fulfillment^{me} of the intellectual faculties.⁷⁶

Because of the centrality of faith in their thought, the Platonists reacted strongly against the "materialistic atheism" of Hobbes^e who misinterpreted the significance of the universe because he misconceived the relationship between matter and spirit. For the Platonists divine intelligence was the ultimate reality and the spiritual world was prior to the material. "The primordials of the world are not mechanical but supermatrical or vital. . . which some moderns call the spirit of nature."⁷⁷ This "spirit of nature" was really a manifestation of the Providence of God, who wisely directed all things.

That which ultimately controls the universe was the divine wisdom, love and power. This divinity was often beyond the capacity of human intelligence to fathom. Yet it was none the less real. The mystery of the universe pointed to the finiteness of the human reason and the vastness and depth of the divine nature rather than to his non-existence. Yet reason did have a role to play. The divine activity was not incomprehensible even though it was mysterious. The divine direction and presence in the created order could be discerned by the enlightened understanding.

God made the universe and all the creatures
contained therein as so many glasses wherein

he might reflect his own glory. He hath copied forth himself in the creation; in this outward world we may read the lovely characters of Divine goodness, power and wisdom.⁷⁸

The relationship between reason and revelation and between material and spiritual realities, the mystery of the created order and its control by the divine wisdom, the manifestation of the divine glory in the "outward world" are recurring themes in those Platonists' writings with which Edwards was familiar. These themes are also to be found in Edwards' thought.

RALPH CUDWORTH

Of the Platonists' writings, the most direct influence on Edwards' understanding of the natural world was Ralph Cudworth's The True Intellectual System of the Universe.⁷⁹ The universe, for Cudworth, consisted of things corporeal and incorporeal. That which is passive, has no activity of its own, and can move only under external pressure, is corporeal. By this definition nature is corporeal since the natural world consists of bodies or extensions of bodies unable to move themselves or act upon themselves.⁸⁰ Yet the natural world is also composed of incorporeal substances, centers of "self-activity or internal energy" which are alien to corporeal substance, which act upon it and move it and thus prevent or avoid a motionless world in which there is "no life, cogitation, consciousness. . .or volition", in which "all would be

a dead heap or lump."⁸¹

For Cudworth, then, passivity is the essence of the corporeal and self-activity is the essence of the incorporeal. "There are in nature two kinds of substances, specifically differing from one another; the first 'bulks' or 'tumors,' a mere passive thing; the second, 'self-active powers' or 'virtues,' the 'energetic nature'."⁸² The former has no "self-unity," is infinitely divisible, exists without mind, has no self-action and can only move when it is moved. The latter is life and mind, self-acting and essentially profound.⁸³

The incorporeal substance is for Cudworth the plastic nature which he sees as an answer to both mechanism and occasionalism. To assert mechanical necessity is "irrational. . . impious and atheistical."⁸⁴ To hold the latter, that God himself does all things "immediately and miraculously" is "absurd or incongruous to reason." It also provides no way of accounting for the "errors and bumbles" of the natural world since God, the infallible "omnipotent agent" could not be resisted by the "inaptitude or stubbornness of matter."

Therefore, it is necessary to postulate a

plastic nature under Him, which as an inferior and subordinate instrument doth drudgingly execute that part of his providence, which consists in the regular and orderly motion of matter; yet so as that there is also, besides this, a higher Providence to be acknowledged, which presiding over it doth often supply the defects of it and sometimes over rule it; forasmuch as the plastic nature cannot act

electively nor with discretion. And by this means the Wisdom of God. . .will display itself abroad, and print its stamps and signatures everywhere throughout the world; so that God . . .will be not only the beginning and end, but also the middle of all things.⁸⁵

Unless one does accept the concept of a plastic nature, one must logically adopt one of two propositions. "Either in the efformation and organization of the bodies of animals, as well as the other phenomenon, everything comes to pass fortuitously. . .without the guidance and direction of any mind or understanding; or else, that God himself doth all immediately and, as it were, with his own hands form the body of every gnat and fly, insect and mite, as of other animals in generations, all whose members have so much contrivance in them. . ." To accept the latter is to proposition "that everything in nature (is) done immediately by God himself." This would "render divine providence operose, solicitous and distractious, and thereby make the belief of it to be entertained with greater difficulty, and give advantage to Atheists."⁸⁶

The divine wisdom is "the very law and rule of what is simply the best in everything" and nature is its "living stamp or signature." Yet nature is neither God nor wisdom. It is true that artificial nature is a "kind of art" which is "incorporated and embodied in matter," and which acts in it "immediately," as an inward principle, "easily, cleverly and silently." Yet this art, "the reason of the thing without matter,"⁸⁷ is an inferior

or subservient art. It is incapable of consulting or deliberating⁸⁸ and acts non-electively or without reason and without discretion for ends it cannot understand.⁸⁹ Nature, then, is the "drudging executioner" of the dictates of the divine wisdom "and can at best mimic or imitate it, in its actions," and this imperfectly, which explains its bungleings and mistakes. Thus it is that while wisdom is the "first and highest life," nature is "the least and lowest."⁹⁰

Nature, then, can be said to act according to a certain fate. "Nature moveth as it were by a kind of fate or commands, acting according to laws." These are "the laws of the Deity, concerning the mundane economy."⁹¹ They are manifestation of the divine wisdom, "an energetical and effectual principle, constituted by the Deity, for the bringing of things decreed to pass."⁹² Thus Cudworth concludes that "the plastic nature may be said to be the true and proper fate of matter or the corporeal world."⁹³

Cudworth maintains that "mind and understanding is the only cause of orderly regularity; and he that asserts a plastic nature asserts mental causality in the world."⁹⁴ Plastic nature, itself, however, is "no pure mind" nor a pure soul, but its product, "something which depends upon it, being as it were an effulgency or irradiation from both together, mind and soul."⁹⁵ Hence this 'artificial nature' "though itself indeed do not understand the reason of what it doth, nor properly intend the ends thereof, yet may well be conceived to act regularly for the sake

of the ends understood and intended by the perfect mind, upon which it depends."⁹⁶

Cudworth concludes that because there must be such a plastic nature in "the whole corporeal universe, that which makes all things thus to conspire every where and agree together into one harmony," there must therefore be one power which "ordered and formed the whole world," viz. "a spirit and a living and generative nature."⁹⁷

Why, then, did God create the world? Simply to share his goodness with others so that "there might be other beings also happy besides him, enjoying themselves."⁹⁸ And the goodness of God is "chiefly and properly his glory." God created the world to communicate or manifest his glory.

The similarity between Cudworth's thought and that of Edwards' can be seen at several points. Both viewed the created order in ^Platonic categories, or in terms of the "corporeal and incorporeal." For Edwards, the universe consisted of two worlds, "the external and the internal: the external, the subject of natural philosophy; the internal, our minds."⁹⁹

Both saw the reflection of the divine glory in the natural order and felt it was created to provide for the creatures' happiness. The role of the divine wisdom in this order was central to Cudworth's understanding of it. We will find this to be true also for Edwards.

Cudworth conceived of the created order in idealistic

terms. So also did Edwards.¹⁰⁰ Yet he also retained a strong empiricist tendency to seek knowledge and understanding through an experience of the material order. This tendency remained with him throughout his life.¹⁰¹

Like Cudworth, Edwards rejected a mechanistic concept of creation.¹⁰² Yet, unlike Cudworth, he accepted a form of occasionalism. Creation is performed every moment.¹⁰³ The impetus for Edwards' later expression of the concept might have been received from Cudworth, however, in as much as the latter explained it in his True Intellectual System.

We cannot say that Edwards' understanding of the natural world was in any one particular taken directly from Cudworth. However, we do assert that the issues with which Cudworth dealt in his discussion of the natural world, which was the contextual reality in which Edwards lived and to which he devoted much time, were also the object of Edwards' attention and study. Consequently we hold that the Cambridge Platonists generally and Cudworth in particular, provided another source for Edwards' continued reflection upon the significance of the natural world and man's relationship to it.

ISAAC NEWTON AND JOHN LOCKE

We have stated that Edwards' view of the created order was to a certain extent mediaeval. Yet he was also too much a man of his age for his view of the natural order to have been

simply mediaeval. He was enamoured of the new philosophy and the new science which he came upon and read with more pleasure "than the most greedy miser finds, when gathering up handfuls of silver and gold, from some newly discovered treasure."¹⁰⁴ Consequently, he rejected the advice of certain Yale professors who warned against being too receptive to the new learning.¹⁰⁵

As a consequence of his continuing study of the new science and his own inherent capacities and inclinations, Edwards arrived at a theology that "comported with an entirely different logic, with a totally opposed metaphysic and a basically altered cosmology" than much of the Puritanism of his day and sixteenth century Calvinism.¹⁰⁶ While still a youth, he resolved "if ever I live to years, that I will be impartial to hear the reasons of all pretended discoveries and receive them, if rational, how long so ever I have been used to another way of thinking."¹⁰⁷ For Edwards at least, "the gloriously romantic universe of Dante and Milton. . .had now been swept away."¹⁰⁸ It was Isaac Newton together with John Locke, who were most influential in destroying this mediaeval world view.

ISAAC NEWTON

Edwards became acquainted with Newton from a variety of sources. European scientific thought early penetrated New England. Minutes of the Royal Society were circulating there as early as 1682. Edwards' father was himself a correspondent with

those who were familiar with this thought.¹⁰⁹ Edwards' earliest essays reveal an awareness of the work of Newton.¹¹⁰ This original influence may have been obtained at second hand. However, by the time Edwards arrived at Yale, both the Opticks and the Principia were available in the Drummer collection to which Edwards had access.¹¹¹ Both volumes are noted in Edwards' "Catalogue."¹¹²

The influence of both the Opticks and the Principia on Edwards when he was constructing his "Notes on Natural Science" has been documented by Tufts.¹¹³ His judgment has been confirmed by another investigator.

The evidence indicates that Edwards' attention was drawn to atomism, through a study of Newton's Opticks. . . In 'The Notes on Natural Science' there are a number of passages treating optical phenomena, in which the corpuscular theory of light is involved. . . (These) suggest that Edwards adopted Newton's corpuscular theory of light as part and parcel of the general theory of atomism, as set forth in the third book of Opticks. There is no single scientific text which Edwards more thoroughly appropriated or persistently incorporated into his own image of nature than this of Newton's.¹¹⁴

A less direct acquaintance with Newton was attained by Edwards through his reading of certain eighteenth century authors, especially Pope and Addison who themselves were indebted to Newton, especially to his work on color and light.¹¹⁵

The first effect of Newton's resolutions of the colors and his careful analysis of their properties was to produce a new scientific

grasp of a richer world of objective phenomena particularly sympathetic to poets. To the descriptive poets of the age of Newton, light was the source of beauty because it was the source of color. This is a persistent refrain in the period.¹¹⁶

There are allusions to both color and light in Edwards' idealism and empiricism: "Let us suppose this world deprived of every ray of light so that there should not be the least glimmering of light in the universe." If this were to happen, the universe would be deprived of all its colors and "there would be no visible distinction between this world and the rest of the incomprehensible void."¹¹⁷ And this, suggests Edwards, would be tantamount to depriving the universe of its bodies, for the chief property which constitutes bodies is color.

For what idea is that which we call by the name of body? I find color has the chief share in it. 'Tis nothing but color, and figure which is the termination of this color, together with some powers. . . that wholly makes up what we call body.

And color does not inhere in the body itself.

No more than pain is in a needle--but strictly nowhere else but in the mind. . . The world is therefore an ideal one.¹¹⁸

Color, then, was a basic concept in Jonathan Edwards' view of the created order and for this concept he was primarily indebted to Newton.

A second concept which played a large part in Edwards' early thought about the universe was space. For Newton, space

functioned as the omnipresence of God.

"He endures forever and is everywhere present; and by existing always and everywhere he constitutes duration and space He is omnipresent, not virtually only, but also substantially, for virtue cannot subsist without substance."¹¹⁹

It also functioned as the locus of the "divine knowledge and control."

Does it not appear from phenomena that there is a Being incorporeal, living, intelligent, omnipresent, who in infinite space, as it were in his sensory, sees the things themselves intimately and thoroughly perceives them and comprehends them wholly by their immediate presence to himself?¹²⁰

Absolute space, then, is God's sensorium, the center of reference for all things in space and time and he is the source of all motion. "All real or absolute motion in the last analysis is the resultant of an expenditure of divine energy."¹²¹

For Edwards, space was also identified with God.

It is self-evident, I believe to every man, that Space is necessary, eternal, infinite and omnipresent. But I had as good speak plain: I have already said as much as, that space is God. And it is indeed clear to me, that all the Space there is, not proper to body, all the space there is without the bounds of creation, all the Space there was before the creation, is God himself.¹²²

A third element in Edwards' understanding of the created order which he received from Newton was his concern with atoms.

For Newton, atoms were the indestructible "building blocks" of the world.

All these things considered, it seems probable to me, that God in the beginning formed matter in solid, massy, hard, impenetrable, movable particles, of such sizes and figures, and with such other properties, in such proportion to space, as most conduced to the end for which he formed them; and that these primitive particles, being solids, are incomparably harder than any porous bodies compounded of them; even so very hard, as never to wear or break in pieces: no ordinary power being able to divide what God himself made one in the first creation.¹²³

For Edwards also, atoms composed the primary unit of matter. "All bodies whatsoever except atoms themselves must, of absolute necessity, be composed of atoms, or of bodies that are indiscernible, that cannot be made less, or whose parts cannot, by any finite power whatsoever, be separated from one another."¹²⁴

And these bodies, said Edwards, are "nothing but the Deity acting in that particular manner in those parts of space where He thinks fit. So that strictly speaking, there is no proper substance but God Himself."¹²⁵ Edwards here combines two Newtonian concepts and interprets them in terms of the Calvinist concept of divine sovereignty. For it was the sovereign will of the Creator which determined the nature of the created order.

At an early age, Edwards discovered and developed his appreciation of the unity of the created order. For example, in

his study of the spider Edwards pursued his investigation by taking into consideration the totality of the environment in which the insect lived. Wind, water, the ocean, the rain, all were considered for the part they played in maintaining the species in existence.

When Edwards began to consider Newton's conclusions about the nature of atoms, this earlier tendency to see reality in its wholeness was reinforced. What struck Edwards above all else about the atom was its unity or oneness.¹²⁶ And if the basis of the created order, which is the atom,¹²⁷ is constituted by a unity or oneness, so must the order itself reflect this unity, when it is functioning as it was created to do. And since the created order is nothing but the essence of God - since God exerts his infinite power in every part of every atom of the universe and therefore his essence must be in every part of every atom - the essence of God must likewise be constituted by a unity.¹²⁸

From the assumption that the natural world is a created unity whose basic characteristic is love (an assumption of both Calvin and Newton), Edwards arrived at the conclusion that this unity cannot be disturbed without the effects being felt throughout the community as a whole. "The existence and motion of every atom has influence, more or less, on the motion of all other bodies in the universe, great or small."¹²⁹ Even the smallest atom, were it to collide with a "leaden globe" swiftly moving

through the ^{infinite} "infinite void" would eventually retard its velocity.¹³⁰ The unity of the Creator and the interdependent unity of his creation were the presuppositions through which Edwards viewed both. Nothing could exist independently. Any attempt to so exist created radical consequences. "For perhaps there is not one leaf of a tree nor spire of Grass but has effects all over the universe and will have to the end of eternity."¹³¹ To learn the effect each part of the natural world produced, and thus to learn how to promote its harmony and avoid its disruption, was an ongoing concern for Edwards who was convinced that there was a reason for "the smallest assignable difference between the things which God has made."¹³²

Finally, Edwards inherited from Newton his understanding of the laws of nature as the medium of God's active governance of the natural world.¹³³ For Newton, the created order moved according to its own laws, which were established, activated and maintained by the divine wisdom and power. The regularity and reliability of these laws were evidence of the faithfulness and reliability of God. They were also the only means man had of knowing him. "We know him only by his most wise and excellent contrivance of things and final causes. . . ."¹³⁴

For Edwards the natural laws were the means chosen by the Creator to establish the operation of the created order. These guaranteed its stability. Consequently, "there can be no . . . alteration in the motion of the earth created naturally

or in observance of the laws of nature."¹³⁵

Newton was concerned to understand those "excellent contrivances" and "final causes" he discovered in the world around him. Because these alone would provide knowledge of their source, he was determined, as far as possible, to eliminate from his thought all hypotheses or unverifiable speculations. For him, ". . . science was composed of laws stating the mathematical behaviour of nature solely - laws clearly deducible from phenomena - everything further is to be swept out of science, which thus becomes a body of absolutely certain truth about the doings of the physical world."¹³⁶ Newton had a passion for the truth of the empirically verifiable. This empiricism was motivated by a desire to know the Creator who revealed himself in his creation. This was also the motivation for Edwards' empiricism.

Color, space, the structure and significance of the atom and the nature and significance of the natural laws were areas of investigation for Newton. His reflections on these themes were appropriated by Edwards for his own purposes.

JOHN LOCKE

Edwards saw in the utility of things, that is, in their fitness to provide or contribute to the harmony of the created order, a natural beauty.¹³⁷ One source of this thought was Francis Hutcheson. John Locke was a second, although, as Miller points out, Edwards combined Locke's concept of utility with his

own consciousness of the glory of God.¹³⁸

From Locke, Edwards also received an abiding understanding of the importance of the senses. It was through the senses, said Locke, that we perceive the world in which we live. "Our senses. . . convey into the mind several distinct perceptions of things, according to those various ways wherein those objects do affect them."¹³⁹

The utility of the natural order, then, consists both in its performing those tasks for which it was created, thus contributing to the stability or well being of the whole, and in its ability to manifest a beauty expressive of the nature of God which can be communicated via the senses. Both in this beauty and its communication, the glory of God is apparent.

Miller states that for Locke, perception was the "immediate irresistible response of sensation to the impact of an object."¹⁴⁰ Edwards accepted Locke's position and also the thesis that there are different perceptions for the same objects, "according to those various ways wherein those objects do affect them." Thus, what one sees as beauty, another sees as ugly. What one finds significant, another finds meaningless. How to account for this difference?

Edwards began with the assertion that there is in the natural world a beauty which all can appreciate. Yet he went to nature not only to appreciate its natural beauty, but to determine what it revealed of the divine pattern or the "propor-

tion of God's acting." This was "the stated methods of God's acting with respect to bodies and the stated conditions of the alteration of the manner of His acting."¹⁴¹ It was Edwards' conviction that God works through his created order and that this working constitutes its inner beauty. He thus combined his sense of the divine in nature with Locke's understanding of the role of the senses in determining a perception of the natural order to arrive at an understanding of both the inner or primary beauty of the natural world and the way in which it is perceived.

And the way in which this is perceived is, said Edwards, through a supernatural illumination. For this inner beauty is an image of the beauty of the spirit, and "it is not a thing that belongs to reason, to see the beauty and loveliness of spiritual things. . .but depends on the sense of the heart."¹⁴² This sense of the heart, then, is a blessing and "nothing which the creature receives is so much a participation of the deity: it is a kind of emanation of God's beauty and is related to God as the light is to the sun. It therefore is congr^uous and fit."¹⁴³ Without the "new sense" one cannot perceive the beauty of God.

Locke held that the mind cannot add any new elements not already given in sensation and reflection, the only two methods we have of deriving ideas.¹⁴⁴ For Edwards, this meant that reason cannot add to the materials of the natural world the ability to understand or perceive its essence. For such knowledge is

spiritual, which God imparts by His Spirit immediately, "not making use of any intermediate natural causes, as he does in other knowledge."¹⁴⁵ Reason itself yields only a natural light "of no superior kind to what mere nature attains to."¹⁴⁶ And the Spirit acts arbitrarily "bestowing this knowledge on whom he will."¹⁴⁷

For Locke, perception is related to experience.¹⁴⁸ Apart from experience the appropriation of knowledge is an impossibility.¹⁴⁹ Similarly, without the experience of the "new sense" no amount of empirical investigation can yield a knowledge of the beauty that constitutes the natural order. "It is not ratiocination that gives men the perception of. . . beauty. . . : it depends on the sense of the heart."¹⁵⁰ Thus, Edwards accepted Locke's contention that the created order is not perceived by all in the same way because it is not understood by all in the same way. "Perception", said Locke, "(is) the act of understanding."¹⁵¹ And Edwards maintained that man understands aright only insofar as he possesses a knowledge of that which constitutes the created order.

Locke also was concerned with the rest of the natural world and considered at length the ~~identity~~ identity of plants and vegetables. Plants, he says, are composed of particles of matter which constitute their various parts. These parts are organized "in one coherent body, partaking of one common life." As long as it partakes of that life the plant remains the same, even

though this life is communicated to new particles of matter which are continually added to the plant.¹⁵² Similarly with the identity of animals, whose bodies are composed of a "fit organization. . . of parts," which constitute a common life and which work towards a particular end.¹⁵³

Here again we find reference to two concepts with which we have seen Edwards to be familiar, the concept of the essential unity of life and that of the continual creation of the natural world or occasionalism. At every turn Edwards found additional material for his thought concerning the natural world from those he studied most thoroughly.

With respect to Locke, our conclusion is that he, like Newton, strengthened Edwards' native empiricism. The two contributions he made which were especially significant for Edwards' understanding of the natural world were his stress on experience as the vehicle of knowledge, and the nature of perception. The latter concept, which involved an understanding of the role of the senses in discovering reality, was appropriated by Edwards in the light of his understanding of the nature of beauty, for which he was indebted to Francis Hutcheson.

Edwards appropriated the thought of both Newton and Locke in his understanding of the natural order. What we find in this appropriation as elsewhere, is his attempt to combine scientific, theological and aesthetic principles in order to interpret and account for the whole of the reality of this order.

FRANCIS HUTCHESON

Edwards was well acquainted with Hutcheson's work. Possibly his earliest encounter with him was through excerpts in Ephraim Chambers' Cyclopaedia of 1738.¹⁵⁴ That Edwards read Hutcheson's An Inquiry into the Original of Our Ideas of Beauty and Virtue (1738) as well as his Essay on the Nature and Conduct of the Passions and Affections With Illustrations on the Moral Sense (1728) is evinced in his own Dissertation Concerning the Nature of True Virtue. In this last work Hutcheson is named three times.¹⁵⁵

Edwards viewed the natural world principally in terms of beauty. He was primarily indebted to Hutcheson for one aspect of his understanding of this concept. Hutcheson held that beauty was of two types, aesthetic and moral. The former is constituted by the regularity, order and harmony which one observes in contemplating the created order. The latter is constituted by the regularity and order of moral actions and affections.¹⁵⁶ Edwards picks up this thought and makes his own distinction between what he terms primary beauty (true virtue) and an "inferior, secondary beauty, which is some image of this, and which is not peculiar to spiritual beings, but is found even in inanimate things; which consists in a mutual consent and agreement of different things, in form, manner, quantity, and visible end or design; called by the various names of regularity, order, uniformity, symmetry, proportion, harmony,

etc."¹⁵⁷

This secondary beauty which "Mr. Hutcheson, in his Treatise on Beauty, expresses by uniformity in the midst of variety . . . is no other than the consent or agreement of different things, in form, quantity, etc."¹⁵⁸ The greater the number and interdependence of mutually agreeing things, the greater is the beauty. "And the reason of that is, because it is more considerable to have many things consent with one another, than a few only."¹⁵⁹

EDWARDS' THEORY OF BEAUTY

Edwards' theory of beauty was held against two others. One was that beauty as such is arbitrary and relative, since two people may view the same contexts in totally opposite ways (Hutcheson). The second was that truth, goodness and beauty are absolute qualities, independent of God and "conforming to an invariable law in nature in consequence of which all rational beings perceive beauty in certain relationships and deformity in the contrary."¹⁶⁰

These theories do not hold, says Edwards, because one cannot see beauty unless one is so disposed and one so disposed must see beauty in what is beautiful. For Edwards, what is beautiful is the divine glory manifest in the created order. Once this beauty is perceived its attraction cannot be denied. For this intrinsic beauty is nothing less than a vision of the di-

vine Being.

Edwards held that many, while experiencing pleasure from secondary beauty do not perceive its basic agreement and proportion, that is, they do not perceive the true or intrinsic beauty of the created order. And this is because they do not perceive that the universe is constituted by God himself who is "the infinite universal and all-comprehending existence."¹⁶¹ Here again, we find an adaptation of Calvin's contention that the natural man, when confronted with God's works "whereby he renders himself near and familiar to us, and in some manner communicates himself,"¹⁶² disregards the Author of these works, corrupts their truth by his vanity and sits "idly in contemplation."¹⁶³ In Aldridge's words this adaptation of Hutcheson's concept of beauty which was both a refutation of it and a going beyond it, represents also "a retracing of Hutcheson's ground from a Calvinistic viewpoint."¹⁶⁴

BEAUTY AND THE NATURAL WORLD IN EDWARDS' THOUGHT

What Edwards admits then, is that the intrinsic beauty of the natural world, of which its harmony, regularity, and interdependent order, is a manifestation, must be experienced or perceived in order to be understood. He accepted the fact that one could have a highly developed aesthetic sense or appreciation and love of secondary beauty without assenting to the divine sovereignty. With himself, however, his love of the God to whom

he yielded, reinforced his love and appreciation of the natural world. In return, his sense of the Creator was reinforced by his appreciation of his creation.

The gift of grace, mediated through the senses (Locke), was for Edwards all-important. One could not appreciate the reality of the natural world without it. Reality could not be perceived "without some direct experience of the divine being taken radically" as a presupposition. This tenet of Edwards' empiricism was always acknowledged by him.¹⁶⁵

Thus, beauty is neither arbitrary nor an absolute. It cannot be arbitrary because it is invariable, if seen. And it cannot be an absolute, for it is dependent for its presence on the One who emanates beauty.

In determining the nature of things as they are, empirically, Edwards sought to determine the utility of things or "the proportion and fitness of a cause, or means, to a visibly designed effect." For there is a "beauty which consists in the visible fitness of a thing to its use."¹⁶⁶ Edwards does not say, as Hutcheson does, that the proportion and symmetry of the natural world alone constitutes its beauty, without consideration of its functional qualities. Nor does he accept the thesis that utility alone produces beauty. Rather, he maintains that the beauty of the natural world consists in its intrinsic beauty, its secondary physical beauty and the way in which the whole coheres in interdependent harmony. This beauty or interdependent

wholeness is twofold. In the first place the different elements agree in a common purpose or end. Secondly, these individual entities agree with and are united to one another.¹⁶⁷ In this way, Edwards seeks to relate both a utilitarian view of the created order and Hutcheson's concept of independent beauty.¹⁶⁸

We find in Edwards' understanding of the nature and significance of the beauty of the natural world an appropriation of Hutcheson's thought. We will find this appropriation to be most evident when we consider his understanding of the natural world as a community.

SUMMARY

We have discovered that attempts to understand the natural world and its significance for man were current in Edwards' day. Wherever he turned in his reading, he encountered reflection on it. His own Puritan tradition stressed the sovereignty of the Creator over his creation and his immanence in it. Similarly it stressed man's responsibility to understand his environment in order to understand the Creator's nature and will. Calvin likewise spoke of the sovereignty of the Creator, his self-communication and his manifestation in his creation. He stressed His providential creative activity in it. His view of the created order was Christological. And he took seriously the fact of the presence of the Devil or of a power-

ful destructive force in this order. All of these emphases are reflected in Edwards' thought.

The Cambridge Platonists also exerted an influence on Edwards. The idealistic strain in Cudworth's thought is reflected in Edwards' idealistic understanding of the natural world. There is also a similarity in their understanding of the role of the divine wisdom in the natural order.

Cudworth's idealistic tendency was balanced in Edwards' thought by the strong empiricist tendency of Locke and Newton. Newton's studies on the atom also helped shape Edwards' view of the natural world as an interrelated community. Similarly, Locke's belief in the importance of the senses for perception was significant for Edwards' thought concerning the manner in which one understands the significance of the natural order. Francis Hutcheson reinforced Edwards' natural aesthetic sensibilities and influenced his reflection on the nature of beauty and on the difference between primary and secondary beauty.

Edwards' approach to the natural world was not haphazard. All of these influences found a place in his thought about it. Therefore it is impossible to maintain with Emily S. Watts, for example, that "Edwards' concept of nature. . .has its foundation in The True Intellectual System."¹⁶⁹ The foundation of Edwards' understanding of the natural world is not located in any one of the sources we have discussed, although each makes a distinct contribution to this understanding. The foundation, rather, is

in Edwards himself.¹⁷⁰

Edwards attempted to synthesize what he could learn from all sources concerning the natural world and construct a logical system of thought about it in order to add to man's knowledge of the nature and will of the Creator. We shall now consider the constituents of that system.

NOTES

¹Perry Miller, "Jonathan Edwards and the Great Awakening", Errand Into the Wilderness, p. 162.

²Puritanism has been described as "that point of view, that philosophy of life, that code of values, carried to New England by the first settlers in the early seventeenth century." Perry Miller, Thomas H. Johnson, Ed. The Puritans, p. 1.

³ibid., p. 9, 10.

⁴Samuel Eliot Morison, The Intellectual Life of Colonial New England. "Religion proved a stimulus rather than a restraint, because the clerical leaders of the community were well-educated men, curious about what was going on, eager to keep in touch with the movements of their day, receptive to new scientific theories." p. 241.

⁵ibid., p. 266.

⁶Morison, op. cit., p. 266.

⁷ibid., p. 267.

⁸ibid.

⁹Theodore Hornberger, "The Date, the Source and the Significance of Cotton Mather's Interest in Science", American Literature, 6: 1934-35, p. 415.

¹⁰Quoted by Hornberger, ibid., p. 416.

¹¹ibid., passim.

¹²ibid., p. 417.

¹³We are unable to find a direct reference to the latter two in any of Edwards' works. However, Edwards quotes from Mather in his "Catalogue" (Thomas Johnson, "Jonathan Edwards' Background of Reading", op. cit., p. 209) And Mather freely admitted his debt

to John Ray. Mather's The Christian Philosopher - a collection of the best discoveries in Nature with Religious Improvements well expressed his interest - which was to understand the best of contemporary science in a Christian context. Hence he believed his writing to be both philosophical and evangelical. John Dillenberger, Protestant Thought and Natural Science, p. 158.)

¹⁴Thomas Johnson, The Puritans, p. 733.

¹⁵ibid.

¹⁶John Preston, Life Eternall or, A Treatise of the Knowledge of the Divine Essence and Attributes, (London, 1631), p. 15. Quoted by Perry Miller, "The Marrow of Puritan Divinity", (hereafter cited as "Marrow"), in Errand into the Wilderness, p. 77.

¹⁷Thomas H. Johnson, The Puritans, p. 731.

¹⁸ibid., p. 730.

¹⁹"But, you will say, faith is beyond sense and reason. It is true, it is beyond both, but it is not contrary to both; faith teacheth nothing contrary to reason, for sense and reason are God's works as well as grace, now one work of God doth not destroy another." (John Preston, "Cuppe of Blessing", p. 12-13, quoted in "Marrow", op. cit., p. 76.)

"Faith added to the eye of reason raiseth it higher; for the understanding is conversant, as about things of reason, so also about things of Faith; for they are propounded to the understanding, only they are above it, and must have faith to reveale them. . . ." (John Preston, "Life Eternall," p. 21, quoted in ibid., p. 80.)

²⁰Harvey G. Townsend, Ed., The Philosophy of Jonathan Edwards From His Private Notebooks, p. viii, ix.

²¹"For the Puritans of New England, there was one man above all to whom they looked for guidance in the management of reason. . . . Petrus Ramus." (The Puritans, p. 28.)

²²ibid., p. 30.

²³ibid.

²⁴Thomas Johnson, "Jonathan Edwards' Background of Reading", op. cit., p. 197.

²⁵The Puritans, p. 31.

²⁶ibid.

²⁷O.B., p. 7.

²⁸"Edwards. . . was highly resolved not to let science itself, as a mere description of phenomena, take the place of a philosophy or theology of nature. Neither was he ready to turn his back on the flux, to seek reality in a supersensuous realm of essences separate from things. The Lockean empiricism bound him to the earth." (Perry Miller, Images, Editor's Introduction, p. 29)

²⁹cf. proposition 4 above.

³⁰Mind, 14.

³¹Misc. 638.

³²Perry Miller, Images, p. 39.

³³ibid., p. 35.

³⁴Images, 212.

³⁵ibid., p. 14.

³⁶Images, 174.

³⁷Townsend, op. cit., p. 2, 3.

³⁸ibid.

³⁹Mind 15.

⁴⁰For example, Perry Miller, Jonathan Edwards, passim. Joseph

Haroutinian, ^uPiety Versus Moralism, p. xxi.

⁴¹Douglas Elwood, The philosophical Theology of Jonathan Edwards, p. 155.

⁴²F.W., p. 131.

⁴³Calvin, Institutes 1:5:2. "There are innumerable evidences both in heaven and on earth that declare (God's) wonderful wisdom; not only those more recondite matters for the closer observation of which astronomy, medicine and all natural science are intended, but also those which thrust themselves upon the sight of even the most untutored and ignorant persons, so that they cannot open their eyes without being compelled to witness them."

⁴⁴François Wendel, Calvin: Origins and Development of His religious Thought, p. 177 ff.

⁴⁵Calvin, Institutes 1:5:2.

⁴⁶ibid.

⁴⁷ibid.

⁴⁸ibid. 1:5:9. In his works "he renders himself near and familiar to us and in some manner communicates himself."

⁴⁹Wendel, op. cit., p. 177-178.

⁵⁰David Little, "Calvin and the Prospects for a Christian theory of Natural Law", in Outka and Ramsey, Eds., Norm and Context in Christian Ethics, p. 177.

⁵¹Calvin, Institutes 1:16:1.

⁵²ibid., 1:16:4.

⁵³Calvin, Institutes 1:5:1.

⁵⁴Calvin, Commentary on Romans XI:36.

⁵⁵Calvin, Commentary on Psalm XIX:4.

⁵⁶Calvin, Institutes, 1:5:11.

⁵⁷Calvin, Commentary on Romans 1:20.

⁵⁸Calvin, Commentary on I Corinthians 1:21.

⁵⁹Calvin, Institutes 1:5:9. "The most perfect way of seeking God, and the most suitable order, is not for us to attempt with bold curiosity to penetrate to the investigation of his essence, which we ought more to adore than meticulously to search out, but for us to contemplate him in his works whereby he renders himself near and familiar to us and in some manner communicates himself."

⁶⁰cf. John Dillenberger, op. cit., p. 35.

⁶¹E.C., p. 501.

⁶²H.R., p. 275, 276.

⁶³F.W., p. 285-286.

⁶⁴Wendel, op. cit., p. 179.

⁶⁵H.R., p. 19.

⁶⁶H.R., p. 14.

⁶⁷Calvin, Institutes, 1:14:3-5; 1:14:6, 9, 10.

⁶⁸ibid., 1:14:6, 17, 19.

⁶⁹M.O., p. 23.

⁷⁰ibid., p. 13.

⁷¹ibid., p. 23.

⁷²ibid., p. 19.

73 Misc. F. "No happiness is solid and substantial but spiritual happiness, although it may seem that sensual pleasure is most real and spiritual only imaginary, as it seems as if sensible matter were only real and spiritual substance only imaginary.

74 Douglas Elwood, op. cit., p. 7.

75 Gerald R. Cragg, Ed., The Cambridge Platonists, p. 11.

76 ibid., p. 17.

77 Henry More, Divine Dialogues (London 1605), Third Series, quoted in ibid., p. 22.

78 John Smith, quoted in G. R. Cragg, The Church and the Age of Reason, p. 69.

79 Thomas Johnson, "Jonathan Edwards' Background of Reading," op. cit., p. 207, 211. Edwards also quotes at length from Cudworth's True Intellectual System in Misc. 40.

80 Ralph Cudworth, The True Intellectual System of the Universe, Vol. 3, p. 393, 394, 396.

81 ibid., p. 394.

82 ibid., p. 393.

83 ibid., p. 396.

84 ibid., Vol. 1, p. 220.

85 ibid., p. 224. The similarity with Edwards' thought is unmistakable.

86 ibid., p. 222-223.

87 ibid., p. 238.

88 ibid., p. 236.

89 ibid., p. 241.

⁹⁰ibid., p. 241, 242, 250, 251.

⁹¹ibid., p. 249.

⁹²ibid.

⁹³ibid., p. 250.

⁹⁴ibid., p. 234.

⁹⁵ibid., p. 252.

⁹⁶ibid., Vol. 2, p. 606.

⁹⁷ibid., Vol. 1, p. 260.

⁹⁸ibid., Vol. 3, p. 486.

⁹⁹Part of an outline of "Subject to be handled in the Treatise on the Mind", Works, Vol. 1, p. 664 c.

¹⁰⁰By "idealism" we mean to indicate the view that mind and spiritual reality constitute the essence of the created order. (cf J. O. Urmson, "Idealism", The Encyclopedia of Philosophy, Vol. 4, p. 111) "It is impossible", suggests Edwards, "that the world should exist from Eternity, without a Mind." (Mind 28) And "God. . . is the infinite, universal and all-comprehending existence." (ibid., 62, corollary 1) "The world is therefore an ideal one." (ibid., 27)

Egbert C. Smyth suggests that "'of Being'. . . sets forth 'in nuce' a view of the universe which, so far as appears, he never lost. . . . Its idealism is a fitting philosophical counterpart to a main article of his faith, . . . his well-known doctrine of an immediate divine communication to men of spiritual light and life." (Egbert C. Smyth, "Jonathan Edwards' Idealism". The American Journal of Theology 1:1897, p. 951) The importance of Edwards' early idealism for his thought as a whole and especially for his understanding of the created order, is expounded by Smyth in this article.

¹⁰¹For example, in one of his "Images", (43) which were composed at various times throughout his life, Edwards suggests that the

natural laws which govern the created order should be studied in order to learn God's purpose in at times setting them aside.

It is a great argument with me, that God, in the creation and disposal of the world and the state and course of things in it, had great respect to a shewing forth and resembling spiritual things, because God in some instances seems to have gone quite beside the ordinary laws of nature in order to it. . .

102 "There is no such thing as mechanism if that word is taken to be that whereby bodies act upon each other purely and properly by themselves." O.A., p. 19.

103 Misc. 346.

104 "Life of President Edwards", Works, Vol. 1, p. 306.

105 Egbert C. Smyth, "The 'New Philosophy' against which students at Yale College were warned in 1714". Proceedings, American Antiquarian Society, New Series, 10:1896, p. 252. Presumably this hesitancy was still current, to some extent at least, during Edwards' years at Yale.

106 Perry Miller, The New England Mind: The Seventeenth Century, p. 176-177. This, of course, is not to deny that both Calvin's and Edwards' own tradition influenced him in ways we have discussed.

107 "Life of President Edwards", Works, Vol. 1, p. 94 c.

108 E. A. Burtt. The Metaphysical Foundations of Modern Science, p. 236.

109 "(Edwards') father had communicated to a scientific friend, probably in England, an account of some interesting natural curiosity. In his reply, the friend had 'expressed a desire for any other information of a similar nature.' Under this inspiration and the command of his father, Edwards wrote a letter on the flying spider." (Clarence H. Faust, "Jonathan Edwards as a Scientist", op. cit., p. 395.) The details of the episode to which this quotation refers are set forth in the "Life of President Edwards", op. cit., p. 22, 23 c. Here it is stated

that "No trace of the name or residence of the correspondent is preserved."

110 "We shall Endeavour to Give a full Account of the Rainbow and such an One as we think if Well understood will be satisfactory to Any body if they Are fully satisfied of Sir Isaac Newton's Different Reflexibility and Refrangibility of the Rays of light. . . ." (Of the Rainbow", Faust and Johnson, op. cit., p. 13)

111 "In 1714 Jeremiah Drummer sent a collection of books to the Yale College Library. The collection included as gifts from 'Sr. Isaac Newton' the Principia (2nd Ed.) and Optice (Latin translation by Samuel Clarke, 1706)." (James H. Tufts, "Edwards and Newton", The Philosophical Review 49:294, November 1940, p. 615) The Drummer collection is also referred to by Ola Winslow, op. cit., p. 58, 83-84,

112 Thomas Johnson, "Jonathan Edwards' Background of Reading", op. cit., p. 210.

113 Tufts, op. cit., p. 616 ff.

114 Wallace E. Anderson, "Immaterialism in Jonathan Edwards' Early Philosophical Notes." Journal of the History of Ideas, 25: 1964, p. 182.

115 Thomas Johnson, "Jonathan Edwards' Background of Reading", op. cit., p. 215. We can surmise that the use these poets made of Newton's works contributed to Edwards' own imaginative treatment of Newton.

116 Marjorie Hope Nicolson, Newton Demands the Muse, p. 22, 23.

117 O.B., p. 7.

118 Mind 27.

119 Principia, p. 311, quoted in Burt, op. cit., p. 257.

120 Opticks, p. 344, quoted in ibid., p. 258.

121 ibid., p. 261.

¹²²O.B., p. 2.

¹²³Opticks, p. 275 ff quoted in Burt, op. cit., p. 229-230.

¹²⁴O.A., p. 9, 10.

¹²⁵ibid., p. 17.

¹²⁶For an elaboration of this point see Perry Miller, Jonathan Edwards, p. 89 ff.

¹²⁷"All bodies whatsoever except atoms themselves must of absolute necessity be composed of atoms or of bodies that are indiscerpible." O.A., p. 9.

¹²⁸Misc. 976.

¹²⁹Mind 40.

¹³⁰ibid.

¹³¹O.B., p. 7.

¹³²F.W., p. 392.

¹³³cf Mind 61, 27. In the latter section resistance or solidity is attributed to the exertion of God's power in the form of the natural law of gravity. "Resistance is nothing else but the actual exertion of God's power, so the power can be nothing else but the constant law or method of that actual exertion."

We are here suggesting that Edwards' study of Newton provided him with additional motivation and resources to resist the deistic tendencies of much of the thought of his day.

¹³⁴"General Scholium", Principia, p. 546.

¹³⁵Mind 65.

¹³⁶Burt, op. cit., p. 223.

¹³⁷T.V., p. 26.

138 "The coordination of utility and glory in the very act of perception was the great, the original and creative result of Edwards' deep immersion in Locke." Jonathan Edwards, p. 67.

139 ⁿⁿ~~John~~ Locke, An Essay Concerning Human Understanding 2:1:3.

140 Perry Miller, Jonathan Edwards, p. 65.

141 O.A., p. 18, 19.

142 D.L., p. 17.

143 ibid.

144 op. cit., 2:1:4.

145 D.L., p. 4.

146 ibid., p. 5.

147 ibid., p. 13.

148 op. cit., 2:9:8.

149 ibid., 2:1:2.

150 D.L., p. 18.

151 op. cit., 2:21:5.

152 ibid., 2:27:4.

153 ibid., 2:27:5.

154 Thomas H. Johnson, "Jonathan Edwards' Background of Reading", op. cit., p. 204.

155 "The general plan of his theory of moral sense is constantly suggested for comparison, contrast or illustration, fundamental

doctrines and corollary principles from his ⁵system are specifically stated and attacked; and others of his notions are cited in support of Edwards' own views."

A. Owen Aldridge, "Edwards and Hutcheson", Harvard Theological Review 44:1951, p. 35

¹⁵⁶Faust and Johnson, op. cit., p. lxxix ff.

¹⁵⁷T.V., p. 26.

¹⁵⁸ibid.

¹⁵⁹ibid.

¹⁶⁰Aldridge, op. cit., p. 40.

¹⁶¹Mind 62.

¹⁶²Calvin, Institutes, 1:5:9.

¹⁶³ibid., 1:5:11.

¹⁶⁴op. cit., p. 37-38.

¹⁶⁵Clyde A. Holbrook, "Edwards and the Ethical Question", Harvard Theological Review 60:1967, p. 168.

¹⁶⁶T.V., p. 26.

¹⁶⁷ibid., p. 27.

¹⁶⁸Aldridge, op. cit., p. 44, 45.

¹⁶⁹Emily Stipes Watts, Jonathan Edwards and the Cambridge Platonists, unpublished Ph.D. thesis, p. 90.

¹⁷⁰It is difficult to "prove" that Edwards received his understanding of the natural world directly from a particular individual or school of thought. Not only was he much too original a thinker for it to be said that he took over directly the thought of any one else, but he was also most reticent about his sources.

Before his time the theological writers. . .
with scarcely an exception, followed on, one
after another, in the same beaten path. . . .
Mr. Edwards had a mind too creative to be thus
dependent on others.

