

BESHARA

ISSUE 6

SUMMER 1988

KATHLEEN RAINE	The Puer Eternis
PETER YOUNG	The New
JOHN BARROW	The New Cosmology
WILLIS HARMAN	For a New Society, A New Economics

plus the Global Survival Conference, The Visit of the Dalai Lama, Stephen Hirstenstein on The Abrahamic Tradition, dom Sylvester Houédard on Meister Eckhart, Richard Twinch on Paul Davies' 'The Cosmic Blueprint', reviews of books on Zen and Science, Visual Islamic Arts at the Royal College of Art and more . . .

£1.75

\$4.00

Ismail Hakki Bursevi's
translation of and commentary on

FUSUS AL-HIKAM

by Muhyiddin Ibn 'Arabi



rendered into English by
BULENT RAUF
with the help of R. Brass and H. Tollemache

The Fusus al-Hikam is one of Ibn 'Arabi's most important works. It consists of twenty-seven chapters, each treating a unique aspect or 'bezel' of the Divine Wisdom as exemplified in a particular prophet in the line from Adam to Muhammed.

Volume 2, just published, includes chapters on Noah, Idris (Enoch), Abraham, Isaac and Ishmael.

Volume 1, consisting of Ismail Hakki Bursevi's Introduction and chapters on Adam and Seth, is still available.

"This book is beyond ordinary measure. It is beyond the general run of mystical writings and it is more than just a book of meanings. It is to do with the very meaning of meanings, with the meanings, the realities and the knowledges of God..."

from Rosemary Brass's Foreword to Volume 2

Hardback £40.00
(including postage worldwide)

Available from all good bookshops and from the
Muhyiddin Ibn 'Arabi Society, 23 Oakthorpe Road, Oxford OX2 7BD, England

BESHARA

THE MAGAZINE OF THE BESHARA TRUST

Issue 6 Summer 1988

NEWS

2

Global Survival

The Global Conference of Religious and Parliamentary Leaders was held in Oxford in April.

4

The Visit of the Dalai Lama

A report on the nine day visit to the UK during April.



5

The Opening of the Samyé-Ling Temple

A traditional Tibetan temple will open in the Scottish border country in August.

6

Swedenborg's Tricentenary

7

Terra Sancta

Stephen Hirtenstein considers the Abrahamic Tradition

Regular Features

Letters	25
Beshara Trust News	37
Notes on Contributors	38

FEATURES

9

The Puer Eternis

Kathleen Raine discusses the meaning of this archetypal figure and the contribution of Jung to modern thought.

13

The New

Peter Young

14

For a New Society, a New Economics

Dr Willis W. Harman, President of the Institute of Noetic Sciences, California, considers the great changes taking place in the global economy.

19

The New Cosmology

Dr John Barrow reveals the latest scientific ideas on the expanding Universe, whether the universe is infinite or finite, and *Creatio ex Nihilo*.

REVIEWS

26

BOOKS

The Cosmic Blueprint

by Paul Davies

Reviewed by Richard Twinch

New Books on Meister Eckhart

dom Sylvester Houéard

Books on Zen

Martin Notcutt

New Books on Science

Jane Clark

Islamic Art and Spirituality

by S. H. Nasr

Reviewed by Layla Shamash

Temenos 9

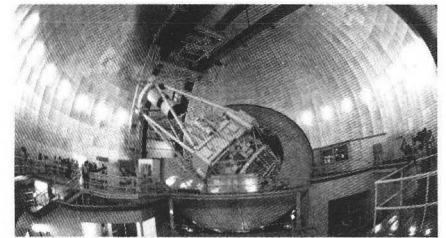
Christine Hill

35

EXHIBITIONS

Visual Islamic Arts

Richard Twinch reviews this year's degree show at the Royal College of Art.



The world's most advanced telescope, the Anglo-American (AAT) at Sidney Spring, New South Wales, Australia. Photograph by Jamie Shepherd.

BESHARA

24 Sidney Street, Oxford OX4 3AG.

Telephone: Oxford (0865) 243406

Fax: Oxford (0865) 722103

ISSN 0954-0067

EDITOR: Jane Clark.

ASSISTANT EDITORS: Alison Yiangou, Cecilia Twinch.