In contrast to those who preceded him and who wrote on the
same subjects

his positions are new, his definitions are
new, his plans are new, his arguments are new
(and) his mode of reasoning and his method of
discovering truth are perfectly his own. ("Life
of President Edwards", op. cit., p. 610 c)

With respect to Edwards' "superabundance of modesty"
which he sought to cultivate, he resolved "to be very moderate
in the use of terms of art. Let it not look as if I was much
read or was conversant with books, or with the learned world."
(Rule nine, N.S., p. 702, 703) Thomas Johnson holds that even
though this resolution was made at a young age, it was "efficient-
ly practiced" throughout his life ("Jonathan Edwards' Background
of Reading", op. cit., p. 199). "His reading was undoubtedly
much more extensive than the evidence in the Catalogue and the
references and notes in his treatises, miscellanies and letters
would suggest." (ibid., p. 221) Hence the difficulty of de-
termining an external "foundation" for his thought. And "the
more one knows of him the less easy such an attempt becomes."
(ibid., p. 199)

CHAPTER II

THE DOCTRINE OF CREATION

INTRODUCTION

"A theological understanding of Nature begins not with Nature but with creation."¹ Edwards sought to understand the natural world in its totality. In this attempt a definite view of creation is presupposed. Consequently, before investigating Edwards' understanding of the natural world and man's relationship to it as such, we shall consider his view of creation. To this end we shall first outline a Biblical view of creation with which Edwards' view has much similarity. We shall then state where Edwards went beyond the Biblical understanding. To further clarify his position we shall then compare his understanding of creation with a Christian alternative to it.

THE BIBLICAL UNDERSTANDING OF CREATION

The Biblical understanding of creation is based on the affirmation that the whole created order is "good", that is, fitted for a particular purpose. This goodness is indicative of the sovereignty of the Creator. It also indicates his benevolence toward the creature, in token of which he gives the creature a habitat. In this habitat the creature can find his joy in service to the Creator and is everywhere reminded of the Cre-

ator's goodness. He is irrevocably wedded to this habitat in such a way that it becomes both the foundation of and the setting for his relationship with the Creator, which alone gives meaning to life.²

The created order, then, is a manifestation of a covenantal³ relationship between Creator and created. It is not rationally constituted and self-sustaining. It is rather the executor of the purposes of the divine will and is dependent upon the Creator for its existence. And it is this created order in which the Creator delights and to which he commits himself. Creator and created are thus inseparable⁴. This fact is the basis of the unity of the creation. It is through the continuous activity of the Creator that this unity is maintained and the disruptive forces, inherent in an imperfect order, restrained. The regularities of the created order evince the reality of its unity, the personal relationship which exists between the Creator and his creation and his intention to maintain it.

Of all the creatures in the created order man is the chief. The world in which he lives was created as his dwelling place and all things contained in it were established for his benefit. He is required to exercise authority over the rest of this order in conformity with the divine will or sovereignty. This implies that the rest of the created order is related to the Creator through man. This also implies that man's actions vis a vis the

7

Creator likewise affect the creation. His consent or dissent to his duty to the Creator affects the well being of the creation as a whole. The whole creation praises the Creator, the whole creation converses with itself and with its Creator. Yet it is only with man that this praise and conversation become articulate.

The present creation points to that which goes beyond it. This is the new creation, the promise of which is contained in that radically new element which inheres in the present created order and causes it to progress toward its goal. In the new creation, the original intention of the Creator will be fulfilled. It will be consummated in the person of Christ in whom the purpose of creation is revealed and in whom all things will be taken up and brought together.

The Biblical doctrine of creation, then, would seem to have at least the following elements: the sovereignty of the Creator,³ his indissoluble relationship with his creation,⁴ the gift of the creation to the created by the Creator,⁵ the scale of the created order and man's place on it,⁶ the subordinate relationship of the rest of the created order to man,⁷ man's effect on the rest of the created order,⁸ the goal of creation,⁹ and the new creation in Christ.¹⁰ We shall find all of these elements present in Edwards' understanding of the natural world. We may therefore say that Edwards viewed the natural world in the con-

text of his understanding of creation and that this understanding was primarily Biblical and especially Hebraic. To what extent did Edwards move beyond the elements we have noted or uniquely interpret them? We find Edwards to be original in this respect in at least six particulars.

EDWARDS' UNDERSTANDING OF CREATION

First, Edwards combines a belief in creation ex nihilo with a belief in creation ad extra. The doctrine of creation ex nihilo cannot be maintained from Biblical sources.¹¹ Edwards conceives creation as being ex nihilo in the sense that it represents the coming into existence of a system of consent to being which is the antithesis of that dissent from being which is the equivalent of nothingness. The creation of the universe ex nihilo "even of every individual atom or primary particle" was an arbitrary operation as was "the gradual bringing of the matter of the world into order."¹² The Creator brings order out of nothingness.

For Edwards, the opposite of being is nothing. Only as created elements are united with their source do they have existence. It is the love of the Creator which continually creates by "retrieving" that which is estranged from non-existence; that is, by bestowing upon the creation the power to consent to being. The greater the consent, the greater the distance from nothing

or non-being and the greater the "quantity" of existence. By maintaining the created order in being, God continually creates, he continually maintains the order against the destructive power which constantly threatens it. God also creates through his self-communication. "It is God's essence to incline to communicate himself."¹³ In this self-communication, God creates ad extra.

His glory in the more extensive sense of the word, (is) his shewing forth or the going forth of his excellency, beauty and essential glory, ad extra. By the one way it goes forth towards created understanding, by the other it goes forth towards their wills or hearts . . . His glory is then received by the whole soul, both by the understanding and by the heart.¹⁴

God seeks to communicate goodness to the creature.¹⁵ In this communication he gives to the creature that which as it were overflows from the divine Being, from that which inheres in the divine Being. That is, the Creator gives something of himself to that which he has created. In God's creative activity "there is something of good actually communicated, some of that good that is in God."¹⁶ For Edwards, to communicate is to create.

God creates, then, ex nihilo and ad extra. In both cases there is a movement from dissent to being or nothingness to consent to being and life. God takes life from nothing or contradiction by communicating himself or his goodness. This is manifest in the creature as a will and power to consent to being, or consent to duty.

Secondly, Edwards distinguishes between a primary and secondary creation. Men and angels, he suggests, were formed by a "primary creation" and an absolutely arbitrary operation, just as was the case with the creation of the primary particles of matter or atoms. This arbitrary operation was absolute and unlike that process operative in the creation of the natural world where both natural and arbitrary modes of operation were utilized. The sun, moon, stars, minerals, plants and animals "were formed out of pre-existent principles by a secondary creation. . .operating upon these principles or subsisting by certain general laws of nature already established."¹⁷

A third feature of Edwards' understanding of creation is that it maintains both a transcendence and immanence in relating the Creator to his creation. God is always and everywhere immediately and creatively present in the world. Because God communicates something of himself to his creation, there can be no artificial separation between the two. In this sense the Creator inheres in the created order.

The fact that Edwards saw the Creator as operative in his creation did not imply for him that the Creator and the created are identical. The Creator is not identifiable with his creation, he transcends it although he is not independent of it. Edwards could not accept a traditional view of transcendence which separated the Creator from his creation because, as R. Gregor Smith put it, "the old doctrine of transcendence is nothing more than an assert-

ion of an outmoded view of the world."¹⁸ Nor could Edwards conceive of the Creator as simply the one who gives meaning and direction to nature. Such naturalism, Edwards perceived, could easily give rise to a belief in mechanical causation and the dissociation of the creation from the Creator. What Edwards was trying to express was the paradox of the immanence of the transcendent. God is "wholly other" (Barth) but not other-^{worldly}worldly. He belongs to a dimension of existence which cannot be contained in the natural realm.¹⁹

Douglas Elwood has termed as "pan-en-theism" Edwards' effort to combine the pantheistic and theistic elements found in traditional doctrines of God. This word is used to describe a relationship of mutual immanence between the creation and the Creator: "God in the World and the World in God."²⁰ Yet God remains separate from the created order in that he alone is self-sufficient. He alone is independent of the total system of relations which he has established. He alone can exist without the consent of other beings. He alone is infinite and not finite.

Whatsoever is a part is finite. God, as He is infinite and the being whence all are derived and from whom everything is given, does comprehend the entity of all His creatures; and their entity is not to be added to His, as not comprehended in it, for they are but communications from Him.²¹

A fourth contribution we find peculiar with Edwards is his affirmation that creation is God's means of giving himself

to the creature. Through creation he puts himself at the creature's disposal. Central to this thought was Edwards' concept of the power of God, the constant exercise of which was necessary "to preserve bodies in being."²² It is the power of God which enables the natural world to cohere. It is also the power of God which the creature has the possibility of discovering, liberating and using as he has the will to do.

The creation, because it is divine, is also sacred. It is to be revered and used as it was intended to be used. As the self-giving of the Creator, the creation is good, and is to be accepted with thanksgiving and used as a means to sustain and support the religious quest. Any other use is a misuse and constitutes an estrangement from the Creator and a failure of love.

A fifth contribution we find in Edwards' understanding of creation is his contention that it is the medium of the Creator's self-communication, and that what is communicated is the creature's happiness. The Creator in creating exercises his goodness, and the exercise of goodness and the communication of the creature's happiness are the same thing.²³ This happiness is communicated to the whole created order. For if the whole of creation is good, --that which is, is good because it is equipped to do its duty,--²⁴ then the whole of creation is happy to the extent that it fulfills its purpose. Therefore, the whole created order rejoices in its own existence. It delights at the glory of the Creator

displayed in it when it acts according to the principles and for the purposes for which it was created.²⁵

And the happiness that is communicated to the creation by the Creator is communicated in the creation by those elements which constitute it. For when the created order does its duty it exercises or realizes its potential for good. And to be good or to do one's duty, is both to experience and enjoy happiness and to communicate this happiness to all other elements with whom there is a relationship. To communicate happiness is an absolute good.²⁶ Goodness, then, is an exercise in the communication of happiness²⁷ and a participation in the end of creation.

The highest good that can be brought to pass by anything that can be done by either God or created beings is the happiness of the creature. Therefore that is properly made the highest end by both.²⁸

The Creator seeks his own happiness by seeking the creatures' happiness and by providing them with the means to achieve it.²⁹ Part of the good in God is his happiness which is communicated to the creation. He exercises his goodness by showing forth his power, wisdom, holiness and justice in the created order, in order that the creation might receive it and therefore be happy.³⁰ For the creature, happiness is "the perception of excellency", which is the perception or the grasping of the significance of who God is and what he does in the created order.³¹ That is, happiness is the perception of the divine glory.

Specifically, the happiness of the creature consists in the perception of three things. First, the consent of being to its own being or the Creator's agreement with himself. God is "happy in himself, or, delights and has pleasure in his own beauty." "God's holiness consists in love to himself."³² The perception of this beauty and holiness is in itself delightful. It fills the creature with happiness. Secondly, happiness consists in the perception of the Creator's consent to the created. The creature is happy when he perceives himself to be the object of a loving relationship, when he perceives his acceptance by the source of life.³³

Thirdly, the creature is happy when he perceives his own consent to being or his own consent to this relationship. Happiness consists in making the Creator's purposes the creature's own and therefore being united with all other created elements which are likewise united with the Creator. That is, happiness consists in the perception and execution of duty.³⁴ And the happiness experienced in the execution of duty is not essentially different from the happiness experienced by the elect when they are eternally united with their Creator. Indeed, the happiness experienced in the created order is a foretaste or prefiguring of eternal bliss in which the perfect society will at last be realized, in which all will be perfectly united, holy, full of love and equally fellow citizens of the kingdom of love.³⁵

In addition, happiness has a social dimension. God's glory cannot be present without community also being present. It is "fit and desirable that the glorious perfections of God should be known, and the operations and expressions of them seen, by other beings besides himself. . . . It is a thing infinitely good in itself, that God's glory should be known by a glorious society of created beings."³⁶ Whenever God glorifies himself in his creation, there community exists.

Since "happiness is nothing but the emanation and expression of God's glory,"³⁷ it follows again that happiness is also impossible apart from community. Isolated existence cannot experience true happiness. It cannot participate in the fulfillment of the end for which creation was brought into being: the glorification of the Creator.

A sixth characteristic of Edwards' doctrine of creation can only be alluded to--viz. a sacramental view of the created order. Edwards, to our knowledge, nowhere explicitly states this view. However he does contend that the creation is a medium of God's self-communication. If we conceive of a sacrament as that which communicates the "Spiritual Presence",³⁸ then, according to Edwards, the whole created order is sacramental in character. For it has the capacity or potential for being the vehicle of the divine self-communication.

So that, when we are delighted with flowery meadows, and gentle breezes of wind, we may consider that we see only the emanations of the sweet benevolence of Jesus Christ. When we behold the fragrant rose and lily, we see His love and purity. So the green trees, and fields, and singing of birds are the emanations of His infinite joy and benignity. The easiness and naturalness of trees and vines are shadows of His beauty and loveliness. The crystal rivers and murmuring streams are the footsteps of his favor, grace and beauty. When we behold the light and brightness of the sun, the golden edges of an evening cloud, or the beauteous bow, we behold the adumbrations of His glory and goodness; and, in the blue sky, of His mildness and gentleness.³⁹

In short, the whole of the created order is "a lively shadow of His spotless holiness, and happiness and delight in communicating Himself."⁴⁰

AN ALTERNATIVE UNDERSTANDING OF CREATION

Edwards' view of creation places him in that theological tradition which views the Creator as being in a state of continuity with his creation. It sees the created order as a product of His on-going creativity. In its view this creative activity provides the creation with a consciousness of being in relation with the Creator.⁴¹

Schleiermacher expressed the view of this tradition in terms of the feeling of absolute dependence.⁴² To this understanding, withdrawal of the creative activity would result in the non-existence of the object of creation. "Created things. . .

would drop into nothing, upon the ceasing of the present moment, without a new exertion of the divine power to cause them to exist in the following moment."⁴³ This is not a pantheistic viewpoint because it does not identify the object of creation and the Creator. Yet it also avoids a dualism in that it does not sharply distinguish his creative activity and the created element. It maintains that God participates in the existence of that which he creates. Therefore, reality cannot be uniquely separated into natural and divine areas. The same reality inheres in all existence.

This view of creation is opposed by that tradition which views the Creator as being only over against that which he has created. The Creator and the creation are distinct entities. To this understanding, knowledge of God's creativity comes solely through revelation and is in no way related to what is discovered about the nature of creation. This means in turn that revelation can have no extension or reality in time or in the created order; it is limited to specific instances. There can be no such thing in this school of thought as a sacramental creation because the one who reveals or the spiritual presence can in no way be in or a part of the creation. The creation can not be a medium of revelation or a bearer of the spiritual presence since the Creator is absolutely discontinuous with his creation.

This point of view is expressed by Emil Brunner in The Christian Doctrine of Creation and Redemption. Positing the

Creator as one who stands "before and above" his creation he explicitly denies any correlation between the two. He affirms it is possible to conceive of the one apart from the other.

"The fact that God 'called the world into existence'. . . means that He has created something other than Himself, 'over against' Himself. . . .A world which is not God exists alongside of Him."⁴⁴ The creation therefore is not the "alter ego" of the Creator. Consequently, when we think of the created order,

we must think of it as something which does not naturally, essentially, and eternally, belong to God, but as something which only exists because it has been created by God. If it were otherwise, God would not be the Lord of the World at all, but, so to speak, its double.⁴⁵

To this view, creation contains within it nothing new or unique. Redemption occurs out of the created order, not through it. "This world is thereby no whit exalted, or established, or transformed."⁴⁶ The glory of God is in no way manifest in the created order, for he is in no way bound to that which he has created. He has in no way placed himself at the disposal of the creature or offered himself to him. The creature can only respond to a somewhat capricious divine initiative. "It is God who pronounces and speaks and renders, who selects and values according to His pleasure."⁴⁷ Reason is useless in such a situation. For no exercise of reason can reveal the Creator if he does not specifically act to enable this to be done. And, if he does, reason

is unnecessary. Consequently, what reason discovers about the nature of the created order has either nothing to do with what revelation "reveals" about it or it adds nothing to what is already known. Creation is

a fact which we cannot grasp in thought, nor can we evolve it out of our own needs, but we have to accept it, through the Divine revelation, as 'posited'. Thus we now see the necessary connection between creation and revelation. We can only speak of Creation on the basis of Revelation. . . . On the basis of our own intellectual efforts, to speak of 'creation' is. . . nonsense.⁴⁸

Brunner maintains that the fact the Creator has called the world into existence "means that non-divine, creaturely existence and even all that is material and destined to pass away has been freed from the odium of standing in opposition to God."⁴⁹ Because the Creator has willed the entire created order, because he has limited himself by allowing this creation to stand "over against" himself, all things "cease to be regarded as contemptible, disgusting or unreal."⁵⁰ All things therefore are good.

The proponents of the first view of creation maintain that only if God inheres in all things or only if all things partake of the divine nature can the creation be termed "good", that is, equipped or fitted to act as it was created to do. This means that apart from the continuous activity of the Creator, the creation has no freedom. Only where God is present is there freedom; only there exists the possibility of creative activity.

For apart from the presence of the Creator, the "energy of the divine will" (Brunner) is absent. This means there can be no progress, nothing new, no history. Apart from the divine presence or power the creation cannot and does not participate in history.⁵¹

Brunner states that "creation remains God's secret, a mystery, an article of faith."⁵² Edwards also maintains that there is a mysteriousness about the created order which escapes the capacity of the creature to fathom. The basis of this mystery is the essential mystery of the Creator and his communication or infusion of it into that which he creates.⁵³ The recognition of the mystery of creation depends upon a perception of the continuity of the creation and the Creator. But this Brunner explicitly denies. The mystery of the one who is in some sense wholly "other" cannot be experienced in the created order because what is there is essentially non-mysterious. What is there are simply natural laws, whose operations are capable of rational determination. And as Tillich has pointed out this is not mystery. "Nothing which can be discovered by a methodical cognitive approach should be called a 'mystery'. What is not known today, but which might possibly be known tomorrow, is not a mystery."⁵⁴ That which ceases to be a mystery after it has been revealed is not essentially mysterious.

Brunner cannot take the mystery of creation seriously because in his emphasis on the transcendence of the Creator he

has excluded the possibility of his immanence^e in the created order. The Creator exists only in so far as he is comprehended by faith. Likewise the mystery of the creation is "an article of faith." This means the emphasis in the understanding of faith is placed on cognition at the expense of being. The Creator exists only in so far as he unveils himself to the creature. And the creature exists before God only in so far as he perceives the Creator in faith. In this transcendental thought form the reality of the created order has been removed. The latter therefore cannot be taken seriously. Consequently, its significance for the creature, and the significance of its mystery, cannot be taken seriously. For it is denied that the creation is, in fact, mysterious.

The consequences of Brunner's position are two-fold. First, the creation is ultimately not taken seriously. For the supreme end of devotion is the Creator and he has no part in that which he has created. Here, Brunner might agree with Ritschl's affirmation that "God is the only Being (who) is not burdened with nature."⁵⁵ Secondly, for Brunner, what is done in the creation cannot be ultimately significant for it does not directly affect the Creator. Reality is other-worldly. Eternity, not temporality, is all-important. Except where the eternal realm "breaks into" the temporal, the latter has no permanent significance.

Thus we have two views of creation. The first is static in which there is essentially nothing new. The creation is set over against the Creator and is discontinuous with him. This

means the creation cannot participate in the historical process. Because God is the God of history it is the historical realm only that can be taken seriously. Creation and Redemption are therefore unrelated.⁵⁶ To be redeemed means to be taken out of the natural order.

By contrast, Edwards holds that Creator and creation exist in a personal relationship. The creation is not that which is set "over against" the Creator but that which participates in him. Apart from this relationship the created order has no reality. Its participation in the Creator is the source of its value, integrity and life.

Creation is attended by a mystery which cannot be penetrated by human reason alone but which cannot be taken seriously if the created order is not itself taken seriously. For it is only when the natural realm is taken seriously that the mystery which inheres in it can be perceived as mystery and not simply as unknown.⁵⁷

The purpose of the natural order and the mystery surrounding that purpose, and the mystery of the active, creative, redeeming presence of the Creator in his creation, are two dominant motifs in Edwards' view of creation. He would set man free to participate in this purpose, and investigate and perceive this mystery.

SUMMARY

Edwards appropriated the Biblical understanding of creation and gave to it his own interpretation. The elements of this interpretation which he introduced into the Biblical account were: a belief in creation ex nihilo together with a belief in creation ad extra, the distinction between a secondary and primary creation, the relating of the Creator to his creation in terms both of transcendence and immanence^e, the affirmation that the creation is the means whereby the Creator gives himself to and communicates with the creature, and the inference that the created order maintains a sacramental character.

Edwards' understanding of creation is at variance with that understanding in which the Creator does not participate in his creation, give of himself in it, or communicate through it. The result of maintaining this position, from Edwards' perspective, is the separation of those elements which must be maintained in a relationship of tension in any adequate understanding of creation. These are, the relationship between: the immanence^e and transcendence of the Creator, reason and revelation, and creation and redemption. In addition, a view of creation which separates these elements denies its reality and mystery. Consequently, this understanding cannot grasp their significance for man. Therefore, it cannot, in Edwards' view, comprehend the nature and purpose of the created order.

NOTES

¹James C. Logan, "The Secularization of Nature", Christians and the Good Earth, p. 113.

²B. W. Anderson, "Creation", Interpreter's Dictionary of the Bible, Vol. 1, p. 727 ff.

³Isa. 44:24.

⁴Jer. 33:20.

⁵Isa. 45:18.

⁶Ps. 8:5.

⁷Ps. 8:6f.

⁸Hos. 4:3.

⁹Rom. 8:20-23.

¹⁰Eph. 1:10.

¹¹Anderson, op. cit., p. 728.

¹²Misc. 1263.

¹³Misc. 107, quoted in Roland A. Delattre, Beauty and Sensibility in the Thought of Jonathan Edwards.

¹⁴Misc. 448.

¹⁵Misc. 87.

¹⁶Misc. 1218.

¹⁷Misc. 1263.

¹⁸The New Man, p. 108, quoted in J. A. T. Robinson, Honest to God, p. 44.

¹⁹Edwards holds this position over against and in reaction to the Deistic tendencies inherent both in his own tradition and in post-Newtonian scientific thought (I. Woodbridge Riley, American Philosophy: The Early Schools, p. 195). Hornberger points out that as early as 1693, after the introduction of the telescope, Mather observed that the cosmos declared the glory of God to every thoughtful observer and manifested itself as a marvelously regulated machine (op. cit., p. 148). He then suggests that as early as the 1690's Mather, like Ray before him, was captured by Deistic thought (ibid., p. 419). Johnson also notes this Deistic tendency in Mather and in certain Puritan writings. He states that in The Christian Philosopher Mather enunciates "the deistic principle that God's benevolence is manifested in the well-ordered beauty of Nature apparent to man through his Reason." (The Puritans, p. 733)

Such a point of view, he suggests, marks the beginning in America of the Enlightenment which, first expounded by Franklin, Paine and Jefferson, later flowered in Emerson and Thoreau." (ibid.) Yet Johnson also goes on to point out that Mather did not entirely abandon his orthodox Puritan view that the creator God can set aside his law to intervene directly in his world. Thus did Mather attempt to reconcile God's sovereign freedom and the reign of law, which was a recognized antinomy in his thought. Riley comments that Mather's Christian Philosopher represents "a rejection of Deism in name, . . . an acceptance of it in principle and still not in its fullest measure." (op. cit., p. 197.)

This tension was not at all evinced by the followers of Newton. Burttt claims that because of Newton's work, post-enlightenment thought has viewed the world of nature "as essentially a realm of masses, moving according to mathematical laws in space and time, under the influence of definite and dependable forces." (op. cit., p. 237.) Newton himself held that all the phenomena of motion in nature could be derived from mechanical principles and it was his hope that eventually all natural phenomena could be explained in terms of this mathematical mechanics. (Frederick Copplestone, History of Philosophy, Vol. 5, p. 148, 149.)

From Newton onward man became an "irrelevant spectator" in "the vast mathematical system whose regular motion according to mechanical principles constituted the world of nature." (Burttt, op. cit., p. 236.) Such a view of the universe and man's place in it expressed the prevailing Deism which "represented God as if a passive agent, governing the world by general laws and secondary causes, as well as far removed from the scene of human activity." (A. V. G. Allen, op. cit., p. 58.)

The proponents of Deism, then, accepted the common eighteenth century idea that the world operated in an orderly, purposive and thoroughly rational manner and that it demonstrated the existence of an all-wise, all-powerful, benevolent God. This God, the creator and governor of the world, nevertheless acted at a distance from it. This inevitably gave rise to a religious thought that, while it began by attempting a harmony between reason and revelation (e.g. Cotten Mather), inevitably made reason dominant. It stressed both the transcendence and the benevolence of God. It deemphasized human sin and the determination of moral action. It represented an attempt to rationally justify the way of God to man rather than an acceptance of the inscrutable nature of the divine decrees. (I. W. Riley, op. cit., p. 191 ff.)

Edwards fought against this school of thought for at least two reasons. First, it would appear that Deism as it developed in New England, was bound up with Arminianism and Pelagianism, both of which were at variance with the Calvinist doctrine of the Sovereignty of God and which substituted instead, a rational, natural, subject-centered religion. (Paul Ramsey, F.W., p. 3.) It was Edwards' intention to combat this thought through a reassertion of the sovereignty of God, the irresistibility of divine grace, and the impossibility of contingency of the existence of any part of the created order without a preceding cause. If contingency and the reality of self-determination were admitted, then "the supreme Lord of all things must be under great and miserable disadvantages in governing the world which he has made, and has the care of, through his being utterly unable to find out things of chief importance, which hereafter may befall his system; which if he did ^{not} know, he might make seasonable provision for." (F.W., p. 254.)

This Edwards could not countenance since to him the sovereignty of God involved his absolute rule and his perfect ordering of all things according to His own will. To deny that all things were so ordered was to deny the reality of this sovereignty. And, said Edwards, "absolute sovereignty is what I love to ascribe to God." (P.N., p. 59.) It is because of this affirmation that Miller contends that Edwards "always was to insist, as the major premise of all his thinking, 'nothing ever comes to pass without a cause.'" (Images, p. 22.) And a cause was not that which "has a positive efficiency to produce a thing, or bring it to pass." Rather, this is but a sequence, and one "based upon the divine establishment that it shall follow." (Miller, Jonathan Edwards, p. 121-22.) For since the whole universe existed only in the divine consciousness, it contained no independent capacity for development; "The atoms of creation impinged on and impelled each other only because God, at each moment, thought it fit that they do so." (Alan Heimert, Religion

and the American Mind, p. 73.) Because the Deists, in effect, deny the reality of God's governance of His creation, they are worse than the heathen. The latter at least know that God has spoken with man and that he is present in some way in his world. Therefore, those who hold that God is somehow present in his creation or who even hold nature to be in some way sacred, are in Edwards' opinion closer to the truth than those who hold that God is simply transcendent.

If we suppose that God never speaks to or converses at all with mankind, and has never, from the beginning of the world, said anything to them but has perfectly let them alone. . . . such a notion, if established, would tend exceedingly to atheism. It would naturally tend to the supposition, that there is no Being that . . . governs the world. . . . It would tend to overthrow every doctrine and duty of natural religion. Now, in this respect, deism has a tendency to a vastly greater degree of error and brutishness with regard to matters of religion and morality, than the ancient heathenism. For the heathen in general had no such notion, that the Deity never at all conversed with mankind in the ways above mentioned; but received many traditions, rules, and laws, as supposing they came from God, or the gods, by revelation. (M.O., p. 225.)

Deistic thought also brought with it a secularization of the natural law tradition. Calvin provided for a rational, natural, knowledge of God which was of God. (Institutes 1:1.) This meant, that the innate capacity to know God could not be separated from God himself. However, with the passing years the natural law assumed increasing independence and autonomy. It became, for the Deists, a means for determining the way in which God can be known and, hence, a substitute for God's sovereign will. The secularization of the natural law in this way provided the basis for a religion "within the limits of reason" which by deifying the law relieved man of the necessity of "having to do" with the law giver. In Riley's words:

Between an absolute creator and an abject creation there was brought in a third factor, the law of nature, in whose benefits man participated. . . . By the time the law was made universal, the deity was brought to a far remove, and while counted the maker, was no longer considered the ruler. . . . With

this banishment of the master, the servant grew boldly arrogant. (American Thought from Puritanism to Pragmatism, p. 9, 10.)

To this "emancipation" of human reason and assertion of creaturely independence, Edwards reacted sharply. He saw in this development not only the establishment of reason apart from its source, but also an optimistic discarding of the reality of sin, with the implication that without revelation man could see and obey the natural law. The erection of the natural law into a self-sufficient principle signified to Edwards that man had lost a sense of his innate depravity and that he no longer realized the necessity of having this sense restored by grace.

For this reason, says Edwards, all Tindal's argumentations in his Christianity as old as the Creation, are absurd. (M.O., p. 196, 197.) "Tindal's main argument against the need of any revelation is, that the law of nature is absolutely perfect. But how weak and impertinent is this arguing, that because the law of nature (which is no other than natural rectitude and obligation) is perfect, therefore the light of Nature is sufficient." (ibid., p. 212) (We will consider Edwards' understanding of the relationship between reason and revelation in Chapter VIII.)

The light of nature is not sufficient. It is not sufficient to enable man to obtain a true knowledge of God, viz. true religion or "the religion of a sinner, . . . of depraved, guilty and offending creatures. . . ." (ibid., p. 214.) Similarly the law of nature is incapable of either prescribing or establishing this religion; "Not only is the light of nature insufficient to discover this religion, but the law of nature is not sufficient to establish it, or to give any room for it." (ibid.)

There were rationalistic elements in Tindal's thought that were undoubtedly congenial to Edwards' temperament and outlook. Yet it also represented those tenets of Deism which Edwards found most offensive. For Tindal held that God is the God of reason, that because human nature does not change, human reason has always been able to discern His being and attributes, that morality is capable of demonstration and is therefore true, that the Bible must be read like any other book and that the scriptures provide at best an uncertain guide to morality. (E.

C. Mossner, "Matthew Tindal", The Encyclopedia of Philosophy, Vol. 8: p. 140) These propositions Edwards rejected.

²⁰ op. cit., p. 22.

²¹ Misc. 697. In his "Jonathan Edwards and the Theology of the Sixth Way" Robert C. Whittemore denies that Edwards is a panen-

theist (Church History, Vol. 35, p. 62). He contends that Edwards is rather a "Christian neoplatonist" (p. 68) who sees the creation as a shadow or image of the Creator who is "in no way dependent upon and hence separated from, it." (p. 67)

We have admitted Edwards' emphasis on the sovereign independence of God. For him, "the first Being. . . is self-existent, independent, of perfect and absolute simplicity and immutability, and the first cause of all things." (F.W. p. 377) Yet, Whittemore does not sufficiently consider that this independence was maintained according to Edwards in a relationship in which the Creator relates all things to himself by means of his self-communication or creative activity. This means that the created order is more than an image of reality although it is that. It is also reality itself; it is in some way a "divine constitution." Consequently, while in one sense the Creator is independent of his creation and separated from it, he chose also to unite it to him and to infuse it with his very being. In this sense the Creator is in the creation and the creation is in or united with the Creator.

It is true, as Whittemore points out, that there is in Edwards' thought the Mediaeval affirmation of the attributes of the Creator e.g. his immutability. (op. cit., p. 72) This indicates to him that Edwards was not a "modern" in the sense that he was a theologian "free to frame his conception of God in accordance with the findings of contemporary science and psychology." (ibid., p. 68) Consequently, he concludes, Edwards' view of creation is also Mediaeval. There is no doubt, says Whittemore, that with respect to the origin of the created order Edwards "would opt for the cosmology of the Six Days." (ibid., p. 72)

The reason for this is that Edwards has subjected his philosophy to the service of scripture, (ibid., p. 69) whose authority rests ultimately on revelation. Consequently, there is in the final analysis no place for a continuously changing or deepening view of either God or creation in Edwards' thought. His understanding of both is Biblicist and static.

There are undoubtedly passages that could be cited to show that Edwards had in some ways a Mediaeval "mind set". Yet from what we shall discover about his concern that reason be present if revelation is to be revelation, his conviction that many of the mysteries of the created order will be cleared up as man perfects his use of reason and learns more about the natural world, his rejection of a world view that cannot be sustained in the light of the latest scientific discoveries, and his understanding of faith, which requires continual growth in knowledge of both the Creator and his creation--in view of these elements in Edwards' thought, we hold that in both theory and practice neither Edwards' theology as a whole nor his doctrine of creation in particular was either Mediaeval or Biblicist. Whitte-

more's assertion that Edwards did not aspire to be anything other than a consistent Calvinist does not stand up to Edwards' own denial of this assertion. (F.W., p. 131)

Nor can this assertion be sustained from Edwards' works. In his doctrine of creation, Edwards moved beyond Calvin's understanding to hold transcendence and immanence in creative tension in a way not present in Calvin's thought. In addition, his attempt to synthesize these elements, which are implicitly but not explicitly present in the Biblical material, indicates that Edwards was not a Biblicist, at least as far as his doctrine of creation is concerned. This is not to deny, of course, that Edwards' understanding of creation was dynamically Biblical.

²²O.A., p. 16.

²³Misc. 679.

²⁴E.C., p. 484.

²⁵Misc. 1518.

²⁶Misc. 92.

²⁷Misc. 679.

²⁸Misc. 140.

²⁹ibid.

³⁰Misc. 87.

³¹ibid.

³²E.C. 468, 475.

³³Misc. F.

³⁴P.N., p. 71, 72.

³⁵Covenant of Redemption (C.R.): "Excellency of Christ." Faust and Johnson op. cit., p. 374.

³⁶E.C., p. 458, 459.

³⁷ibid., p. 478.

³⁸Paul Tillich, Systematic Theology, Vol. 3, p. 120.

³⁹C.R., op. cit., p. 373, 374.

⁴⁰ibid.

⁴¹For Edwards, it was the creative activity of man, reflecting the divine creativity which provided the natural order with this consciousness. (Misc. 1)

⁴²The Christian Faith, Sec. 4.

⁴³O.S., p. 401, 402.

⁴⁴p. 19, 20.

⁴⁵p. 4.

⁴⁶Karl Barth, The Epistle to the Romans, p. III.

⁴⁷ibid.

⁴⁸Brunner, op. cit., p. 12.

⁴⁹ibid., p. 19.

⁵⁰ibid., p. 20.

⁵¹Brunner admits that the created order is a work of the Creator that has a definite beginning and end and that it reaches this end or goal only by means of "the energy of the divine will." (ibid., p. 14) Yet he denies that the created order in any way mediates, or is part of the divine power. Rather, "the world created by God, as limited, dependent being, is fundamentally different from the Being of God." (ibid., p. 21) It is only through natural laws that the created order is sustained.

What we call the 'laws of nature' are God's orders of creation. This and this only is the way God has ordered the world. . . . He works according to law and not in an arbitrary manner. (*ibid.*, p. 25)

Yet Brunner is forced to admit that while these laws of nature are the means used by the Creator to preserve his creation, they do not exclude the possibility that "God is still actively and creatively at work in a world which He has already created, and which He preserves." (*ibid.*, p. 34) In fact, "the more we take into account the fact that the various forms of life did not all arise at the same time, . . . the more unavoidably are we led to this thought. God did not create everything at once; He is continually creating something afresh." (*ibid.*)

But the fact that God is continuously creative means that he is continuously interjecting a new element into the created order. Thus the divine preservation of the created order by means of the laws of nature, is distinct from the divine creative activity. This Brunner concedes. (*ibid.*) Therefore, he must also concede that the Creator, in that he creates this life and not that, this world and not some other, does act arbitrarily. This is Edwards' position. (O.S., p. 403) Brunner, at this point, would seem to be inconsistent.

⁵²op. cit., p. 35.

⁵³M.O., p. 203.

⁵⁴op. cit., Vol. 1, p. 109.

⁵⁵Albrecht Ritschl, Instruction in the Christian Religion. A. T. Swing, Ed. The Theology of Albrecht Ritschl, p. 182-83.

⁵⁶Edwards' understanding of the relationship between History, Creation and Redemption will be discussed in Chapter 8.

⁵⁷This statement will be discussed in Chapter 4.

CHAPTER III

MAN AND HIS ACTIVITY IN THE NATURAL WORLD

INTRODUCTION

We have discussed the basis of Edwards' understanding of the natural world, which is his understanding of creation. We will now discuss the way in which he views man's relationship to the created order. We will first investigate where Edwards places man in this order and how man, in Edwards' estimation, relates himself to it. Secondly, we will consider the attitude which man, in Edwards' view, should maintain toward the natural order and the character of the activity in it, that should arise from this attitude.

MAN AND THE NATURAL ORDER

Man, says Edwards, is that creature formed in the image of God.

As there are two kinds of attributes in God . . . his moral attributes. . . and his natural attributes. . . so there is a two-fold image of God in man, his moral or spiritual image which is his holiness, i.e. the image of God's moral excellency (which image was lost in the Fall) and God's natural image, consisting in man's reason and understanding, his natural ability and dominion over the creatures, which is the image of God's natural attributes.¹

What distinguishes man from other creatures is his potential for participating in the holiness of God and of manifesting His excellency in his life. Man is free to do as he chooses. He can yield his consent to the whole in which he is immersed. He can act to sustain rather than destroy life. In man "the thing wanting is not a being able but a being willing. There are faculties of mind, and capacity of nature, and everything else sufficient but a disposition; nothing is wanting but a will."²

Consequently, man has a greater capacity than any other element in the natural order to know the Creator and his purpose or creative design. He has a greater capacity to comply actively with it.³ Therefore he has a greater responsibility to his Creator than any other creature. Because men "are capable of knowing the end of which their author made them, it is doubtless their duty to fall in with it."⁴ Man's actions are, therefore, not necessarily destructive.

Yet man has also a greater capacity for dissent from being and consequent immorality than any other creature. For man has lost God's moral image or holiness. He lacks an inherent capacity for moral excellence. This means he has no capacity to play his part perfectly within "the universal system of existence." He is always subject to the demands of inordinate self-love which primarily seeks the good of the private system. For "self-love signifies man's regard to his confined private self, or love to himself with respect to his private interest."⁵ And

"nature cannot go beyond self-love, but all that men do, is some way or other from this root."⁶ Self-love is an inevitable component of the motive for even the most disinterested of man's actions.

Because man worships what is partial he seeks to destroy all that is not included in this partial interest. And ultimately to exalt a private system or private interest is to treat with great contempt and act in opposition to "the rightful supreme object of our respect." It is to "act the part of an enemy to it" and "in opposition to the true order of things."⁷

Hence, man, the agent of greatest good as well as the greatest agent for good, is also the most destructive. His destructiveness exceeds anything known in the natural world. With respect to their own species the creatures of the natural order are "for the most part harmless and peaceable."⁸ With man, however, one finds both in his own communities and in his relation with the natural community destruction that is wanton. "No creature can be found anywhere so destructive of its own kind, as mankind are."⁹ The "decency, beauty and harmony" of the natural world reflect "the God of order, peace and harmony" which constitutes it.¹⁰ Such is not always the case in the higher part of the created order, which is often a realm of "deformity, discord, and the most hateful and dreadful confusion."¹¹

Man has always destroyed the natural world, and rationalized this destruction as being in the public interest. "Many

7

kinds of brute animals are esteemed very noxious and destructive . . . and the destroying of 'em has always been looked upon as a public benefit."¹² In fact, however, it is a manifestation of man's enmity toward the natural world and his contempt for it. Invariably he seeks to use it in the service of his own private interests (self-love) and therefore to act in opposition to "that which is infinitely (his) supreme interest."¹³ And when man does seek to protect the natural world or preserve it, he does so usually because he sees in it some value to himself. This means that for the most part his love for or interest in the natural world is not disinterested. "If we love not God because he is what he is but only because he is profitable to us, in truth we love him not at all."¹⁴

Man acts the enemy to the natural order because of his hostility to the One who has created it and the One to whom it is ultimately subject. "Private affection, if not subordinate to general affection, is not only liable . . . to issue in enmity to being in general but has a tendency to it. . . and must necessarily be."¹⁵ Man seeks not to play his part in the general scheme of things but to dominate it by seeking his private interest at the expense of the whole of existence with which he stands related. For "when a man is governed by a regard to his own private interest" he is constrained "to pursue the interest of its particular object in opposition to general existence."¹⁶

With respect to both the good of his own community, ("the

good of the public") and the good of the natural community, man generally fails to do his duty. His self-will or pride prevents him from consenting to the divine sovereignty.¹⁷

Men everywhere and at all times choose thus to determine their own wills. . . and to sin constantly as long as they live and universally. . . choose never to come up half way to their duty.¹⁸

The Creator has given the natural community an awareness of its life by means of man. Man has been given the task and capacity to be the consciousness of the creation "whereby the universe is conscious of its own being, and of what is done in it, of the actions of the creator and governor with respect to it."¹⁹ Because the will, decision and action of man affects the natural world to the extent it does, God has subjected man to "a good moral government" and his "voluntary acts" to rules.²⁰ The relationship between man's innate depravity and the destruction of the created order is necessary. The destructive element in man cannot be self-contained; it affects the whole of which he is a part. There is no effect (destruction) without a cause (depravity). Consequently, if man's authority over the natural world were unconditional both would be subject to a "reign of everlasting discord, confusion and ruin."²¹

Because the fate of the natural order is bound up with man it can fulfill its purpose only as man wills to play his part in the universal design. To the extent that he refuses this con-

sent, the natural world continues in bondage and in subjection to futility.²² Conversely, when man does play his part in this design, he strengthens that unity which constitutes the fabric of life. For consent to the Creator's design or will is Excellency²³ and "Excellency is Harmony, Symmetry and Proportion."²⁴ And the more he does maintain his proper role in the "universal system" the more he is aware of this unity both within and without himself and the more does he find joy in its maintenance.

If he has a sense not only of his not dissenting, but of his consenting to Being in general or Nature, and acting accordingly; he has a sense that Nature, in general, consents to him; he has not only Peace but Joy of mind, wherever he is.²⁵

Man and the natural community are made aware of each other through man's response to it. This response determines whether they know each other in enmity or in peace. Consequently, since the Creator inheres in that which he has created or is in continuity with it, man's response to the created order determines whether he knows the Creator in enmity or in peace. Consent to nature is consent to Being in general.²⁶ Dissent from the created order is therefore dissent from Being in general. The "act of dissent to Being in general" produces in man the realization "of that Being's dissent from him."²⁷ This realization is "most disagreeable to (him)."²⁸ As a consequence, "wherever he is he sees what excites horror."²⁹ Man perceives the created order either in terms of beauty and joy or in terms of horror and fear,

depending upon his willingness to relate to it, as he is required to do, by the Creator.

In activity which supports the created order in the performance of its duty man not only unites himself with it, but also participates in its progress toward the full realization of that unity and harmony which is its goal and which is now imperfectly expressed.³⁰ And in this union with the created order man unites himself with the being and purpose of its Creator. He makes the Creator's purposes his own.³¹ He participates in that ongoing creation which manifests the Creator's activity.³²

This means that he constructively avails himself of and participates in the divine power which infuses the whole created order.³³ Human and divine action are inseparable. The link between the two is the natural community in that it is the means whereby the divine power and activity ^{are} ~~is~~ made available to man. Man is surrounded by the divine presence; he cannot escape this universal energy which influences his every faculty at every moment.

By reason of our so great dependence on God, and his perfections, and in so many respects, he and his glory are the more directly set in our view, which way soever we turn our eyes.³⁴

The implication of Edwards' understanding of man's activity in the natural order is twofold. First, it requires that his activity be secular activity. Secondly, it requires that it

be with reference to the Creator; that it be faithful activity.

FAITH AND MAN'S ACTIVITY IN THE NATURAL WORLD

Faith for Edwards is a rational understanding of³⁵ and an emotional consent to³⁶ what is real in this world. What is real is the dependence of the whole created order on its Creator. "All things. . .are upheld in being by him and would sink into nothing in a moment, if he did not uphold them."³⁷ This realization yields humility. "Faith abases men and exalts God."³⁸ Humility increases in the act of obedience. "Humility is that wherein a spirit of obedience does much consist."³⁹ Obedience consists in both the "negatives and positives of religion."⁴⁰ It consists in that practice which is the result of a confidence in "Christ's sufficiency and faithfulness to bestow eternal life . . .and trust in him for happiness and life."⁴¹ Only when there is confident obedience is faith possible. And only where there is faith is obedience a possibility. The source of the power to both trust and obey is the Creator of whom, through whom and in whom are all things.⁴²

Faith is an integral element in all progress and understanding. It carries with it participation in all endeavour which has as its goal the building up of all things or the strengthening of all things in their essential unity in and in dependence on the Creator in whom "all unites as the center."⁴³ Faith is active and he who remains "an indifferent unaffected spectator"

has little or no faith for he lacks the will to faith.⁴⁴ Where there is this will, however, there is also understanding. Where this occurs, the integrity of self is restored. For the two faculties which constitute the soul are then present.⁴⁵ And when they are present in this manner "the soul comes to act (so) vigorously and sensibly, and. . .with (such) strength that, through the laws of the union which the creator has fixed between soul and body" faithful activity results.⁴⁶ Such activity flows from this union of soul and body and is impossible apart from it.⁴⁷

Faithful activity which seeks the union of all things in the Creator is a response to a discerning of the divine presence in the created order. Faithful activity is the result of a "spiritual understanding" of the natural order which sees the Creator's "holiness, righteousness, faithfulness and goodness" manifest in it.⁴⁸

The natural world exists to manifest these divine moral perfections. "The glorifying of God's moral perfections is the special end of all the works of God's hands."⁴⁹ In so doing, the natural world participates in and takes as its own these perfections. The natural world shows forth these perfections to the extent that it reacts to the will of its Creator as it was designed to do, to the extent that it does not commit "that evil which is against duty and contrary to what is right and ought to be."⁵⁰

It is mutual faithful activity or conformity to the will of the Creator that unites man and the natural world. In this activity the natural community becomes man's partner; each provides the completion of the other. For in this mutual relationship each is nourished, sustained and provided with the opportunity and means of growth and therefore of faithful activity. The natural world is meant to serve man.⁵¹ Man, in turn, is to consent to the activity of the natural world.

For what disagrees with or is contrary to Being is deformity.⁵² And the greatest or most "odious" deformity is "dissent from consenting Being."⁵³ The natural community consents to the design of its Creator since he inheres in that which he creates and consents to or glorifies himself.⁵⁴ The Creator has given man the capacity to recognize this design and to assist the natural world to conform to it.⁵⁵ That is, man has been given the capacity to consent consciously to consenting being. In this consenting activity the Creator rejoices.⁵⁶ He rejoices when man consents to the being (the natural order) which He has given him.

It is the tendency toward such a faithful union that constitutes the basic thrust of both the natural and human communities. For such a relationship is the relationship of harmonious consent in which the Creator is glorified. This relationship is willed by him. And this will cannot fail.⁵⁷ It is impossible that there should be a "failing of his end in anything that he has undertaken or done."⁵⁸ And what he has undertaken is to

create an order in which he is glorified⁵⁹ by means of the activity of the elements which constitute it.⁶⁰ Faithful activity, again, is obedient activity.

If ye give consent; there is the first thing: but that is not enough, but if ye also obey: the consent that standeth in the inward act of the mind, the truth of it will be seen in your obedience, in the acts of your lives.⁶¹

THE NATURE OF SECULAR ACTIVITY

Man's activity in the natural world is to be faithful activity. Faithful activity is obedient activity. Obedient activity requires an attitude of detachment. This attitude consists in a willingness to relinquish all understanding perspectives and knowledge which are superseded by new knowledge and understanding.⁶²

Activity that is the product of faith, obedience and detachment is secular activity.⁶³ It is motivated by a perception in each reality of that which points to a more inclusive reality.⁶⁴ It is also motivated by a desire for a more complete understanding of the more inclusive reality. This reality manifests the presence of the Creator⁶⁵ of whom, through whom and in whom all things are.⁶⁶ Secular activity, then, is activity which has primary reference to the fact of this presence.⁶⁷

The created order is good.⁶⁸ The good of the created order consists in its fitness to fulfill the purpose for which

it was created.⁶⁹ But it cannot be the origin of this good because it cannot establish itself as good. Its goodness is a dependent or derived goodness because its existence is a dependent existence. It is dependent on the Creator first for its creation, secondly for its sustenance or continuation in being and thirdly, for its order.⁷⁰ Therefore it is imperfect since all dependent existence is imperfect.⁷¹ Consequently it lacks unity or wholeness. Only perfection is absolute unity.⁷² Therefore "we can conceive of its being a part of a disjunction."⁷³ The created order reflects or manifests the goodness that issues from "absolute perfection." However, to accept the natural order as the origin of goodness and therefore the only or ultimate reality is to give to the creature "or (a) system of created beings" an affection "which is not dependent on, nor subordinate to a propensity or union of the heart to God, the supreme and infinite Being."⁷⁴ That is, this acceptance represents idolatry, the worship of a partial reality. And idolatry issues in a false secularity.

For "the life, essence and sum of all true religion" consists in the inclination to love God supremely.⁷⁵ And this inclination involves both the understanding that perceives primary reality in derivative reality⁷⁶ and the will to respond to primary reality with appropriate action through the medium of derived reality, as duty requires.⁷⁷ "Practice is the proper evidence of a gracious love. . . to God."⁷⁸ "Our real taking of

Christ, appears in our actions and works."⁷⁹ Activity that is directed primarily to derived reality is unfaithful and disobedient activity. It is the activity of the person who is falsely secular.

SUMMARY

Man is that creature created in the image of God ~~and~~ who therefore has dominion over the "lower world." Man therefore has the responsibility and capacity for determining how he will exercise this responsibility. His decision will result in either chaos or harmony throughout the created order. Harmony is the yield of activity which is characterized by faith, obedience and detachment. Disunity or chaos is the product of activity motivated by a false or partial perception of reality and therefore not in conformity with the "universal system of existence." Man chooses that reality to which his existence and actions will conform. As the head of the natural order he inhabits he therefore determines its character and the extent to which this order manifests the perfection of the design of its Creator.

NOTES

¹R.A., p. 256.

²F.W., p. 162.

³M.R., p. 303.

⁴E.C., p. 485.

⁵T.V., p. 36.

⁶C.F., p. 250.

⁷T.V., p. 22, 23.

⁸O.S., p. 168.

⁹ibid.

¹⁰M.R., p. 305.

¹¹ibid., p. 304.

¹²O.S., p. 168.

¹³T.V., p. 23.

¹⁴O.S., p. 144.

¹⁵T.V., p. 22.

¹⁶ibid., p. 21.

¹⁷O.S., p. 210.

¹⁸ibid., p. 194.

¹⁹Misc. 1.

²⁰M.R., p. 305.

²¹ibid.

²²H.A., pp. 463, 464.

²³Mind 1.

²⁴ibid.

²⁵Mind 45, Paragraph 14.

²⁶ibid.

²⁷ibid.

²⁸ibid.

²⁹ibid.

³⁰H.A., p. 464.

³¹E.C., p. 26c.

³²O.S., p. 402.

³³ibid.

³⁴G.G., p. 445.

³⁵C.K., p. 391.

³⁶R.A., p. 272 ff.

³⁷D.S., p. 481.

³⁸G.G., p. 448.

³⁹R.A., p. 396.

⁴⁰ibid., p. 386.

⁴¹ibid., p. 446.

⁴²G.G., p. 445.

⁴³ibid., p. 446.

⁴⁴R.A., p. 96.

⁴⁵ibid.

⁴⁶ibid.

⁴⁷ibid., p. 272.

⁴⁸ibid., p. 273.

⁴⁹ibid.

⁵⁰R.A., p. 254.

⁵¹M.R., p. 361c.

⁵²Mind 1.

⁵³ibid., 45.

⁵⁴Images 53.

⁵⁵F.W., p. 162, E.C., p. 485.

⁵⁶Misc. F.

⁵⁷F.W., p. 256.

⁵⁸F.W., p. 256.

⁵⁹E.C., p. 495.

⁶⁰W.U., p. 548.

⁶¹John Preston, The Church's Carriage, p. 99-100, quoted by Edwards in R.A., p. 445.

⁶²C.K., p. 382 ff.

⁶³To our knowledge, Edwards does not employ the term secular or secularization in setting forth his view of man's activity in the natural world. We employ the term to indicate our understanding of Edwards' conception of this activity. Hence, we use it as do contemporary theologians: to signify the release of man from subjection or bondage to and worship of the created order and acceptance of responsibility for and active domination of it. Such is the way, for example, that Friedrich Gogarten employs the term. (cf Larry Shiner, The Secularization of History, Chapter 1)

⁶⁴Images 59.

⁶⁵Misc. 362.

⁶⁶G.G., p. 437.

⁶⁷Edwards' understanding of man's activity in the natural order arises out of his understanding of creation in which he views the Creator and his creation in a continuity. The point at which the creation and the Creator are seen as one is in the person of Christ, whose beauty the whole created order embodies, both spiritually and materially.

"The Son of God created the world for this very end to communicate himself in an image of his own excellency." (Misc. 103) He communicates himself primarily to spirits, for "they only are capable of being proper images of his excellency." (*ibid.*) Therefore "we see far the most proper image of the beauty of Christ when we see beauty in the human soul." (*ibid.*) Yet the natural world is not excluded, for Christ communicates himself to it. Consequently "the beauties of nature are really emanations. . . or the excellencies of the Son of God." (*ibid.*) "For all the beauties of the universe. . . immediately result from the efficiency of Christ." (Misc. 185)

Therefore creation has reality only insofar as it participates in the reality of God in Christ who inheres in all derivative reality and who is encountered in this reality. It is

through involvement with derived reality (creation) that primary reality (God in Christ) is recognized. Only then is it possible to receive and participate in that good which is there communicated.

Dietrich Bonhoeffer also expounds this theme in his Ethics. "Whoever sees Jesus Christ does indeed see God and the world in one. He can henceforward no longer see God without the world or the world without God." (p. 70) For Edwards and Bonhoeffer both, it was impossible to experience the reality of the world apart from the reality of God in Christ.

⁶⁸S.H., p. 456.

⁶⁹E.C., p. 484, T.V., p. 24.

⁷⁰Misc. 650.

⁷¹ibid.

⁷²ibid.

⁷³ibid.

⁷⁴T.V., p. 107-108 c.

⁷⁵R.A., p. 146.

⁷⁶ibid., p. 96.

⁷⁷ibid., p. 13, 96.

⁷⁸ibid., p. 447.

⁷⁹John Preston, The Church's Carriage, quoted by Edwards in R.A., p. 445.

CHAPTER IV

KNOWLEDGE AND THE NATURAL WORLD IN

EDWARDS' THOUGHT

INTRODUCTION

Man's activity in the natural order is to be secular activity. However, such activity is impossible apart from a knowledge of this order. The basis of man's activity in the created order then is his knowledge and understanding of it and of its significance. We will now investigate the place Edwards assigns knowledge in his understanding of the natural world and what he considers knowledge, in itself, to be.

THE PLACE OF KNOWLEDGE IN EDWARDS' UNDERSTANDING OF THE

NATURAL WORLD

If we define grace as "the goodness of God and the activity of this goodness in and toward his creation"¹ we can say that the created order for Edwards was a theatre or realm of grace. For the goodness of the Creator is a communicated goodness.² And the created order is the realm of his self-communication.³ This self-communication is the divine power which gives life to all existence.⁴ Hence "the power of a being, even in creatures, is nothing distinct from the being itself."⁵ And power is "nothing but the essence of God."⁶ The power of energy

inherent in the natural world, then, represents the activity of its Creator, since "God is pure act."⁷

It is the self-giving of the Creator that makes the created order a realm of grace. This means the natural world is invested with both ultimate significance and continuing demand. Its significance is that it represents the gift of life. That is, it represents the willingness of the Creator to unite all things with himself who is the source of life.⁸ The demand is that the creature make the appropriate i.e. obedient response to the divine initiative.

The obedient response involves a knowledge both of the will and nature of the Creator, and of the nature and design of his creation.⁹ The former is necessary in order that the purpose and goodness of the Creator might be known and appropriated. The latter is necessary in order that the Creator's will be communicated to the natural order which communication is man's function.¹⁰ In the act of this communication he exercises his legitimate dominion over the natural world. It was to exercise this dominion that he was created with unique powers.¹¹

Obedience or consent to the will of the Creator should therefore be man's primary concern. And since obedience or consent is impossible without an understanding of both the Creator and his creation, "the main business of man (becomes) the improvement and exercise of his understanding."¹² And "we cannot make

a business of the improvement of our intellectual faculty, (the understanding) any otherwise than by making a business of improving ourselves in actual knowledge."¹³ Consequently, man is to employ those faculties that he has in common with the rest of the created order "in subserviency to (his) understanding; and therefore it must be a great part of man's principal business to improve his understanding by acquiring knowledge."¹⁴ Every element in the natural order is unique; each is fitted for a particular task. The uniqueness of man, however, is of a different order than other elements because he alone retains the image of God. He alone exercises dominion over the rest of the created order.¹⁵ The uniqueness of man which is his identity as man is therefore also expressed in a way that is qualitatively different from the self-expression of other created elements. For he expresses his self-identity through his reasoning and understanding.¹⁶ It is these faculties which make man superior to the rest of the created order.¹⁷

God hath given to man some things in common with the brutes, as his outward senses, his bodily appetites, a capacity of bodily pleasure and pain and other animal faculties: And some things he has given him superior to the brutes, the chief of which is a faculty of understanding and reason.¹⁸

What man reasons about and seeks to understand is the creation and its Creator. For "God gave man the faculty of understanding, chiefly, that he might understand divine things. For

the knowledge of these things is the principal end of this faculty."¹⁹ The natural world does not have the capacity for this knowledge to the extent that man does.²⁰

The reason why we have faculties superior to those of the brutes given us, is that we are indeed designed for a superior employment. That which the Creator intended should be our main employment, is something above what he intended the beast for, and therefore hath given us superior powers.²¹

It is the Creator's intent that his glory be shown forth in his created order.²² In his perception of and consent to the manner in which this glory is manifest, that is, the Creator's design, the creature finds his happiness.²³ Consequently, the context in which this design is operative, the natural world, is to be investigated in order to determine how the design may best be supported and complied with. The created order, in that it is the medium of divine self-communication, is a realm in which "divine things" are to be understood. The empirical investigation of this order is part of man's duty to God and of his responsibility to the natural order.

Reason shows that it is fit and requisite, that the intelligent and rational beings of the world should know something of God's scheme and design in his works. . . . And therefore surely it is requisite, that they should know something of it; especially since reason teaches that God has given his rational creatures a capacity of seeing him in his works; for this end, that they may see God's glory in them, and give

him that glory. But how can they see God's glory in his works, if they do not know what his design in them is, and what he aims at by what he is doing in the world?²⁴

The acquisition of knowledge is therefore necessary in order for man to exercise his dominion over the natural world. A question that follows is, how does man acquire this knowledge and consequently exercise his proper dominion? How does he acquire knowledge of the truth of things (reality) and avoid confusing this truth with a falsity? Unless this question is answered, it is not possible for man to know how to maintain a proper relationship with the natural world. For since the natural world represents the gift of the Creator's power to man, who has the possibility of using this power as he wills,²⁵ the relationship between man and the created order will be determined by his use of this power. And this in turn will depend on his perception of reality. The requirement of man to make the appropriate response to the natural world as an order of grace requires that he ask what he can know. This is required in order that he may involve himself in the chief business of life which is the improvement of the faculty of his understanding through the acquisition of and growth in "actual knowledge."²⁶ What then did Edwards mean by "actual knowledge"?

THE NATURE OF KNOWLEDGE IN EDWARDS' UNDERSTANDING OF THE
NATURAL WORLD

Edwards views knowledge as that which contains both subjective and objective elements. Knowledge is objective in that it represents a mastery of empirical reality.²⁷ Objective knowledge is therefore a necessary prerequisite for full knowledge, for it is a knowledge of the way in which the Creator has established his creation and thereby communicates himself to his creature. It is mandatory, for Edwards, to accept the results of scientific enquiry²⁸ as integral to the religious enterprise. Since God alone is, all objective knowledge of the natural world is in a sense knowledge of God and therefore a religious pursuit.

It is a presupposition of Edwards' thought that all elements of the created order so work together or interact that none "disturb the harmony and subserviency or obscure the beauty" of the natural world.²⁹ Yet man does not perceive the reality of this beauty without understanding it. The natural world must be studied in order to be understood. It is only when one determines the systems of the natural world and their "proper relationship, exact situation and commensuration"³⁰ that one begins to understand the reason for its ordering and the purposes for which it was created. It is only then that these purposes can be promoted and supported. This means that knowledge and understanding of the workings of these systems is imperative.

Knowledge also has an existential or subjective aspect in that it is acquired through personal involvement or experience. What is known is what is experienced.³¹ What is not experienced cannot be known, nor can its significance be determined.³² It can only be reasoned about.³³

Experience is therefore necessary if reason is to know that about which it reasons. And it can only have this experience when there exists the will to do so. Lack of will is that which prevents the appropriation of truth. "Men will readily see where they are willing to see but where they hate to see they will hide their eyes."³⁴ Truth is a product of the will to know.

Consequently, knowledge involves both that which is known and the one who knows. It is therefore a relational concept. The object of knowledge acts upon the subject via the senses and the subject in turn reacts toward the object. Knowledge is not gathered information. It is an appropriation of experience in action. That action which yields knowledge of reality is activity which has as its purpose consent to reality. That is, it is obedient activity. For obedience is a "consenting" and a "submitting and yielding of the will. . .to the manifested will of the commander."³⁵ When this occurs, the knower has "the weight and power of real things (reality) in (his) heart."³⁶ No longer does he simply have an opinion about reality, he now knows it because he has "seen the truth of it."³⁷ He now has a "certainty of knowledge", a "sensible knowledge" which is distinct from a

speculative and objective knowledge.³⁸

For certainty of knowledge is nothing else but knowing or discerning the certainty there is in the things themselves that are known. Therefore there must be a certainty in things to be a ground of certainty of knowledge, and to render things capable of being known to be certain. And this is nothing but the necessity of the truth known or its being impossible but that it should be true.³⁹

That is, certainty of knowledge is the certainty of the truth of things or of the created order. And the truth of the created order is the divine constitution which makes truth.⁴⁰

The activity of obedience, therefore, is the activity of love. For to consent to being in general is virtue. "Virtue . . . consists in the cordial consent or union of being to being in general."⁴¹ That which constitutes virtue is love. "The general nature of virtue is love."⁴² Virtuous activity therefore "is an exercise or fruit or manifestation of this love."⁴³ Apart from this activity knowledge of reality is impossible. For activity which does not issue from such consent results in "the greatest possible discord"⁴⁴ because it contradicts "the true order of things."⁴⁵ This discord yields a false reality in that it does not reflect the divine nature or "the moral perfection and excellency of the divine being" which constitutes "the necessary nature of things."⁴⁶ When this occurs, there is a "prevalence of those dispositions which are contrary to it, (which) tends to darken and distract the mind, and dreadfully to delude and

confound man's understandings."⁴⁷ In the third place, then, it is in the activity of consent (love) that progress or growth in the knowledge of reality (love) is acquired.

Love is that which constitutes the essence of the created order.⁴⁸ For this is the essence of "the eternal and infinite Being", who "comprehends all entity, and all excellence, in his own essence."⁴⁹ The created order, then, is an emanation of the divine fulness⁵⁰ or divine nature.⁵¹ The divine nature is divine perfection. It is "the Pattern of all, and has the sum of all perfection."⁵² And "God's perfection. . . is love."⁵³

Fourth, man wills to know that about which he is concerned, that to which he gives a particular valuation, significance or meaning. This was one motivation for Edwards' interest in knowing and studying the natural world; i.e. because of his delight in it.⁵⁴ And delight is "an infinitely sweet energy."⁵⁵ It was Edwards' sense of participation in the divine Being which filled him with this "sweet energy," that prompted him to highly value all else that participates in this same Being,⁵⁶ to seek to know it, and to support its existence.

It is by God's providential activity that he maintains the world in existence for his own purpose. "God's active and positive interpositions, after the world was created, and the consequences of these interpositions. . . must all be determined according to his pleasure."⁵⁷ And this purpose is the creation's happiness. Happiness is the "end" of the creation.⁵⁸ God "exerts himself" to so order things that this happiness is achieved. God,

in offering the natural world to man and maintaining it in existence for his use, communicates his own happiness to the creature.⁵⁹ Man appropriates this happiness for himself when he acquires a knowledge of this gift. "Knowledge is pleasant and delightful to intelligent creatures."⁶⁰ Knowledge carries with it an element of joy.

Finally, Edwards acknowledges that creaturely knowledge is both limitless and limited. The more passionately knowledge of the created order is sought, the more awareness there is of that which cannot be grasped. "Nothing is more certain than that there must be an unmade and unlimited Being; and yet, the very notion of such a Being is all mystery, involving nothing but incomprehensible paradoxes and inconsistencies."⁶¹ This Being has "absolute self-sufficiency, independence and immutability."⁶² For the natural order "this implies the most perfect, absolute and universal derivation and dependence."⁶³ Since the created order is fully derived from and dependent on the One who is "wholly a mystery and seeming inconsistency",⁶⁴ it can be assumed that "such a mysteriousness is no other than is to be expected in a particular exact observation of nature, and a critical tracing of its operations. It is to be expected, that the farther it is traced, the more mysteries will appear."⁶⁵ The discovery of truth or the acquisition of knowledge at all levels of existence is attended with an impenetrable mystery "quite beyond our comprehension, and attended with difficulties which it is impossible for

us fully to solve and explain."⁶⁶ Yet knowledge of the works of nature can always increase for there will always be "room. . . left for vast improvement in the knowledge of them, to the end of the world."⁶⁷ The work of scientific inquiry is never ending since such inquiry can never be complete. For inquiry into the nature of physical reality is inquiry into the nature of that which constitutes physical reality, which is the divine reality.⁶⁸ To this enquiry and the knowledge acquired from it, there can be no end.

Those who have applied themselves most closely, have studied the longest, and have made the greatest attainments in this knowledge, know but little of what is to be known. The subject is inexhaustible. That Divine Being, who is the main subject of this science, is infinite, and there is no end to the glory of his perfections. His works at the same time are wonderful, and cannot be found out to perfection.⁶⁹

SUMMARY

Edwards regarded the natural order as the realm of the communicated goodness of the Creator⁷⁰ and so as a realm of grace. He was therefore concerned to learn what it revealed of the Creator's nature and will. It was his conviction, that to learn this, the physical reality of the created order had to be understood. To grasp the significance of what physical reality reveals, there must be consent to the will of the Creator and appropriate action

issuing from this consent. Such action in turn yields a knowledge that the primary reality of existence is love. Knowledge of love yields a concern for the object of love. Such knowledge is also a source of joy to the knower. Knowledge of the created order is limited by one's capacity to penetrate the divine mystery which constitutes it. Yet even though the natural order cannot be found out "to perfection", there is no limit to what may be discovered about it.

Sittler states that "the incessant pressure of the question what ought I to do modifies decisively the question what can I know."⁷¹ Having given an answer to the first question, viz. what must I do in order to know the Creator who communicates his fulness in the created order, Edwards was content with the answer it gave to the second. First, what one can know of "divine things" is sufficient to make a search for this knowledge the chief employment and contemplation of life. Second, one can know that one can never know all there is to know of the nature of the divine constitution. "When one of an inferior nature considers what concerns beings of a nature entirely above his own, there is something belonging to it that is over and above all that the inferior nature is conscious of."⁷² One can only know what one perceives.⁷³ And to perceive the essence of the divine constitution is beyond human capacity.

It would be unreasonable to suppose any other, than that there should be many things in the

nature of God, and in his works and government, to us mysterious, and which we never can fully find out. . . . We are infinitely unequal to any such thing as comprehending God.⁷⁴

NOTES

¹Joseph Sittler, "The Presence and Acts of the Triune God in Creation and History", The Gospel and Human Destiny, Vilmos Vajta, Ed., p. 100.

²G.G., p. 437.

³E.C., p. 460.

⁴D.S., p. 481.

⁵Misc., 259.

⁶ibid.

⁷Misc. 94.

⁸E.C., p. 478.

⁹H.R., p. 430, 431 c.

¹⁰Misc. 1.

¹¹C.K., p. 382.

¹²ibid.

¹³ibid.

¹⁴ibid.

¹⁵R.A., p. 256.

¹⁶ibid.

¹⁷Some scientists today also view man's dissimilarity with other creatures in terms of man's capacity to understand and dominate

the whole of the created order.

The nonrational animals have some sort of unity of response to the world around them. (In Edwards' words they are united in a common purpose and a common consent.) They have their integrity, (individuality). But their own species is practically all that has value; the rest is largely unknown to them. Man can raise his sense of integrity and wholeness to the conscious level; he makes a conscious unitary response to the universe around him. (Charles Birch, "Purpose in the Universe: A Search for Wholeness" Zygon 6:1, p. 15)

¹⁸C.K., p. 382.

¹⁹ibid.

²⁰E.C., p. 485. However Edwards implies the possibility that it possesses consciousness. cf. Chapter 5, n 6.

²¹C.K., p. 382.

²²Misc. 448.

²³Misc. f.

²⁴H.R., p. 430-431 c.

²⁵M.R., p. 361 c.

²⁶C.K., pp. 377, 381, 382.

²⁷This was the premise of the "Notes on Natural Science". Without the acquisition of factual knowledge man is subject to ignorance, opinions and prejudices which are "powerful against truth" and which cause him "either to reject things really true, as erroneous, or to embrace those that are truly so". ("Of the Prejudices of the Imagination", Works, vol. 1, p. 703-04)

²⁸C.K., p. 381.

²⁹Misc. 880.

³⁰ibid.

³¹Edwards was indebted to Locke for this insight. His appropriation of it and his use of it in his first ^{published} public address has been demonstrated by Perry Miller. cf. Jonathan Edwards, p. 44 ff.

³²R.A., p. 46 f.

³³D.L., p. 18.

³⁴C.C., p. 412.

³⁵F.W., p. 302.

³⁶R.A., p. 292.

³⁷ibid., p. 306.

³⁸ibid., p. 272.

³⁹F.W., p. 264.

⁴⁰O.S., p. 404. This points to a consistent theme in Edwards' thought, viz. that truth is a hidden reality which only the enlightened understanding can perceive. Contemporary commentators are making the same point. Thus Bernard Meland states that today there is "a wholly new estimate of our human powers and facilities and of the results we are able to achieve. . . . The modern physicist points up a radical discrepancy between what this world of sense can report or that human reason can describe, and the reality which underlies yet persistently evades observation." (The Realities of Faith, pp. 155-56)

⁴¹T.V., p. 73.

⁴²ibid., p. 60.

⁴³Mind 45.

⁴⁴T.V., p. 74.

⁴⁵ibid., p. 22.

⁴⁶T.V., p. 75.

⁴⁷ibid.

⁴⁸ibid., p. 74. Chardin takes the same position. "Love - that is to say the affinity of being with being - is not peculiar to man. It is a general property of all life and as such it embraces, in its varieties and degrees, all the forms successively adopted by organized matter. . . . If there was no real internal propensity to unite, even at a prodigiously rudimentary level - indeed in the molecule itself - it would be physically impossible for love to appear higher up, with us, in 'hominised' form. By rights, to be certain of its presence in ourselves, we should assume its presence, at least in an inchoate form, in everything that is." (The Phenomenon of Man, p. 290)

⁴⁹E.C., p. 479.

⁵⁰ibid., p. 464.

⁵¹ibid., p. 463.

⁵²Mind 45.

⁵³Mind 45. This implies that the inevitably conflicting value judgments which accompany different experiences of reality can never be reconciled. In all views of reality the natural faculties are actively employed. God makes use of rational faculties. (D.L., p. 11) Consequently the objective basis of viewing is similar in all cases. Yet the understanding implied in differing judgments is qualitatively different. The "light" in the one case is natural, the other supernatural, even though the natural faculties are involved. The spiritual understanding cannot be obtained by natural means. (ibid., p. 17) It is rather a gift, "the highest and most excellent gift that ever God bestowed on any creature." (ibid.) It is also the most important because "it is that wherein man's happiness consists." (ibid.) Man cannot view his relationship with the natural world aright without this spiritual understanding which he cannot command but

only receive. Without this spiritual understanding he is doomed to unhappiness and a conflict within himself, with others and between himself and the world he inhabits.

Opposing world views can never be reconciled. The significance attached to what is seen in the natural world by one is denied by another who views the same objective phenomena. Opposing conceptions of reality spring from a different "sense of the heart" and are supported by strongly held emotions. And reason is defenseless against emotion. For emotion is the product of will and the will is always controlled by the greatest apparent good. And what is the greatest apparent good or that which has the greatest beauty (the attractive power of good) is that which the will affirms. (F.W., p. 144) Consequently different realities are affirmed equally plausibly. Reason cannot deny this affirmation. Only a stronger emotion or only that which has a greater attractiveness for the will can dispel another emotion or understanding. Edwards recognized that the natural beauty of the natural world alone will not prevent its destruction. As he saw it, only the love of God and the attraction of his beauty (holiness) could overcome the will to dissent that has its issue in the destruction of the whole created order.

⁵⁴P.N., p. 61.

⁵⁵Misc. 94.

⁵⁶T.V., p. 74.

⁵⁷F.W., p. 432.

⁵⁸E.C., p. 465.

⁵⁹Misc. 1182.

⁶⁰C.K., p. 391.

⁶¹M.O., p. 207.

⁶²E.C., p. 467.

⁶³ibid., p. 452.

⁶⁴M.O., p. 208.

⁶⁵ibid., p. 203.

⁶⁶ibid., p. 207.

⁶⁷ibid., p. 211.

⁶⁸O.S., p. 405.

⁶⁹C.K., p. 387.

⁷⁰E.C., p. 460.

⁷¹op. cit., p. 133.

⁷²M.O., p. 206.

⁷³ibid., p. 205.

⁷⁴D.S., p. 479.

CHAPTER V

THE CHARACTERISTICS OF THE NATURAL COMMUNITY

INTRODUCTION

We have referred to the natural world as the natural community. We have also stated that Edwards sees this community as being subject to the will of the Creator who is both its physical and moral "governor".¹ This implies the created order has both physical and moral dimensions.

We now ask:

What are the characteristics of this natural community which Edwards sees as constituting the created order? (Chapter 5)

To what extent did he conceive this community to be a moral community? (Chapter 6)

What then is the natural world for Edwards? (Chapter 7)

THE NATURAL COMMUNITY IS CHARACTERIZED BY PURPOSIVENESS

The members of this community are united in a common purpose. Edwards specifically denies a conscious purpose in the lower evolutionary species. Following Cudworth, he holds that the "inferior creation" can act only according to its nature, i.e., passively.² Man alone can actively pursue a goal. He alone is capable of "intelligent voluntary acts."³ Yet, in maintaining that

the whole created order is "of God and in God and to God"⁴ he is forced to admit that God, in seeking to unite all things in himself, inheres in the natural community and is proceeding to that goal which he has established.

God aims at that which the motion or progression which he causes, aims at, or tends to. If there be many things supposed to be so made and appointed, that by a constant and eternal motion, they all tend to a certain centre; then it appears that he who made them, and is the cause of their motion, aimed at that centre. . .to which they eternally tend and are eternally, as it were, striving after. And if God be this centre, then God aimed at himself.⁵

The Creator, by inhering in the natural world, infuses it with a consciousness of purpose.⁶ Purposiveness is a necessary quality of life. Whether it be mental or physical, purposeful activity remains integral to all life.⁷

The common purpose of the natural community is the glorification of its Creator.⁸ The whole of the natural world participates in this glorifying activity.⁹ In this activity the natural order conforms to the spiritual world.¹⁰ Indeed, as the Creator inheres in his creation, he glorifies himself.

This is God's manner, to make inferior things shadows of the superior and most excellent; outward things shadows of spiritual and all other things shadows of those things that are the end of all things and the crown of all things. Thus God glorifies himself.¹¹

The purpose of the creation and that of the Creator is one. The natural community participates in the purpose of the one who

establishes it. It has made his purposes its own. In this way it is united with its Creator. For the created order is to be "regarded as nearly, and closely united to God," when "its interest (is) viewed as one with God's interest."¹²

THE NATURAL COMMUNITY IS CHARACTERIZED BY UNITY.

A second feature of the natural community, consequently, is that it is a united community. It is united first with its Creator and because of that, secondly, it is united with itself. Union, says Edwards, "is one of the most beautiful and happy things on earth, which indeed makes earth most like heaven."¹³ It is the act of consent that unites the natural community both with itself and to its Creator. The act of consent is the act of love. And those who love that which is most worthy of love must love those who likewise love.¹⁴ For those who love that which is most worthy of love are united or in relationship with the object of their love. Therefore, argues Edwards, they are in a similar relation with each other. That is, they consent to or agree with each other.

What disagrees with Being must necessarily be disagreeable to Being in general, to everything that partakes of Entity. . .and what agrees with Being, must be agreeable to Being in general.¹⁵

To be united with another means to be in a loving relationship with another. In Edwards' vocabulary, union and love are largely synonymous. True virtue is a "cordial. . .consent, or union of heart to Being in general."¹⁶ And consent to Being in

general "when it is of minds towards minds" is love.¹⁷ Insofar as it is united with itself and with its Creator the natural community is a community that loves.

Edwards saw activity of the mind at every level of the natural community because he viewed nature as a scale which progresses from the incomplete to the complete. At each level that which has gone before is consolidated and comprehended and every new level reached points to that which lies ahead.¹⁸ Each level of existence represented on this scale is more integral and more explicitly self-sufficient than those which preceded it.¹⁹

This series, Edwards held, must have a conclusion or completion or telos.²⁰ What it culminates in, that to which all else points, must be absolutely whole and self-contained. It must be all-inclusive, both in the sense that it is the complete realization of that of which all else is an imperfect representation and in the sense that it includes within itself all that is involved in the process on the scale of which it is the end point. That in which the process culminates is both the end of the process and that which comprehends or gathers up in itself the whole process.

This is to say that both the end of the process and the process itself are so intimately related that the latter is impossible without the former.²¹ The end is therefore immanent in the process itself in such a way that the process is both sublated and transcended. It is sublated in that every imperfect stage yields that which is more perfect. It is transcended in that in no stage

is the end (wholeness) completely reached.²² The ideal remains unattainable within the process itself.²³

THE NATURAL COMMUNITY IS CHARACTERIZED BY INDIVIDUALITY
AND CORPORATENESS

1. Individuality in the Natural Community.

Edwards was convinced that the natural community was a manifestation of divine wisdom.²⁴ The assertion of this belief was at the same time a denial of all possibility of contingency. All things are as they are and could not be otherwise since all things, as they are, are established to perfectly fulfill the Creator's purpose and design.²⁵

For there is a "moral necessity of God's will arising from or consisting in the infinite perfection and blessedness of the divine Being."²⁶ This perfection requires that His will be perfectly expressed. This requirement means, in turn, that the created order is not "a fixed unalterable state of things" but a "state of the divine will and design."²⁷ Because the Creator's will is sovereign, all things are subject to it. Consequently, no existence is a contingent existence or the result of chance.

This reality is demonstrated by the fact that every element in the created order has an identity unlike any other. "It is very unlikely that any two of all these created elements are exactly equal and alike."²⁸ Every created element is an individual, therefore it must be different from every other element.

For 'tis difference only, that constitutes distinction."²⁹

These differences are important.

There is not one atom, nor the least assignable part of an atom, but what has influence, every moment, throughout the whole material universe to cause every part to be otherwise than it would be, if it were not for that particular corporeal existence. And however the effect is insensible for the present, yet it may in length of time become great and important.³⁰

Differences are important because they represent the will of God that causes things to be as they are. "Nothing comes to pass without a cause."³¹ By cause is meant "any antecedent. . .on which an event, either a thing, or the manner and circumstance of a thing, so depends, that it is the ground and reason. . .why it is, rather than not; or why it is as it is, rather than otherwise."³² Differences are not accidental but have their origin and significance in the will of the Creator. Consequently, whatever is, has sufficient reason since it is determined or constituted by that will according to its "own good pleasure." The pleasure of the Creator is the creatures' good or that which is "agreeable" to the creatures' nature. "I use the term 'good'. . .as of the same import with 'agreeable'".³³ God cannot but choose this since it is in the creatures' happiness that he delights.³⁴ It is morally necessary that God choose what is good. Consequently "God himself cannot choose what is not good. The freedom of the Almighty hinders not his being

determined by what is best."³⁵ What is, exists for the creatures' good and the Creator's happiness.

These differences that characterize the natural community become more pronounced as the scale of being is ascended. The closer in the scale of being we come to the Creator, the more arbitrary do we find his operations in the creature. And the greater the arbitrariness of God's creative activity, the more does that which is created experience a freedom from the laws of nature or natural operations and the more does its activity mirror the arbitrariness of the divine activity.³⁶

"There are two kinds of divine operation" says Edwards, viz. "that which is arbitrary and that which is limited by fixed laws."³⁷ An arbitrary operation is any operation not confined to or limited by the laws of nature. The latter are dependent upon the former. "Tis arbitrary operation that fixes, determines and limits the laws of natural operation."³⁸ In this sense the whole of the natural community represents an arbitrary operation.

The creation of the matter of the material world out of nothing, the creation even of every individual atom or primary particle, was by an operation perfectly arbitrary. . . . It was by arbitrary divine operation that the primary particles of matter were put in motion and had the Direction and Degree of their motion determined, and were brought into so beautiful and useful a situation one with respect to another.³⁹

The natural community is also a natural operation in that the arbitrary operation that is the will of God is executed in or through that which occurs "naturally". Thus it is that "personal identity depends on God's sovereign constitution."⁴⁰ Personal identity depends upon the way one is required to show forth or execute the divine will, by which alone each individual existence is sustained. It is the divine will which establishes the natural community and each member of it responds to this will differently.

Each member of the natural community, therefore, is unique. Each has its duty, each has a function to perform which is uniquely its own. In the natural community there is "no one thing determined without an end, and no one thing without a fitness for that end, superior to anything else."⁴¹ And as each element has its peculiar function, so each was created differently in some respect. This difference might be so small as to escape notice. Yet even if this distinction consists "only in those things which are called circumstances; as place, time, rest, motion or some other present or past circumstances or relations,"⁴² the difference still exists. And so, therefore, does the reason for its existence and its effect on the whole of which it is a part. For "it would be unreasonable to suppose, that God made one atom in vain, or without any end or motive."⁴³ And, again, "there is not one atom, nor the least assignable part of an atom, but what has influence, every moment, throughout the whole mat-

erial universe."⁴⁴

2. Corporateness in the Natural Community.

Each member of the community exercises its individuality with respect to and as a part of the whole of universal existence.⁴⁵ Every existence affects every other existence. For good or ill even the smallest atom affects "the whole material universe." The whole of the natural world glorifies its Creator. It does so by acting according to that purpose for which each element in it was created. All creatures inferior to man "glorify their Creator, according to their nature. . . . (Even) things without life, as earth and stones. . . answer their end . . . They are all useful in their places, all render their proper tribute of praise to their creator."⁴⁶ The extent to which each element fails in its duty is the extent to which the natural community as a whole fails to glorify its Creator. It is the extent to which its beauty is diminished. For no one element lives in isolation, no one element is self-sufficient.

Speaking of comets, Edwards observed that because they travel "in the empty etherial spaces where are no bodies with which they have communication to repay their expenses and restore their loss," they spend themselves.⁴⁷ The natural community can only grow, maintain its resources and live when all its elements are in communication with each other. One species and form of life is dependent for its existence upon its interdepen-

dence with others.

To attempt to live apart from the whole, in self-sufficient isolation, is death. It is to "waste oneself." It is to lead a fruitless life. Consequently, no created existence can be said to be useless, even if its usefulness is not readily apparent. For if it plays its part it is useful. It glorifies the Creator in its giving and receiving, i.e. in communication with other life and with God.

For seeing they are constantly expending and wasting themselves and sending forth their own substance and that substance they emit is not annihilated, it must necessarily be that other parts of the frame of the universe must receive what they expend.⁴⁸

No element of the created community can exist if there is not other life to receive what it gives of its very substance. To give without being received is to waste away or to be self-destructive. This is why the natural world continues to live. That is, because each element is created for a particular purpose and answers to that purpose. Even "things without life" serve their purpose. The natural community was originally established so as to ensure that there would be at least one element in it equipped to receive the substance of another and in return give to another.⁴⁹

Each element of the natural community has a particular end for which it is uniquely fitted,⁵⁰ "superior to anything else."

Yet because its function and responsibility are limited no one element can fully reflect that unity which characterizes its society. Only the totality of this order, responding to itself in response to the divine will can accomplish this. And the whole is so created that when one element fails, another element, dependent upon it, cannot perfectly fulfill its own function. The result is that the community as a whole suffers and the Creator is less than perfectly glorified. The whole of the created order is dependent for its very existence on the consent of being to being, or the execution of its duty by each member of the community.

All members of the natural community, then, are mutually dependent and subservient,

and all parts help one another to mutually forward each other's ends. In all the immense variety of things that there are in the world, every one has such a nature and is so ordered in every respect and circumstance as to comply with the rest of the universe and to fall in with and subserve the purpose of other parts.⁵¹

The interest of both the individual and the community is subordinated to the interest of that in which their interest is subsumed, viz. the interest of the Creator who sustains the individual in community. For the interest of the individual and the community is their common good. And their common good is the glorification of the Creator.⁵² It was for this end (his glory) the Creator created.⁵³ And "God, in seeking his glory,

seeks the good of his creatures."⁵⁴

THE NATURAL COMMUNITY IS CHARACTERIZED BY OBEDIENCE TO
EXTERNAL AUTHORITY

The natural community exists by means of that power which is creatively coercive. This is the laws of nature, which exercise control over it. "No created thing has power to produce an effect any otherwise than by virtue of the laws of nature."⁵⁵ Therefore they represent the active will of God⁵⁶ which cannot be violated without the community suffering.

This implies that all created elements must live according to those laws which govern them; according to those laws by which they can most effectively do their duty. They must live for that end for which they have a fitness "superior to anything else", and according to the circumstances of place and time in which they were placed by the divine will. And to live in this way and for this purpose without attempting to escape duty or violate the laws of one's constitution is to acknowledge the divine sovereignty.⁵⁷ This sovereignty, which determines the life of the natural community, is manifest in three ways. First, it is manifest in the similarity of the laws of nature.

The same laws of nature obtain throughout the universe; every part of matter, everywhere, is governed by exactly the same laws, which laws are only the appointment of the governors. This argues, therefore, that they are all governed by one appointment or will.⁵⁸

Secondly, it is shown in the fact that "the same laws obtain in all ages without any alteration." This argues that there is but "one design and contrivance" that "manages" the world in all ages. "Not only the identity of law in inanimate beings but in the same sort of animals. . . in all ages of the world" shows that "in all ages (they are) in the hand of the same being."⁵⁹

A third evidence that there is but one sovereign Creator lies in

the analogy there is in the bodies of all animals and in all plants and in the different parts of the inanimate creation; the analogy there is, likewise, between the corporeal and spiritual parts of the creation; the analogy in the institution and government of different orders of being - this argues that the whole is the fruit of but one wisdom and design.⁶⁰

The natural community lives by its obedience to that which is greater than itself, to that which is "infinite in understanding and power", who is "self-sufficient" and "all-sufficient", and by whom all things are "upheld in being."⁶¹

THE NATURAL COMMUNITY IS CHARACTERIZED BY ORDER

The Creator who upholds all things "is the God of order, not of confusion."⁶² Consequently, the community that lives in conformity with him and exhibits the divine nature is an ordered community. Disorder is foreign to it. In fact, says Edwards, the natural community, because it is the Creator's design, is "an

immense multitude of particular regular systems all with a convenient mutual vicinity and a proper relationship and exact situation and commensuration."⁶³

The natural community represents the truth of existence. First, because it represents the product of the arbitrary divine will "which makes truth."⁶⁴ In this sense truth is arbitrary reality. Second, because it is itself an ordered or coherent existence. It is the product of a will which permeates apparent chaos with a unity of action which produces a coherent unified whole. That which is not coherent is not true.