ART EDITOR: Lesley Abadi

ILLUSTRATIONS: Julia Dry, Ruth Kenner, Evelyn Morrison

ADMINISTRATION: Judy Keams

COVER DESIGN: Lesley Abadi after a painting by Mondrian

BESHARA is published by the Beshara Trust, a registered educational charity, No.296769.

Copyright on all articles is held by The Beshara Trust. Permission for multiple photo-copying and reprinting is required.

NEWS

GLOBAL SURVIVAL

Religious and political leaders acknowledge dependence and stewardship.

by Martin Notcutt

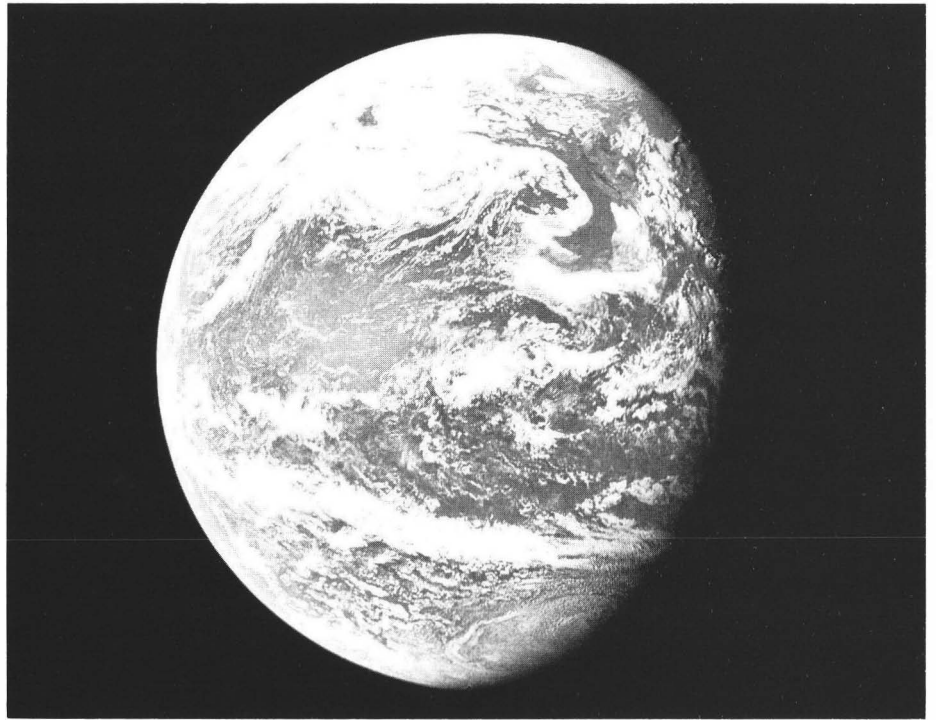
Sometimes I call our planet 'mother', said the Dalai Lama. "Because of the planet we human beings came into existence. Now it seems as though our mother is telling us, 'My children, my dear children, behave in a more harmonious way. My children, please take care of me.'

"We are approaching the next century, the 21st century. I feel it is extremely important to seriously consider long-term benefit rather than short-term interest. I think our time has come to think very carefully about this matter.

"When we talk about global crisis, or a crisis of humanity, we cannot blame a few politicians, a few fanatics or a few troublemakers. The whole of humanity has a responsibility because this is our business, human business. I call this a sense of universal responsibility."

The Dalai Lama was speaking at the Global Conference of Spiritual and Parliamentary Leaders on Human Survival, which was held in Oxford from 11-15th April, 1988. The culmination of more than 6 years work by the Global Forum of Spiritual and Parliamentary Leaders on Human Survival, it brought together 200 religious and political representatives from 56 countries. Delegates included well known figures such as The Archbishop of Canterbury, Mother Teresa of Calcutta, the astrophysicist Carl Sagan, Dr Evguenij Velikhov of the Soviet Academy of Sciences and the Secretary-General of the United Nations, Pérez de Cuéllar. They also included Sheikh Ahmed of Kuftaro, the Grand Mufti of Damascus, Dr Karen Singh (the founder of the Virat Hindu Samaj in New Delhi) and a party from the Hoppi Nation in Arizona.