That there is coherence in the midst of chaos represents a mystery which is never absent from life and for which human reason alone cannot account.⁶⁵ Yet much of created existence appears contingent because its intimate relationship "with its causes or antecedents according to the established course of things" is not discerned.⁶⁶ However, because nothing occurs apart from the Creator's will, that which is contingent is not "accidental" but the result of an arbitrary operation.⁶⁷ And because of this operation every phenomenon of the natural world exhibits an individuality that cannot be accounted for by or solely derived from "natural operation" or "the Laws of Nature."⁶⁸

THE NATURAL COMMUNITY IS CHARACTERIZED BY CONSENT

In responding to the divine initiative, the created community is active in providing for the needs of its members. The community, when it so acts, acts in full possession of its powers. It is a community that is filled with life,⁶⁹ and it is continually sustained and renewed in its life-giving activity.⁷⁰ When it seeks its own end rather than that of the Creator's its capacity to give and receive life is diminished. So is its capacity to provide for its members. This capacity is simply a reflection of "the exuberant Goodness of the Creator who hath not only Provided for all the Necessities but also for the Pleasure and Recreation of all sorts of Creatures and even the insects and those that are most Despicable."⁷¹

THE NATURAL COMMUNITY IS CHARACTERIZED BY SERVICE

Each element is fitted to serve the needs of another, "the inanimate to the animate, the animals to the beasts, the beasts to each other and to man."⁷² Man, too, is part of the created order. And being of "the highest rank of creatures" he receives the service of those elements which are subservient to him. The Creator has "made the earth, and seas, and all their fulness, for the use of man. . . . He made the vast variety of creatures for man's use and service. . . . For the same purpose he made all the plants, and herbs, and trees of the field." In

fact, "Nature is continually labouring for (him)." ⁷³ In the service of the natural community to man and in man's service both to this community and to its Creator, God is glorified. For in this mutual service the purpose of the Creator - the realization of a holy society united in love ⁷⁴ - is furthered.

SUMMARY

The natural community is united in a common task; the glorification of the Creator. It is characterized by an interaction between the individual element and the totality to which it is related. In this interaction the community demonstrates a unity within itself which has its foundation in its unity with its Creator. The common purpose of both the individual and the group is realized when the community as a whole functions in obedience to the divine sovereignty which has established it. Because each element in the community has been equipped to do its duty in this respect, the natural community as a whole can be said to be "good." This goodness is shown forth in that activity by which it secures its life. This activity is an ordered activity and the whole serves to glorify the Creator. The natural community is a serving community. To what extent is it therefore also a moral community?

NOTES

¹Misc. 1196.

²M.R., p. 362 c.

³ibid.

⁴E.C., p. 84 c.

⁵E.C., p. 532.

⁶Edwards apparently assumed that such consciousness could not properly be attributed to the natural community itself but was simply the consciousness of God inhering in and directing an otherwise passive nature. Yet he attributed to the natural world the quality of mind and where there is mind there is awareness. "There is no other proper consent but that of minds." (Mind 45) Consent presupposes awareness of that to which consent is made. And as modern science has discovered, awareness is consciousness. (E.W.Sinnott, "Biology and Spiritual Values", The Journal of Religion, 36:2 April 1956, p. 182)

Science does not know where this consciousness or awareness begins. (ibid.) It admits as a possibility that consciousness is characteristic of all life. And this Edwards also implicitly and perhaps unknowingly held.

⁷This conclusion has led some to affirm that "in living organisms physical integration and psychical integration represent two aspects, corresponding to two mutually complementary sets of factors of one and the same biological process." (E.W.Sinnott op. cit., p. 182) Body and mind are here represented as two aspects of one existence, not distinct or different things.

This is to say that some scientists are coming to share Edwards' affirmation of the unity of life. Body and mind are no longer seen as distinct entities, but as part of the same process of growth toward unity or completeness. On the lower end of the evolutionary scale normal life is maintained through patterns of regulatory behaviour or instincts. These have come to be regarded as "the simplest beginnings of mind." (ibid.) And since all life seeks to maintain itself in wholeness or has wholeness as its goal, it can be said that mind is rooted in

purpose. As we will see, this is Edwards' position; all life partakes of a quality of mind and all life seeks by nature unity and wholeness.

⁸E.C., p. 492.

⁹Images 8.

¹⁰ibid.

¹¹Images 53.

¹²E.C., p. 532.

¹³H.A., p. 482.

¹⁴T.V., p. 32.

¹⁵Mind 1.

¹⁶T.V., p. 73.

¹⁷Mind 45.

¹⁸Images 19.

¹⁹ibid.

²⁰E.C., p. 532.

²¹Edwards denies, however, that the reverse holds. No finite entity comes into existence without a cause. This means that all finite entities share something common; "they are not self-existent, or necessary in the nature of things." This created order need not have been. It was brought into existence by the arbitrary will of the Creator as the chosen means whereby he responds to himself and delights in himself. It represents the love of God who delights in the happiness of his creatures. It therefore also represents the means the Creator has chosen by which this happiness is to be attained.

²²Misc. 650.

²³Misc. 725.

²⁴This statement will be discussed in Chapter 7.

²⁵No event and no act of will can occur without reference to that to which it is subject and which is the ground and reason of its existence. (F.W., 392 ff) This is the will of God which, because it establishes all things, is the criterion of truth. (O.S., p. 404) Consequently, that which contradicts this will, i.e. which does not make the appropriate response to it, is in error. In this sense, sin, for Edwards, is error, although avoidable error.

²⁶F.W., p. 395.

²⁷ibid.

²⁸F.W., p. 387.

²⁹ibid., p. 388.

³⁰ibid., p. 392-93.

³¹ibid., p. 181.

³²ibid.

³³ibid., p. 143.

³⁴E.C., p. 478.

³⁵F.W., p. 378.

³⁶Misc. 1263.

³⁷ibid.

³⁸ibid.

³⁹ibid.

⁴⁰O.S., p. 399.

⁴¹F.W., p. 388.

⁴²ibid.

⁴³F.W., p. 392.

⁴⁴ibid.

⁴⁵T.V., p. 62.

⁴⁶W.U., p. 548.

⁴⁷Misc. 1038.

⁴⁸ibid.

⁴⁹This is not always true of human society. For man, who above all other creatures has been given "a capacity of glorifying the great Creator" (W.U., p. 548) is that creature who fails in precisely this duty. He alone of all the creatures is not willing to receive what other elements give. He alone seeks to live in isolation. And this is why human community, as opposed to the natural community, is always close to disintegration. (M.O., p. 305) Self-love is the norm of the former, it is the exception in the latter.

Whereas the natural community secures its happiness in the glorification of the Creator, "selfish proud man" seeks his happiness in that which "contributes to his (own) interest and gratifies his ambition." (R.A., p. 246). This is because man must first consent to or be united with God, "before he will esteem God's good his own, and before he will desire the glorifying and enjoying of God, as his happiness." (R.A., p. 241) And this is what happens in the natural community. All creatures inferior to man "glorify their Creator according to their nature." (W.U., p. 548) This means that the natural community as a whole is related to its Creator more closely than the human community as a whole.

⁵⁰M.R., p. 303.

⁵¹Misc. 651. Thus does Edwards attempt to combine in his concept of community the one and the many without giving the priority to either. He does this by tying the interest of the individual to that of the whole in such a way that the interest of the one cannot be served unless the interest of the other is also fulfilled. No one element can grow or fulfill its destiny apart from all other elements in the community. It is only in union with the whole that individuality is realized.

⁵²E.C., p. 478.

⁵³ibid., p. 501.

⁵⁴ibid., p. 477.

⁵⁵T.V., p. 37.

⁵⁶Misc. 651.

⁵⁷D.S., p. 478.

⁵⁸Misc. 651.

⁵⁹ibid.

⁶⁰ibid.

⁶¹D.S., p. 431.

⁶²D.M., p. 575.

⁶³Misc. 880.

⁶⁴O.S., p. 404.

⁶⁵In fact it was a mysterious matter that anything should exist in the first place. We see that "the being of the world, with all its constituent parts, and the manner of their existence. . . are not necessary in their own nature, and so self-existent and therefore must have a cause." (F.W., p. 182) The very acknowledgment of the mystery of life is an admission that it cannot be fully penetrated.

⁶⁶F.W., p. 155. As Ramsey has pointed out, (F.W., p. 99 ff) the concept of contingency for Edwards involved a belief both in the inherent connection between cause and event, (F.W., p. 181) and in the certainty of this connection. (F.W., p. 118) Both of these beliefs were based on what Edwards saw revealed in the natural world. And what he saw revealed was the will and presence of the Creator in every created existence, which is the effect of his creative activity.

"The way that mankind came to the knowledge of the being of God, is that which the apostle speaks of (Rom. 1:20) 'the invisible things of Him, from the creation of the world, are clearly seen; being understood by the things that are made; even his eternal power and Godhead.' We first ascend, and prove a posteriori or from effects, that there must be an eternal cause; and then secondly, prove by argumentation, not intuition, that this being must be necessarily existent." (F.W., p. 182) If we do not maintain that what is not necessary in itself must have a cause, then "all our means of ascending in our arguing from the creature to the Creator, and all our evidence of the being of God, is cut off at one blow." (F.W., p. 183)

Edwards' support for his concept of contingency was thus his own form of the argument from or to design. The natural world testifies to a progressively ascending scale of being "from the creature to the Creator" in which each level points to that which goes beyond it and which ultimately tends to the perfection of divinity. And since the end of the process and the process itself are inseparable, a cause (the Creator) must exist.

Edwards also employs a modified form of the Cosmological proof or the argument from contingency. There is a certainty in the connection between cause and event, sustained by the will of God. That things are one way and not another is indicative of the operative power of this will. For only with reference to this will does the operation of the system make sense. It is not self-explanatory. Consequently, every entity and event in the created order is what it is because of its place, the part it plays and its interrelations within the system as a whole. The fact that each plays a particular part, has a particular place and is related to the whole in a particular way is evidence of the arbitrary divine operation. Each existence then, is a dependent existence. Therefore each unit gives witness to the reality or certainty of the arbitrary will of the Creator and therefore of the Creator himself. The divine totality or perfection inheres in every finite which points to it. Without the determination of this perfection, each finite entity would be other than it is.

⁶⁷O.S., p. 404.

⁶⁸Misc. 1263.

⁶⁹This statement will be discussed in Chapter 7.

⁷⁰O.S., p. 401.

⁷¹O.I., p. 7.

⁷²Misc. TF.

⁷³W.U., p. 547.

⁷⁴H.A., p. 482.

CHAPTER VI

THE MORALITY OF THE NATURAL WORLD

INTRODUCTION

We have discussed Edwards' understanding of the natural world as community. In this chapter we shall discuss his attribution of morality to this community. Edwards equates morality, virtue and consent. Since the divine Being constitutes the natural order and since the divine Being consents to himself, the natural order can be said to be virtuous and characterized by morality. Yet only man, of all the creatures, has the capacity to consciously consent to the divine Being and actively comply with his design in the natural order. Therefore, it would appear that morality and moral activity could be rightfully attributed only to him. We shall now determine how Edwards treats these two apparently contradictory aspects of his thought.

MORALITY IN THE NATURAL COMMUNITY

Edwards sees the natural community as a conversible community. "There are no beings that have even the semblance of intelligence and will, but possess the faculty of conversation, as in all kinds of birds, beasts and even insects."¹ Wherever there is even the appearance of a mind, there conversation becomes possible. It is of the very nature of mind to communic-

ate with mind. "So far as there is any appearance of something like a mind, so far they give significations of their minds one to another in something like conversation among rational creatures."²

Conversation is of the natural world. And "the moral world and the conversible world are the same thing."³ Therefore, non-human creatures,⁴ and their environment, constitute a moral world the essence of which is a spiritual reality who "represents things as they truly are."⁵

Secondly, the natural community is a moral community because it is characterized by friendship. The context of morality is society. The medium of its communication is conversation. The well being of this community that converses and is moral depends on friendship, "the highest happiness of all moral agents."⁶ Friendship requires conversation.⁷ And this is abundant in the natural world.

George Thomas⁸ has outlined three conditions of friendship; involvement, acceptance (consent) and companionship. At least two of these conditions Edwards saw as operative in the natural community.

Edwards understands the natural community as that community that exists through each element's acceptance of all other elements in its environment or through "one part having such consonant proportion with the rest as represents a general agreeing and consenting together."⁹ In this mutual consent, the com-

munity reflects an acceptance of the divine will which requires it.

In acting in agreeableness and conformity with itself, the natural world acts morally. For in its acceptance of the divine sovereignty it does its duty. And there is no distinction between moral duties and other duties. "Every duty whatsoever is a moral duty."¹⁰ And the natural world does its moral duty in imitation of or as an image of God's own dealing with the created order. "God deals. . .with everyone according to their kinds, deals forth those blessings that are most fit for them; that which is fit for one is not fit for another."¹¹

God provides for the well being and happiness of each individual and species differently, depending on its needs, constitution and circumstance. And the natural community acts in its own way to achieve a similar purpose, that is, to provide for its members according to their needs, constitution and circumstance. Thus, for example, the earth acts as the womb for plants which are "propagated by seed which produces others of the same kind."¹²

Edwards also saw the involvement of each element of the natural community in the existence of every other element, either directly or indirectly. For example, the existence and motion of every atom influences the motion of all other bodies in the universe.¹³

The elements of the whole created order affect one another and agree with one another. Taken in themselves, these elements are relatively insignificant. And they are distinct entities,

which appear dormant, "without the least sensible. . .change of their situation from one thousand years to another."¹⁴ This is due to the fact that their mutual attractions "balance one another so wonderfully as to keep all in rest and quietness."¹⁵ All the elements of the created order are interrelated. For all agree in both their internal nature and "the mutual action of their minute parts."¹⁶ To perceive this is to perceive the fact that "God does purposely make and order one thing to another."¹⁷

The natural community is a moral community because it is characterized by conversation and friendship. It is also a moral community because it is characterized by participation in Being. The natural community consents to the will of its Creator who is Being in general.¹⁸ To consent to Being is to participate in Being. "The eternal and infinite Being, is in effect, Being in general; and comprehends universal existence."¹⁹ The Creator makes his creatures the "objects of his benevolence - not by taking what he finds distinct from himself, and so partaking of their good, and being happy in them, but - by flowing forth, and expressing himself in them, and making them to partake of him, and then rejoicing in himself expressed in them, and communicated to them."²⁰

God thus gives to beings the temper to consent to the "universal system of existence" of which it is a part and to which it stands related.²¹ Only those beings which have this temper of mind or disposition can consent. Those that do not have such a

disposition cannot consent or agree with the universal system but must oppose it. And the elements of the natural world are of this disposition because they consent to that to which they stand related.²² In communicating this consent to his creatures, God both communicates beauty to that which is and brings into existence that which is not. "God's virtue is so extended as to include a propensity not only to being actually existing and actually beautiful, but to possible being."²³

Consequently, again, a quality of mind inheres in the natural community. For consent to Being in general is true virtue.²⁴ And virtue is "the excellence of minds."²⁵ It is the quality of mind in the natural community that reacts against that which destroys the relationship through which it is maintained. That is, it reacts against that which is out of proportion with the whole. What the mind loves in the created order is its proportion.²⁶ The mind hates that which disrupts the laws of nature established to retain all things in a union of harmony.²⁷ Therefore, all nature reacts in the same way to that which would destroy or disrupt this harmony. Although subject to this destructive force "yet does not it (nature) rest in this subjection, but is constantly acting and exerting itself (against it)."²⁸ All elements of the natural community possess a "beauty of mind", which is the essence of virtue.²⁹

The natural community was "designed to teach us moral lessons."³⁰ Only that which has the character or experience of

morality or excellence can teach morality. Consequently the natural community is a moral community, characterized by conversation, friendship and participation in Being.

LOVE AND THE NATURAL COMMUNITY

Morality is virtue and true virtue is love.³¹ The natural world, in that it is a community characterized by morality, must therefore also be characterized by love. To what extent does Edwards conceive this to be so?

Edwards holds that love to Being in general or to "the great system of universal existence" is possible only for intelligent beings. Inanimate things "or Beings that have no perception or will" are incapable of moral perfection because their actions do not arise from "a generally benevolent temper. . . or frame of mind, wherein consists a disposition to love Being in general."³² The actions of the natural world therefore cannot be said to be moral actions.

Nor can the natural order act immorally. For immorality consists primarily in a lack of will to consent to Being in general. That is, immorality does not consist in external action or lack of action that is the consequence of "some impeding defect or obstacle that is extrinsic to the will; either in the faculty of understanding, constitution of body, or external objects."³³ It is in the willingness to act in conformity with "the great system of universal existence" that the moral act occurs. For

"the very willing is the doing" and once willed "the thing is performed and nothing else remains to be done."³⁴

The natural world cannot will to consent. If it is not subject to external interference it must act in conformity with its "established law and order".³⁵ Only intelligent creatures can choose among alternatives. For only intelligent creatures are free. They alone have the power to will or do according to their own free choice.³⁶ They alone have the capacity to perceive "things as they are in themselves" and willingly consent to them. "The only thing wherein men differ from the inferior creation, is intelligent perception and action."³⁷ And, acting and willing are the same thing. Thus it is in the power to perceive and in the power to will in response to what is perceived that "the Creator has made man to differ from the rest of the creation and (that) by which he has set him over it, and by which he governs the inferior creatures and uses them for himself."³⁸

Thus we have in Edwards two thoughts about the capacity of the natural world to love. First, only man has the capacity for active consent to the Creator's will. Therefore, he alone has the capacity for active love. Second, Edwards also wants to maintain that there is in the natural community a quality of mind which also makes it capable of consent and of maintaining itself in a relationship that is in fact a relationship of love.

Edwards could not maintain the former position in isolation from the latter. For, while man uses the natural world as a

means of expressing consent to the "universal system of existence", the natural community also expresses this consent in its own way. The difference is that man does this willingly and has the power to choose not to do so, while the elements of the natural world do so by instinct and continue to do so as long as they are not externally prevented.

But this does not mean that the action of the natural world is less an expression of love than the action of man since it is the action of the Creator which inheres in both. This does not mean that when man acts for this purpose, to express consent, his motive is different from that of the natural world, which acts by instinct from motives it does not understand. This lack of conscious motivation does not make non-human creatures non-moral agents or their action morally neutral. The acts of man become the properties of man because he wills them. He is somehow "in them".³⁹ It cannot be said that the actions of the elements of the natural world are any less the property of their executors.

Indeed, Edwards is not unwilling to admit that the actions of the elements of the natural community are moral actions. For morality is consent to the divine will. Such consent is "good". Evil then is a denial of this consent and a disruption of that harmony or union of the creature with its "ground" (Tillich) which is the product of consent.⁴⁰ Edwards admits that such disruption and chaos are a part of the natural order, even though it

is a chaos maintained within the context of the divine sovereignty.⁴¹ This means the natural world has the possibility of moral agency; of obedience and disobedience, of consent and rebellion, even if this is at an infinitely lower level than that of which man is capable.⁴² And since the natural world does consent to the Creator's purpose - since God is in all things and he consents to his own purpose - it, though fallen, is also inherently virtuous. And virtue, again, is love. Considerations such as these forced Edwards to admit in practice what in theory he denied, viz. that elements of the natural world, other than man, had the possibility of conforming to being in general and therefore of loving.

Yet human community remains superior to the natural community because it has a greater capacity to consent and is therefore capable of greater virtue.⁴³ That existence to whom virtue has been communicated most fully or which has received the most virtue, that is, that existence which has the greatest capacity for a "supreme love to God" and therefore "true morality",⁴⁴ is most worthy. It is greater and morally superior to existences which have this capacity to a lesser extent.⁴⁵ It is greater in that it has a larger share of "being in general" by virtue of the fact that it consents to Being in general to a greater extent than other existences.⁴⁶ And consent is union⁴⁷ and participation.⁴⁸

Human community is therefore characterized by morality in

that moral goodness means the creature's fitness for a particular end or "fitness to answer the design for which it was made."⁴⁹ All existence was made to exercise and express an esteem of love to and joy in God.⁵⁰ That which has the capacity to do this most perfectly is therefore most worthy and morally superior. For it is in this respect, love and joy that morality consists.⁵¹

Therefore, that which is great, that which is capable of a supreme regard to God, "has more existence and is further from nothing, than that which is little."⁵² And it is obvious that some beings have "a greater capacity and power" for "everything which goes to its positive existence" than others.⁵³ Hence "an Arch-angel must be supposed to have more existence and to be every way further removed from non-entity, than a worm."⁵⁴ The greater the existence the greater is virtue present. The more virtue present, the more is there participation in Being and therefore life and therefore love.⁵⁵

SUMMARY

Edwards views the natural community as being characterized by conversation, friendship and participation in Being. Therefore, it is also characterized by morality or virtue. Man alone has the capacity to choose between moral and immoral activity. Yet the activity of the natural community is also characterized by morality because it has the quality of consent or

dissent from the Being who constitutes the created order. Therefore the consenting activity of all created entities is an expression of love. Man, however, is capable of a more perfect expression of love than any other creature because he has the greatest capacity for a "supreme love to God" and this, because he participates in Being to a greater extent than any other creature.

NOTES

¹M.O., p. 217.

²ibid.

³M.O., p. 218.

⁴It is possible to find two sources for Edwards' interest in animals, apart from his native interest in and constant exposure to them. (See for example, "the Affair of the Sheep". "Six Letters of Jonathan Edwards to Joseph Bellamy". Stanley T. Williams, Ed., New England Quarterly, Vol. 1 April 1928) The first was Ralph Cudworth.

Animals, said Cudworth, are not mere senseless material machines (Descartes) but are governed by "those natural instincts that are in animals, which without knowledge direct them to act regularly in order both to their own good and the good of the universe". (op. cit., vol. 1, p. 243) And "these instincts of nature in them are nothing but a kind of fate upon them" or "the laws of commands of the Deity concerning the mundane economy". (ibid., p. 244) Because animals have a certain consciousness or "instinct" that enables them to act according to these divine laws Cudworth could not regard animals simply as automata. His rejection of mechanism was complete.

Animals have no "wisdom" or reason. They are simply passive agents of the divine will. Therefore animals "are not masters of that wisdom, according to which they act, but only passive to the instincts and impresses thereof upon them. . . . However, though they do not understand the reason of those actions, that their natural instincts lead them to, yet they are generally conceived to be conscious of them. . . ." (ibid.)

This concept of the passive nature of animals was also emphasized by Edwards. Animals are capable of acting only according to their nature and therefore passively. It is in this that their goodness and obedience consists. The main difference between the inferior and superior parts of the created order is between those that have the faculty or ability "of knowing their Creator, and the end for which he made them, and capable of actively complying with his design in their creation, and promoting it (and) other creatures (who) cannot promote the design of their creation, only passively and eventually." (E.C., p. 485) "The minds of beasts, if I may call them minds, are purely passive with respect to all their ideas. The minds of men are not only

passive but abundantly active." (Mind 59) It is this active "intelligent perception and action" that differentiates man from the natural order. (M.R., p. 305)

Edwards, as Cudworth, refused to grant to animals reason, wisdom or any "exalted faculty." Like Cudworth, he saw that once this faculty was granted to animals, their intellectual capacities would have to be considered as "far transcending that of human reason." But this cannot be since human reason alone is "capable of reflecting upon what passes" in the mind. "Beasts have nothing but direct consciousness." (Mind 59) They are capable of "no voluntary action about their own thoughts. Hence there is no necessity of allowing reason to beasts." (*ibid.*)

Locke also had an interest in animals. For him animals were capable of limited perception, reason and memory. Their ability to perceive distinguishes them from the "inferior parts of nature." (*op. cit.*, 2:9:11) They have the ability, some to a "great degree" to "retain ideas in their memories." (*ibid.* 2:10:10) And while the brutes cannot deal with abstract ideas they can reason if "only in particular ideas, just as they received them from the senses." (*ibid.*, 2:11:10)

Both Cudworth and Locke had an interest in the "brute creation". They also had a definite understanding of it and wrote about this understanding. Their thought is reflected in Edwards' own understanding of its significance and nature. Again we find support for the contention that Edwards encountered attempts to understand the natural world in much of his reading and that this reading reinforced his native interest in it and his desire to understand it.

⁵D.M., p. 565.

⁶M.O., p. 219.

⁷*ibid.*

⁸Christian Ethics and Moral Philosophy, p. 481.

⁹Misc. 62.

¹⁰Misc. 4.

¹¹Images 44.

¹²Images 19.

¹³F.W., p. 392.

¹⁴Misc. 976.

¹⁵ibid.

¹⁶ibid.

¹⁷Images 8. Here we find again the argument that the essence of existence is unity and that all existence is of one piece. All of the natural community, despite its diversity, is interrelated and "so united by the established law of the Creator" that we are naturally prompted "to look upon all as one." (O.S., p. 397, 398) Consequently, "a tree, grown great and a hundred years old is one plant with the little sprout that first came out of the ground, from whence it grew, and has been continued in constant succession; though it is now so exceeding diverse, many thousand times bigger and of a very different form, and perhaps not one atom the very same." (O.S., p. 397)

Similarly the body of a man of forty years "is one with the infant body which first came into the world, from whence it grew." And just as a person's body is one body, so also does his body and soul constitute one personality. They are "different parts of the same man." (O.S., p. 398) These two entities are of a nature "as diverse as can be conceived." Yet they are so "strongly united" and have established such "a wonderful communication" by means of a "law of nature" created and maintained by God, they have in effect, become one. The physical and non-physical are not absolutely discontinuous. There exists "conversation" between them. "The union and mutual communication they have, has existence." (ibid.)

¹⁸T.V., p. 73.

¹⁹E.C., p. 479.

²⁰ibid., p. 479, 480.

²¹T.V., p. 74.

²²ibid.

²³ibid., p. 10.

²⁴ibid., p. 8.

²⁵Mind 45.

²⁶ibid., l.

²⁷ibid.

²⁸H.A., p. 464.

²⁹T.V., p. 11.

³⁰Images 134.

³¹T.V., p. 9.

³²ibid., p. 10.

³³F.W., p. 159.

³⁴ibid., p. 162.

³⁵ibid., p. 158.

³⁶ibid., p. 192.

³⁷M.R., p. 305.

³⁸ibid.

³⁹F.W., p. 428.

⁴⁰T.V., p. 21, 22.

⁴¹H.R., p. 19.

⁴²M.R., p. 304 ff.

⁴³W.U., p. 546, M.R., p. 304.

⁴⁴T.V., p. 20.

⁴⁵ibid.

⁴⁶ibid., p. 32.

⁴⁷ibid., p. 25.

⁴⁸E.C., p. 479, 480.

⁴⁹T.V., p. 24.

⁵⁰ibid.

⁵¹ibid., p. 25.

⁵²ibid., p. 12.

⁵³ibid.,

⁵⁴ibid.

⁵⁵This means that virtue and life exist in degrees. "Mere existence" is to be accounted a beauty (T.V., p. 10) because that which exists, exists in God. "God and real existence are the same", since "God is and there is none else." And God is that by which beauty, morality or consent are defined and upon which they depend. Therefore, that which consents must exist. Existence depends upon consent. That which does not consent does not exist and that which consents the most is most real. Therefore a state of absolute nothing cannot exist. "That there should absolutely be nothing at all is utterly impossible" (O.B., p. 1) since there is nothing else but God. And "it is a contradiction to suppose that being itself should not be. To say "that there may be nothing" is to suppose that "nothing has a being." (Misc. 650) And, if nothing cannot exist, then that which does exist must be capable of consent and therefore morality.

Thus it is true as Delattre suggests that for Edwards "order and disorder in the natural world are seen in terms of harmony and discord while order and disorder in the moral world

are seen in terms of consent to being and dissent from being." (op. cit., p. 112) But, as we have seen, this order and disorder ~~are~~ ~~is a~~ products of consent or dissent. Nothing can function as it should unless it consents to the end for which it was created. The less it consents, the less it ~~ceases to~~ exists. Hence, consent is primary in both realms of existence which Delattre identifies and which Edwards himself distinguishes. "The moral world is the end of the natural world and the course of things in the latter is undoubtedly subordinate to God's designs with respect to the former." (F.W., p. 251)

But while "moral perfection" belongs to an order that is non-natural, morality as such does not exclusively so belong. Thus it is a moot point whether the two realms can be absolutely distinguished, as Delattre does, since the beauty (consent) of all God's works "both of creation and providence", is derived from God's moral perfection. (R.A., p. 273) Edwards would agree that the consent inherent in the spiritual realm is not merely an extension of natural beauty. Yet it is doubtful that he would view it as completely discontinuous as Delattre suggests he would. (op. cit., p. 112)

It is true that in the natural world we find the less perfect made in imitation of the more perfect, plants made in imitation of animals and they of men and so forth. (Misc. 59) It is also true that here all things are constituted in imitation of and are subordinate to the spiritual. (Images 43) But if all existence is of one piece, there cannot be an absolute discontinuity between the "noble and real world" and the imperfect and physical world. Both realms are moral realms.

CHAPTER VII

A CONCEPTION OF THE NATURAL WORLD

INTRODUCTION

The natural community is qualified by a morality, the basis of which is the presence of the Creator who inheres in and is active in the created order and sustains its existence. In this chapter we shall first consider the nature of the divine activity in the natural community and the relationship of this activity and the natural community itself to the divine wisdom. We shall then discuss the unity of the Godhead and its relationship to the natural order. To conclude we shall summarize the discussion of the last three chapters.

THE NATURAL COMMUNITY AS DIVINE ACT

Life can be defined as activity or growth. The natural community, because it is infused with life or participates in life is therefore an active community. It must act, because it is "energized" or infused with the divine power which maintains it in existence.¹ The concern of the Creator for his creation is seen in the fact that he provides the energy from which the created order lives.² "All creatures are wholly and entirely the fruits of God's power."³

This activity is both continuous and discontinuous. It

is discontinuous with past activity in that it is an effect of divine power which is "without any dependence on prior existence."⁴ For example, the wind that blows in one instant is not the same as that which blew just before "any more than the agitated air, that makes the sound, is the same."⁵ Nor is the water in a river, which now passes by "individually the same with that which passed a little before."⁶ Each element is new because each is the product of a new application of divine power or activity. "Everything. . . is the immediate effect of a new exertion or application of power."⁷

The activity of the natural community is also continuous activity in that it is purposeful activity. This continuous activity is treated as one effect by the Creator.⁸ For all dependent existence is an effect which must have a cause. And since this cause cannot be "the antecedent existence of the same substance", it must be the power of the Creator.⁹ All activity proceeds wholly from the Creator.¹⁰ Consequently, all activity in the natural community is related activity and therefore continuous, because its activity is purposeful. Its "restlessness", its "continual labor" and its "vast and mighty" processes are all integrated and designed to the common purpose of glorifying the Creator.¹¹

The Creator, then, "so unites these successive new effects that he treats them as one."¹² These successive new effects maintain the natural community. Consequently, the natural com-

munity can be said to be an arbitrary constitution, that is

a constitution which depends on nothing but the divine will; which divine will depends on nothing but the divine wisdom. In this sense, the whole course of nature, with all that belongs to it, all its laws and methods and constancy and regularity, continuance and proceeding, is an arbitrary constitution.¹³

The activity of the natural world is purposeful because it is activity in conformity with the will of God. The extent to which the natural community is a community depends upon the extent to which its activity conforms to this will. For it is a sovereign will, that against which nothing can stand. "There is no such thing as frustrating, or baffling or undermining his designs. . .there is no wisdom, nor understanding, nor counsel against the Lord."¹⁴ And community must result from obedience to this will because community is what is willed.¹⁵

The will of God is sovereign in the natural world because the latter is his own and he has a right to dispose of it "according to his own pleasure. . . . All things are his, because all things are from him, they are wholly from him and from him alone."¹⁶ And the will of God is sovereign in the natural world because "he is worthy to be sovereign over all things." It is worthy that the will of God govern the created order because it is "essentially and invariably holy and righteous and infinitely good."¹⁷ It is therefore perfectly excellent. Because of this it is "of infinitely greater importance than the

will of creatures."¹⁸ This will is also perfect, infinite in understanding and power, because it is informed by the divine wisdom. Consequently, the natural community itself is "under the guidance of a perfect unerring wisdom."¹⁹

THE NATURAL COMMUNITY AND THE DIVINE WISDOM

The concept of the divine wisdom occupies a central place in Ralph Cudworth's thought. It is likely that Edwards was familiar with his use of it.²⁰ For Cudworth, the divine wisdom is "the very law and rule of what is simply the best in everything" and nature, its "living stamp and signature."²¹ For Edwards, the divine wisdom which determines the divine will is "supreme, perfect, underived, self-sufficient and independent."²² It represents the rational love of God.

The divine wisdom is rational in its design and execution. It is the antithesis of chaos, confusion and chance. The divine wisdom must be most rational because it is that which is most wise. And that which is most wise is that which in all things determines the divine will. Were it otherwise the divine will would be

subject to some degree of undesigned contingency and so in the same degree liable to evil. To suppose the divine will liable to be carried hither and thither at random by the uncertain wind of blind contingency, which is guided by no wisdom, no motive, no intelligent dictate whatsoever. . . would certainly argue a great degree of imperfection and meanness, infinitely unworthy of the deity.²³

The divine glory requires that the divine wisdom be rational. The divine glory is shown forth in the natural order. And the natural order is characterized by the "constancy and regularity" of its laws and methods.²⁴ Hence when it glorifies God it acts rationally. This is what God requires of all his creatures. God does not require submission to his will "contrary to reason."²⁵ What is required of the whole created order is consent to things as they are in themselves, that is, consent to the divine constitution.²⁶ And the divine constitution or truth is rational, since the divine constitution, the manifestation of the divine wisdom, is the definition of reason and truth. The appropriate response to this reason and truth therefore must also be rational and truthful. For without reason and truth the Creator cannot be glorified.

The divine wisdom also represents the love of God for his creation in general and man in particular. All things are so ordered that the happiness of the creature can be attained. The very order of the natural community insures that it can be used by man for his benefit. And in its orderly functioning the natural community achieves fulfillment of purpose and therefore happiness. The ordering of all things by the divine wisdom demonstrates again the fact that the Creator does not seek to be the enemy of his creation.

Consequently, the Creator who has power "to enable him to execute the determinations of wisdom"²⁷ does not leave that which

he loves to the power of chaos. Because the power of his creativity is greater than the destructive power of chaos, he is able to continually execute that which the divine wisdom decrees to be the way of life in the created order. Consequently, the natural community is not left to its own abilities to sustain its life nor are its constituent elements "left to themselves to fall into confusion." Rather it is established in such a way that it can live under "the direction of his (the Creator's) wise providence."²⁸

By virtue of the decree of the divine wisdom each element in the natural community is equipped to make the fitting response to the divine initiative which maintains all things in being. By means of this response the natural community lives. And life represents union with God. Consequently, by establishing all things in such a way that they can unite themselves with the source of life, the divine wisdom represents the love of God for his creation. For God seeks the union of all things with himself. And God is love and love seeks the union of that which has been separated.

THE NATURAL COMMUNITY AND THE UNITY OF THE GODHEAD

In speaking of the divine will, the divine sovereignty and the divine wisdom, Edwards did not mean to imply any division within the Godhead. From first to last, he affirms its unity. We know it is a unity first from the way the world is both cre-

ated and governed. For it conforms in all its parts to one purpose. "Tis but one design that orders the world."²⁹ Only one will and purpose could design all parts of the created order in such a way that they operate distinctively and individually yet in interdependent harmony. We also know the Godhead is a unity because God is infinite and incorporates in himself all being. "God is in no respect limited and therefore can in no respect be added to."³⁰ Therefore he can be but one. That the Godhead is but one God is also manifest in the invariability and similarity of the laws of nature, which have remained constant since the beginning of the creation.³¹ Wisdom, will and sovereignty are therefore attributes of one God, who has designed all things to manifest his glory and who has subjected all things to himself.³² How then do these attributes relate to each other?

The wisdom of God, says Edwards, is the Son of God, Jesus Christ. "The son's honor is that he is (the) perfect and divine wisdom itself."³³ The honour of the Father consists in the fact that it is from him that the divine wisdom proceeds.³⁴ From the divine wisdom proceeds the divine will. The divine will is thus subject to the divine wisdom and obedient to it. The divine will is the Holy Spirit. "There is understanding and will in the Son, as he is understanding (wisdom) and as the Holy Ghost is in him and proceeds from him. There is understanding and will in the Holy Ghost as he is the divine will and as the Son is in him."³⁵

Because each element in the Godhead has both understanding

and will,³⁶ each can be termed a person. For "a person is that which has understanding and will."³⁷ And each of these persons is equal in every way "in the society or Family of the three."³⁸ And their equality consists in the fact "that they are all God."³⁹ The divine will, the divine wisdom and the divine sovereignty are of the same essence.⁴⁰ And "there is such a wonderful union between them that they are. . .one in another."⁴¹

The divine wisdom is the object of the love of God and this love is consented to and returned. Their love is mutual.⁴² "God loves the understanding and that understanding also flows out in love so that the divine understanding is in the deity subsisting in love. It is not a blind love."⁴³

The mutual love of the divine sovereign and the divine wisdom is communicated to the created order by the divine will or energy, who also partakes of this love. "An infinitely holy and sacred energy arises between the Father and Son in mutually loving and delighting in each other. . . . This is the eternal and most perfect and essential act of the divine nature."⁴⁴ And that which "expresses the divine nature as subsisting in pure act and Perfect Energy and as flowing out and breathing forth in infinitely sweet and vigorous affection" is the Holy Spirit.⁴⁵ The Holy Spirit is "the Deity in act."⁴⁶

The Holy Spirit represents the sovereign will of the Creator. Therefore the Holy Spirit represents the power of the Creator whereby he brings to pass what he wills. "God's power or

ability to bring things to pass. . .is not really distinct from his understanding and will."⁴⁷ And because the Holy Spirit which proceeds from the Father and the Son partakes of the bond of love which unites the two,⁴⁸ and is the means whereby this love is communicated to the creation, it can be said that the will of God, the Holy Spirit, is love. Consequently, just as the Son of God can be spoken of as the personal wisdom of God,⁴⁹ or "the deity generated by God's understanding,"⁵⁰ so the Holy Spirit "may with equal foundation and propriety be called "the personal Love of God,"⁵¹ or "the divine essence flowing out and Breathed forth in God's Infinite love to and delight in himself."⁵²

The Holy Spirit is love and love is active. Consequently, love represents the active will of God. "God's will. . .is not really distinguished from his love."⁵³ And the power of God which is also the Spirit of God is the active exercise of this love. Thus the Holy Spirit effects the sovereign will of God which is the will to love. The power of the spirit is supreme. Consequently, the Spirit which once "moved upon the face of the waters or of the Chaos to bring it out of its Confusion into harmony and beauty"⁵⁴ continues to so act that community is maintained in the created order. The fact that this occurs in the natural world demonstrates again that God does not will to be the enemy of his creation. It also assures that in spite of the chaos and confusion in that world, all things will ultimately be brought to a good issue, "when truth and righteousness shall finally pre-

vail and he whose right it is shall take the kingdom."⁵⁵

The will of God is the love of God. And this is not a blind love, because it is directed by divine wisdom.⁵⁶ The created order is an exercise of this divine wisdom or an exercise of the divine love.⁵⁷ "But Christ is divine wisdom, so that the world is made to gratify Divine Love as exercised by Christ or to gratify the Love that is in Christ's Heart."⁵⁸ The natural world is an expression of the love of the Father or of "the Deity subsisting in the Prime, unoriginated and most absolute manner or the deity in its direct existence"⁵⁹ for the Son. It was for the Son that the world was made.⁶⁰ And this love is in turn reciprocated in such a way that the created order is taken ultimately seriously.

For this reason the divine wisdom orders all things so that the purpose of the created order, the glorification of the Creator, will be effected. And the will of God or the power of God, conforming to or directed by the divine wisdom effects all things, maintains all things in existence, and directs all things to this end. And this end will not be frustrated. God will be glorified because this is what he wills. And he wills this because he loves. And he loves himself supremely.⁶¹

The natural community reflects the community that exists in the Godhead and is characterized by it. But the Godhead remains a mystery. "I am far from pretending to explaining the Trinity, so as to render it no longer a mystery."⁶² And because

that which constitutes it is characterized by mystery, the natural community, again, has itself a mysterious quality which no amount of investigation can make rationally comprehensible. The more one knows about the divine constitution, the more mysterious it becomes.

He that looks on a plant or the parts of the bodies of animals or any other works of nature at a great distance. . . may see something in it wonderful and beyond his Comprehension, but he that is near to it. . . understands more about them. Yet the number of things that are wonderful and mysterious in them that appear to him are much more than before. And if he views them with a microscope, the number of the wonders that he sees will be much increased still, but yet the microscope gives him more of a true knowledge concerning them.⁶³

The more knowledge of the natural world is increased, the greater becomes its mystery, "which we never can fully find out."⁶⁴ Were it otherwise, God would not be God.⁶⁵ And the deeper the mystery, the more is the glory of the Creator revealed. For it is in that mystery which the Godhead represents that the Creator is glorified.

God is glorified within Himself these two ways: 1) By appearing or being manifest to Himself. . . in His Son who is the brightness of His glory. 2) By flowing forth in infinite love and delight towards Himself, or in his Holy Spirit.⁶⁶

It is the duty of the creature to glorify the Creator by making the appropriate response to this wisdom and will. In this

the creature participates in the Creator's essential glory. That is, he participates in that process whereby he glorifies himself. And to do this is to love the Creator supremely.⁶⁷

SUMMARY

We now summarize our response to the questions raised at the beginning of Chapter five.

THE CHARACTERISTICS OF THE NATURAL COMMUNITY

Edwards sees the natural community as an organic existence in which each element is dependent for its subsistence and happiness on other elements. Just as man needs nourishment to survive, so the natural community needs nourishment, such as rain, falling leaves or rotting plants, and "nitrous parts by the snow and frost or by other means gradually drawn in from the atmosphere that it is encompassed with."⁶⁸ Even the sun which "nourishes the whole planetary system, is nourished by comets."⁶⁹ In the natural community, one species and form of life is dependent for its existence upon the extent of its interdependence and union with other species. Isolation in the natural community is death. Consequently it cannot be said that any element of the natural world is useless. Even when its usefulness is not readily apparent, it plays its part in sustaining the whole.⁷⁰ And

in its giving and receiving each element glorifies the Creator and thereby fulfills its purpose. Therefore the importance of an existence is not determined by its size but by its fitness to be used for a specific purpose or its election. For example one seed of a plant or animal is used to produce a future plant or animal while many other similar seeds are lost "in divine providence." And these seeds are just as great a work of God's as are the planets.⁷¹

The community as a whole is dependent for its life and happiness on its relationship with its Creator. He is the means whereby it relates to or communicates with itself. He infuses this community with his creative being. Without this primary relationship it would be impossible for the natural community to consent to its duty.

The natural community is characterized by the diversity of its members. It is not an undifferentiated unity. And, without diversity of form and function there could be no consent.

One alone without reference to any more cannot be excellent; for, in such a case, there can be no manner of relation no way, and therefore no such thing as consent. Indeed, what we call 'one' may be excellent because of a consent of parts, or some consent of those in that being that are distinguished into a plurality some way or other. But in a being that is absolutely without any plurality there cannot be excellency, for there can be no such thing as consent or agreement.⁷²

The natural community is also characterized by the integrity of each of its members. The integrity of each element consists in its self-acceptance or union with itself. And because it is united with itself it has the potential for union with or consent to the whole. Each element has the capacity to be united with itself because each element is involved in the divine constitution. And the divine constitution or Being in general is God. And God is united with himself. God, that is, loves himself and gives this same capacity to the created order.

God himself is in effect, being in general; and without all doubt it is in itself necessary, that God should agree with himself, be united with himself, or love himself: and. . .he gives the same temper to his creatures.⁷³

Consequently, self-love, when based on consent to Being in general, "implies agreement and union with every particular being, except in such cases wherein union with them is by some means inconsistent with union to general existence."⁷⁴ Without this integrity there again would be no consent by the elements of the natural community. Without this self-regard each element would be divided within itself and therefore estranged from the whole community. This would result in disunion, destruction and dislocation throughout the community.⁷⁵

The natural community is characterized by unity, truth and goodness. Its unity is both internal and external. It consists in each being's consistency with itself and with those

elements to which it stands related.⁷⁶ Its truth consists in its establishment by the will of God who establishes truth. Its goodness consists in its conformity to this will.

THE MORALITY OF THE NATURAL COMMUNITY

The natural community is a moral community because it contains within it the quality of mind. This means it has the capacity for conversation, friendship and participation in Being. This in turn signifies that the natural community has the capacity for love. Its very existence is an expression of the divine love. Its activity expresses this love in the created order. The expression of this love in the natural community does not have the potential for perfection that exists in the human community because the former does not participate in Being to the extent the latter does. Yet this love is none the less real. For it is the same love of the one Creator which permeates all life.

A CONCEPTION OF THE NATURAL WORLD

The natural world for Edwards represents that community which acts in conformity with the divine will, which will is established by the divine wisdom.

NOTES

¹O.S., p. 402.

²ibid., p. 66.

³D.S., p. 481.

⁴O.S., p. 402.

⁵ibid., p. 403.

⁶ibid.

⁷ibid.

⁸ibid.

⁹ibid., p. 400.

¹⁰ibid., p. 402.

¹¹Misc. 867.

¹²O.S., p. 403.

¹³ibid., pp. 403-404.

¹⁴D.S., p. 482.

¹⁵H.A., p. 482.

¹⁶D.S., p. 481.

¹⁷ibid., p. 482.

¹⁸ibid., p. 481.

¹⁹ibid., p. 482.

²⁰cf Emily S. Watts, op. cit., Chapter II.

²¹op. cit., 3:22:4.

²²F.W., p. 380.

²³ibid.

²⁴O.S., p. 403.

²⁵D.S., p. 478.

²⁶O.S., p. 404.

²⁷D.S., p. 482.

²⁸ibid.

²⁹Misc. 651.

³⁰Misc. 697.

³¹Misc. 651.

³²ibid.

³³E.T., p. 118.

³⁴ibid., p. 119.

³⁵ibid., p. 116.

³⁶ibid.

³⁷ibid., p. 114.

³⁸ibid., p. 118.

³⁹ibid.

⁴⁰ibid., p. 110.

⁴¹ibid., p. 114.

⁴²ibid., p. 94.

⁴³ibid., p. 115.

⁴⁴ibid., p. 94.

⁴⁵ibid., p. 95.

⁴⁶ibid., p. 94.

⁴⁷ibid., p. 111.

⁴⁸T.G., p. 47.

⁴⁹ibid., p. 44.

⁵⁰E.T., p. 110.

⁵¹T.G., p. 44.

⁵²E.T., p. 110.

⁵³ibid., p. 111.

⁵⁴ibid., p. 95.

⁵⁵H.A., p. 455, 464.

⁵⁶E.T., p. 133.

⁵⁷ibid.

⁵⁸ibid.

⁵⁹ibid., p. 110.

⁶⁰H.A., p. 455.

⁶¹ibid., p. 112.

⁶²E.T., p. 117.

⁶³ibid., p. 129.

⁶⁴D.S., p. 479.

⁶⁵ibid.

⁶⁶Misc. 448.

⁶⁷ibid.

⁶⁸Misc. 990.

⁶⁹ibid.

⁷⁰"By proportion one part may sweetly consent to ten thousand different parts; all the parts may consent with all the rest; and not only so, but the parts, taken singly, may consent with the whole taken together." (Mind 62)

⁷¹Misc. 1303.

⁷²Mind 1.

⁷³T.V., pp. 73-74.

⁷⁴ibid., p. 74.

⁷⁵ibid.

⁷⁶Misc. 976.

CHAPTER VIII

ISSUES

INTRODUCTION

We have investigated Edwards' understanding of the natural world. We shall now discuss nine issues which arise out of this investigation.

1. The interpretation of the Fall
2. The relationship between creation and redemption
3. Secularization and man's responsibility for the natural order
4. The interpretation of Natural Law
5. The presence of estrangement in the natural order
6. Technology and man's use of the natural order
7. Man's relationship to his environment
8. The relationship between reason and revelation
9. The relationship of the Holy Spirit to the natural order

The first three of these issues arise out of Edwards' doctrine of creation (Chapter II). The fourth relates primarily to his doctrine of creation as well as to his understanding of man's activity in the created order (Chapter III) and his per-

ception of morality in the natural community (Chapter VI). The fifth and sixth issues also arise out of Chapter III. The seventh issue also relates to this Chapter as well as to his conception of knowledge (Chapter IV) and to his understanding of the natural world as an integrated community (Chapter V). The eighth issue also arises out of Chapter IV. The last issue arises out of Edwards' understanding of the relationship of the Godhead to the created order (Chapter VII).

THE INTERPRETATION OF THE FALL

Edwards understands the natural order to be, in one sense, perfect. For all created existence is dependent upon the Creator who "has the sum of all perfection. . . . He is likewise infinitely excellent and all excellence and beauty is derived from him in the same manner as all being."¹ Since he is "the Infinite, Universal and All-comprehending, Existence"² there is no existence which does not contain his beauty and perfection. Therefore, imperfection partakes of perfection. Its essence is of the nature of perfection. Consequently, the natural world is perfect in that its order and regularity represent the effect of a "superior contrivance" which cannot be improved upon by the works of man. The perfection of the beauty of the natural world can be imitated only.³

Yet the natural order is also and inevitably imperfect,

since "as soon as ever we have descended one step below absolute perfection possibility ceases to be simple: it divides and becomes manifold."⁴ Wholeness, the ideal for which the created order strives, is unattainable within that order itself. Although it partakes of an existence which is of one piece and is characterized by it, it is also characterized by disjunction, disunion, separation and division. It lacks that absolute unity which is definitive of perfection.⁵ For perfection is paradise. And when imperfection was introduced into the natural order, the place of paradise was changed from earth to Heaven "so that nothing paradisaical should be here any more."⁶ Whatever remains in the natural order is but a shadow of paradise and whatever perfection found here now "will have some sting to spoil (it)."⁷ Edwards attributes this imperfection to the participation of the created order in the fall of man.

Because of Adam's disobedience, he and his posterity were cursed and punished by death.⁸ That is, Adam's posterity was condemned to "a privation of good," a privation of the active creative power of God.⁹ The natural world is involved in this curse on man in that it is the means or vehicle through which the curse comes and terminates upon him.¹⁰ Man is cursed with respect to the natural world¹¹ which itself is cursed and full of "thorns and thistles for man's sake."¹² The natural community does not function perfectly because man must sustain himself from it. Man is not to have at his disposal that which is perfect

or that in which fulness has been realized.¹³ He must therefore suffer the results of these imperfections in his own life as a just punishment for his sin.¹⁴

The natural world is cursed because of man's guilt. The content of the curse is that it will be a source of sorrow and suffering to man.¹⁵ The object of the curse, however, is not the "lifeless, senseless earth" but man.¹⁶ The curse or wrath of God is mediated to man via the natural community, to which he is inescapably related and with which he is inextricably bound up.

The Fall is universal, involving all created or derived existence, material and spiritual. Even the angels are included for they also failed to consent to the purpose for which they were created.¹⁷ The reason for their existence was to be the servants of Christ in his "great work of exalting and glorifying beloved mankind." To this relationship they were unwilling to consent and they became estranged from the ground of their being. "Hence we may infer that the occasion of their fall was God's revealing this to be their end and special service to them and their not complying with it that must be the occasion of their fall."¹⁸

Edwards has difficulty in determining why the Fall should have occurred and as a consequence why sin should have become universal and why therefore the whole created order should be subject "to that death and final destruction, which is the proper

wages of sin."¹⁹ Yet, whatever the cause, the result is obvious. Before the Fall, Adam "was in happy circumstances, surrounded with testimonies and fruits of God's favor."²⁰ After the Fall these "fruits of God's favor", that is, the "superior" or "super-natural" principles through which the union of God and man was maintained, were withdrawn. Consequently, "the inferior principles of self-love and natural appetite, which were given only to serve. . . became reigning principles."²¹ Cast adrift from the relationship which sustained him, man became helpless to control these inferior principles. They in turn "having no superior principles to regulate or control them, . . . became absolute masters of the heart."²² The result of this was "a turning of all things upside down and the succession of a state of the most odious and dreadful confusion."²³

This has been and always will be the universal human situation. For "through a law of nature established by the Creator" Adam and his posterity are united as and "constitute but one moral person."²⁴ Consequently, all mankind participates in the original disruption of the life-giving relationship or in the dissent from being. For all together participate and concur as "one (moral) whole, in the disposition and action of the head."²⁵ And where there is consent to sin, there sin is committed.²⁶ Man and Adam then, have always coexisted. Hence God treats all men as one because all have sinned in Adam. "And therefore, as God withdrew spiritual communion and his vital gracious influence

from the common head, so he withholds the same from all the members, as they come into existence."²⁷

And this "odious and dreadful confusion" is also to be found in nature, because man and nature participate in each other. Nature was created for the sake of man and it is because of him that it is subject to futility. Whether this curse occurred before or after the Fall, and Edwards maintains it occurred after²⁸, the fact is it did occur and as a result the whole of the created order now suffers.²⁹

However, although Edwards acknowledged the imperfection of the divine manifestation in the natural world, he was primarily concerned with its unity and beauty and the fact that it manifests the love of the Creator for his creation.

The supreme reality of existence, the love of God, so colored all he saw and experienced that it cast out or at least limited the impact of all lesser realities including evil. Evil is that which separates, breaks down, and isolates. Virtue or love is that which "builds up", which strives for the reunion of that which has become separated. It was this state Edwards saw prefigured in the beauty of the natural world. Its beauty, in turn, points to the actualization of the purpose of God; the everlasting union of all things in Christ to whom "the whole universe is put in subjection."³⁰ God's purpose for his creation is a reunion with Being in such a way that separation and disintegration can never again occur.

Consequently, Edwards emphasized that it was not God's wrath but his love which would be his final word to his creation. Because God loves it as he does, he will not leave it in a state of "continual labor." For this labor is simply a preparatory phase, leading to the final "great event and issue of things" which will be in conformity with his sovereign will.

Does God make the world restless, to move
and revolve in all its parts, and make no
progress? To labour with motions so mighty
and vast only . . . that things may be as they
were before?³¹

For the present, God chooses to subject nature to an inherent dissent or evil, rather than "disturb and interrupt the course of nature according to its stated laws."³² Yet because God is active in his created order it remains dynamic, "constantly acting and exercising itself" against this subjection, and reaching forth toward "that glorious liberty that God has appointed."³³

At that time, the bondage to which the created order is now subject, will be fully lifted. This is guaranteed by the fact that it was partially delivered from it" when Christ came, and when the gospel was promulgated in the world."³⁴ The final event will not materialize until vast changes have occurred in the created order, greater and more violent than any that have occurred to date. By these changes it will be known that the end is at hand.³⁵ And when this occurs, the whole created order, animate and inanimate, will rejoice.³⁶ The earth will be "glad",

the mountains will "sing", the hills will be "joyful", the trees will "clap their hands", the lower parts of the earth will "shout" and the sea will "roar".³⁷

This conclusion stands in contrast with one aspect of Edwards' thought which has not been previously stressed. This is his often repeated statement that the natural world "is to come to an end; it is to be dissolved." "It shall vanish totally, and absolutely be as though it had not been."³⁸ These two thoughts cannot be reconciled in Edwards; they stand in tension.³⁹ Yet the major thrust of his thought is that all things will be made new or reunited in Christ. For love is the primary reality of existence and Christ is its means of actualization, the one by whom the unity destroyed by the Fall will be restored.⁴⁰ Hence, we interpret Edwards to mean that the imperfections of the natural world will be swept away when taken up in Christ but that the reality which is the natural world, i.e. the glory of God, will be manifest for all to see and experience. What form this reality will assume, however, cannot be known. And Edwards himself warns against useless speculation.

We had better. . .abstract no farther than we can conceive of the thing distinctly and explain it clearly; otherwise we shall be apt to run into error and confound our minds.⁴¹

Edwards' understanding of the Fall is thus at variance with some contemporary interpretations which view it, as Edwards does, relationally, but only one-dimensionally. That is, they hold that the Fall is symbolic of man's estrangement from his

Creator and of his dissent from the Creator's purpose for his creation. In Edwards' terms, the Fall is symbolic of man's dissent from duty, his misuse of reason for his own purpose. Man thus misuses the natural world, subjecting it to his own purposes without reference to the Creator's will. The disorder in the natural world is therefore not the result of any inherent defect in the natural realm itself, not the result of any estrangement of the creation from the Creator, but solely the result of man's mistaken relationship with it.

Man refuses to cooperate with the divine purpose and accordingly the whole cosmos is frustrated and disoriented. . . . The figures of the 'fall' and the 'groaning' of creation are to be seen as symbolic statements derived from man's broken relationship with nature. . . . The disorder is not in the cosmos as such but in man's mistaken relationship to the cosmos.⁴²

In contrast to this position Edwards does not accept the proposition that the natural world is an innocent world. It is not "morally neutral" even though its inanimate constituent elements such as stones and trees "love nothing and hate nothing."⁴³ The natural world is in some sense guilty because it is estranged from that to which it essentially belongs.

This is another way of saying that the natural world cannot be "innocent" because it is characterized by morality. And the universality of sin is such that every existence that "comes to act in the world as a moral agent is, in a greater or

lesser degree, guilty of sin."⁴⁴ To the extent that the natural world so acts, it too is "guilty of sin", whatever its cause. The mark of all created existence is finiteness, estrangement, and separation.

An alternative to Edwards' understanding of the participation of the created order in the Fall is that of Paul Santmire. His thesis is that "Man definitely has fallen, but the whole of nature has not."⁴⁵ Although nature is cursed because of man's sin, it is not fallen.⁴⁶ In support of this thesis he maintains that:

- i) Man alone is given freedom to obey.
- ii) Man alone is created in the Image of God.
- iii) Only man can sin.
- iv) In the Biblical material sinful man is contrasted with nature.
- v) In the Biblical material the land vomits out its inhabitants when they have sinned.
- vi) Nature is blessed or cursed solely because of man's obedience or sin before God.
- vii) The curse is removed from nature when man is forgiven.
- viii) The natural world is subject to futility against its own will because of man's sin.
- ix) The Biblical notion of a new creation does not presuppose a universal fall.
- x) The divine curse is an anthropological not a cosmo-

logical theme.⁴⁷

From our investigation of Edwards' thought we conclude that had he encountered Santmire's position, he would have agreed with some of his propositions. He admits that man alone is created in the Image of God and that because of this he is to be contrasted with the rest of the created order. He suggests that the natural order, because it is inherently virtuous and has preponderant propensity to consent to "universal general existence", seeks to resist or "vomit out" those elements which oppose this tendency.⁴⁸ He holds that the created order is subject to futility or corruption against its will.⁴⁹ He maintains that it is cursed because of man's sin with respect to the Creator. He also implies that with forgiveness or reconciliation between man and God the curse or wrath of God⁵⁰ will be removed because the reunion of the Creator and his creature will be effected. For the wrath of God consists in his "withdrawing, as it was highly proper and necessary that he should, from rebel-man."⁵¹ And since the whole of the created order is "summed up" in man⁵² and man is its consciousness or a means whereby it glorifies its Creator, therefore the reunion of man and his Creator implies the reunion of the created order and its Creator.

Edwards is ambivalent with respect to Santmire's assertion that only man can sin. On the one hand he wishes to maintain that man alone has the capacity to will to consent or dissent

from being.⁵³ Yet, as we have seen, he also invests the natural order with a morality and therefore with the possibility of both obedience and disobedience to the divine will. And if this is the case, then it too has the possibility of sinning since sin is disobedience or lack of consent to the divine will. Consequently, while Edwards does say that man is the only creature with the freedom to obey or disobey, and consequently, the only creature that can sin, he implies the possibility that this is not the case.

Two of Santmire's propositions Edwards would have rejected. He denies that the divine curse is solely an anthropological concern. And he denies by implication that it is possible to conceive of a new creation without presupposing a universal Fall.

Edwards denies the former proposition first because he views man as part of the natural order. Therefore, anything that affects man must affect the natural order since all relationship in the created order is interdependent. Second, the curse which terminates on man is mediated to him "through the ground."⁵⁴ The natural order conveys the curse to man and is therefore necessarily involved in it. In the third place, since all existence is relational, one cannot consider the fallen condition of the natural order apart from the relationship of perfect unity from which it has fallen. Nor can one speak of the natural world apart from the nature of the Creator which is its essence and the divine activity which maintains it in existence. Similarly one

cannot consider the natural world apart from that power in it which opposes the divine activity. Just as the natural world represents one dimension of "the created realm of God"⁵⁵ so does it also represent one dimension of the destructive realm of Satan. It is one aspect of his visible kingdom.⁵⁶ One cannot consider the natural order apart from its propensity to consent to and dissent from being in general. Finally, one cannot consider the Fall in itself but must also consider the consequences which issue from it, viz. the estrangement of life with life. Consequently one cannot consider the Fall apart from the enmity which exists between man and the natural world which is its consequence.

Edwards also implies that the idea of a new creation presupposes a universal Fall. For the natural order fell "when man sinned, and broke God's covenant."⁵⁷ It was then cursed.⁵⁸ Consequently, it was no longer perfectly united with its Creator. It is because this union is no longer "infinitely strict"⁵⁹ that all perfection now has a "sting" to it. When this was still the case, the natural order was a medium of the Creator's blessing only. Now it is the medium both of his blessing and his wrath.⁶⁰ Yet it is toward a restoration of that "infinitely strict union" of the Creator with his creation which once existed, that the latter is now moving.

Santmire claims that the Biblical point of view is contrasted with this position.

To express the biblical presupposition metaphorically: Adam and Eve and the whole of Paradise would have had a history and would have been transformed at the end of that history even if Adam had not sinned. Paradise. . . is the created beginning of a real history whose goal is something new, the final re-creation. Paradise, moreover, is created as a realm of mortality; God alone is immortal.⁶²

Edwards was aware of the validity of this point of view. Consequently, he admits that "in creating the world" the Creator sought "during the whole of its designed eternal duration (to bring it) in greater and greater nearness and strictness of union with himself, in his own glory and happiness, in constant progression, through all eternity."⁶³ In stating this he admits that what the Creator created was good but not perfect. This position he maintains in tension with that which is implied throughout his thought: viz. that the divine nature is perfect⁶⁴ and that what at least originally proceeded from him must have been likewise perfect.⁶⁵ That is, the Creator would not have created the natural order if in so doing he would be only imperfectly glorified and if the creature were only imperfectly happy. Paradise was removed from the created order as a consequence of the Fall but it originally existed in it.

THE RELATIONSHIP BETWEEN CREATION AND REDEMPTION

Because Edwards could not think "in terms of two spheres" (Bonhoeffer) he could not accept the separation of creation and redemption. "The work of redemption. . . is both the greatest work of salvation and the greatest work of creation."⁶⁶ Creation and redemption are inseparable because the Creator and Redeemer are one.⁶⁷ Edwards sees the Creator present as Redeemer primarily as the creative force which is active in the natural order to secure it from domination by that power which would prevent it from yielding consent to the Creator.⁶⁸ Redemption means a release from captivity to sin and its effects.⁶⁹ The natural world is, through the activity of the Redeemer, kept from the power both of the alien destructive force inherent in it (chaos) and the effects of man's sin to which it has fallen victim and for which it is cursed.⁷⁰ "The work of redemption (is) the sum of God's works of providence."⁷¹

Joseph Sittler states that

what the doctrine of the trinity affirms, and labors to protect against misunderstanding and diminishment, is that creation, redemption, and sanctification have their source in God, that this God is not identical with but is present in what he creates, is present in the redemption of what he creates, and is present in all restoration, uniting and upholding of his redeemed creation.⁷²

Edwards sought to work out "A History of The Work of Re-

demption. . .in a Method Entirely New."⁷³ And what he sought to affirm and laboured to protect "against misunderstanding and diminishment" by the new method was this original insight and affirmation. Sittler also states that in "a time that understands creation as continuous and understands anthropology as not extractable from the story of man in an evolving world-process, one . . . cannot separate the doctrine of redemption from the doctrine of creation."⁷⁴ Two centuries ago, when such views were not current, this was Edwards' position.

That which links the fall of the whole created order and its restoration to union with its Creator, that is, that which links creation and redemption, is the incarnation. For the bondage which causes the natural world to suffer at present is man's wickedness, which perverts it, abuses it and causes it to be used for "far meaner purposes than those for which the author of its nature made and adopted it."⁷⁵ And it was the incarnation which began the process of liberation from this bondage.⁷⁶

Edwards does not speculate on the manner in which the redemption of the creation will be fully realized. He is content to assert that 1) God's will is sovereign and that he will effect judgment on sinful man, 2) the Holy Spirit or the divine presence inheres in the created order, 3) this order will come to an end "and absolutely be as though it had not been."⁷⁷ In the light of these assertions we can say that the Creator uses the natural world as the medium of the communication of both his

wrath and his love. Therefore he uses it as the means by which he effects both universal judgment and universal redemption.

When his purposes have been realized God will allow the created order to be destroyed "by an arrest in the laws of nature everywhere in all parts of the visible universe."⁷⁸ And this, in order that he might directly exercise judgment and in order that the secrets of the world might be revealed. Indeed, the law of nature would have to be set aside for the sake of time if for no other reason for "if the law of nature were not in numberless ways to be departed from in these things, the day of judgment would take up more time by far, than the world has stood."⁷⁹ And in their arbitrary exertion, the execution of judgment and the power of God will be "extraordinarily manifest."⁸⁰ Since all existence is interrelated, the life of man and the life of the natural world are interdependent. Consequently the destruction of the one necessitates the destruction of the other.⁸¹ The destruction of the natural world implies the dissolution of the power of dissent within it. Similarly, the universal destruction of "the end of this lower world" implies the universal non-existence of the irrational power of dissent which is in man. Since "God turns everything he (the devil) does to the greater and more illustrious advancement of his own honour,"⁸² the Creator can use the occasion of man's rebellion against his will and his subsequent destruction of the natural community to effect the "new creation", which "consists in restoring the moral world" by his son who is

the Redeemer.⁸³ The Creator and Redeemer are one. For "the work of redemption. . . is accomplished by the Son of God."⁸⁴ And "Christ built the house; he built all things, especially in this new creation; and therefore, is God."⁸⁵ God in reality uses Satan to cast Satan "out of the whole world."⁸⁶

Nature and History in Edwards' Thought.

The view that redemption is cosmic in scope⁸⁷ implies that nature participates in the historical process. Edwards' understanding of the historical process is two-fold. First, he understands it as taking place in an interim, the period between the fall of the created order and the establishment of the kingdom of God. For it was "from the very first fall of mankind" that all things were being prepared for the incarnation.⁸⁸ And the incarnation is that point in the historical process at which the effects of the Fall were in principle overcome.⁸⁹ It is for this reason that "the creation of the world was a very great thing, but not so great as the incarnation of Christ."⁹⁰ Yet the power of "Satan's visible kingdom on earth" remains.⁹¹ Consequently, the natural order remains in bondage to it. The power of the Spirit of God causes all things to move toward the establishment of Christ's Kingdom.⁹² And "so far as the kingdom of Christ is set up in the world, so far is the world brought to its end, and the eternal state of things set up."⁹³

The fact that the historical process takes place in an

interim implies that it has an end. This end has two connotations, finis and telos. As finis, the end is that point where the "lower world" no longer exists. "The natural world, which is in such continual labour. . . will doubtless come to an end."⁹⁴ "It is to be dissolved."⁹⁵ As telos, the end is the fulfillment of the purpose and goal for which the natural order exists, the glorification of the Creator and the establishment of Christ's Kingdom. This is the point at which "all the great changes and revolutions in the world (are) brought to their everlasting issue and all things come to their ultimate period."⁹⁶ This means that the natural world, as part of the created order, continuously moves, both toward its fulfillment and dissolution, both toward the perfect expression of its essential character (love) and toward death (separation from Being).⁹⁷ These two thoughts remain unreconciled for Edwards because of his belief that such a reconciliation is an impossibility within the historical process. Again, this reflects the mystery of the created order which cannot be penetrated by human reason. The meaning of the natural world is set in the context of its mystery. It is the mystery of the created order which gives an ultimate dimension to its meaning and thus prevents it from being reduced simply to rational intelligibility.

The mystery of the created order has positive and negative aspects. Life and death, creation and destruction, consent and dissent are equally mysterious and not amenable to rational

analysis. We do not know when the force of death became operative within the natural order. "I am far from pretending to determine the time when the reign of Antichrist began."⁹⁸ But we do know that at some point "Satan's visible kingdom on earth shall be utterly overthrown."⁹⁹

Yet, while the natural order is characterized by mystery, rational intelligibility is not absent from it. It is an essential element of that mystery to which it points. For its perception in the created order signifies that purpose and not chance, creation and not chaos is dominant. This order is a participant in the process of history which is a series of events connected "like the links of a chain; the first link is from God, and the last is to him."¹⁰⁰ It is reason's task to determine how and where these links are connected.

All the events of history form a unity because the Creator is one and his purpose is one.

All revolutions from the beginning of the world to the end of it are but various parts of the same scheme, all conspiring to bring to pass that great event which the great Creator and Governor of the world has ultimately in view.¹⁰¹

This event is the telos of the created order; the establishment of Christ's kingdom.

The end of God's creating the world was to prepare a kingdom for his Son (for he is appointed heir of the world) which should remain to all eternity.¹⁰²

The events of history represent God's work of providence. And "God's work of providence, like that of creation, is but one. The events of providence are not so many distinct, independent works; but rather so many different parts of one work, one regular scheme."¹⁰³ God's work of providence, his creating and maintaining his creation in being, is like a river with many tributaries, which "are apt to appear like mere confusion to us, because of our limited sight whereby we cannot see the whole at once." Yet "after their very diverse and apparent contrary courses, they all collect together, the nearer they come to their common end, and at length discharge themselves at one mouth into the same ocean."¹⁰⁴ And "not one of the streams fail."¹⁰⁵ No event of history or no work of creation is without significance because by it the Creator reveals himself and it contributes in some way to the one great design. It does not fail in this purpose. And "all God's works of providence through all ages, meet at last, as so many lines meeting in one centre."¹⁰⁶ This center is Christ by whom all things are created¹⁰⁷ and who reigns "in uncontrolled power and immense glory."¹⁰⁸

Because the natural order is involved in the historical process, it will be involved in this last great event which pre-sages the "glorious issue of things." For the natural world is at present "constantly groaning and travailing in pain to bring forth the felicity and glory of it " (i.e. the "glorious issue of things").¹⁰⁹ And "the last struggles and changes that

shall immediately precede this event (will be) the greatest of all. . . (and) the most violent."¹¹⁰ These are the "travail pangs of the creation" which will be necessary "in order to bring forth this glorious event."¹¹¹ This upheaval will be the most violent because it is only at this point that the inherent power of dissent in the created order, which is present simultaneously with the power of love and which works against the latter's manifestation, will itself become fully manifest. For it is only at this point that "the powers of hell will be mightily alarmed", and "the powers of the kingdom of darkness will rise up and mightily exert themselves."¹¹² This will be "the last and greatest effort of Satan to save his kingdom from being overthrown" and to regain the world for his power.¹¹³ And this effort will be met by "a most glorious display of divine power."¹¹⁴

Thus, the first result of the coming of the Kingdom of Christ will be its most explicit denial and the most widespread destruction. The second result will be that the parasitic and negative force inherent in the natural order, and which is so positive in effect, will be forced out from it.¹¹⁵ The third result will be that the whole created order from which this force has been expelled "shall greatly rejoice", be glad and sing. The joy of love will reign in it supreme.¹¹⁶

SECULARIZATION AND MAN'S RESPONSIBILITY FOR THE NATURAL
ORDER

We have discovered that Edwards had a definite understanding of the nature of secular activity, derived from his doctrine of creation. An alternative to Edwards' conception of secular activity can be derived from an alternative view of creation. Such an alternative understanding of secular activity is proposed by Friedrich Gogarten. We shall examine his understanding and compare it with that of Edwards in order to determine both the differences between them and their significance for man's relationship to the natural world.

Gogarten's understanding of secular activity has five elements: the acceptance of responsibility for the created order, requirement of faith, the freedom of man for the Creator and a corresponding freedom from the world, the separation of faith and works, and the forswearing of any Christian "world view" in the application of reason to the discovery and maintenance of the created order.¹¹⁷ The first element (responsibility) is basic to the other four and involves three things: first, a responsibility exercised in faith, second, a responsibility exercised in freedom and third, a responsibility exercised by reason.

The decisive thing is that modern man is
no longer responsible to the world

and its power as the classical man and, in a modified way, even the mediaeval man was. Instead, he has become the one who is responsible for his world. . . Faith, by the power of the freedom for God safeguarded by it and accessible in it, opens to man at one and the same time freedom for himself and independence toward the world.¹¹⁸

Because man is no longer responsible before the world and its law but rather for the world and its law, "the religious power of the world and its law is ended."¹¹⁹

Man has been released from servitude to the world in order that he might be free for the Creator. Failure to exercise this freedom and the responsibility that goes with it is sin.¹²⁰ For it is to choose servitude to that which is finite rather than infinite, to that which is ultimately unreal. That is, servitude to a world which is regarded either mythically or whose unity and wholeness is provided by the creature.¹²¹

Faithfulness to the Creator requires that the world be accepted as a divine gift and responsibility, to be investigated, controlled, protected, maintained and used.¹²² The natural world is man's heritage.¹²³ Yet it has only "penultimate" status, it remains simply the world, its constitution is neither sacred nor divine.¹²⁴

Freedom thus involves both freedom for God and consequently freedom from the world and its mastery.¹²⁵ To be free for God means to take responsibility for the maintenance of the created

order. But the emancipation of reason means that man must make his own decisions; he receives no instructions as to what he should do. Man is required to be obedient to the will of the Creator. But what that will requires at a particular time man must decide for himself.¹²⁶ Consequently, it is possible to accept the fact, with Paul, that at any given time all things are permitted.

However minor the external occasion on which Paul spoke the phrase: 'all is permitted' it is nevertheless one of the most powerful words ever spoken. Because this statement opens up a fully new relation of man to the world, the face of the world has been completely changed. With this word the basis is laid for the lordship over the world and its powers that the human spirit is later to achieve.¹²⁷

Acceptance of the fact that "all things are permitted" implies that man's responsibility for the world precludes any "Christian" approach to the common tasks of investigating the nature and structure of the created order and of maintaining it and using it for its intended purposes. Man's emancipation from servitude to the natural order has been achieved through the use of his reason, which is no longer necessarily determined by a Christian world view or "God hypothesis." (Bonhoeffer) Both the Christian and non-Christian equally run the risk of error in the exercise of their reason.

The implication of this is that faith and works are unrelated. Man stands before God as a mature son who exercises

his responsibility for the world to the best of his ability. To do this is to live an "authentic" existence, an existence lived in freedom for the Creator, in which faith encourages submission to the autonomous exercise of reason.¹²⁸ But the works which are the result of the exercise of this reason do not achieve eternal good or provide ultimate meaning.¹²⁹ There is no direct relationship between the work of the Creator and the response to this work by man as the Creator's heir and son.¹³⁰ To attempt to integrate faith and works; i.e. to make works a means of demonstrating a state of grace or of obedient faith, would be to deny the efficacy of saving grace in itself and reduce the status of God as the One who can in himself effect man's salvation.¹³¹ The works of creation and man's response to it and the work of salvation are distinct. Redemption is the work of God, not of human action.¹³² Consequently human action and the created order without which man cannot act, have a this-worldly significance only.

So long as faith and secularization remain what they are according to their nature, the relation between them cannot be one of contending with each other for the sphere belonging to them. If faith means keeping from secularization what is seized by it, faith ceases to be faith. If secularization begins to claim for itself that which belongs to faith, secularization does not remain within secularity, but becomes secularism. The task faith has in regard to secularization, therefore, is to help it remain within secularity. But it can only fulfill this task when faith

remains faith. It remains faith when it is distinguishing unceasingly between faith and works, between the divine reality of salvation and the earthly-worldly meaning of all human acts.¹³³

There are similarities between this view of secular activity and that of Edwards'. Both emphasize the necessity of faith, the exercise of reason, man's relative freedom from the rest of the created order, his responsibility for this order, and the fact that his relationship to the Creator should be reflected in his relationship with the natural world.¹³⁴

The primary difference between the two perspectives is the understanding of creation presupposed in them. In the dualistic view, implied in Gogarten's understanding, the created order is "desacralized", it is not sacred or divine. What is of God is of God, what is of the created order is simply of the created order. The one can never be found in the other. This means that reality is dichotomized. There is no continuity between the Creator and his creation. Consequently, there is no continuity between temporal and spiritual reality. Reality is not of one piece.

From Edwards' position, this understanding poses certain questions. If reality is discontinuous, can the tension between faith and secularization, posited by Gogarten, be maintained? If the Creator is not perceived as inhering in the created order, is it possible not to attribute to this order a false indepen-

dence? Is it possible to have an attitude of detachment with respect to it? And as that creature that is dominant within it, can man see himself as other than "the source of meaning for all being"?¹³⁵ And if he sees himself as the one "upon whom all being in its way of being and in its truth is based",¹³⁶ can his activity in the natural order be directed to anything other than his self-interest?

To all these questions Edwards would answer, "No". Either the created order is perceived in continuity with its Creator or its reality is not perceived. And if it is not perceived it is not understood. And if this is not understood, nothing about the created order is really understood.¹³⁷ And if man does not understand the natural order correctly his activity in it will not be obedient activity. For only a perception of a spiritual reality inhering in physical reality can yield an attitude of detachment that sees a more inclusive reality in the discovery of new realities.¹³⁸ Without this perception either the created order will be treated with indifference because man is the measure of its value, (self-love), or man will attribute to it ultimate significance.

Both attitudes are derived from a reason that is falsely autonomous. Edwards would deny that reason can be exercised autonomously if the actions that follow this exercise are to be obedient actions. For, reason that is not informed by a sense of the heart, cannot reason correctly.¹³⁹ To reason about the nat-

7

ural order only theoretically is to guarantee its misuse because man's proper relationship to it is not perceived.¹⁴⁰ This is not perceived because the Creator is not perceived. Therefore, where the Creator and his creation are not seen as one reality, the response to the one will be qualitatively different from the response to the other. Either the one or the other will be taken with ultimate seriousness. In either case, the reality that is accorded priority is partial.

It is a premise of the thought of both Gogarten and Edwards that "there is no relation of man to God which does not, at the same time, involve a relation to the world, and vice versa."¹⁴¹ However Edwards would not accept, as Gogarten does, that "man as creature is related to his Creator in a way quite different from his relation to the rest of creation."¹⁴² For him, man responds to the Creator or is related to the Creator in his response and relationship to the created order. This is because both man and the order to which he is related participate in and are constituted by the divine constitution. For Gogarten, man can respond appropriately to the Creator only when he responds to the natural order as that which is derived from and dependent upon him, but also essentially separated from him. It is because it is so separated that man's activity in it has an "earthly-worldly meaning" only. For Edwards it is because the Creator and his creation are perceived as one reality that such activity can manifest evidence of a quality of heart and of the will to make obedience to the

Creator the primary and all-encompassing concern of life.¹⁴³

The danger inherent in the process of secularization has been described by Smith:

Whenever men have assumed that the world is their natural possession and depend upon human effort for ultimate wholeness and purpose, or have opposed the development of experimental science, belittled the 'penultimate' in behalf of the 'ultimate', and felt their faith threatened by the discovery of new truth - there the process of secularization has been short-circuited by the absolutizing of the relative on the one hand, or by the perversion of faith into ideology on the other.¹⁴⁴

It was Edwards' ability to perceive all realities in the context of one Reality that enabled him to maintain both polarities in tension in his thought and avoid either "the absolutizing of the relative" or "the perversion of faith." He would argue that unless reason and a sense of the heart, faith and works, and the reality of the Creator and that of his creation were seen as inseparable, secular activity would wreck itself on either the Scylla of self-love or the Charybdis of false love. In the first instance man's relationship to the natural world is perverted because the natural world is misused.¹⁴⁵ In the second instance man's relationship to the created order is perverted because it is absolutized.¹⁴⁶ In both cases man's activity loses its faithfulness and obedience because the attitude of either responsibility or detachment has been lost. For activity and the attitude that motivates activity are inseparable.¹⁴⁷ And when faith

and obedience are lost, so is true secularity.

THE INTERPRETATION OF NATURAL LAW

John Macquarrie states that "the expression 'natural law' refers to a norm of responsible conduct, and suggests a kind of fundamental guideline or criterion that comes before all rules or particular formulations of law."¹⁴⁸ Further, these "most general moral principles against which particular rules or codes have to be measured" are incapable of precise formulation.¹⁴⁹ Consequently, the natural law is best characterized as an "ordered movement" toward a goal.¹⁵⁰ This movement has "a constant tendency" and "an inbuilt directedness" which provides the criterion for evaluating all particular laws.¹⁵¹

This movement is also operative only in man. It is qualitatively different from movement in any other part of the natural order.¹⁵² This difference distinguishes the law of nature from natural law in an ethical sense. Both types of law are characterized by movement. However "the first kind of movement is unconscious evolution; the second has become a conscious moral striving."¹⁵³

Edwards would accept Macquarrie's statement that the natural law can be characterized as an ordered irreversible movement toward a goal. Such a movement represents the law of God's nature which is love and the will of God which is sovereign. However, his understanding of the natural law is distinguished

~~from Macquarrie's in two respects.~~ First, the Creator has willed the consummation of all things in the Kingdom of Christ.¹⁵⁴ Hence, it is this kingdom or goal, and not the movement in this direction, that represents the norm by which the value or significance of all activity is to be measured. Secondly, Edwards maintains that this movement applies to the whole created order. All things are to become part of a new creation.¹⁵⁵ Edwards cannot distinguish, in terms of morality, the movement in that part of the created order which is non-human from the movement in that part which is, because he cannot say that which is non-human is therefore non-moral.

Consequently, Edwards differentiates this movement not in terms of morality but in terms of particularity. All created existence is subject to the laws of nature.¹⁵⁶ These laws are "the stated methods of God's acting"¹⁵⁷ in order to effect his will. Where the created order participates least in being, there these laws are most undifferentiated. As participation in Being increases, these laws become increasingly particularized and subject to the arbitrary influence of the Creator.

If we ascend from the most imperfect to the most perfect kind of plants, we shall come to more particular laws still; and if from thence we rise to the most perfect of them, we shall find particular laws or instincts yet nearer akin to an arbitrary influence.¹⁵⁸

Consequently, again, it is not the laws that are normative but

the criterion by which they are altered. The natural law is subject to the arbitrary law of God's "righteous sovereignty."

In presenting the natural law in this way Edwards makes a two-fold contribution to man's understanding of the natural world. In the first instance, he allows for both the fallenness of the created order and its inherent goodness to be taken seriously. The created order does not always act according to those laws which regulate it. Yet these laws are good¹⁵⁹ and the primary tendency of the created order is to act in conformity to them.¹⁶⁰ This implies that sin and grace are both always present in the created order. Man alone is made in the image of God.¹⁶¹ Therefore, it is in him that grace and sin are most present. Yet they are present also in all other created elements, for these are taken up or incorporated in man their head.¹⁶² Therefore, the whole created order is characterized by morality. This moral character is reflected in the natural law which constitutes the created order and which is subject to the sovereign will of its Creator.

The second contribution Edwards makes in his interpretation of the natural law is the manner in which he allows it to be the link between religion and morality. The natural law is founded in "the way things are" because it has been established by the Creator. Secular morality, too, may affirm the natural law as being founded in "the way things are". The natural law, as Edwards understands it, need not be given a religious interpre-

tation because his conception of natural law is not incompatible with secular morality.

This he himself recognized. There are, he suggests, natural principles and affections common to all men such as pity, gratitude, natural affection and so forth.¹⁶³ These principles have been implanted by the Creator "chiefly for the preservation of mankind, though not exclusive of their well being."¹⁶⁴ These are operative whether their source be acknowledged or not. Because they are operative the created order is secured.

To the extent that every element in the created order obeys the laws or principles which govern its life, it consents to the Creator's will. This does not mean such consent indicates the presence of true virtue. To follow a natural instinct does not necessarily imply benevolence to Being in general. Yet these natural instincts "have the appearance of benevolence and so in some respects resemble virtue."¹⁶⁵ They resemble virtue because their tendency is to promote the objectives which true virtue seeks.¹⁶⁶ Therefore they are the point of co-operation between the theist and non-theist who seek justice, peace and harmony in the created order.

There is a natural beauty in the created order arising from "the order and harmony every where observed among the laws of nature."¹⁶⁷ There is "a general moral sense common to all mankind"¹⁶⁸ which prompts man to be "conformed to the nature of things."¹⁶⁹ The peace of the natural order depends upon the ex-

tent to which he is so conformed. For it is in "the nature of things" that man treat the natural world with justice.¹⁷⁰ Without justice there cannot be community. The more man's consent to "the nature of things" is virtuous, the more is justice likely to occur. For this means the "private system" which is the context within which one seeks justice and perceives beauty, is becoming more inclusive. And the closer one's perception of beauty comes to "comprehending all existence to which we stand related"¹⁷¹ the closer one comes to perceiving the necessity for justice in the whole created order. It is in the struggle to continually enlarge their area of perception and to seek justice for all existence that Edwards' understanding of natural law is helpful both for the theist and the non-theist. In this struggle the primary reality of the created order, love, is reflected. For as G. Ernest Wright has pointed out, the love of God cannot be separated from his justice.¹⁷² This means that the intent of justice and the intent of love cannot be separated.

Christ represents the love of God.¹⁷³ Therefore the decision for or against justice is a decision for or against Christ. But as Tillich has pointed out,

The decision for or against the Christ is made by people who do not even know his name. What is decisive is only whether they act for or against the law of love, for which the Christ stands. Acting according to it means being received in the unity of fulfillments. Acting

against it means being excluded from fulfillment and being cast into the despair of non-being.¹⁷⁴

Consequently, the theist, who acts in conformity with the law of love, which for Edwards is the natural law, may in good conscience co-operate with the non-theist who perceives himself to be acting solely in conformity with the nature of things, but whose objectives and intent are those which true virtue demands.

THE PRESENCE OF ESTRANGEMENT IN THE NATURAL ORDER

Charles Birch¹⁷⁵ states that there is a "formless yawning" in modern life which has four aspects:

1. "Our inner chaos: the inability to live in harmony with oneself."
2. "Our social chaos: the lack of relatedness to others."
3. "Our environmental chaos: . . . Man has become the chief earth pest."
4. "Our metaphysical chaos: the sense of separation from the 'whole scheme of things' because we have no conviction that there is any scheme of things"

or value in the universe."

In this study we have found that Edwards was also aware that there were these aspects of the power of chaos involved in the created order. It was his position that all four were related to man's lack of relatedness to the Creator. Because of this primary lack of relationship, all other relationships were imperfect. First, because man lacks a primary relationship with the Creator, he is estranged from himself. He is "as if he were two."¹⁷⁶ Only when man consents to the will, purpose or design of the Creator is he at peace with himself. Only then does he take "great delight and happiness in conferring and communing with (himself)."¹⁷⁷ Without this primary consent men "accuse themselves and fight with themselves."¹⁷⁸ Man is truly happy "then, and only then, when these two agree. And they delight in themselves and in their own idea and image as God delights in His."¹⁷⁹

Edwards saw that man could be at peace with himself only when he discovered his identity and with it a sense of self-fulfillment or purpose. This could only come, in his view, when there was commitment to a cause or purpose in which the whole self was taken up and to which the whole self could be surrendered. This for Edwards was the cause or purpose of the Creator.¹⁸⁰ It was this commitment which he saw as the integrating principle

of life. Only through such commitment could the disillusionment accompanying commitment to lesser purposes be avoided.¹⁸¹

Second, Edwards perceived that man's enmity with his Creator¹⁸² and the consequent division within himself, was reflected in the destructiveness of his common life,¹⁸³ and his indifference to those around him.¹⁸⁴

Third, Edwards saw that the state of the natural world mirrored man's unhappiness. Man, estranged from his Creator, himself and his neighbour is also at enmity with the rest of the created order. For having no purpose save his own to guide him,¹⁸⁵ and being influenced primarily by self-love,¹⁸⁶ he acts in opposition to the natural order.¹⁸⁷ The primary allegiance of disaffected man is to a "private system", which even if it "contains millions of individuals"¹⁸⁸ "falls infinitely short of the universal system, and is exclusive of being in general."¹⁸⁹ He therefore sees everything outside that system as a means to the well-being or support of this private system. For him this system alone has intrinsic value.¹⁹⁰ For it is that which concerns him ultimately.¹⁹¹

In the fourth place Edwards saw that there could be no "point" to existence unless all existence has a meaning. He maintained that all existence did have a value, a purpose and a significance even if this could not be seen. The integrating aspect of existence is, in Birch's words, "all-inclusiveness."¹⁹² It is a "unitary actuality" which unifies all diversity. This

is "the universal system of existence" which includes all things and to which all things can completely respond. It is the object of ultimate value or worth and therefore fit to be and deserving to be the object of primary devotion or worship.¹⁹³

TECHNOLOGY AND MAN'S USE OF THE NATURAL ORDER

It was Edwards' belief that "at the heart of the universe there is integrating love¹⁹⁴ that gives¹⁹⁵ and that responds to the response of the creatures."¹⁹⁶ One activity in which man continually engages and therefore responds to what has been given, is technical activity. Technical activity has been characterized as the transformative aspect of the scientific enterprise which changes man's physical environment and mode of existence.¹⁹⁷

Man's power to transform his environment and mode of existence continues to increase. He now has the ability to destroy both his environment and himself.