The conference consisted of a series of



The Earth as seen from above the Pacific Ocean. Taken by returning Apollo 2 astronauts.

plenary sessions, addressed by speakers on various themes. These were followed by working sessions during which delegates divided into groups to discuss the issues. During the fourth and fifth plenary sessions, a final statement of aims and intent was jointly drawn up.

CHANGE WAY OF DOING

Carl Sagan's contribution was to spell out some biological aspects of the crisis. According to him, the threat to human survival has three main sources: the growth of man's powers in the physical world, the pressure of expanding human populations, and above all the ignorance or indifference of people. Sagan detailed some of the threats to life that come just from our ordinary collective activities of seeking to keep warm, eat, travel, etc. These now make a much greater impact on the environment than they did before. Of the nuclear arms race he said, "The United States and the Soviet Union have booby-trapped the world with 60,000 nuclear weapons..."

"The visions we present to our children *shape* the future. Our children (and we ourselves) long for realistic maps of a future that they and we can be proud of. Where are the cartographers of human

purpose?

"What we must do now is well within our power, but it cannot be done merely by hoping. It requires serious changes, not just in our ways of thinking but in our way of doing. It requires political action."

IN THE SAME SHIP

Among the political delegates present were scientists from the Soviet Union, who stressed the importance of nuclear disarmament. They saw progress in that direction being achieved through the current negotiations between governments. However this had to be extended by the mobilisation of a worldwide intellectual potential.

Valentino Tereshkova, the Soviet cosmonaut said, "Human beings had to break out into space to realise how beautiful is their cradle, planet Earth. But it is small, fragile and defenceless as well. While in space one tends to think about the Earth. It comes in the images of people who are near and dear, our kin and kith, who incarnate for each and every one of us the nucleus of People, Motherland, Humanity.

"These moral values are recognised by all people regardless of their race, political conviction and religious beliefs. We

can preserve those values only by pooling our efforts, by seeing ourselves as a crew of one spaceship – planet Earth.”

SHARED CONCERNS

Several delegates pointed out that this conference was not an isolated event. Mention was made of the gatherings in Assisi in 1986, where the spiritual heads of all the world's faiths met, and of the first meeting of the World Congress of Faiths, convened by Sir Francis Younghusband in Oxford in 1937.

One contribution came from a group called The InterAction Council. This has been created with some 30 members from East, West, North and South, all of whom have at one time been national leaders; it is currently led by Helmut Schmidt of West Germany. They recognise that although many political leaders are trying their best for world peace, they are limited by their own positions, being preoccupied with daily tasks and solving short-term problems. Thus the Council seeks to draw on the accumulated experience of former presidents and prime ministers who are free to take a wider view.

Takeo Fukuda, a former prime minister of Japan, reported that in March 1987 the Council had organised in Rome a meeting of political leaders with leaders from the world's five major religions. “In that meeting, it was confirmed that there are an astonishing number of areas that are of mutual concern to the political and religious circles. We are, of course, committed to expand and further develop this cooperative relationship.”

THE CENTRALITY OF SPIRIT

The Archbishop of Canterbury, Dr Robert Runcie, spoke on the first day of the conference. What he said went beyond the acknowledged need for common social action to that which is more essential, and which will therefore bring action about. “We live in a world society which desperately seeks some measure of world community in order to survive. What spiritual resources can be brought to bear upon this situation?”

“First, and most self-evidently, we can bring our faith, that is, our awareness of the transcendent. We must regard this, whatever its source, as an essential constituent of being human, and recognise that all religious traditions affirm the

spiritual nature of humanity and recognise the ‘divine spark’ in all human beings...”

“We must learn to affirm together the centrality of the spiritual in our various traditions, and that the unity of all human beings is grounded in an ultimate unity which is greater than the recognition of it in each of our traditions...”

“We need, as never before, to share our different spiritualities with each other. Our world is in danger of being pervaded by a widespread pessimism about the future of humankind. There is a diminished sense that our problems can be resolved by technology alone or political utopias alone. We are confronted by a search for meaning in the human enterprise, the need for reconciliations, for greater compassion, for justice and for a celebration of life in all its wholeness. These are deeply religious themes...”