Contemporary man not only has knowledge of good and evil, he has as well absolute power to destroy. This man-made power of destruction lays on man a burden he has never before experienced - a burden, like that of the knowledge of good and evil, from which he cannot escape in the foreseeable future.¹⁹⁸

Edwards was aware "that on the whole man tends to use the gifts of nature and the gifts of grace badly rather than well."¹⁹⁹ Because he lacks the will to do his duty or fulfill his

vocation as a son of God²⁰⁰ man cannot understand the meaning of the power that is put into his hands or of the activity which employs it.²⁰¹ Consequently, Edwards suggests, at least by implication, that man does not have the right to expect that the possibilities for transforming the created order and the power its processes make available to him will not be used to destroy completely all that the Creator has provided and all that man has accomplished to this point in time.

Yet he also contends that the Creator's purpose is sovereign²⁰² and that it will be fulfilled.²⁰³ This means that "progress", i.e. advancement toward the completeness or fulness of the creation's glorification of the Creator, is inevitable. The issue as to the direction this progress will take will be decided by man himself as he has been given the authority and means to deal with the created order as he wills. However, even if this activity results in the destruction of the whole created order so that it should vanish without a trace,²⁰⁴ the Creator will be glorified.

The question Edwards' thought poses for man's technical activity is, how can this activity be so ordered that it becomes an activity of responding love? How can man use the gift of divine power or energy, given in love, as an exercise of love? How can scientific and technical activity remain a creative process by and in which the created order is increased in value, and not threatened by "demonic perverseness"? (Birch)

The answers to questions such as these are given in Edwards' understanding of man's relationship to the world over which he has in stewardship been given dominion. Man is required to relate to the natural world in three ways: in freedom, in responsibility and in justice.

i) Man has been placed in the created order to fulfill a religious vocation.²⁰⁵ This can be done only when there is knowledge of God and knowledge of self. This is why "of all kinds of knowledge that we can ever obtain, the knowledge of God, and the knowledge of ourselves are the most important."²⁰⁶ Knowledge of God is obtained partly through an investigation and understanding of the processes of the natural order, constituted by him.²⁰⁷ Man has been given the freedom to investigate the created order²⁰⁸ so that he might "grow in this knowledge"²⁰⁹ and thus increasingly glorify the Creator and allow the created order to do likewise. This is in fact a duty laid upon man which he cannot escape. He is to exercise his understanding in order that knowledge might increase and truth be attained.²¹⁰ This means renunciation is not an alternative to the misuse to which man puts the knowledge he continually gains. Kaelin asks:

If it is true that man is in danger of abusing goods, of becoming a slave to them instead of using them to conquer a higher liberty, is it not better to teach him to do without things rather than to make things which will enslave him tomorrow?²¹¹

Man has been given a freedom which he continually abuses. He therefore continually enslaves himself to false gods; he chooses the things of the world and rejects its Creator.²¹² Yet man retains his liberty. He retains the natural Image of God. Therefore he cannot renounce either his desire and ability to grow in knowledge or the products he wills to produce as a consequence of his knowledge. This means he must continually run the risk involved in his mastery of the world - that is, total devastation^a of all that he has accomplished.

ii) This means, in turn, that man is burdened with a responsibility in his dealing with the products of this knowledge which he never before experienced.²¹³ Because man has the freedom to choose his response to the natural world, the actions and consequences that result from this choice are held to his account. Kaelin states that "the bad use to which technology may be put remains accidental to it and does not detract from the benefit which it represents as a liberating factor for man."²¹⁴ Edwards also saw man's use of the visible creation and of the "derived creation which is technical achievement"²¹⁵ as liberating for him. The purpose of the scientific enterprise, he suggests, is to serve man. It is to allow "nobler" or more human functions to be exercised, mutual assistance more easily given and communication facilitated in order that "the whole earth may be as one community, one body in Christ."²¹⁶ Man is responsible for using the created order for these purposes. He

is commanded to make progress in this area of his life.

iii) In using the natural world in this way, man respects its importance and value. For the importance of an existence consists in its fitness to be used for a specific purpose.²¹⁷ The natural order therefore has value because it can be used for specific purposes. It is in this that its greatness and dignity consist.²¹⁸ Therefore man is to honour it or treat it with justice.

Man is to respect the natural order to the extent that it participates in being and consents to being.²¹⁹ This respect is subordinate only to a greater virtue, beauty or consent.²²⁰ This means the natural world is not justly subordinated to man as such, but only to the good of man.

When he does respect the natural order, however, man acts with justice toward it. For in this he obeys the will and command of the Creator. And to be obedient to this will is to act justly.²²¹

Though Injustice is the greatest of all deformities, yet Justice is no otherwise excellent, than as it is the exercise, fruit and manifestation of the mind's love or consent to Being; nor Injustice deformed any otherwise, than as it is the highest degree of the contrary.²²²

When man abuses the natural world by using it for an illegitimate purpose he acts contrary to its best interest and therefore unjustly.

Injustice is not to exert ourselves toward any (existence) as it deserves, or to do it contrary to what it deserves, in doing good or evil, or in acts of Consent or Dissent.²²³

And this injustice is reflected in his own community. Because life is interdependent, injustice perpetrated in one area of life is reflected in every other area. It is by means of the created order that man relates to or communicates with his fellow man. And when he misuses this means of communication he cannot with justice relate to him. We are responsible for the manner in which "we have disposed of those goods which our master has put into our hands."²²⁴ We are to dispose of them justly. This means man's use of his technical achievements is limited by the rights of the created order to be used for their intended purpose and by the rights of every man's humanity.²²⁵ Without concern for these principles, community is impossible.

Man's use of technology, then, is to be characterized by freedom, responsibility and justice. Yet these are possibilities for man only when he acquires a new sense of the heart.²²⁶ Therefore, Edwards implies we are not to be optimistic about the use to which man will put his technical achievements. Yet we are to be optimistic about the use to which the Creator will put them. For this reason, and in order to witness to this faith and hope, man cannot renounce his freedom to progress in his dominion of the natural order, his responsible use of its

resources or his concern that justice be done both to man and the elements of the natural world.

MAN'S RELATIONSHIP TO HIS ENVIRONMENT

In holding that man is part of his physical environment, Edwards implies that his values and presuppositions are shaped or influenced by that reality which he perceives. For example, we have no knowledge of beauty apart from our experience of it.²²⁷ We do not know the nature of honey unless we taste it.²²⁸ Knowledge depends upon experience. Consequently, our perception of reality and knowledge of reality cannot be separated. What we know as ugly we perceive as ugly and what we know as sweet, beautiful and beneficial we perceive as such.²²⁹

Man's values, then, are a product both of that which is internal to him, uniquely his and independent of environmental factors (a sense of the heart and will to consent) and of the environment itself. This implies, further, that understanding, goals, and growth can be altered and facilitated as the environment itself changes. Growth toward unity of life and unity with life can be facilitated or retarded by environmental factors. Both aspects of man's nature, his creativity and drive toward unity (consent) and his destructiveness (dissent) and flight to nothingness (estrangement) are influenced and supported by the rest of the created order. The natural world, in its creativity, not only maintains itself in being, but also nurtures man's human-

ity and happiness.²³⁰ And since this is its normal state or greatest propensity,²³¹ we can say that all life is essentially creative.

Man's understanding of reality is in part determined by the environment he experiences. To what extent does he have the right to modify his environment and therefore his understanding of reality? The factors to be considered in answering this question are the following:

i) The natural world is given to man to be his "home". In several places Edwards speaks of the natural world as that "which God hath made to be the habitation of mankind"²³² and as that in which all things are created for man's use. "The world is evidently made to be an habitation for man and all things are subordinated to his use."²³³ Man's home is thus fitted for his use and given as a gift.²³⁴ It is a home shared by other elements of the created order. Man is responsible for the condition in which he maintains this home and for those who are placed in it to serve him.

ii) The imperfection of the created order points to the fact that man's home is in constant danger of destruction. There is, in the natural order, a conflict between the powers of chaos and destruction on the one hand and fittingness and creativity on the other.

iii) Therefore, because he is responsible for his "home",

man's modifying activity is to respect the proportion and community inherent in the natural order.

a) Proportion

Edwards saw the maintenance of proportion as a necessary condition for the harmonious development of this order according to the will of the Creator. "All the natural motions, and tendencies and figures of bodies in the Universe are done according to proportion."²³⁵ And proportion is Being itself "for Being, if we examine narrowly, is nothing else but proportion."²³⁶ All things are created according to the will of the Creator who seeks to maintain all things in proportion or in agreement or in union with himself. "Disproportion. . . is contrary to Being."²³⁷ Consequently, when disproportion or lack of consent by one element threatens the design and life of the whole community, a compensation is effected in order that the life of the whole might be preserved and the overall design by which this life is lived retained and the purpose for which all things were created realized.

Taken in themselves, certain elements and certain tendencies in the natural order seem to be destructive and without purpose. Yet viewed in the context of the Creator's total design and the sovereignty of his will, this chaotic or destructive activity can be seen to contribute to "the harmony of the whole."

Consequently, particular disproportions sometimes greatly add to the universal proportion. Hence some created elements "are not proportioned, but are confusion among themselves; yet

taken with the whole they are proportioned and beautiful."²³⁸

It can be observed that there are "tendencies in the natural world. . .propensities of nature in minerals, vegetables, animals, rational and irrational creatures."²³⁹ It can also be observed that the dominant propensity in all elements is toward coherence and harmony. For that which is less perfect and inclusive always points to that which is more perfect and more inclusive. The dominant tendency of the natural world is toward wholeness.²⁴⁰ And this tendency can never be perceived through observing elements, events or tendencies in isolation.

A notion of a stated tendency or fixed propensity is not obtained by observing only a single event. A stated preponderation in the cause or occasion is argued only by a stated prevalence of the effect.²⁴¹

Appearances to the contrary, the chaos inherent in the created order is never an end in itself but always serves the Creator's design.²⁴² For the God who is the Creator is "the God of order, peace and harmony," with which he has "constituted the inferior parts of the world."²⁴³ These parts "which he has subjected to man and made subservient to him in such decency, beauty and harmony"²⁴⁴ are subject both to internal and external destructive forces, "but for a short time." The Creator's design will be realized. The "confusion" that characterizes "the present state of things, is not lasting."²⁴⁵ Consequently, "seeing it is to be but a little while God chooses. . . (not) to interrupt

the course of nature according to its stated laws."²⁴⁶ Rather he permits these laws and all things to work their course because they all "in one respect or other. . .prepare the way for that glorious issue of things."²⁴⁷ In every instance the power of chaos serves "order, peace and harmony."²⁴⁸

b) Community

The laws of nature maintain proportion in the created order. They also maintain the natural world as an integrated community. For they permit the maximum contribution of each element to the life of the whole.²⁴⁹ Without this contribution neither the community nor the individual can prosper. These laws of nature are both internal and external to the natural community. They are internal in that they are involved in the essential character of each element and are obeyed by instinct.²⁵⁰ They are external in that they were established by some force, appointment or will not contained within the community itself.²⁵¹ They are to be respected and not opposed because the Creator wills community in his creation.

iv) The fact that man's modifying activity in the natural order must respect its inherent ^{to}proportion and community implies that his activity has to be that of a conservationist. Each created element has a value both in itself and with respect to the whole and is therefore to be supported and conserved.

It is to be supported and conserved first, because the destruction of individual elements disrupts both the internal

and external harmony and union of the natural community. Each element has been designed to interact with "the whole system of beings" in such a way that the unity of the whole is maintained. When this interaction is disrupted, the life of the whole suffers because its overall capacity both to receive and give life is diminished. For this reason Edwards was convinced that "there is not one leaf of a tree nor spire of Grass but what has effects all over the universe."²⁵²

Second, the conservation of the natural order is required because man has been given responsibility for it. Because he is one means by which the Creator manifests his will to the created order,²⁵³ he has the responsibility to ensure that it conforms to this will and therefore glorifies Him. This means he is required to maintain the natural world in a proper relationship with himself. The natural world relates to man properly when it serves him and supports him.²⁵⁴ Consequently, he is required to ensure that it does this.

In the third place, the conservation of the created order is enjoined by the requirements of divine love and one's duty to express gratitude for this love.

If you had not mean thoughts of God, you would not find fault with him for not setting his love on you who never exercised any love to him. . . (and) who have never been truly thankful for one mercy which you have already received of him.²⁵⁵

He who loves sees in the object beloved a "supreme excellency", and "a loveliness immensely above all, worthy to be chosen and pur^{su}ued and cleaved to and delighted in far above all."²⁵⁶ Consequently he seeks to find means of continually expressing this love and delight, and of effecting this union. "Love naturally desires to express itself."²⁵⁷ And love not only seeks to express itself but to have this expression returned by the object of love. "Such returns, love always seeks, and just as in proportion as any person is beloved, in the same proportion is his love desired and prized."²⁵⁸

In the created order, it is man in whom the Creator delights and whose love he prizes supremely. "It is manifest by the creation itself, that God has more respect or regard to man, than to any other part of the visible creation; because he has evidently made and fitted other parts to man's use."²⁵⁹ Consequently, he desires above all else that the exercise of his love to man be returned to him. "For as the nature of love, especially great love, causes him that loves to value the esteem of the person beloved; so, that God should take pleasure in the creature's just love and esteem, will follow from God's love both to himself and to his creatures."²⁶⁰ The return of this love is manifest in man's concern that the purpose of the Creator be effected,²⁶¹ and therefore that the means through which it is effected, be preserved. In this, man exercises that gratitude to the Creator, for the communication of His fulness and

therefore for that provision for his good, which is His due. "God making himself his ultimate end, does not at all diminish the creature's obligation to gratitude for communications of good received."²⁶² In this expression of love and gratitude, man exercises his responsibility to the Creator for the life of the natural community with which he has been entrusted.²⁶³ In this he also expresses his responsibility, as the consciousness of the natural order,²⁶⁴ to mediate to it the divine will.

Fourth, the conservation of the natural order is necessitated by the requirements of the divine glory. All elements of the natural community are necessary in order that the fulness of the good of the Creator be communicated and that he be fully glorified. For "God's being glorified" consists in his "infinite perfection being exerted and so manifested" and in "His infinite happiness being communicated."²⁶⁵ The natural world was created in order that the attributes of the Creator, knowledge, holiness and happiness, might be exerted. "If the world had not been created, these attributes never would have had any exercise. . . . The divine wisdom and prudence would have no exercise in any wise contrivance, any prudent proceeding, or disposal of things; for there would have been no objects of contrivance or disposal."²⁶⁶ And when the design of the divine wisdom is destroyed, the communication of the divine glory is impaired. For the latter consists in "God exercising his perfections to produce a proper effect."²⁶⁷

The "proper effect" of the communication of the Creator's glory is, first, the creation of life and second, the "multiplication" or "increase" of his glory in this life. The emanation or communication of God's glory "is in some sense a multiplication of it. . . . It may be looked upon as an increase of good."²⁶⁸ The latter (the multiplication of glory) is a consequence of the former (the creation of life), just as the result of the diffusion of sap by the roots of a tree is the production of leaves and fruits.²⁶⁹ The Creator in communicating his fulness, creates. That is his nature. "A disposition in God, as an original property of his nature, to an emanation of his own infinite fulness, was what excited him to create the world."²⁷⁰ The result of this creativity is the manifestation of the divine glory, "wherever we are and whatever we are about."²⁷¹ Indeed,

it is very fit and becoming of God, who is infinitely wise, so to order things that there should be a voice of His in His works, instructing those that behold them and pointing forth and shewing divine mysteries and things. . . immediately appertaining to Himself and His spiritual kingdom. The works of God are but a kind of voice or language of God to instruct intelligent being in things pertaining to Himself.²⁷²

Where the Creator's works are eliminated or destroyed, knowledge of his glory is also diminished. And the divine knowledge is one part of his glory which the Creator communicates in the created order.²⁷³ Consequently, the divine glory is not increased or returned as the Creator intended it should be. In

creating the natural world, the Creator had a supreme concern for the value of "his own infinite, internal, glory."²⁷⁴ And, he was concerned for it "as an emanation from himself, a communication of himself, and, as the thing communicated, in its nature returned to himself, as its final term."²⁷⁵

When the created order is preserved, the result is the perception of its beauty and harmony.²⁷⁶ This is perceived because the Creator continues to produce his "proper effect." And when this knowledge of the Creator is expressed, the Creator is glorified. For then his glory is manifest in the created order, it is communicated to and among the created order and it is "returned to himself as its final term." Again, the conservation of the natural community is necessitated by the requirements of the divine glory, the beams of which "come from God, are something of God, and are refunded back again to their original. So the whole is of God, and in God and to God; and he is the beginning, and the middle, and the end."²⁷⁷ Without the conservation of the natural order, the manifestation of the divine glory is impaired and the reflection or return of its fulness to its source is rendered impossible. Hence the task of the natural community is rendered impossible.

Consequently, before modifying his environment, man must consider the extent to which his activity will secure these legitimate objectives. This means, in turn, that he must know both the physical reality with which he is related and the spir-

itual reality which is its essence. Unless both elements are accounted for, man's activity will be deficient. Yet, man is commended² to continually grow in his understanding of these two aspects of reality.²⁷⁸ Therefore, the modifications he may legitimately make to his environment are endless. So, therefore, is his growth in understanding and perceiving reality.

We conclude, then, that man is required and permitted to modify his environment to the extent that such modification is in conformity with or in agreement with "the true order of things."²⁷⁹ The true order of things is that order established by the divine wisdom, in which each element acts individually and interdependently to glorify the Creator. Man's activity is to support this activity. In this he responds to the demand mediated by the natural order as a realm of grace. This implies that man is permitted to modify his environment in all ways that are useful to him; in all ways that support his humanity and support or strengthen his interrelationship; in all ways that increase the manifestation of the divine perfections, show forth another aspect of the divine beauty or increase knowledge of the divine nature and in all ways that overcome or resist the dislocation and estrangement within the natural order itself.

THE RELATIONSHIP BETWEEN REASON AND REVELATION

Reason and experience together are necessary to grasp reality or truth. The reality of the created order is known only through experience. We might know, theoretically, for example, that the essence of the created order is beauty. But we do not perceive this as fact unless we experience it.²⁸⁰ The senses are the media through which knowledge is obtained. They do not deceive. They convey the same information or make the same representations of the created order to all. However the senses are unreliable in that they do not in themselves convey to the knower the whole of reality or the essence of what they represent. This essence is the "inward conformation" of the created order to the Creator, which is diffused throughout all its elements.²⁸¹ "That inward conformation that is the foundation of an agreement in these things is the real essence of the thing."²⁸²

What is known as truth by reason must therefore be supported by experience if this "truth" is to be truth for the knower and if it is to be perceived and not merely sensed. Reason and experience, then, are not set over against one another. Rather "the former includes the latter, as the genus includes the species or as a whole includes the several particular sorts comprehended in that whole. For, judging by experience is one way of judging by reason, or rather, experiencing is one sort of

argument which reason makes use of in judging."²⁸³

Reason, then, judges the validity of the senses by virtue of its experience. It does not accept the testimony of the senses as fully authentic because experience teaches that they lack perfect perception.

We judge the degree of dependence that is to be had in our senses by reason; by viewing the agreement of one sense with another, and by comparing, in innumerable instances, the agreement of the testimonies of the senses with other criteria of truth, and so rationally estimating the value of these testimonies.²⁸⁴

The nature of the relationship between reason and experience is also that which applies to reason and revelation.²⁸⁵ In the first place reason and revelation are not set over against one another; rather is reason established by revelation. Reason is not superior to revelation as a test of truth just as reason is not a test of truth superior to experience. Both assertions are "very nonsensical."²⁸⁶ Revelation is experienced as that which constitutes the reason. Yet the reason cannot on its own have recourse to it, as something which can naturally be "discovered". Reason cannot "control" revelation; it is not at reason's disposal.

Revelation, then, is prior to reason. It is that which in some way is communicated to the reason as self-authenticating. It is the mind of the Creator which is communicated to the natural reason via the created order.²⁸⁷ In the course of this

communication the reason is enlightened. This means that revelation does not contradict reason for reason has been established by the Creator to be the means whereby that which is communicated through the natural order can be interpreted.²⁸⁸

Revelation, however, is necessary for this because the reason by itself is cut off from that about which it reasons.²⁸⁹ It is not fully involved in that which it perceives as external to it.²⁹⁰ It cannot therefore go beyond what it can comprehend as object. Consequently it cannot explain the mystery of life evident in the natural world. Reason, for example, cannot determine how God who is pure spirit can act in matter or can constitute simultaneously a moral and physical universe.²⁹¹ It cannot conceive of a world beyond that which the natural senses reveal.²⁹² It cannot explain how something that now is can have been from eternity or can have been created out of nothing.²⁹³ It cannot explain why there should be a self-existent being who has the reason for his existence within himself.²⁹⁴

Yet in one sense, reason is primary. Revelation could not reveal unless there was a reason to interpret. "We have no other faculty but our reason, by which we can determine of truth or falsehood by any argument or medium whatsoever. Let the argument be testimony or experience, or what it will, we must judge. . . by reason."²⁹⁵ Reason views things as they are in themselves which are revealed to the reason by an agency both internal and external to it.²⁹⁶ It makes use of "divine testimony" as a "me-

dium of judgment" by which it rationally estimates the value of all testimony to truth.²⁹⁷ This is to say that revelation adds a necessary dimension to reason in order that reason might grasp reality.²⁹⁸ In the context of ordinary sense experience, revelation manifests that which transcends that context, and which unaided, reason in itself cannot grasp.²⁹⁹

Second, revelation reveals to the reason the essential mysteriousness of life yet does not permit this mystery to become simply part of the total body of knowledge about the subject-object structure of reality. Mystery remains mystery even though it illumin^es sensory knowledge.³⁰⁰ The former does not become part of the latter nor does it interfere with the latter. Scientific investigation is thus supported by revelation. For it belongs to a dimension of reality that is inadequate to account for that dimension of reality to which revelation properly belongs. This realm is and will always remain a mystery which illumin^es the reality of the sensual but does not reveal its essence. Therefore, "mysteries constitute the criterion of divine revelation."³⁰¹ Sensory knowledge is not mystery after it has been discovered. The knowledge of revelation, however, is.

Third, revelation involves the knower in that which is known in a way that the exercise of reason cannot. Revelation forces the reason to be subjectively involved with that about which it reasons.³⁰² Revelation, in other words, calls the reason into question.

This is to say, fourth, that . revelation destroys the autonomy of reason. The willing sacrifice of the reason to the content of revelation alone enables the basic dichotomy of all knowledge, which dichotomy is characteristic of created existence,³⁰³ to be overcome. In the experience of revelation alone knower and known become one and the extent and depth of their interrelationship ^{are} ~~is~~ experienced. Revelation is always characterized by subjective and objective aspects which interpenetrate each other and are interdependent.

Dissent from this reality or the attempt to preserve the autonomy of reason ends in the destruction of that about which the reason reasons, i.e. the natural order. Reason, unregulated by revelation, contradicts and conflicts with its own nature, subordinates it to the rule of the senses instead of judging the validity of the senses and improves itself "only as a weapon of mischief and destruction of God's workmanship."³⁰⁴ Division within the created order is thus perpetuated and the conflict between reconciliation and estrangement is continued. Reason, uninformed by revelation, cannot sense or experience the reality of the Creator in the created. And without this knowledge, community is impossible. For Edwards, one purpose of revelation was to create community or to overcome estrangement, and reason was the effective means whereby this could be accomplished. Apart from revelation it becomes the means whereby this possibility is denied.

THE RELATIONSHIP OF THE HOLY SPIRIT TO THE NATURAL ORDER

We have found that Edwards perceived the primary reality of existence to be wholeness, or a "unitary actuality." The basis for this thought is to be found in large part in his appreciation of Newton's studies on the atom. Following the thought of his period he characterized atoms as "indiscerpible", bodies "whose parts cannot, by any power whatsoever, be separated from one another."³⁰⁵ Today this view has been discarded.

The 'billiard ball' concept of atoms as irreducible material particles has disintegrated, and in its place we have twenty or thirty 'particles' - electrons, protons, neutrons, mesons, etc., that may, in terms of internally consistent systems be described either as 'particles' or as 'waves'. Matter and energy have conceptually fused, and energy seems to be the more useful concept for dealing with the very small in physics at the level of atomic structure.³⁰⁶

Although Edwards' understanding of the nature of the atom has been superseded, his understanding of the nature of reality has not been rendered obsolete. For science has discovered that matter and energy can be thought of as one reality. And, says Edwards, all matter is infused with the divine power or energy which is "nothing else but the essence of God."³⁰⁷ The whole created order is constituted and sustained by the divine energy. "For the perfect energy of God, with respect to Himself, is the most perfect exertion of Himself, of which the cre-

ation of the world is but a shadow."³⁰⁸ And "the power of a being (the essence of its Creator), even in creatures, is nothing distinct from the being itself" (i.e. its material substance or body).³⁰⁹

Hence, Edwards' contention that "there is oneness in the cause of all,"³¹⁰ continues to be validated as scientific knowledge increases. For him, the unity of the created order reflects the unity of the Godhead³¹¹ and is the product of its one wisdom and one design.³¹² This wisdom and design are perfect since "God is the Prime and Original Being, the First and Last and the Pattern of all and has the sum of all perfection."³¹³ And because the divine wisdom and design are perfect, their manifestation in the created order is also perfect. That which is, is, because the divine wisdom decreed it should be so and nothing can alter this decree.

Providence governs all things (and). . .
you cannot alter what God determines and
orders in providence. . . . If the clouds
be full of rain, they empty themselves
upon the earth; and if the tree fall
toward the south, or toward the north; in
the place where the tree falleth, there it
shall be; i.e. you cannot alter the
determinations of Providence.³¹⁴

Edwards maintained, in Charles Hartshorne's words, that there is but one "ordering principle" in the created order who is "universally influential."³¹⁵ That which executes the will of this universally influential ordering principle is the Holy Spirit. He is the divine energy with which the whole created

order is infused.³¹⁶ This energy is a form of communication of the Creator's love. For 'tis the office of the Person that is God's Love to communicate divine love to the Creature. In so doing, God's spirit or love doth but communicate of itself."³¹⁷ If this is true, then Edwards asks us how man, with respect to his relationship with the natural world, can "walk in the Spirit." How can this relationship be an exercise of the love which is the energy of the Spirit or spiritual energy? For "to walk in the Spirit is to walk in the Exercise of this love."³¹⁸

The Holy Spirit is a principle of life which reveals itself in the created order. As John E. Smith put it, Edwards maintained that "the Holy Spirit not only dwells in the depths of the soul but is manifest in that power through which the face of nature is transformed."³¹⁹ Edwards insists upon the immanence of the Creator in his creation in such a way that it is continually sustained and ordered according to his will. How is man to deal with the presence of this living and dynamically active Spirit whom he cannot escape because he cannot live apart from the created order of which he is a part? What is the relation of this presence to man's domination of the natural world? Can he "control" that power which is immanent in the natural world, which creates and sustains its life, and which is offered to man for his use, when this is the gift of the One who is transcendent and sovereign? Edwards' understanding of the relationship of the Holy Spirit to the natural world invites us to consider these

questions.

Edwards' position is that man cannot control or "possess" this spiritual energy or power,³²⁰ even though it has been given to him as the means by which he is to dominate the natural order.³²¹ He maintains that the Spirit is also present in man in a way that cannot be defined but only felt. For the Spirit represents the divine love³²² and "divine Love. . . (is) better felt than defined."³²³ It is only when this love is perceived that man can gain an understanding of the nature and significance of the power he uses, which is given to him in the processes of the natural world. It is only then, therefore, that he can relate to this power as he should, that is, again, in freedom, responsibility and in justice. Only then can he walk in the Spirit by using it as an exercise of love. For "the Creation of the world is to gratify divine Love."³²⁴

To possess the will to act in this way is a mark of election since to possess this will to consent to love is the result of the divine grace which has been freely given to some.³²⁵ "Those creatures which Wisdom chuses (sic) for the object of divine love are Christ's elect."³²⁶ Edwards seeks to relate a doctrine of "immanent grace" in man to a doctrine of grace in the natural world. The basis of the relationship is the presence of the Holy Spirit, operative in both man and the natural world. He who is possessed of the Spirit shows this in the attitude by which he relates himself to the rest of the created order which

is similarly "spirit-possessed." And this attitude inevitably expresses itself in "actions and works."³²⁷ This does not represent a doctrine of works, but a doctrine of the Spirit, who is love, and who expresses himself in works. For it is the nature of love to express itself.³²⁸ This love is expressed in "the practice of the soul" at which God looks.³²⁹ It is the practice "which is not only the motion of our bodies, but the exertion and exercise of the soul, which directs and commands that motion."³³⁰ In God's sight "the soul is the man."³³¹

SUMMARY

We have found Edwards' understanding of the natural world, and man's relationship to it, to involve each of the issues we have discussed. These issues are also current in contemporary investigations and discussions of this topic.³³² This fact demonstrates that Edwards' understanding of the natural world and of man's relationship to it is not outmoded, but has a contribution to make to contemporary views of this topic.

Edwards' understanding of the Fall presents us with one view of the imperfections of the natural order and the reason they exist. This view must be accounted for in any alternative interpretation. His understanding of the relationship between creation, redemption and history provides us with an understand-

ing of the purpose of the created order. The question of purpose is also raised wherever the presence of estrangement in the created order is recognized. Edwards provides an interpretation of this estrangement which warrants serious consideration. And the question of purpose is raised whenever man considers his activity in the natural order, the changes he effects in it, and the use he makes of it. Edwards' treatment of this activity places upon man a responsibility for his use of this order for which he must account when he attempts to determine what his proper relationship to it is. It also provides an understanding of the nature of this relationship and of the characteristics it must assume if it is to be constructive.

Edwards' understanding and treatment of the natural law provides the theist and non-theist with a point of contact and co-operation in their mutual concern to relate properly to the natural order. His understanding of man's relationship to his environment also treats the nature of this relationship and raises the question, again, of the purpose of those actions through which he modifies his environment. It also presents an argument for the conservation of the natural order which has relevance for any responsible activity in it or use of it.

In his treatment of the relationship between reason and revelation, Edwards attempts to give full value to the reality and significance of the created order, and to maintain that a proper understanding of it and a proper relation to it are im-

possible without both the exercise of reason and the perception of the "divine testimony" in that reality about which reason reasons. Without both elements operative in his relation to the created order this relation will be destructive of both man and the natural order. In maintaining this, Edwards denies the validity of that attitude which views the natural order as insignificant, of no consequence or as possessing no reality. He also denies the validity of the view which holds derived reality to be the only reality and the mind and reason of man to be the criterion of its value and the means whereby it can be fully penetrated. By contrast Edwards attempts to reconcile reason and revelation and demonstrate the necessity of each for an adequate understanding of the natural world.

Edwards' understanding of the Holy Spirit as the power of the Creator in the created order represents his attempt to interpret the presence and significance of that energy which he sensed to inhere in all matter and whose presence the scientific enterprise continues to verify. He perceived this energy to be the sustaining power of love. Its accessibility to man, again, forces on him the necessity of deciding how he will use this energy and therefore how he will respond to the love it represents. Edwards sees in this response a mark of man's election or non-election.

In our view, any adequate understanding of the natural world must account for the issues which Edwards' understanding of

the natural world and man's relationship to it raises. If it does not, such a view would be deficient because it would omit consideration of certain aspects of reality with which any consideration of this topic must concern itself.

NOTES

¹Mind 45, Corollary 8.

²ibid., 62, Corollary 1.

³Misc. 296.

⁴Misc. 650.

⁵ibid.

⁶Misc. 725.

⁷ibid.

⁸O.S., p. 245, 247.

⁹ibid., p. 251. We assume Edwards agrees with Taylor whom he is here quoting.

¹⁰ibid., p. 253.

¹¹ibid., p. 254.

¹²ibid.

¹³ibid.

¹⁴ibid., p. 253 ff.

¹⁵ibid., p. 254.

¹⁶ibid., p. 253.

¹⁷Misc. 939.

¹⁸ibid.

¹⁹O.S., p. 51, 392 ff, 346.

²⁰ibid., p. 231.

²¹ibid., p. 382.

²²ibid.

²³ibid.

²⁴ibid., p. 391, 392 n.

²⁵ibid., p. 392.

²⁶ibid.

²⁷ibid., p. 383.

²⁸ibid., p. 231, 233.

²⁹Edwards' understanding of the situation of the created order at this point is similar to that of Paul Tillich, who expresses the same point of view with the statement that "actualized creation and estranged existence are identical." (S.T. 2:1:44) All existence is fallen existence. It is a state of estrangement. Sin is this existence in which that which is created is separated both from that to which it belongs, the Creator, and from that with which it is related, the Creator, itself and the rest of the created order. The sin of the creature consists in being out of proportion with the universal system of existence or in being estranged or separated from "the ground of his being, from other beings, and from himself," (S.T. 2:1:44) or from God, self and world. (S.T. 2:1:46)

Tillich maintains that creation and fall coincide at the point where essence is actualized in existence (ibid.) But for Edwards and Tillich, essence and existence are not identical. For creation, if actualized "falls into universal estrangement" (S.T. 2:1:46). Consequently, even though God who is good continually creates all things and maintains them in existence, and thereby gives all things life; all things, because they participate in the transition from essence to existence, are imperfect. They are imperfect because they are estranged or separated from or "out of proportion" with being. And all participate in this separation because all participate in Adam and his Fall. For Adam designates one whole moral complex and there is for

Edwards no part of the created order that is not to some extent qualified or characterized by morality.

Separation from being is characterized by nothingness and absolute separation is equivalent to absolute non-entity. This means that all created existence implies non-being, and because of this, death is inescapable. All created things will come to an end. (M.R. p. 313) Yet because created existence is also characterized by being and participates in being it has ultimate significance.

³⁰E.C., p. 498.

³¹M.R., p. 312.

³²H.A., p. 463.

³³ibid., p. 464.

³⁴ibid.

³⁵ibid.

³⁶ibid.

³⁷ibid.

³⁸M.R., p. 313, 317.

³⁹But not in contradiction. The relationship between them is dialectical. That is, a relationship characterized both by the tension and interconnectedness of its constituent elements.

⁴⁰Misc. 186, 187.

⁴¹Mind 8.

⁴²James C. Logan, op. cit. p. 122.

⁴³T.V., p. 35.

⁴⁴O.S., p. 114.

⁴⁵Paul Santmire, Brother Earth, p. 194.

⁴⁶ibid., p. 196.

⁴⁷ibid., p. 195 ff.

⁴⁸S.H., p. 456.

⁴⁹H.A., p. 463, 464

⁵⁰O.S., p. 382.

⁵¹ibid., p. 383.

⁵²M.R., p. 312.

⁵³F.W., p. 192.

⁵⁴O.S., p. 253.

⁵⁵Santmire, op. cit., p. 133.

⁵⁶H.R., p. 237.

⁵⁷O.S., p. 382.

⁵⁸ibid., p. 231.

⁵⁹E.C., p. 478.

⁶⁰This statement will be discussed in the following section.

⁶¹H.A., p. 464.

⁶²op. cit., p. 199-200.

⁶³E.C., p. 478.

⁶⁴E.C., p. 455.

⁶⁵E.C., p. 460.

⁶⁶M.O., p. 285.

⁶⁷P.N., p. 61.

⁶⁸H.R., p. 18.

⁶⁹O.S., p. 255 ff, 336.

⁷⁰ibid., p. 254.

⁷¹H.R., p. 274. Redemption thus implies a personal relationship between the Creator and his creation. It is a difficult question to decide whether or not Edwards would extend the idea of redemption of the creation to the claim that since it was his own, the Creator had an obligation to maintain it in unity with himself. Edwards rejected the traditional interpretation of the God-man relationship espoused by Federal theology. Yet, as Conrad Cherry demonstrates, Edwards remained within or identified himself with Covenant Theology. (The Theology of Jonathan Edwards, p. 110 ff)

As he points out, Edwards did not deny that God related himself to man in a covenant relationship out of his own free will. What he does affirm is that the Creator is in no way indebted to the creature for the creature's redemption. God may dispose of his creation as he sees fit. He may, if he wishes, abandon it to those forces which would destroy it. God therefore voluntarily limits his freedom for the sake of his creation. By a free act he binds himself to it. This, for Edwards, was the significance of the incarnation.

The creation of the world was a very great thing, but not so great as the incarnation of Christ. It was a great thing for God to make the creature, but not so great as for the

Creator himself to become a creature.
(H.R., p. 137)

The nature of the Creator and the nature of the creature became one at the incarnation. And since man sums up or incorporates all that precedes him on the scale of being, (M.R., p. 312) the whole of the created order is involved in his constitution. (ibid.) This means that the whole of the created order has already been taken up, incorporated, redeemed and united in and by the Creator in the person of Christ. The natural world has thus become an order of grace.

⁷²op. cit., p. 91

⁷³H.R., p. 5.

⁷⁴op. cit.

⁷⁵H.A., p. 464.

⁷⁶ibid. Although this bondage has not yet been fully lifted (H.A., p. 464) it does not follow that "while man is in a state of sin and corruption the creation must inevitably lack purpose and significance" because "it is primarily, and increasingly, through man that God acts upon it." (G.W.H.Lampe, "The New Testament Doctrine of Ktisis," Mid Stream 4:2, p. 78, 79.)

The natural order has a purpose and significance independent of man's activity in it. Its purpose is the glorification of the Creator. Its significance is that it is the manifestation of his nature (love) and the medium of his self-communication. This purpose is expressed although imperfectly because, in creating, the Creator glorifies himself by actively inhering in his creation. Because the Creator does "flow forth" in his Holy Spirit the created order participates in being itself. Thus while it may be that it is primarily through man that the Creator acts upon the natural order, it is not the only way. For the Creator knows that "in the fall of man evil entered into this lower world," (H.R., p. 18) and that it "was

ruined. . .as effectually as if it had been reduced to chaos again." (ibid., p. 19) He knows that the natural world is misused and destroyed by man. Yet the Creator loves his creation because he loves himself supremely. (E.T., p. 112) Consequently, he does not leave it either to the destructive power (chaos) which inheres in it because of man's fall or to the determination of man who has reason but acts "in all things contrary to it;" who sets sense above reason and improves it "only as a weapon of mischief and destruction of God's workmanship." (M.R., p. 305) And while it might be said that God increasingly acts upon the created order through man, it can with as much justification be maintained, from Edwards' position, that the Creator is himself increasingly active in his creation.

⁷⁷M.R., p. 317.

⁷⁸Misc. 1263.

⁷⁹ibid.

⁸⁰ibid.

⁸¹Edwards suggests that it is only the mercy of the Creator which has prevented that from happening already.

God's creatures are good, and were made for men to serve God with, and do not willingly subserve to any other purpose, and groan when they are abused to purposes so directly contrary to their nature and end. And the world would spew you out, were it not for the sovereign hand of him who hath subjected it in hope. (S.H., p. 456)

⁸²"The Devil," p. 23, Works, Vol. 10.

⁸³M.O., p. 285.

⁸⁴ibid., p. 285-286.

⁸⁵ibid., p. 285.

⁸⁶H.R., p. 241, cf Mk. 3:23, 26; Lk. 11:18. Such an interpretation of Edwards' thought is justified because of his understanding of the Fall. Nature is not in itself pure or perfect as some contemporary theologians hold. (Cf Paul Evdokimov, "Nature", Mid Stream 4:2, p. 59) "Nothing in nature is impure in itself, but the corrupted spirit of the devil or of man may sully it." If any part of the created order were perfect, that is, if its consent to being were perfect, "the corrupted spirit of the devil" could not sully it. But it is not so perfect. Because of man evil actually entered the lower world. (H.R., p. 18) Nature might not be evil in itself, (Evdokimov) but neither is it holy or morally perfect. Therefore it also must be redeemed. That power which prevents it from fully consenting to "the universal system of existence" must be exorcised from it.

Edwards would not accept the suggestion that "the idea of a corrupted, or even of a corrupt, nature cannot render credible the personal, total responsibility of man in his action in this world." Nor the suggestion that "evil is always caused by the responsible act of men." (Wilhelm Dantine, "Creation and Redemption. . .: Attempt at a Theological Interpretation in the Light of the Contemporary Understanding of the World", Mid Stream 4:2, p. 94)

The fact that the natural world is imperfect or fallen does not destroy man's responsibility to the Creator for actions in the created order.

⁸⁷H.R., p. 19.

⁸⁸ibid., p. 135.

⁸⁹H.A., p. 464.

⁹⁰H.R., p. 137.

⁹¹ibid., p. 237.

⁹²ibid., p. 171.

⁹³ibid.

⁹⁴M.R., p. 312.

⁹⁵ibid., p. 313.

⁹⁶H.R., p. 171.

⁹⁷This view of the historical process, implicit in Edwards' thought, is explicitly set forth in Reinhold Niebuhr's The Nature and Destiny of Man, Vol. 2 Chapter 10.

⁹⁸H.R., p. 207.

⁹⁹ibid., p. 237.

¹⁰⁰ibid., p. 274.

¹⁰¹ibid., p. 276.

¹⁰²ibid., p. 171.

¹⁰³ibid., p. 275.

¹⁰⁴ibid.

¹⁰⁵ibid., p. 276.

¹⁰⁶ibid., p. 275.

¹⁰⁷ibid., p. 274.

¹⁰⁸ibid., p. 275.

¹⁰⁹H.A., p. 463.

¹¹⁰ibid., p. 464.

¹¹¹ibid.

¹¹²H.R., p. 240-241.

¹¹³ibid., p. 241.

¹¹⁴ibid., p. 24.

115 ibid., p. 241.

116 H.A., p. 465.

117 These characteristics have been established in two studies dealing with Gogarten's thought: Larry Shiner, op. cit., and Harry E. Smith, Secularization and the University. In discussing these characteristics we do not mean to imply an exhaustive treatment of Gogarten's understanding of secular activity or of the concept of secularization. We have omitted, for example, any reference to man's relationship to and participation in history which is integral to Gogarten's use of this concept. We have merely selected two areas appropriate for our purposes and in which Gogarten sees the process of secularization at work, viz. "Man's relationship to the world as user (and his relationship) to God as son." (Smith, op. cit., p. 43)

118 Verhängnis Und Hoffnung der Neuzeit, quoted in Harry E. Smith, op. cit., p. 29. Hereafter referred to as Verhangnis.

119 ibid.

120 Shiner, op. cit., p. 31.

121 Smith, op. cit., p. 29.

122 ibid.

123 Shiner, op. cit., p. 32.

124 Smith, op. cit., p. 29, 30.

125 ibid.

126 Shiner, op. cit., p. 33.

127 Verhängnis, p. 97-98, quoted in Shiner, op. cit., p. 34.

128 Smith, op. cit., p. 33.

129 ibid.

130 ibid., p. 35.

131 ibid., p. 33 ff.

132 ibid.

133 verhängnis, p. 144 quoted in Smith, op. cit., p. 28.

134 Smith, op. cit., p. 28.

135 Gogarten, The Reality of Faith, p. 104, quoted by Smith, op. cit., p. 35.

136 Heidegger, quoted by Smith, ibid.

137 R.A., p. 274.

138 M.O., p. 211.

139 R.A., p. 272. This does not mean that with respect to the natural world, the exercise of man's reason is in any way restricted. "As to (the) sciences, he hath left us to ourselves, to the light of our own reason." (C.K., p. 384) What it does mean is that the purposes for which the reason reasons will invariably be destructive because the reason, uninformed by the sense of the heart, will miss the significance of what it discovers.

140 ibid., p. 47.

141 Smith, op. cit., p. 28.

142 ibid., p. 30.

143 R.A., p. 383 ff.

144 op. cit., p. 76.

145 H.A., p. 464.

146 T.V., p. 20 ff.

- 147 R.A., p. 425.
- 148 John Macquarrie, Three Issues in Ethics, p. 92.
- 149 ibid., p. 104.
- 150 ibid., p. 107.
- 151 ibid.
- 152 ibid.
- 153 ibid., p. 107-108.
- 154 H.R., p. 171.
- 155 H.A., p. 464.
- 156 Misc. 1263.
- 157 ibid.
- 158 ibid.
- 159 S.H., p. 456.
- 160 W.U., p. 547.
- 161 ibid., p. 546.
- 162 M.R., p. 312.
- 163 T.V., p. 57 ff.
- 164 ibid., p. 58.
- 165 ibid., p. 54.
- 166 ibid., p. 75.

167 ibid., p. 55.

168 ibid., p. 77.

169 ibid.

170 ibid., p. 31. The place of justice in man's relationship with the natural world will be discussed in section six below.

171 ibid., p. 61.

172 "The law of love presumes the social context of existence, and . . . in the Bible this love is to express itself in a vital concern for justice. . . . These two conceptions simply cannot be separated because they are united in God." The Biblical Doctrine of Man in Society, p. 168.

173 E.T., p. 133.

174 Biblical Religion and the Search for Ultimate Reality, p. 46.

175 op. cit., p. 4.

176 Misc. 94.

177 ibid.

178 ibid.

179 ibid.

180 E.C., p. 485.

181 T.V., p. 61.

182 ibid., p. 23.

183 O.S., p. 168.

184 T.V., p. 21.

¹⁸⁵O.S., p. 194.

¹⁸⁶T.V., p. 63.

¹⁸⁷ibid., p. 23.

¹⁸⁸ibid., p. 62.

¹⁸⁹ibid., p. 21.

¹⁹⁰ibid., p. 162.

¹⁹¹James A. Keller maintains that adherence to a private system, in this case mankind or even some group within it, e.g., the nation, has become an illegitimate motive for ecological concern. He argues that much of this concern is based upon the fear that destruction of the non-human environment will involve the destruction of the private system. This motive he terms "crass self-interest". He also suggests that some would protect the natural order because of what it contributes to the private system either aesthetically or materially. This he terms "enlightened self-interest." Neither attitude attributes intrinsic value to the natural world. The concerns expressed by these attitudes would vanish if the natural order ceased to have value for the private system. ("Types of Motives for Ecological Concern", Zygon 6:3, p. 197 ff.)

¹⁹²op. cit., p. 15.

¹⁹³T.V., p. 22.

¹⁹⁴Misc. 4.

¹⁹⁵E.T., p. 110.

¹⁹⁶E.C., p. 465 ff. (Birch, op. cit., p. 23)

¹⁹⁷Harold Schilling, "A Contemporary Macedonian Plea", Union Seminary Quarterly Review, 18:2, January 1963, p. 116.

¹⁹⁸Margaret Mead, "Introduction", Christians in a Technological Era, Ed. Hugh C. White Jr., p. 23.

199 Jean de la Croix Kaelin, O.P., "Faith and Technology", ibid., p. 116.

200 F.W., p. 162.

201 R.A., p. 47.

202 J.G., p. 369.

203 F.W., p. 256.

204 M.R., p. 317.

205 F.W., p. 133.

206 ibid.

207 H.R., p. 276-277.

208 C.K., p. 382.

209 ibid., p. 377.

210 C.K., p. 382.

211 op. cit., p. 117.

212 J.G., p. 371.

213 This fact has now been recognized. "If science remains still to be accomplished it is because the logos of the world still remains a hidden logos. The revelation of it is barely beginning, and it is man's privilege to bring it about. We are face to face with one of man's fundamental responsibilities in relation to the world, of a dimension of his vocation which he is only just beginning to recognize. (Francis Russo, Christians in a Technological Era, p. 97)

214 op. cit., p. 115.

215 ibid.

216 Misc. 262.

217 Misc. 1303.

218 ibid.

219 T.V., p. 32.

220 ibid.

221 ibid.

222 Mind 45.

223 ibid.

224 C.C., p. 405

225 A contemporary theologian also holds that man has been made responsible for the rest of the created order. One aspect of this responsibility, he suggests, is "the element of advocacy for members of the kingdom of life that cannot effectively represent their own interests. Oysters, egrets, golden plovers, peregrine falcons, leopards, grizzlies: they cannot speak effectively for themselves. But they deserve to be represented before the bar of justice." (Julian N. Hartt, "Faith and the Informed Use of Natural Resources", A New Ethic for a New Earth, p. 78) To disregard this principle of justice is to act without regard to the whole community of life. And "man has no effective way of living beyond or outside the kingdom of life. So whatever diminishes that kingdom diminishes him both as a form of life and as a form of spirit." (ibid.) The alternative to justice throughout the whole of the created order, is chaos.

226 R.A., p. 51.

227 M.O., p. 205.

228 D.L., p. 18.

229 ibid.

230 M.O., p. 232.

231 S.H., p. 456.

232 O.S., p. 127.

233 M.R., p. 304.

234 This thought can be traced to Edwards' appropriation of Newton's work on the atom. In section 88, NS he suggests that the natural order was originally so established that

the various chaoses of Atoms, . . . according to the established Laws of Matter, were brought into these various and excellent forms, adapted to every of God's ends. . . . So the Atoms of one Chaos were created in such places, of such magnitudes and figures, that the Laws of Nature brought them into this form, fit, in every regard, for them who were to be the inhabitants. (Works, Vol. 1, p. 760)

235 Mind 1.

236 ibid.

237 ibid.

238 ibid.

239 O.S., p. 121.

240 Images 59.

241 O.S., p. 121.

242 Scientists are discovering that it is in the midst of what appears as random or chaotic activity that the creative or fitting response of the created order is taking place.

If one examines microscopically a developing plant or animal structure, he often sees thousands of cells, dividing and growing in all directions in apparent chaos. There is no chaos however, for despite the seeming confusion, a precise structure is slowly unfolding, each part and dimension in step with the others. (Sinott, op. cit., p. 180)

243 M.R., p. 305.

244 ibid.

245 H.A., p. 463.

246 ibid.

247 ibid.

248 Edwards holds the destructive power inherent in the natural order to be the effect of the power of Satan or the devil. Satan has the power to introduce into "the true order of things" which is the product of the "consent of being to Being" a false reality, the product of beings dissent from Being. Yet it is a reality. It is "Satan's visible kingdom on earth." (H.R., p. 237) For Edwards the natural world represented the true order of things because it embodied the divine constitution "which makes truth." (O.S., p. 404) That which opposes this truth is therefore false. Hence, the power and disorder of Satan, though real, are ultimately false.

A similar theme appears in Bonhoeffer. "There is a truth which is of Satan. Its essence is that under the semblance of truth it denies everything that is real. It lives upon hatred of the real and of the world which is created and loved by God. . . . God's truth has become flesh in the world and is alive in the real, but Satan's truth is the death of all reality." (Ethics, p. 366)

The problem to which both Edwards and Bonhoeffer point is that of the false reality or truth. The truth for which both Edwards and Bonhoeffer were contending is the truth that all things are united in God and are tending toward the explicit realization of this union. To perceive this reality in the midst of proportion in the created order, is to acquire understanding. In Bonhoeffer's words this perception is the perception of wisdom.

The wise man is the one who sees reality as it is, and sees into the depths of things. That is why only that man is wise who sees reality in God. To understand reality is not the same as to know about outward events. It is to perceive the essential nature of things. . . . The wise man will seek to acquire the best possible knowledge about events but always without becoming dependent upon this knowledge. To recognize the significant in the factual is wisdom. (Ethics, p. 68-69)

How one is able to achieve this perception and what characterizes this perception was one of Edwards' primary concerns as he contemplated man's proper relationship to the created order. Consequently this consideration forms an integral element of his own understanding of what this relationship should be.

It was one of his primary concerns because he was convinced that all events, including "particular disproportions", add to or serve the "harmony, subserviency and beauty" (Misc. 880) that characterizes "the universal proportion." He was also convinced that the primary tendency of the created order was toward life and wholeness rather than death and disintegration. "All the changes brought to pass in the world from age to age, are ordered by infinite wisdom in one respect or other to prepare the way for that glorious issue of things. . . . All the creatures in all their operations and motions, continually tend to this." (H.A., p. 464)

Edwards' concern was thus two-fold. First, how to perceive this reality in the midst of the reality of "Satan's visible kingdom." And secondly to know how this truth can be made as visible as Satan's. Edwards was concerned to demonstrate that the reality of God, so evident in his created works, be recognized and assented to as the ultimate reality and that he therefore be glorified. This was the purpose of the Images. "Wherever we are (in the natural order) and whatever we are about, we may see divine things excellently represented and held forth." (Images 70)

Some scientists also maintain that the dominant power in the natural order is "order, peace and harmony." Sinnot, for example, holds that "there is something in the universe that makes for order and form, something especially manifest in life, which opposes the tendency of lifeless matter to randomness and formlessness, some sort of organizing patterning force in nature." (op. cit., p. 188) Life always tends to create order out of randomness (ibid.) Consequently, disorder, whatever its cause, can never be "the last thing" but only "the thing

before the last." (Bonhoeffer) Whenever death occurs, the methodical or harmonious arrangement of created elements disintegrates. (ibid.) Yet the ultimate reality is always life. For life and its order continually reasserts itself. It reasserts itself because all living stuff is goal-seeking or goal-directed. (ibid., p. 189) And the impulse to achieve this goal (wholeness) is such that death can never ultimately dominate it.

²⁴⁹F.W., p. 388.

²⁵⁰M.R., pp. 303-305.

²⁵¹Misc. 651.

²⁵²O.B., p. 7. Today the role of trees, leaves and grass in the natural world and the effects of their destruction both on man and on the natural community are being forcefully brought to our attention.

²⁵³Misc. 3.

²⁵⁴W.U., p. 547.

²⁵⁵D.S., p. 485.

²⁵⁶Misc. 739.

²⁵⁷C.F., p. 491.

²⁵⁸ibid., p. 485.

²⁵⁹M.R., p. 304.

²⁶⁰E.C., p. 476.

²⁶¹ibid., p. 466.

²⁶²ibid., p. 480.

²⁶³M.R., p. 307.

264 Misc. 3.

265 Misc. 1066.

266 E.C., p. 458.

267 ibid., p. 527.

268 E.C., p. 460.

269 ibid.

270 ibid.

271 Images 70.

272 Images 57.

273 E.C., p. 464.

274 ibid., p. 530.

275 ibid.

276 Misc. 976.

277 E.C., p. 529.

278 C.K., p. 382.

279 T.V., p. 22.

280 Misc. 53.

281 Misc. 47.

282 ibid.

283 M.O., p. 230.

284 ibid.

285 ibid.

286 ibid.

287 ibid., p. 214.

288 D.L., p. 17.

289 R.A., p. 272.

290 ibid., p. 271.

291 M.O., p. 210.

292 ibid., p. 205.

293 ibid., p. 202.

294 ibid., p. 207 ff.

295 ibid., p. 229.

296 ibid.

297 ibid.

298 D.L., p. 9, 10.

299 In his attempt to reconcile revelation and reason and demonstrate the necessity of each for an adequate understanding of the natural world Edwards was reacting against that form of Enlightenment thought which was associated with Deism. Deism originally attempted to harmonize the claims of both reason and revelation. Eventually, however, it grew into a form of natural religion in which reason became totally divorced from revelation. Deism,

that is, rejected the idea that reason had any "metaphysical depth." This Edwards could not accept. He held that reason was the means of interpreting revelation. And it was so simply because it contained an element that was receptive to revelation or non-natural knowledge or mystery. He thus rejected that concept of natural religion common to the eighteenth century and sought a return to that concept of reality from which Deism had departed.

³⁰⁰M.O., p. 207.

³⁰¹M.O., p. 259.

³⁰²R.A., p. 272.

³⁰³Misc. 650.

³⁰⁴M.O., p. 305.

³⁰⁵O.A., p. 10. Townsend (op. cit., p. 10) states that the word "indiscernible" was used by Henry More in discussing immortality (The Immortality of the Soul 1659, Vol. 1, p. 3). This book was in the collection of books at Yale when Edwards was there as a student. He uses the word only with reference to atoms and not with reference to the soul.

³⁰⁶Hudson Hoagland, "Reflections on the Purpose of Life". Zygon 6:1, p. 29.

³⁰⁷Misc. 94.

³⁰⁸ibid.

³⁰⁹Misc. 259.

³¹⁰Misc. 976.

³¹¹Misc. 651.

³¹²ibid.

313 Mind 45.

314 C.C., p. 413.

As Paul Ramsey points out, whether or not everything is as it is because it reflects the divine purpose, was a point of debate between Edwards and Watts. (F.W., Editor's Introduction, p. 99 ff) The issue of radical contingency as opposed to metaphysical necessity remains current. "The order of nature", says Birch, "is not the order of fixed and determined contrivances. Nature, including man, is a mixture of order and randomness." (op. cit., p. 19) That which is might have been otherwise. Such a view, according to Watts' position, implies that the sovereign freedom of God "guarantees that nothing but his will need be, and that every created thing might not have been or might have been otherwise than it is." (Ramsey, op. cit., p. 100)

315 Quoted by Birch, op. cit., p. 20.

316 T.G., p. 94, 95.

317 E.T., p. 99.

318 ibid., p. 101.

319 R.A., p. 43.

320 J.G., p. 369.

321 M.R., p. 312.

322 T.G., p. 44.

323 ibid., p. 36.

324 E.T., p. 133.

325 J.G., p. 394.

326 E.T., p. 133.

327 R.A., p. 445.

328 C.F., p. 491.

329 R.A., p. 424.

330 ibid.

331 ibid.

332 For example: Paul Santmire, op. cit., Glenn C. Stone, Ed., A New Ethic For A New Earth, Vilmos Vajta, Ed., The Gospel and Human Destiny, etc.

CHAPTER IX

EDWARDS AS INCLUSIONIST AND EXCLUSIONIST

INTRODUCTION

In his book Crisis in Eden, Frederick Elder suggests that man's relationship to the natural world must be viewed from two perspectives, the inclusionist perspective and the exclusionist perspective.¹ From the former perspective man is viewed as an inextricable part of the natural world. From the latter perspective man is considered to be set over against the natural world and separated from it.²

We have investigated Edwards' understanding of the natural world and man's relationship to it and also his approach to certain issues raised in this understanding. In order to determine the significance of his understanding for contemporary considerations of this question we shall apply the categories proposed by Elder to Edwards' approach to it. These categories appear useful for this purpose because Edwards' understanding of man's relationship to the natural world would appear to have similarities with both orientations. In his insistence that all life is interrelated, Edwards would appear to view this relationship from the inclusionist perspective. In his assertion that man is different from the rest of the created order and has been given the capacity and responsibility to dominate it and use it

for his own purposes, he appears to be of the exclusionist persuasion.

In this chapter we shall outline the characteristics of both perspectives and discuss the consequences of accepting either approach, for an understanding of man's relationship to the natural world. We shall then discuss whether Edwards himself could be classified as either an inclusionist or ^{an} exclusionist, neither one or the other, or both, and whether these categories are adequate to account for man's proper relationship to the natural world.

THE EXCLUSIONIST UNDERSTANDING OF MAN'S RELATIONSHIP TO
THE NATURAL WORLD.

Elder has identified certain characteristics of the exclusionist viewpoint which maintains a separation between man and the natural world.³ First there is the belief that man is the end point of or an "emergent" out of a particular process, which gradually eliminates or subjects all forms of life that are not human.⁴ Secondly, then, this group believes that the natural world exists to be "conquered" by man and used for his purposes. It assumes that when the natural world responds perfectly to man's will and plan it acts as it was intended to do. In Teilhard's view, this is the assumption that animates modern science which views its task as being the "conquest of matter put to the service of mankind."⁵ It seeks knowledge not only for its own

sake but also for power.⁶

The dream upon which human research obscurely feeds is fundamentally that of mastering. . . the ultimate energy of which all other energies are merely servants; and thus. . . seizing the tiller of the world.⁷

Third, this viewpoint can envisage the complete extrication of man from the natural world. It foresees a wholly artificial environment, "restructured by the power of the machine."⁸ Such an environment, in fact, is inevitable. The anthropocentric view of the natural world is thus deterministic. It will be shaped according to man's will and plan. And man wills and plans its total control and ultimate destruction.

Fourth, this group emphasizes man's responsible use of his increased power over the natural world. Man has been given both the freedom and the means to determine how the natural world is to be regulated. In Gogarten's terms, man is to take seriously his responsibility as a free son of God to manage the world according to his own purposes and thus actualize for himself the freedom that is his. In organizing the natural world according to his own best judgment, man frees himself from bondage to it. He is now responsible for it, no longer responsible before it. In Bonhoeffer's words, man, before God, exercises his responsibility for the natural world in complete independence, relying on his own rational capacity to determine what to do, etsi deus non daretur.⁹

This leads to a fifth characteristic viz. that the natural world, if it is to be understood, must be "desacralized." "This disenchantment of the natural world provides an absolute precondition for the development of natural science."¹⁰ Nature is not a "divine entity", it does not define God. Man is not part of the natural world, it does not define him. Consequently, "nature is neither his brother nor his god."¹¹ He is in no sense united with it, he is its master. It therefore can hold no ultimate mystery for him because God alone is ultimately mysterious and in this view nature and God are separated. The anthropocentric view of the natural world therefore is both Deistic and mechanical.

This means, in the sixth place, that with respect to the natural world man is the measure of all things. If man stands outside the natural world and determines how it is to be used, he establishes the relative value of all elements that constitute it. The natural world

does not come to man already finished and ordered. It comes in part confused and formless and receives its significance from man God does not simply insert man into a world filled with . . . relationships and meaning patterns already established by decree. Man must fashion them himself. He doesn't simply discover meaning, he originates it.¹²

Man originates meaning. Meaning is what man does. And what man does is reduce his natural environment to a series of problems which can be managed. Having desacralized the natural

world, it becomes merely "a set of problems, not an unfathomable mystery."¹³ Pragmatism is also a characteristic of the exclusionist stance. Because, with respect to the natural world, truth is what man does rather than what things are in themselves, the reality of the natural world is what man decides it is.

The natural world is therefore man's world. It is established for him and given to him "through divine intentionality."¹⁴ The exclusionist view sees the natural world as that which is given to man for a home, a habitat, a place in which to live. But this habitat is disorganized, unfinished, and consequently lacking in meaning. It must therefore be organized, improved upon and given meaning. The exclusionist views his habitat as improvable by human effort. He feels that man must build his "home" on the basis of a given foundation. The foundation, the raw material, is the Creator's free gift to man. What sort of a home man builds on what has been "given" is his responsibility.

In the ninth place the exclusionist views the natural world ahistorically. Both man and God have a history from which the natural world is excluded. It is because neither man nor God is defined by his relationship to the natural world that both are freed for history.¹⁵ In Carl Michaelson's words, "Nature and history are structures in reality so fundamentally different. . . they have nothing in common."¹⁶ They are different because it is only in the structure of reality that is history that the

question of meaning is raised.¹⁷ Meaning is not raised in the natural realm because in itself it is meaningless. It is meaningless because it says nothing about man. It is "the structure of reality exterior to and silent about man."¹⁸ It excludes man - and he cannot enter it. "Over against us, we can only enter into the reality of nature theoretically, without any consciousness of ourselves."¹⁹ And because nature has no meaning in itself, it must be given meaning by man. Man has responsibility for it. It becomes, therefore, "an attribute of man's approach to reality."²⁰

Finally, because the natural world is meaningful only in terms of the uses to which it is put by man, the exclusionist views it as "neutral with respect to the ultimate wisdom or rationality and also neutral with respect to virtue or goodness."²¹ Because the natural world cannot choose, it cannot be responsible, wise, or virtuous. It simply is. Man manifests, exerts and attains his humanity by asserting his transcendence of and domination over the natural community. It is this humanity, realized in his transcendence of the natural world, that makes man a non-natural element in the created order.²² The value of the natural world lies in its usefulness to man. The purpose of the natural community is to serve that which has no part in it. It is this separation or exclusion from the natural world that makes man, man.²³

THE INCLUSIONIST UNDERSTANDING OF MAN'S RELATIONSHIP
TO THE NATURAL WORLD.

Over against the exclusionists, Elder places a second group, the inclusionists. These also are identified by a number of characteristics. The first is the belief that the life of the natural order is interrelated and that man is a part of this life. Man "is as much a part of nature as rocks and trees and other animals."²⁴ No element in the created order can be independent. Therefore man is dependent for his existence upon the rest of the created order. This whole order is so interdependent that the actions of each element in it affect every other element. And what happens to any one element has its effect on every other element. According to this view, the natural world cannot be viewed in isolated fragments because it is so ordered that it is impossible even to change merely one thing.

A second characteristic of the inclusionist viewpoint, therefore, is an insistence on the need for the maintenance of balance, equilibrium or proportion in the natural world, which is dynamic.²⁵ No one element is to assume undue importance relative to the whole. An element of control is therefore necessary in order that no one element grow or diminish inordinately. If the former occurs other elements are excluded and the whole becomes unstable and in danger of collapse. If the latter occurs there can be no growth and therefore no life. Or if there

is growth it cannot be fully dimensional.

The more diverse the elements of the created order the "healthier" it is.

Nature is not a chaos of warring factions but a complex and intricate system of balances in which all living things share and to which they all contribute. The consequence of this fact is that the richer a natural community is in forms and species . . . the greater its chance to survive and prosper.²⁶

The implication of this statement is that all elements of the created order have a function and therefore a value in themselves.²⁷ Consequently they are not to be destroyed or disregarded simply because these functions are not readily apparent or understood.²⁸

A third characteristic of the inclusionist perspective is its emphasis on individuality. Each element in the natural world is to be preserved and supported because each makes a contribution to the whole and receives the contribution of other elements in a way that is unique. The whole of the created order suffers when the contribution of any one element in it is destroyed. Because this contribution can be made by no other, the diversity of the whole is therefore also to a greater or lesser extent destroyed. Creativity comes with diversity. Consequently "the inclusionists emphasize the individual ^{re}precisely for the sake of diversity."²⁹

A fourth characteristic of this group is its belief in

or espousal of the evolutionary process.³⁰ Evolution has been characterized by one scientist as "a natural process which has transcended itself."³¹ As seen by the inclusionist this process has two characteristics. In the first place it is creative, in the second, it is progressive. It is seen as progressive in the sense that it presents a "hierarchy of complexity" culminating in man.³² The evolutionary process, of which man is a part, is not the product of chance, but of purpose, "a striving which is goal-directed."³³ This purpose is seen in the fact that each "level" or stage of development contributes to the fulfillment or goal of each successive stage. The chance events that occur, which seem to deny that the evolutionary process is goal-directed, are seen by the inclusionist as being the servant of purpose. "Purpose and accident. . . feed upon one another."³⁴ The inclusionist consequently views the created order as a "hierarchy of complexity" in which "each level of the hierarchy includes that below. Knowledge of included levels is necessary but is not sufficient for complete understanding of those more inclusive."³⁵

The inclusionist sees the evolutionary process as creative in that it produces new forms of life³⁶ and therefore new values.³⁷ These values do not consist solely in the fact that a new form of life is physically present. Value also resides in the fact that this new form of life brings with it new beauty. "Evolution. . . is. . . continuously creating new things. And many if not most of these appear to us to have value, at least in

the sense of being beautiful."³⁸ And this beauty resides not only in the organism itself but in the part it plays in the whole designed system. Beauty for the inclusionist consists in relationship. What constitutes the perfection of relationship is proportion. What constitutes the beauty of a relationship is thus also proportion. Consequently, when relationships in the natural community break down, "certain elements in a design appear to us out of proportion."³⁹ And since man is also part of the natural order, he too must participate in these relationships. Consequently, "our organs and senses are so constituted as to be in harmony with the proportions and rhythms associated with these things"⁴⁰ (i.e. all other elements). And when we disrupt this harmony, we experience a conflict "with the rhythms that we consciously or unconsciously apprehend in the external world."⁴¹ The beauty and proportion of the natural world is not intangible. It is an integral dimension of reality. In fact, "the empirical and aesthetic are inseparable aspects of the same reality."⁴²

The inclusionist also sees the evolutionary process as creative "in the whole interrelation of organism with environment, animate, and inanimate."⁴³ The environment, for the inclusionist, is all-embracing. It includes the action of one species on another. The environment influences the organism, molds it and alters it. And the organism, through its response, affects and alters its environment. "Modes of behaviour (response) . . . combine with external circumstances to determine the nature

of the effective environment."⁴⁴ This statement applies equally to human and non-human organisms. "Even very humble organisms also must learn about their environments and ways of life."⁴⁵

The inclusionist sees the evolutionary process as all-embracing. Because of this it sees all created elements in purposeful, rationally perceptible relationship. This means that the whole of reality is viewed as community. This is a fifth characteristic of the inclusionist stance. Dubos establishes three criteria for determining the reality of community in the natural world: communication among the elements that constitute the social order, the integration of their activities and the subordination of special interest to group interest or need.⁴⁶ It is his contention that all three criteria are fulfilled in the natural world.⁴⁷

The inclusionist views each element of the created order as a source of wonder.⁴⁸ This is a sixth characteristic of his perspective. He perceives the natural world with a "sense of awe and marvel." He perceives "the extraordinary in the ordinary." He has "an awareness of the numinous" in it which is beyond empirical investigation and without which man would not be man.⁴⁹ The whole of the natural world, in fact, "is one vast miracle."⁵⁰ Some see this mystery or miracle in the various stages of the evolutionary process "in the sense that they appear to be essentially unforeseeable while at the same time exhibiting over-

all consistency."⁵¹ Others simply see life itself as a mystery. "That anything should exist at all is the ultimate miracle with which nature confronts us."⁵²

We have stated the characteristics of the inclusionist and exclusionist views of the natural world and man's relationship to it. The exclusionist position is characterized by the following propositions:

- 1) Man is the end point of a process which has preceded him and out of which he has grown. Man grows out of the natural world.
- 2) The natural world exists for man's use.
- 3) Man does not need the natural world and will ultimately learn to live without it.
- 4) Man is responsible (to himself) for his use of the natural world.
- 5) The natural world is not ultimately a mysterious world.
- 6) The value of the natural world is determined by man.
- 7) The natural world can be understood and mastered if it is viewed as a series of problems to be systematically investigated.
- 8) The natural world represents the "raw material" with which man is to construct a home according to his specifications.
- 9) The natural world is ahistorical.

- 10) The natural world is ethically neutral.

The inclusionist position is characterized by the following ^{yo}propositions:

- 1) Man is an integral inescapable element of the natural order.
- 2) The dynamic equilibrium of the created order must be maintained.
- 3) The individuality of each element in the created order is to be respected and supported.
- 4) The evolutionary process is progressive and creative.
- 5) The natural world is characterized by community.
- 6) The natural world is mysterious.⁵³

EDWARDS AS INCLUSIONIST AND EXCLUSIONIST.

To what extent was Edwards an inclusionist or ^{an} ^uexclusionist? Edwards' understanding of the natural world and man's relationship to it has similarity with the exclusionist perspective in the following particulars.

- 1) Edwards supports the position that man is in some way separate from the natural world and is required to exercise dominion over it.

Mankind are the principal parts of the visible creation. They have understanding, are voluntary agents and can produce works of their own will, design and contrivance, as God does.

This is that in which the Creator has made men to differ from the rest of the Creation, and by which he has set him over it, and by which he governs the inferior creatures, and uses them for himself.⁵⁴

This understanding implies a denial of the assertion of some inclusionists that the natural world has not been organized for man's benefit. Dubos, for example, quotes Francis Bacon disapprovingly.

Man, if we look to find causes, may be regarded as the center of the world; inasmuch that if man were taken away from the world, the rest would seem to be all astray, without aim or purpose, . . . and leading to nothing.⁵⁵

This statement, however, bears marked resemblance to Edwards' view that man serves as the consciousness of the natural world⁵⁶ and that it serves its purpose as long as man himself remains.

(Man) the end of all is equivalent to the whole. Therefore there is no need of anything else to be preserved; nothing is lost, no part is in vain. If the end of all is preserved, all is preserved, because he is all, the rest is only for his occasional use. The beasts subserve man's use in the present state; and then, though they cease, yet their end is obtained, and their good,⁵⁷ which is their end, remains still in man."

2) Edwards emphasizes man's responsibility to the natural world. Yet he would disagree with those who see him solely as God's partner and not also as his steward, accountable to Him for his activity in the natural order. He also could not accept the "pragmatic" approach to this order because of his belief in

the interrelatedness of all life.

3) Edwards supports the assertion that the natural world was intended as man's home or habitat. Yet, he would not accept that this habitat is imperfect because it has not been completely controlled or made perfectly conformable to man's transient purposes. It is imperfect because it is imperfectly related to its Creator.

In two particulars Edwards' position directly contradicts that of some exclusionists.

4) Edwards holds that the natural world is historical in character. It participates in that process which is history. This position is opposed to that held by those exclusionists who assert that the natural world is ahistorical.

5) Edwards also implies that the natural world is not ethically neutral. It participates in the source of all reason, wisdom, goodness, virtue or love. These are the characteristics of its constitution. It actively seeks to maintain that beauty which manifests the love of its Creator. In this it supports His purpose. It is therefore not ethically neutral.

Edwards' perspective is also similar to that of the inclusionist in some respects.

1) Edwards holds that man is an inescapable element of the natural order.

2) He contends for the importance and integrity of each element of the natural community.

3) He sees the natural world maintained in a dynamic equilibrium of continuity and alteration.

4) He views the created order in terms of an increasingly complex order of being in which each stage incorporates that which precedes it.

5) He finds value in every stage of this process, and new value created, as each stage in the process is attained.

6) He finds the interrelationship of all elements to be creative in that it is in this relationship that life is both actualized and secured. For example, "the earth answers the womb" for plants who in turn serve the animal kingdom who in turn serve man.⁵⁸

7) He maintains that the natural world is of a mysterious order which can be interpreted but never fully penetrated.

The book of Scripture is the interpreter of the book of nature. . .by declaring to us those spiritual mysteries that are indeed signified and typified in the constitution of the natural world.⁵⁹

The elements that constitute Edwards' understanding of the natural world and man's relationship to it are reflected in his treatment of the issues which arise out of that understanding. Some of these issues can be treated by the exclusionist - inclusionist perspectives. These perspectives, however, contri-

bute little to others. This is true specifically with respect to the following.

The Fall. Edwards perceived a disharmony and an imperfection in the natural order. This imperfection he attributed to the destructive force which entered into the creation when man fell. Neither the inclusionist nor exclusionist view accounts for the destructive element in the natural world.

Estrangement. Similarly, neither of these perspectives accounts for the "formless yawning" perceived by many. While both place man within the natural order, neither can adequately account for his uniqueness in this order, nor the reason for his destruction of it. And neither perspective establishes the meaning of the natural order or proposes a principle by which the seeming diversity and contingency of natural events can be unified. They provide no principle of integration for the multitude of finite and contradictory purposes to which man puts the natural world.

The Holy Spirit. It is Edwards' doctrine of the Holy Spirit which specifically forces both the inclusionist and exclusionist to consider what man is to do with the technical power he increasingly acquires. Neither approach raises the question of the norm by which man exercises his dominion. The assumption is made that it is man's reason that determines this exercise. But neither the inclusionist nor the exclusionist con-

sider the source of man's power and reason and the norm under which both are employed. The inclusionist maintains that the natural world is characterized by mystery. But he does not identify the character of this mystery or its implications for man's relationship to the natural order.

This Edwards attempts to do in his doctrine of the Holy Spirit. By it, he seeks to relate the power available to man to manipulate his environment, man's responsibility for exercising this power, and the sovereign will of a Creator who unites all antinomies in one purpose. Each of these elements for Edwards is a mystery, but also a reality with which man must deal. Consequently his doctrine of the Spirit provides an ethical dimension to a consideration of man's relationship to the natural world which is not present in either the inclusionist or exclusionist perspective.

Reason and Revelation. Edwards' treatment of this issue forces both the inclusionist and exclusionist to consider whether their view of reality is adequate and whether human reason in itself is adequate to allow man to properly use the natural world and modify it to serve his legitimate needs.

Edwards emphasizes the necessity of the use of reason to determine the reality of the created order. The knowledge gained from this is essential for an adequate conception of man's relationship to this order. He therefore supports the position of both

the inclusionist and ^{the} exclusionist who holds that man is required to investigate the natural world in order to understand it. Such an investigation cannot yield the basis of reality. But it can yield a knowledge of the form reality takes in the created order.

For both the inclusionist and exclusionist the form of reality must be reality. Neither category provides for a means of going beyond that which is materially apparent. This Edwards attempts to do. He attempts this first by his doctrine of the Holy Spirit whom he sees inhering in the natural order and sustaining its life. He attempts it, secondly, in his coupling of the use of reason with the necessity of revelation. Edwards affirms that there is a natural revelation. The created order does present itself as mysterious. Beyond this affirmation the inclusionist cannot go. Edwards maintains that in the providence of the Creator, the natural world can be seen as an empirical and phenomenal world in interdependent relationship. Neither the inclusionist nor ^{the} exclusionist category can maintain this because neither can account for the basis of this relationship.

SUMMARY

Edwards' understanding of the natural world and man's relationship to it has greater affinity with the inclusionist understanding than the exclusionist understanding. Yet, he cannot

be classified exclusively as one or the other, according to the criteria we have established. His position, therefore, is a denial of Elder's thesis that "the gulf between the two general positions is too great to be spanned by some bridge of compromise. One must stand on one side or the other."⁶⁰ We do not suggest that Edwards' position was the result of a conscious attempt to mediate two extreme positions or compromise the elements of both. Rather, we suggest that because of his understanding of the nature of man, of the significance of the created order and of the nature of the Godhead, he would view any other position as a compromise of those elements necessary to a knowledge and glorification of the Creator.

We also conclude that the inclusionist - exclusionist perspectives are not sufficient to allow for a proper understanding of the natural world and man's relationship to it. Both of these perspectives ignore the dislocation inherent in the natural order and neither can account for its mystery or the significance of this mystery for man's relationship to the natural world. Both are defective in their unexamined assumption that man's reason alone is sufficient to determine how the natural world may best be used. And both are defective in their assumption that either reason will eventually solve all that is now regarded as mysterious in the natural order, or that it cannot in any way penetrate this mystery or determine its significance for man's relationship to the created order. These are areas where Edwards' understand-

ing of the natural order and of the nature of man is more inclusive than either the inclusionist or exclusionist perspective. Consequently we find him to be more helpful than either.

NOTES

¹Frederick Elder, Crisis in Eden, p. 13 ff.

²ibid.

³op. cit. p. 62 ff. In setting forth these characteristics we have followed Elder. However, we have gone beyond him at several points to include characteristics which we feel also identify this position.

⁴Teilhard de Chardin, The Phenomenon of Man. p. 203. Elder classifies de Chardin as an exclusionist because Chardin, in his view, subjects the whole of the natural world to man, the new type of organism. He is the measure of its value. "His view is that all nature longs to be mankind, and the earth realizes its ultimate worth only when the unit, man, comes to full expression." (op. cit., p. 67.) This is a very one-sided view of Chardin's understanding of the natural world and man's relationship to it and cannot stand close examination. He himself has doubts about its validity (p. 67n). As John O'Manique points out, Chardin views man not on the basis that he is the center of the universe or that he is an "insignificant accident" in it, but on the basis that he is the most complex of all created elements (Energy in Evolution, p. 29). As N. M. Wildiers put it, man, for Chardin, is "the most complex entity that we have in our world: . . . the being in whom all prior forms of complexity are repeated and surpassed." (An Introduction to Teilhard de Chardin, p. 73.)

Because evolution for Chardin means "an ascent to consciousness and freedom, supported by an ever greater complexity of the nervous system and the brain" (ibid., p. 80) man, while remaining a part of the natural world, also stands at its head. Man for Chardin is both a part of and separate from the natural world. His continuity with the natural world consists in his being subject to the physical laws operative within it. Outwardly man and the animal world are not that different. "We are disturbed to notice how little 'anthropos' differs anatomically from the other anthropoids" (The Phenomenon of Man, p. 186). The physical makeup of man and the rest of the animal kingdom is such that they react to the same laws of their environment similarly, even though man represents "a radical advance on all forms of life that have gone before him". (ibid., p. 184)

What constitutes this advance is an interior revolution in which life has transformed itself in depth. This transformation consists in "the accession to the power of reflection" (ibid.). Through this power, which is man's alone, he not only

knows, but knows that he knows (ibid., p. 183, 184). In this man is unique. "Because we are reflective we are not only different but quite another." (ibid.) Outwardly man is continuous with, although an advance upon, the natural world. Inwardly, he is qualitatively different from anything that has preceded him.

Consequently we do not share Elder's view that Chardin is exclusively an exclusionist in his understanding of man's relationship to the natural world. However, for the sake of establishing the characteristics of this group, which we hold to be valid, we use his example of certain elements in Chardin's thought.

⁵ibid., p. 274.

⁶ibid.

⁷ibid., p. 275. Here again we note that this represents Teilhard's analysis of the assumptions of the scientific endeavour and not necessarily his own view of man's relationship to the natural world. Elder, it seems, identifies the one with the other. (op. cit., p. 66, 67.)

⁸Herbert Richardson, Toward An American Theology, p. 28.

⁹Letters and Papers From Prison. Letter of July 16, 1944.

¹⁰Harvey Cox, The Secular City, p. 24.

¹¹ibid., p. 23.

¹²ibid., p. 74.

¹³ibid., p. 63.

¹⁴Harvey Cox, On Not Leaving it to the Snake. Quoted by Elder, op. cit., p. 76-77.

¹⁵Harvey Cox, The Secular City, p. 23.

¹⁶The Rationality of Faith, p. 24.

¹⁷ibid., p. 29.

¹⁸ibid., p. 26.

¹⁹ibid.

²⁰ibid.

²¹T. S. Derr, op. cit., p. 268.

²²ibid., p. 271.

²³ibid., p. 272.

²⁴James C. Livingston, "The Ecological Challenge to Christian Ethics", The Christian Century, 87:48 Dec. 1, 1971, p. 1409.

²⁵Elder, op. cit. p. 23 ff.

²⁶René Dubos, quoted by Livingston op. cit., p. 1410.

²⁷For the inclusionist this holds even for those species which no longer exist. The creative activity of those elements which have disappeared has its effect on those elements which are now present. For example, the antelope played a part in the creation of the lion. "Who knows if the mammals would ever have evolved but for the creative activity of dinosaurs?" (W. H. Thorpe, Biology and the Nature of Man, p. 11). See also René Dubos' Man Medicine and Environment, p. 29.

²⁸Elder, op. cit., p. 28.

²⁹ibid., p. 41.

³⁰In this it is similar to the exclusionist position. However, the inclusionists do not hold, as do the exclusionists, that man has grown out of this process. They hold that he remains integral to it and inescapably within it.

³¹Theodosius Dobzhansky, "The Present Evolution of Man." Scientific American, September 1960. Quoted in Jacob Kohn, Evolution as Revelation, p. 104.

³²This is the view argued in The Phenomenon of Man.

³³Kohn, op. cit., p. 114.

³⁴ibid., p. 116.

³⁵George E. Simpson, "The Crisis in Biology", The American Scholar, Summer, 1967, p. 367. Quoted in Elder, op. cit., p. 22.

³⁶Dubos, op. cit., p. 29.

³⁷Thorpe, op. cit. p. 7.

³⁸ibid., p. 7-8.

³⁹Dubos, op. cit., p. 65.

⁴⁰ibid.

⁴¹ibid.

⁴²Elder, op. cit., p. 37.

⁴³Thorpe, op. cit., p. 11.

⁴⁴C. H. Waddington, quoted by Dubos, op. cit., p. 35.

⁴⁵ibid., p. 59.

⁴⁶Dubos, op. cit., p. 15.

⁴⁷ibid., p. 16 ff.

⁴⁸J. Bronowski, The Identity of Man, p. 5.

⁴⁹Elder, op. cit., p. 51 ff.

⁵⁰ibid.

⁵¹Thorpe, op. cit., p. 18.

⁵²Kohn, op. cit., p. 79.

⁵³In setting forth these propositions we do not suggest that every inclusionist or exclusionist holds each of these positions or that each holds his position with equal explicitness.. However we have found that these characteristics, taken together, constitute two identifiable perspectives which in some instances are diametrically opposed.

⁵⁴M.R. p. 304, 305.

⁵⁵op. cit., p. 9.

⁵⁶Misc. 1.

⁵⁷M.R., p. 312.

⁵⁸Misc. 19.

⁵⁹Misc. 56.

⁶⁰op. cit., p. 80.

CHAPTER X

THE UNIQUENESS AND SIGNIFICANCE OF EDWARDS'

UNDERSTANDING OF THE NATURAL WORLD

AND MAN'S RELATIONSHIP TO IT

INTRODUCTION

In this chapter we shall summarize Edwards' understanding of the natural world and man's relationship to it, as well as the uniqueness and significance of this understanding. We shall then outline the conclusions we have drawn from this study in reply to the position of A. V. G. Allen elaborated in the preface. A final section considers two criticisms that might be made of Edwards' understanding of the natural world, and to what extent they render invalid this understanding.

EDWARDS' UNDERSTANDING OF MAN'S RELATIONSHIP TO THE NATURAL
WORLD

In answer to the question, what is Jonathan Edwards' understanding of the natural world and man's relationship to it, we find this understanding to be constituted by the following propositions:

- 1) Man is a part of and one with the natural world.

Thus the beasts are made like man, in all kinds of them there is an evident respect had to the body of men, in the formation and contrivance

of their bodies, though the superior are more in conformity and the inferior less. Thus they have the same senses, the same sensitive organs, the same members, head, teeth, tongues, nostrils, heart, lungs, bowels, feet, etc. And from the lowest animal to the highest, you will find an analogy, though the nearer you come to the highest, the more you may observe of analogy. And so plants, that are yet an inferior sort of beings, they are in many things made in imitation of animals: they are propagated by seed which produce others of the same kind; the earth answers to the womb; there is something that answers to generation in the flower; there is a male part that impregnates the female part. . . . They are like animals in their growing by nourishment, running in veins, in suffering and dying by wounds and in some of them there is an image of sensitiveness.¹

2) Man is separate from the natural world; he is not simply a continuation of nature. Man's freedom, perception, will and responsibility set him apart from that with which he is inescapably related. Only man is created in the image of God. He alone possesses a mind which is complete in its kind and the product of "an absolutely arbitrary operation."²

3) The life of the created order, of which man forms a part, can be maintained only in interdependence, that is, in community. There is

a mutual subserviency of all the various parts of the world. This great body is as much one, and all the members of it mutually dependent and subservient, as in the body of man one part is so and acts so and is in every respect ordered so as constantly to promote the design that others are made for. . . . In all the immense variety of things that there are in the world, every one has such a nature and is

so ordered in every respect and circumstance as to comply with the rest of the universe, and to fall in with and subserve to the purposes of the other parts.³

This means the natural world is dependent upon man for its existence. Because man retains the natural image of God, he has power to exercise dominion over it. He also has responsibility for it, because he is its "consciousness". He of all the creatures has the freedom to exercise choice. He therefore has the possibility of not furthering or supporting or consenting to the design according to which it was created and the purpose for which it was designed. Man determines the manner in which and the extent to which the purpose of the natural world is realized.

Conversely, man is dependent upon the natural world for his existence. It was given to him for his use. It is the means by which he relates to himself. It is the means by which he is nourished. It is the habitat in which he lives. It is the means of the Creator's self-communication. What is communicated is the will of the Creator. What the Creator wills is community. Apart from community life is impossible. Consequently, apart from the community of the natural world, man cannot exist. He therefore cannot execute his duty to his Creator; he cannot glorify his Creator. Man requires the natural world in order to function as man; that is, in order to exercise the creative powers given to him for that purpose, and in order, thereby, to

glorify his Creator.

4) The natural world is a fallen world and therefore it is man's enemy. It is "a world in which good and evil are so mixed together as to be a sure sign that this world is not to continue forever."⁴ In it, the rule of Satan is visible.⁵ This rule is characterized by hate or disunion because it is the enemy of love.⁶ The natural world, then, partakes of the quality of hell, which is a realm in which love to God and love to his creation are absent.

No love to God will ever be felt in hell, but every one there perfectly hates him, and so will continue to hate him; and without any restraint will express their hatred to him. . . . And though they all join together in their enmity and opposition to God, yet there is no union or friendliness among themselves: they agree in nothing but hatred, and the expression of hatred.⁷

Hell is a realm of hatred because it is that realm from which the God of love has removed himself. Consequently "in hell all those principles will reign and rage that are contrary to love, without any restraining grace to keep them within bounds."⁸ And this is the purpose of hell; to be a realm to which all that is disproportionate and contrary to love in the created order can be removed and in which it can be perfectly exposed to the Creator's wrath. Through the removal of this destructive force, the natural order will be restored to its proper state.

All things in the wide universe that are hateful shall be gathered together in hell, as in a vast receptacle provided on purpose, that the universe which God made may be cleansed of its filthiness by casting it all into this great sink of wickedness and woe. It is a world prepared on purpose for the expression of God's wrath. He has made hell for this, and he has no other use for it but there to testify forever his hatred of sin and sinners, where there is no token of love or mercy. There is nothing there but what shows forth the divine indignation and wrath.⁹

Hell is the realm of God's wrath. Its effects are felt in the created order. For it is the realm of Satan who has been permitted "to exercise a high, proud, and almost uncontrolled dominion in the world, a long time before Christ finally conquers, and utterly ruins his visible kingdom."¹⁰

Because of the presence of this "visible kingdom" the natural world is ambiguous. Because there is an element in it which actively opposes the will of the Creator, it also opposes the best interest of those who consent to this will. It

devours men and eats them up. As we see this our mother that brought us forth and at whose breasts we are nourished is cruel to us, she is hungry for the flesh of her children, and swallows up mankind, one generation after another, in the grave, and is insatiable in her appetite. So she does mystically those that live by the breasts of the earth and depend on worldly things for happiness; the earth undoes and ruins them. It makes them miserable forever.¹¹

The natural world is man's friend in that it supports him and provides the means for his inter-relationship and for the

glorification of his Creator. But it also seeks his destruction and tempts him to idolatry. Thus there exists between man and the natural world a mutual subserviency and a mutual enmity. The former consists in a mutual consent to each other's equality, a mutual concern for each other's happiness and a mutual concern for the Creator's glory. The latter is manifest in their mutual destruction. This destruction is occasioned by the absence of love. The natural world, because it is a fallen world, is also a realm in which love or consent fails of expression. It is therefore also a realm in which the enmity of God is manifest, although its predominant characteristic remains the manifestation of the love of God.

5) The natural order, then, is the medium through which the Creator communicates both his wrath and his love. God communicates both his love of his creation and his enmity toward that which opposes his will and seeks to separate the creation from its Creator, through the introduction of dissent into it. In this two-fold communication the Creator manifests his nature as the one who loves that which secures the happiness of the creature and who has enmity for that which destroys it. Both the love and the wrath of the Creator are equally realities in the natural world. But both are manifestations of the divine self-love. Thus there is but one reality. The reality that is of Satan is but a subordinate reality, a reality which points to that which incorporates it. It exists "but for a little while" in order that the wrath of the Creator might find

expression. For this reason he allows Satan "to exercise a high, proud and almost uncontrolled dominion". Both his wrath and his love are aspects of the Creator's self-love and a vindication and assertion of his sovereign will.

6) The mystery of the natural world, in its positive and negative aspects, surpasses man's understanding. The love of the Creator and the irrational opposition to this love, both manifest in the created order, are equally incomprehensible. The natural world can be known and interpreted, but not fully understood. For it represents the self-revelation and self-communication of the Creator; the medium through which he offers himself to his creatures.

And if it be said that spirit acts on matter, and matter on spirit, by an established law of the creator, which is no other than a fixed method of his producing effect; still the manner how it is possible to be, will be inconceivable. We can have no conception of any way or manner, in which God, who is pure Spirit, can act upon matter.¹²

Consequently "difficulties and incomprehensible mysteries are reasonably to be expected in a declaration from God."¹³

7) Although "the mysteries that are observable in the system of the natural world" are many,¹⁴ "the system of nature" is not all mystery. The purpose of the Creator's self-communication in the natural world is "to teach mankind and to inform their understandings."¹⁵ And "men are capable of understanding as much

as is revealed, and as much as is pretended to be revealed, though they can't understand everything that belongs to the things revealed."¹⁶ Man has been given "a capacity of seeing (God) in his works" in order that he might see and consent to His glory.¹⁷ Consequently, through an improvement in the knowledge of the natural world, there can be a "vast improvement" in man's understanding of the nature and design of the Creator "to the end of the world."¹⁸

8) Man's response to the natural world represents the extent to which the Creator's revelation in it is experienced in its negative or positive aspects. If he relates to the natural order justly, as one who has been given the freedom and responsibility to exercise dominion over it, he acts in conformity with the true order of things. Consequently, the community of the whole created order is maintained. The Creator wills this community. In it man is sustained and finds life. He there discovers the love of the Creator. When he violates this community, however, he opposes the will of the Creator and destroys that by which he is sustained and which is an expression of the Creator's love. Where this love has been obliterated, disproportion and dislocation predominate. The natural order becomes the realm of hell.

9) The natural world is, therefore, the means the Creator has chosen to exercise judgment on man. For in their res-

ponse to the natural world men demonstrate the extent of their consent to the Creator's sovereignty and therefore the extent to which they "have procured his wrath and hatred on themselves."¹⁹

The natural world represents God's invitation to friendship. It signifies that he does not desire to be man's irreconcilable enemy. If man rejects the invitation he makes God his enemy. He acts in opposition to him because he does not "willingly comply that God should have dominion over the world, and that he should govern it for his own glory, according to his own wisdom."²⁰ God is therefore justified in visiting his wrath upon those who, in their treatment of the natural world, show that they "care not what becomes of God's glory (and) are not distressed how much so ever his honour seems to suffer in the world."²¹ He is justified when he "advance(s) his own glory in the ruin of (their) welfare, not caring how much (their) interest suffers by it."²² In this way dislocation and the destructive force in the natural order become the instrument of his judgment, which he executes against man who seeks his private interest in opposition to the "true order of things" and who values the glory of the Creator "no more than the dirt under (his) feet."²³

THE UNIQUENESS OF EDWARDS' UNDERSTANDING OF THE NATURAL
WORLD AND MAN'S RELATIONSHIP TO IT.

We have stated that with respect to his understanding of creation we find Edwards to be original with respect to the Bib-

lical material in six particulars:

- 1) The manner in which he combines a belief in creation ex nihilo with a belief in creation ad extra.
- 2) His distinction between a primary and secondary creation.
- 3) His attempt to maintain a transcendence and immanence in relating the Creator to his creation.
- 4) His view of the creation as the medium of the Creator's self-giving to the creature.
- 5) His view of the creation as the medium of the Creator's self-communication.
- 6) His sacramental view of the created order.

We now suggest that with specific reference to man's relationship to the natural world Edwards makes explicit what is implicit in the Biblical material or is original, in the following particulars.

- 1) His contention that man is required to study the natural world and gain knowledge of its systems, as a function of his exercise of religion. Religion is "the very business of men for which God made them."²⁴ True religion consists in love to the Creator and a hatred or opposition to those purposes and designs which are not his. "The essence of all true religion lies in holy love." And "from love arises hatred of those things which are contrary to what we love, or which oppose and thwart

us in those things that we delight in."²⁵

Those things that are contrary to love are those things which cause disproportion in the created order. "The want of this proportion is a deformity because it is a manifestation of a defect of. . .love."²⁶ Those things that cause disproportion are those things which act contrary to the design of the Creator, or to the "true order of things." Consequently, love to the Creator is manifest in an attempt to understand his design and fall in with it.²⁷ In this the Creator is glorified.

2) His contention that such knowledge yields a knowledge of the Creator. The natural world is the medium of the Creator's self-revelation. "The system of nature. . .(is) the voice of God to intelligent creatures, a manifestation and declaration of himself to mankind."²⁸ Man has been given the capacity to investigate the natural world and thereby to "see God in his works."²⁹

3) His contention that such knowledge can never yield complete understanding of the Creator. This because of the mystery of the Creator who inheres in his creation and because "there are several things pertaining to the things revealed which God has not revealed."³⁰

4) His view that the natural world represents the limits of the exercise of man's delegated power and authority. The natural world is continually being sustained and created by the Cre-

ator. Man signifies his consent to this exercised sovereignty of the Creator through his attempt to support his sustaining and creative activity, and his willingness to consent to the inherent equality in His design. The natural world has a right to existence. Its right is based on its importance in this design. This right, therefore, limits the use to which man puts it and the exploitation to which he subjects it.

Internally, the natural world also represents the limits of man's dominion over it in that it is mystery. Man can only treat with caution and reverence that which he cannot understand fully. Attempts to exercise unlimited dominion over that which cannot be understood can only lead to chaos and the "destruction of God's workmanship."³¹ Man's attempt^{pt} to attain such power is his attempt to act without regulation. And when this happens all things are "remedilessly in the utmost deformity, confusion and ruin."³²

5) His contention that the natural world will be destroyed and that man alone will remain.³³ If this happens nothing will be lost, because in man the whole of the natural order is summed up.³⁴ This view is held in tension with the view of a transformed reunited natural world which will be included in the new creation. This Edwards also affirms.³⁵ For the new creation consists in the restoration of the moral world.³⁶ And the natural world is a moral world.

Edwards makes no attempt to reconcile these two thoughts. In their juxtaposition they represent another form of his admission that there is a mystery about the origin and telos of all existence which has yet to be revealed and therefore which cannot now be understood. "For there is nothing else (but revelation) that informs us what God designs by that series of revolutions and events that are brought to pass in the world, what ends He seeks, and what scheme He has laid out."³⁷ Hence, Edwards is content to affirm, that by whatever means he chooses, "God's design will be fully reached."³⁸

6) His view that the natural order, of which man is a part, continually makes progress toward that point when God's design will be fully realized.

'Tis evident that He don't fully obtain His end, His design, in any one particular state that the world has ever been in; for, if so, we should have no change. But God is continually causing revolutions. Providence makes a continual progress, and continually is bringing forth things new in the state of the world, and very different from whatever were before.³⁹

This progress which affects man and the natural world equally, is progress in the redemption of both man and the natural world, "the work of redemption being the sum of God's work of providence."⁴⁰

7) His view that the natural world acts as the executor of the wrath of God. "'Tis most rational to suppose that God

should reveal the design he was carrying on to His rational creatures so that as God has made them capable of it, they may actively fall in with it and promote it, acting herein as the subjects and friends of God."⁴¹ Man either accepts or rejects the friendship offered to him by God by his acceptance or rejection of the medium through which it is offered, i.e. the natural world. This decision is inescapable since man cannot remove himself from his relationship with the natural world. Man accepts the friendship of God when he acts as His subject and therefore in consent with all other created existence and in support of the Creator's design. He rejects this friendship when he acts contrary to the best interests of all other existence and, consequently, in opposition to this design. All of life is a unity. Therefore the way man relates to the natural world determines the way he relates both to the Creator and his fellow man. If man acts as an enemy of God, and therefore of man, he will earn God's wrath.

8) His view that as a consequence of the world's estrangement from the Creator, it exists as man's enemy. Physically and spiritually it seeks to destroy him. It is "cruel" to him, it is "hungry for his flesh," it "undoes and ruins" him and makes him "miserable forever."⁴² To the extent that any created existence is separated from its Creator, it will be the enemy of both the Creator and all other existence. Consequently, just as man's

estrangement from the Creator causes him to act the enemy to God, nature and his fellow man, so the estrangement of the natural world from its Creator causes it to act the enemy with respect to God, man and its own community.

9) His implied contention that the Creator uses man's destructive activity in the natural world as a means to effect his will and manifest his glory. If man destroys the created order, he will also destroy the visible kingdom of Satan. The power of Satan will cast out the kingdom of Satan. This is God's purpose, the reunion of all things in Christ in the context of a new creation. And because He is sovereign, this purpose will be realized.

Everything that is, that comes to pass, is altogether of God's ordering and God has some design in it. 'Tis for something that God aims at and will have obtained, that this or the other thing is or happens, whatever it be - even sin and wickedness itself. It comes to pass because God has a use for it, a design and purpose to accomplish by it. . . . All that is or comes to pass, 'tis of God's will and for His pleasure that it happens, and for His ends.⁴³

THE SIGNIFICANCE OF EDWARDS' UNDERSTANDING OF THE NATURAL
WORLD AND MAN'S RELATIONSHIP TO IT.

Edwards' understanding of the natural world and man's relationship to it has significance for a contemporary understanding of this question.

1) Edwards demonstrates the inadequacies of those attempts to establish a relationship between man and the natural world which either make man the measure of all things or which view all considerations of a moral or spiritual dimension of the natural order as irrelevant. Edwards maintains that if man is made the ultimate measure for the value of all elements of the created order, the result will be the destruction of both man and his environment because of the competing purposes of his private systems. Experience has proven this to be the case. He also maintains that if questions of a spiritual dimension of the natural order are ignored, man's responsibility for the natural order is distorted. If there is nothing more to the natural world than that which is physically present, self-interest becomes the criterion for man's use of it. Edwards saw that this would be inadequate to ensure the conservation of the natural order. Again, this has been borne out in man's experience.

2) This points to a second contribution of Edwards' thought. It establishes the significance of man's manipulation of the natural order. All such manipulation has an inescapably ethical dimension. For it is an expression of man's responsibility for exercising dominion over the natural world in conformity with the will its Creator. This responsibility he cannot escape. Therefore he cannot escape the Creator. The will of the Creator is sovereign and he will be glorified. Man has the responsibility

for determining whether He will be known either in love or wrath. This is the significance of man's activity in the created order.

3) Edwards therefore calls into question man's purposes in manipulating the natural order and his assumption that by the use of reason alone he can save the natural world from destruction. Edwards questions whether or not man has either the will or the understanding to put the good of the whole community of life ahead of his own private interest or even to understand that justice for the whole of the community is a prerequisite for the well being of each member of it. Therefore, Edwards gives no basis for penultimate optimism. Because of man's activity the whole of the created order could come to an end "as if it had never been."

4) Edwards promotes neither optimism nor pessimism with respect to man's domination of the natural world. What he does promote is realism, hope and meaning.

Edwards does not promote pessimism because of his belief that the Creator will use the activity of his creatures to glorify himself. He promotes realism in his belief that the creatures' destructive activity could be the prelude to the Creator's glorification. He promotes hope in his assertion that the will of the Creator will be vindicated. He promotes meaning by his implication that this hope should animate man's activity in the natural order. Edwards saw this hope providing the meaning for this activity.

5) A further significance of Edwards' thought is that it is useful both to the theist and non-theist who attempt to relate man properly to the natural order. Since virtue is the primary constituent of the natural order, all men have a moral sense rooted in the way things are. The effect of the work of those who seek to witness to the source of this virtue and the effect of those whose work is its imitation, is similar. The latter are not sustained by the hope of the former. The morality of the latter might be further from true virtue than that of the former because their consent to being is less inclusive. Yet the immediate intent of the former and that of the latter ^{are} is similar. Therefore Edwards' understanding of the natural world and man's relationship to it is useful to both groups.

6) Edwards' understanding of the natural order overcomes the deficiency of two other interpretations, which Paul Tillich terms the "vitalistic" and the "symbolic-romantic."⁴⁴ The former interpretation attributes to the natural order "an immediate power of being", but cannot interpret this power or provide it with meaning.⁴⁵ The latter perceives nature as a symbol of spiritual power, but cannot organically relate man to it. It lacks an awareness of the physical objective structure of the natural order and therefore distorts it.⁴⁶ From Edwards' perspective, it therefore distorts the self-communication and will of the Creator, substituting in their stead "the creations of an

arbitrary imagination."⁴⁷ And as Edwards himself holds, such creations are, of all falsehoods, "the (most) powerful against truth" causing even "very learned men" to "have believed things most absurd."⁴⁸

Tillich maintains that

the power and meaning of nature must be sought within and through its objective physical structures. Power and physical character, meaning and objective structure, are not separated in nature.⁴⁹

Edwards is significant because he too saw this and attempted to provide a means of utilizing the power of the created order for legitimate purposes and of discerning its meaning for man. He is also significant because this "realistic" (Tillich) interpretation of the natural world permits it to become a sacramental sphere. As a medium of divine self-communication that is historical and dependent in character, the natural world is "a bearer and an object of salvation."⁵⁰ For it is an emanation of, and intimately related to, the One who is himself the bearer of salvation and the means of cosmic redemption.⁵¹

7) Edwards took into account and attempted to hold in balance certain factors in his understanding of the natural world. We have discovered these elements in our investigation of Edwards' treatment of those issues which relate to this understanding. Three are especially significant when we consider to what extent Edwards' thought restrains an "unqualified naturalism" and an "un-

restrained exploitation" of the natural order.

(i) Transcendence and Immanence.

Edwards maintained that the Creator was transcendent and exercised absolute sovereignty over his creation. He was equally certain that "the course of nature is (no) proper active cause, which will work and go on by itself without God."⁵² The Creator is also present in his creation. His creative activity maintains it in existence. There can be no second causes. Without maintaining the presence of the Creator in his creation, Edwards perceived that the way was open to an "unqualified naturalism."

For without this presence the natural order would be desacralized. All creaturely activity would have a this-worldly significance only. The way would then be prepared for the "unrestrained exploitation" of the natural world. Without this presence the value of the created order would be determined by man. And this would lead to its sacrifice to his transient and contradictory purposes.

(ii) Freedom and Responsibility.

Man's position in the created order provides him with the freedom to exercise dominion over it. Yet this delegated freedom is not absolute. His responsibility to the natural community and to its Creator restrains his exploitation of the former. Man is responsible to so conduct himself that all his activity reflects the purpose for which all things were created; the glorification

of the Creator. Where man takes this responsibility seriously, the natural order is protected from "unrestrained exploitation." Where he does not, its community is destroyed and man's life is impoverished.

(iii) Unity and Estrangement.

Edwards viewed life as a unified existence. Yet he also perceived that because of the Fall, all dependent life was estranged from its source and from itself. Consequently, man's relationship with the natural world is not perfect nor is his enjoyment of it. How man seeks to relate to the natural world, however, determines his experience of it. It will be experienced either as a source of joy, beauty, refreshment, instruction and sustenance, or as a realm of chaos, ugliness and lifelessness which is to be exploited and conquered rather than enjoyed. Which of these experiences dominates depends, in turn, on man's experience of the Creator. If he perceives in the natural order His beauty and self-communication, he will seek its preservation and life. To the extent he does not perceive this, he will not understand its significance and will seek its destruction. Because he retains the natural image of God, man is capable of the former perception. It is the natural image of God in man that enables him to act so as to secure both his own life and that of the natural order. It is this capacity for life that enables him to struggle against his own destructive tendencies and his drive to exploit all life in the service of his own "private

systems", which because of his Fall, have power over him.

By attempting to hold in balance these three realities of man's existence in the natural order, Edwards is both significant and instructive for those who seek meaning for man's activity in this order, or who are subject to either a false optimism or pessimism with respect to this activity and the ultimate fate of both man and the natural order.

CONCLUDING REMARKS

The arguments supporting this thesis have been elaborated. From the evidence, we conclude that Edwards did have a definite understanding of the natural world and of man's relationship to it which contributes to a contemporary understanding of this problem. This finding contradicts A. V. G. Allen's thesis elaborated at the beginning of this work. We now reply to this view in the light of the evidence we have discovered. Our conclusions, drawn from our elaboration of this evidence, can be enumerated in the following points.

(i) Edwards did trace an organic relationship between man and the natural world. Together they constitute a whole whose parts are mutually dependent and intrinsically related. Man is a part of the natural order although he stands apart from it and exercises dominion over it. He cannot exist without it, for it is his means of sustenance and the means by which he re-

lates to others. The natural world, in turn, is subject to man's manipulation and destructive tendencies. Its survival is dependent upon his will.

(ii) The external world does not exist for Edwards "only mentally and in the mind of God." Idealism is a prominent motif in Edwards' thought. Yet he also stresses that the natural order is an empirical reality with which man must contend. It is because the natural order is an aspect of reality that man's relationship to it has ethical significance.

(iii) The following thoughts find expression in his works.

(a) It is the purpose of nature with respect to man to be a medium of the Creator's communication and revelation to man and also to be the means by which He effects his judgment on him. The natural order represents the initiative of divine love. If man by his treatment of the created order rejects this initiative, he will know the divine love as divine wrath. Consequently the natural world represents to man the sovereignty of the Creator and the limits of his own jurisdiction. It is the purpose of the natural world to represent to man that he is finite, that his existence is a dependent existence and that the Creator's "will and pleasure are of infinitely greater importance than the will of creatures."⁵³

(b) The natural world is necessary to the "spiritual existence" of man. Knowledge of it yields a knowledge of the

Creator for those with the "new sense of the heart." This knowledge also constitutes a necessary element of true religion. It represents an image and shadow of divine things. As such it instructs man with respect to the will and nature of the Creator and nourishes his spiritual growth.

(c) There is a conflict between man and nature. This is due to their mutual estrangement from their Creator and from each other. It is also due to the fact that man exercises his dominion over the natural world in violation of the true order of things.

(d) Edwards does not speak of man's victory over the natural world because he does not consider that it has been given to man to be "conquered". Interdependence and justice, not domination and destruction, are to characterize man's relationship to his environment. There is a struggle between man and the natural world. But this is the struggle between the power of the two realities inherent in the natural order. It is the struggle between the power of dissent and the power of consent. "Victory" for the one results in mutual destruction. Victory for the other results in community and life.

(e) Edwards did transmute physical reality into a spiritual reality in that he had an ever increasing awareness of the spiritual significance of the natural order. Again, however, although he had a strong tendency to spiritualize the natural

order, he never abandoned his approach to spiritual reality through physical reality.

In the light of the foregoing, it is our judgment that A. V. G. Allen was mistaken in his view that Edwards lacked an understanding of the natural world and man's relationship to it.

EVALUATION

We now express a final judgment as to the value of Edwards' understanding of the natural world and man's relationship to it for contemporary studies in this area. First, we acknowledge two aspects of his understanding of the natural world for which he might be criticized; its inconsistency and its idealism.

Inconsistency

Edwards implies that the natural world is a moral world. It is moral in that it is characterized by conversation, friendship and participation in Being. The elements of the natural world possess a quality of mind and betray at least a semblance of intelligence and will. Therefore they possess at least the rudiments of virtue. Consequently they are characterized by morality.

At the same time, Edwards attempts to maintain that the natural world is morally neutral. Only intelligent beings are capable of consent to "the great universal system of existence" and of "intelligent perception and action." Capacity for intel-

ligent perception and action is that which separates man from the rest of the created order. The natural world cannot consent because it lacks perception or will. Therefore it cannot be a moral community. Only man can be characterized by morality. Only man has the will to consent. And it is in the will to consent that the moral act consists.

Edwards holds these thoughts in tension because he could not accept the consequences of maintaining the one to the exclusion of the other. The consequence of maintaining that the natural world is morally neutral is the exclusion of the Creator from his creation. For morality is derived from participation in Being. This exclusion Edwards could not accept.

To maintain that the natural world is a moral world, is to imply that there is little or no difference between man and the rest of the created order. In stating that "intelligent perception and action" is the only thing in which the two differ, Edwards minimizes the difference between the elements of the created order. Yet man dominates the natural world because he alone possesses the image of God. Because of this, the difference between man and the natural world is crucial. As one study put it, "the animal merely uses external nature, man changes it to make it serve his ends."⁵⁵

Edwards attempts to resolve^{ly} this tension by placing man in a hierarchy of being in which quantity of life is related to capacity to consent to Being. And the greater the capacity to

consent, the greater is the capacity for virtue. True virtue is not present in the natural order because all created existence is imperfect. But a form of true virtue is present throughout it although not equally so. Consequently, morality also exists throughout the natural world, although not equally in all elements. The difference between man and the natural world consists, then, not in the fact of man's domination but in capacity to consent and therefore capacity for virtue. Man has a greater capacity for true virtue than the rest of the created order.

These two positions, that is, that the natural world is characterized by morality and that the natural world is amoral, are logically contradictory. Theoretically it is impossible to maintain them simultaneously. In practice, however, failure to adequately account for both positions results in either the unlimited exploitation of the natural world and its consequent destruction or the veneration of the natural order.

To hold that the natural world is amoral is to infer that it is qualitatively different from man who is moral and who dominates it and that he can therefore utilize it without reference to its participation in Being. What constitutes the moral use of the created order is not determined by any consideration of an intrinsic morality in nature, that is, an intrinsic goodness and fitness for particular ends. Rather, it is constituted by values and purposes established by man and the way in which

his use of nature affects his fellow man.

To maintain that the natural world has the same capacity for morality as man leads to either the forfeiting of the image of God in man or the attribution of this image to the whole of the created order. In either case the uniqueness of man is lost.

Idealism

Edwards' view of the universe has been described as a "theistic idealism of matter."⁵⁴ This idealistic element is prominent in his treatment of the created order. It is also a limiting factor in any attempt to appropriate his thought.

Edwards' idealism makes it difficult to apply his thought to practical problems in man's relationship to the natural world. He does not provide guidance for making specific decisions about the way man uses the resources of the natural world. Edwards' thesis that the natural order is a divine community, that it is sustained by the activity of its Creator, and that it participates in Being, is incapable of rational demonstration and irrelevant to "practical" considerations such as the priority to be given to conflicting demands upon finite natural resources. This applies similarly to his contention that knowledge of the natural world yields a knowledge of its Creator and that it is a medium of his self-communication.

The weaknesses of Edwards' understanding of the natural order, then, are, first, an idealism which makes it difficult to

appropriate this understanding in dealing with specific issues and problems involved in man's relationship with the natural world today. Second, Edwards is inconsistent in dealing with the question of the morality of the natural world and consequently with the difference between man and the rest of the natural order. Hence he does not provide guidance regarding the basis of man's dominion over the natural order beyond his affirmation that man has been commanded to dominate this order and is equipped to do so because he possesses the natural image of God.

In spite of this, however, we consider that there can be no satisfactory alternative to Edwards' understanding of the natural world and man's relationship to it. Apart from the approach he has taken, we believe that man's life and that of the natural order cannot be indefinitely sustained.

Barbara Ward and René Dubos suggest that three powerful and divisive thrusts, those of science, markets and nations, have brought man to a crisis in his planetary existence.⁵⁶ They also suggest that these forces

point in the opposite direction - to a deeper and more widely shared knowledge of our environmental unity, to a new sense of partnership and sharing in our sovereign economics and politics, to a wider loyalty which transcends the traditional limited allegiance of tribes and peoples.⁵⁷

Ward and Dubos underline the fact that the master intellectual and scientific achievements of modern times and especial-

ly of the last few decades have provided man with a deepened understanding of reality. And these achievements have factually confirmed Edwards' belief that reality is

a single system, powered by a single energy, manifesting a fundamental unity under all its variations, depending for its survival on the balance and health of the total system.⁵⁸

They also hold that to ensure that those relationships which constitute the "most intricate web of interdependence" which characterizes this unified system are maintained, there must be a vast increase in scientific research and study. Man must take a collective responsibility for discovering much more "about the natural system and how it is affected by man's activities and vice versa."⁵⁹ This thought is fundamental to Edwards' approach. Man, because he has been given responsibility for his own life and that of the natural order, must continually increase in his knowledge of the way in which his activity affects the natural order and the way the natural order affects his life, in order that he might make the appropriate response to it and through it to the Creator. Man's indispensable need to conserve and increase in knowledge of the natural order, which is now evident, was seen by Edwards two centuries ago.

Man has also been brought to the realization that in order to respond adequately to the environmental crisis, he must deal with new economic problems which accompany it, problems from which no nation or groups of nations are immune.⁶⁰ The

whole community of nations share one biosphere, and economic policies, programmes and practices that disrupt or destroy "the biological rhythms and needs of the natural universe"⁶¹ in any one of its areas, will adversely affect many others. What is now required is a new "planetary economy"⁶² in which economic interdependence is acknowledged and in which the natural order is used in ways that support this interdependence.

Edwards holds that the natural order was created to supply man's needs. He holds that he must use the natural order responsibly. And he maintains that man's needs can be met only when he is willing to exist in community, contribute to the well being of others and receive the contribution which others with whom he stands related have to make. And this, in Edwards' view, is the whole created order. Ward and Dubos have demonstrated that only this kind of "planetary modesty", which is characterized by a concern for the life of the whole community and by a willingness to both give and receive life as one element of one community, will be sufficient to secure the life of the created order. We have seen that this is also a fundamental assumption in Edwards' understanding of the nature of the natural community and of man's relationship to it. The validity of his assumption and its significance for the life of the world is now becoming evident.

The necessity for sharing economic resources and of integrating economic policies is related to a third principle to

which Edwards held; that man is required to subordinate his allegiance to partial private systems to his allegiance to "the universal system of existence". He maintained that existence in community was impossible for men as long as their primary allegiance was

limited to a party, or to the nation in general of which they are a part, or the public community to which they belong, though it be as large as the Roman empire was of old.⁶³

Such primary allegiance constantly exposes man to the danger of pursuing the interest of this private system in opposition to and at the expense of the life of the whole community. Today this danger has been recognized.

So locked are we within our tribal units, so possessive over national rights, so suspicious of any extension of international authority, that we may fail to sense the need for dedicated and committed action over the whole field of planetary necessities.⁶⁴

What is now required is a "planetary approach" to the natural order, "undergirded by a sense of collective responsibility to discover more about man-environment relations."⁶⁵

These three areas of man's existence, then, the scientific, the economic and political, and that of his ultimate loyalty all bear directly upon his understanding of the natural world and his relationship to it. It is in these three areas especially that Edwards' understanding of this issue is indispensable for any attempt to deal with it. His thought makes a significant

ant contribution both to its formulation and to an approach through which it might be resolved.

If it is to be resolved man will be required to exercise "the furthest reach of wisdom, detachment and human respect."⁶⁶ If this exercise is beyond him, and if

man continues to let his behavior be dominated by separation, antagonism, and greed, he will destroy the delicate balances of his planetary environment. And if they were once destroyed, there would be no more life for him.⁶⁷

In which event, Edwards would add, the Creator will be glorified.

This, then, is the final and perhaps most significant contribution Edwards makes to a contemporary approach to the environmental issue. He knows that it is not at all certain that man has sufficient will to "achieve just enough unity of purpose to build a human world". What he insists, however, is that man exercise his reason to deal with the problem of his existence. And this he counsels in the belief that in the providence of the Creator, man's use of his reason will ultimately glorify Him. In the light of the fact that there is every possibility that man will ultimately fail to support the life of the created order, this assurance, which Edwards' approach to the natural world and man's relationship to it contributes, is, for some at least, indispensable in their attempt to deal constructively with an increasingly urgent problem.

NOTES

¹Images 19.

²Misc. 1263. This two-fold approach to man's relationship to the natural world is evident in Edwards' earliest thought. In his list of "Subjects to be handled in the Treatise on the Mind", item 37 reads: "Wherein there is an agreement between Men and Beasts. How many things, in Man, are like instincts in Brutes." Item 49 reads: "One section, particularly to show wherein Men differ from Beasts." Works, Vol. 1, p. 667 c.

³Misc. 651.

⁴C.F., p. 515.

⁵H.R., p. 237.

⁶ibid., p. 207.

⁷C.F., p. 517.

⁸ibid., p. 518.

⁹ibid., p. 516.

¹⁰H.R., p. 207.

¹¹Images 157.

¹²M.O., p. 199.

¹³ibid., p. 204.

¹⁴ibid., p. 210.

¹⁵ibid.

¹⁶Misc. 1340.

¹⁷H.R., p. 277.

¹⁸M.O., p. 210.

¹⁹C.F., p. 516, 517.

²⁰J.G., p. 380.

²¹ibid., p. 375.

²²ibid.

²³ibid.

²⁴Misc. 77.

²⁵R.A., p. 107, 108.

²⁶Mind 45.

²⁷Misc. 547.

²⁸Misc. 1340.

²⁹H.R., p. 277.

³⁰Misc. 1340.

³¹M.R., p. 305.

³²ibid.

³³Misc. 547.

³⁴Misc. 867.

³⁵H.A., p. 465.

³⁶M.O., p. 285.

³⁷Misc. 547.

³⁸ibid.

³⁹ibid.

⁴⁰H.R., p. 274.

⁴¹Misc. 547.

⁴²Images 157.

⁴³Misc. 581.

⁴⁴The Protestant Era, p. 100, 101.

⁴⁵ibid., p. 101

⁴⁶ibid.

⁴⁷ibid.

⁴⁸"Of the Prejudices of the Imagination", N.S., p. 703.

⁴⁹The Protestant Era, p. 101.

⁵⁰ibid., p. 103.

⁵¹Covenant of Redemption: "Excellency of Christ", Faust and Johnson, op. cit., p. 373.

⁵²O.S., p. 399. Here he quotes John Taylor approvingly.

⁵³D.S., p. 481.

⁵⁴Robert C. Smyth, "Jonathan Edwards' Idealism", American Journal of Theology, Vol. 1, Oct. 1897, p. 958.

⁵⁵John Lewis and Bernard Towers, Naked Ape or Homo Sapiens?, p.

75. However, the difference between man and his natural environment has to be something other than simply his ability to dominate it. If this were the case there could be no constraint on his action in the natural world. The fact that the natural world is characterized by morality and that all man's actions respecting it are moral actions provides this constraint.

⁵⁶ Barbara Ward and René Dubos, Only One Earth, p. 213.

⁵⁷ ibid., p. 145.

⁵⁸ ibid., p. 219.

⁵⁹ ibid., p. 213.

⁶⁰ ibid., p. 46.

⁶¹ ibid., p. 114.

⁶² ibid., p. 46.

⁶³ T.V., p. 137 c.

⁶⁴ Ward and Dubos, op. cit., p. 217.

⁶⁵ ibid.

⁶⁶ ibid., p. 45.

⁶⁷ ibid.

⁶⁸ ibid., p. 219.

BIBLIOGRAPHY

Collected Works by Edwards

The Works of President Edwards. Ed. Sereno E. Dwight. 10 volumes. New York: G. & C. & H. Carvill. 1830.

The Works of President Edwards. A reprint of a London edition of 1817. Eds. Edward Williams and Edward Parsons. 10 volumes. New York: Burt Franklin. Research and Source Work Series No. 271. 1968.

Additional Works by Edwards

A Treatise on Grace in Selections from the Unpublished Writings of Jonathan Edwards of America. Ed. A. B. Grosart. Edinburgh: 1865.

An Unpublished Essay of Edwards on the Trinity. Ed. G. P. Fisher. New York: 1903.

Charity and its Fruits. Ed. Tryon Edwards. New York: Robert Carter and Brothers. 1856.

Freedom of the Will. Ed., with introduction, Paul Ramsey. New Haven: Yale University Press. 1948.

Images or Shadows of Divine Things. Ed., with introduction, Perry Miller. New Haven: Yale University Press. 1948.

Jonathan Edwards: Representative Selections. Ed., with Introduction, Bibliography and Notes. Clarence H. Faust and Thomas H. Johnson. New York: American Book Company. 1935.

Notes on the Mind. The Philosophy of Jonathan Edwards From His Private Notebooks. Ed. Harvey G. Townsend. Eugene: University of Oregon Press. 1955.

Original Sin. Ed., with introduction, Clyde A. Holbrook. New Haven: Yale University Press. 1970.

Religious Affections. Ed., with introduction, John E. Smith. New Haven: Yale University Press. 1959.

Books About Edwards

Cherry, Conrad. The Theology of Jonathan Edwards: A Reappraisal. Garden City: Doubleday. 1966.

Delattre, Roland Andre. Beauty and Sensibility in the Thought of Jonathan Edwards. New Haven: Yale University Press. 1968.

Elwood, Douglas J. The Philosophical Theology of Jonathan Edwards. New York: Columbia University Press. 1960.

McGiffert, Arthur Cushman. Jonathan Edwards. New York: Harper. 1932.

Miller, Perry. Errand into the Wilderness. Cambridge: Harvard University Press. 1956.

Miller, Perry. Jonathan Edwards. New York: Meridian Books. 1959.

Townsend, Harvey G., Ed. The Philosophy of Jonathan Edwards From His Private Notebooks. Eugene: University of Oregon Press. 1955.

Winslow, Ola Elizabeth. Jonathan Edwards. New York: Macmillan. 1940.

Allen, Alexander V.G. Life and Writings of Jonathan Edwards. Edinburgh: T. & T. Clark. 1889.

Articles About Edwards

Aldridge A. Owen. Edwards and Hutcheson. Harvard Theological Review 44:1 (1951) 35-53.

Alexis, Gerard T. Jonathan Edwards and the Theocratic Ideal. Church History 35:3 (1966) 328-343.

Anderson, Wallace E. Immaterialism in Jonathan Edwards Early Philosophical Notes. Journal of the History of Ideas 25:2 (1964) 181-200.

Faust, Clarence H. Jonathan Edwards as a Scientist. American Literature 1:(1929-30) 393-404.

Holbrooke, Clyde A. Edwards and the Ethical Question. Harvard Theological Review 60:2 (1967) 163-175.

- Johnson, Thomas H. Jonathan Edwards' Background of Reading. Publications of the Colonial Society of Massachusetts 28 (1931).
- McCook, Henry C. Jonathan Edwards as a Naturalist. Presbyterian and Reformed Review 1 (1890).
- Nichols, James H. Perry Miller's Jonathan Edwards. Church History 20:4 (1951).
- Rupp, George. The 'idealism' of Jonathan Edwards. Harvard Theological Review 62:2 (1969).
- Schaefer, Thomas A. Jonathan Edwards' Conception of the Church. Church History 24:1 (1955).
- Smyth, Egbert C. The 'New Philosophy' Against Which Students at Yale College Were Warned in 1714. Proceedings of the American Antiquarian Society N S 10 (1896).
- _____. Jonathan Edwards' Idealism. The American Journal of Theology 1 (1897).
- Suter, Rufus. Jonathan Edwards: An American Pascal. Scientific Monthly 68 (1949).
- _____. The Strange Universe of Jonathan Edwards. Harvard Theological Review 54:2 (1961).
- Tufts, James H. Edwards and Newton. The Philosophical Review 49 (1940).
- Whitemore, Robert C. Jonathan Edwards and the Theology of the Sixth Way. Church History 35 (1966).

Other Books Used or Cited

- Bonafazi, Conrad. A Theology of Things. A study of man in his physical environment. New York: J. B. Lippincott Co. 1966.
- Bonhoeffer, Dietrich. Ethics. New York: Macmillan. 1965.
- _____. Letters and Papers from Prison. Eberhard Bethge. Ed. London: S. C. M. Press. 1956.
- Bronowski, J. The Identity of Man. Garden City: Natural His-

tory Press. 1971.

Brunner, Emil. The Christian Doctrine of Creation and Redemption. Dogmatics Vol. 2. London: Lutterworth Press. 1952.

Burt, Edwin Arthur. The Metaphysical Foundations of Modern Physical Science. A Historical and Critical Essay. London: Routledge and Keegan Paul. 1932.

Calvin, John. Commentary on the Book of Psalms. Vol. 1. James Anderson Tr. Edinburgh: 1845.

_____. Commentary on the Epistles of Paul the Apostle to the Corinthians. Vol. 1. John Pringle Tr. Edinburgh: 1849.

_____. Commentary on the Epistle of Paul the Apostle to the Romans. John Owen Tr. Edinburgh: 1849.

_____. Institutes of the Christian Religion. John T. McNeil Ed. Philadelphia: Westminster Press. 1960.

Coplestone, Frederick. A History of Philosophy. Vol. 5, Part I. New York: Image Books. 1964.

Cox, Harvey. The Secular City. New York: MacMillan. 1965.

Cragg, Gerald R. Ed. The Cambridge Platonists. New York: Oxford University Press. 1968.

Cudworth, Ralph. The True Intellectual System of the Universe. London: 1678.

Dillenberger, John. Protestant Thought and Natural Science. Garden City: Doubleday. 1960.

Dubos, René. Man, Medicine and Environment. New York: New American Library. 1969.

Elder, Frederick. Crisis in Eden. New York: Abingdon. 1970.

Gill, David M. Ed. From Here to Where? Technology, faith and the future of man. Geneva: World Council of Churches. 1970.

Johnson, Aubrey R. The One and the Many in the Israelite Conception of God. Cardiff: University of Wales Press. 1961.

- The Vitality of the Individual in the Thought of Ancient Israel. Cardiff: University of Wales Press. 1961.
- Kohn, Jacob. Evolution as Revelation. New York: Philosophical Library. 1963.
- Lewis, John. Towers, Bernard. Naked Ape of Homo Sapiens? New York: Humanities Press. 1969.
- Locke, John. An Essay Concerning Human Understanding. London: 1841.
- Macquarrie, John. Three Issues in Ethics. New York: Harper. 1970.
- Meland, Bernard. The Realities of Faith: The Revolution in Cultural Forms. New York: Oxford University Press. 1962.
- Michaelson, Carl. The Hinge of History. New York: Scribners. 1959.
- The Rationality of Faith. New York: Scribners. 1963.
- Miller, Perry. Johnson, Thomas H. The Puritans. New York: American Book Company. 1938.
- Morison, Samuel Eliot. The Intellectual Life of Colonial New England. New York: New York University Press. 1956.
- Nicholson, Marjorie Hope. Newton Demands the Muse. Newton's Opticks and the eighteenth century poets. Princeton: Princeton University Press. 1946.
- Niebuhr, Reinhold. The Nature and Destiny of Man. Vol. 2. Human Destiny. New York: Scribners. 1964.
- Manique, John. Energy in Evolution. London: The Gladstone Press. 1969.
- Richardson, Herbert. Toward an American Theology. New York: Harper. 1967.
- Riley, Isaac Woodbridge. American Philosophy: The Early Schools. New York: Dodd Mead and Company. 1907.

_____ American Thought: From Puritanism to Pragmatism. New York: 1915.

Robinson, John A. T. Honest to God. London: S. C. M. Press. 1963.

Santmire, H. Paul. Brother Earth. Nature, God, and Ecology in Time of Crisis. New York: Thomas Nelson. 1970.

Schleiermacher, Frederick. The Christian Faith. MacIntosh, H. R., Stewart, J. J. Eds. Edinburgh: T. & T. Clark. 1928.

Shiner, Larry. The Secularization of History. New York: Abingdon Press. 1966.

Smith, Harry E. Secularization and the University. Richmond: John Knox Press. 1968.

Stefferdud, Alfred. Ed. Christians and the Good Earth. F. M. N. Group. Alexandria, Virginia, N. D.

Stone, Glenn C. Ed. A New Ethic for a New Earth. New York: Friendship Press. 1971.

Swing, Albert Temple. The Theology of Albrecht Ritschl. New York: Longmans Green & Co. 1901.

Teilhard, Pierre. The Phenomenon of Man. London: William Collins Sons & Co. 1959.

_____ The Future of Man. London: William Collins Sons & Co. 1964.

Thorpe, W. H. Biology and the Nature of Man. London: Oxford University Press. 1962.

Tillich, Paul. Biblical Religion and the Search for Ultimate Reality. Chicago: University of Chicago Press. 1955.

_____ Systematic Theology. Chicago: University of Chicago Press. 1963.

Vajta, Vilmos. Ed. The Gospel and Human Destiny. Minneapolis: Augsburg Publishing House. 1971.

Wendel, François. Calvin: Origins and Development of His Religious Thought. New York: Harper. 1963.

- White, Hugh C., Jr. Christians in a Technological Era. New York: Seabury Press. 1964.
- Wilders, Norbert Max. An Introduction to Teilhard de Chardin. London: William Collins Sons & Co. 1968.
- Wright, G. Ernest. The Biblical Doctrine of Man in Society. London: S. C. M. Press. 1954.

Other Articles Used or Cited

- Acton, H. B. Idealism. The Encyclopedia of Philosophy. Paul Edwards. Ed. New York: Macmillan. 1967.
- Anderson, B. W. Creation. The Interpreter's Dictionary of the Bible. New York: Abingdon. 1962.
- Birch, Charles. Purpose in the Universe: A Search for Wholeness. Zygon 6:1 (1970).
- Birch, L. C. Creation and the Creator. The Journal of Religion 37:2 (1957).
- Dantine, Wilhelm. Creation and Redemption III: Attempt at a Theological Interpretation in the Light of the Contemporary Understanding of the World. Mid Stream 4:2 (1964).
- Derr, Thomas Sieger. Man Against Nature. Hidden Assumptions in the Argument Over Environmental Control. Cross Currents 20:3 (1970).
- Evdokimov, Paul. Nature. Mid Stream 4:2 (1964).
- Hoagland, Hudson. Reflections on the Purpose of Life. Zygon 6:1 (1970).
- Hornberger, Theodore. The Date, the Source and the Significance of Cotton Mather's Interest in Science. American Literature 6. (1934).
- Keller, James A. Types of Motives for Ecological^{log} Concern. Zygon 6:3 (1970).
- Lampe, Geoffrey W. H. The New Testament Doctrine of Ktisis. Mid Stream 4:2 (1964).

Livingston, James C. The Ecological Challenge to Christian Ethics. The Christian Century 88:48 (1971).

Mossner, Ernest C. Matthew Tindal. The Encyclopaedia of Philosophy. Paul Edwards. Ed. 8. New York: Macmillan. 1967.

Osborne, Robert T. A Christian View of Creation for a Scientific Age. Religion in Life 44:1 (1972).

Schilling, Harold K. A Contemporary Macedonian Plea. Union Seminary Quarterly Review 18:2 (1963).

Sinnott, Edmund W. Biology and Spiritual Values. The Journal of Religion 36:3 (1956).

Sittler, Joseph A. Called to Unity. The Ecumenical Review 14:2 (1962)

Study Document. God In Nature and History. New Directions in Faith and Order. Bristol 1967. Faith and Order Paper No. 50. Geneva: World Council of Churches. 1968.

Unpublished Material

Holbrook, Clyde A. The Ethics of Jonathan Edwards. Unpublished Ph.D. dissertation, Yale University. 1944.

Watts, Emily Stipes. Jonathan Edwards and the Cambridge Platonists. Unpublished Ph.D. dissertation, University of Illinois. 1963.