“We need to maintain the value, the preciousness of the human by affirming the preciousness of the non-human also – of all that is. For our concept of God forbids the idea of a cheap creation, of a throw-away universe in which everything is expendable save human existence. The whole universe is a work of love. And nothing which is made in love is cheap. The value, the worth of natural things is not found in Man's view of himself, but in the goodness of God who made all things good and precious in his sight. Common action on moral and ethical matters begins in what we believe the world to be, in who made it and why...”

“I believe that people of all faiths share sufficient common ground to recover for human kind two necessary qualities for our survival. The first is reverence... The second and related quality necessary for survival is cooperation.”

NO STOPPING PLACE

There were certain recurrent themes in the conference. One was the image of the Earth seen from space, which has done so much to precipitate the sentiment for the world as one world. Another was the need to begin from what people love, and to draw upon the capacity to extend that love. Another was for the need to listen – to be actively receptive, and respond in service. Because of the particular composition of this conference, this response was most often expressed as social action. Nonetheless with his final words Dr Runcie indicated what is really meant by listening (and by social action):

“Our commitment to reverence and cooperation would provide the sure foundation for our future responsibility together in both spiritual and political leadership. I pray that you approach this time together with expectation and a readiness to listen as well as to say your piece. Meister Eckhardt, the mystic, said centuries ago:

“There is no stopping place in this life. No, nor was there ever one for anyone – no matter how far along the way they've come. This then, above all things: Be ready for the gifts of God and always for new ones.”

For Global Survival

The participants in the Conference drew up a final statement called ‘For Global Survival’, which included the following:

“We recognise that it is not only human survival but the survival of the whole planet, with all its interdependent forms of life, which is threatened... Each of us must accept the responsibility to care for and protect the earth, which is our home.

“We have derived from our meeting a vivid awareness of the essential oneness of humanity, and also the realisation that each human person has both a spiritual and a political dimension. We acknowledge the inadequacy of atti-

tudes and institutions within all our traditions to deal with our present global crisis.

“We therefore now affirm our shared vision of survival, and we commit ourselves to work for a fundamentally changed and better world. We urge the leaders of the world to adopt new attitudes and to implement new policies based on sustainability and justice.”

The Global Forum now has a permanent office in New York and a council of 35 members. It is anticipated that there will be another conference, perhaps after five years, to review the results achieved by this first collaboration.

The Visit of the Dalai Lama

Britain was honoured to receive a visit from His Holiness the XIVth Dalai Lama of Tibet in April 1988. Despite the obsession of the press with the political implications of the nine day visit, its main purpose was a pastoral one – to give Buddhist teachings and to address the Global Forum of Spiritual and Parliamentary Leaders in Oxford. He also spent time with the Archbishop of Canterbury as part of their continuing inter-faith dialogue.

This pastoral intention, which he upheld at press conferences and in television interviews, is in line with the role of the Dalai Lama as a spiritual leader and head of the Tibetan Buddhists. He is also a political leader in exile, and his concentration on spiritual matters was taken by some parties as a diplomatic ploy to avoid upsetting the British government, who are anxious not to jeopardise their policy of appeasement towards China. Yet, whilst his position as temporal leader carries a weighty responsibility towards the plight of his people, who look to him specifically for the relief of oppression in their country, it seems that the spiritual importance is always put first. In this role his aim is to promote compassion for all sentient beings, to increase understanding, peace and harmony in the world, to serve all humanity and not to set one cause against another.

Rajmohan Gandhi, eminent journalist and grandson of Mahatma Gandhi wrote of him: "Not only does he see the world as one, he sees it as one family, where each ought to care for all and all for each. There are others who have enunciated impressive theories about the unity of humanity. But when they meet human beings their thoughts seem elsewhere. Their concern is for mankind in the abstract, not for individual persons! His Holiness is different. The individual in front of him gets all his attention."

At a news conference in London towards the end of his stay, the Dalai Lama reiterated the spiritual purpose of his visit and spontaneously spoke about the convergence of spiritual and scientific development. He said that from his meetings with



The Dalai Lama presents a Tibetan prayer scarf to the Archbishop of Canterbury at Lambeth Palace. Photograph by Simon Townsley, courtesy of The Daily Telegraph.

people from the fields of physics, psychology, biology and the new cosmology, he had come to see that "scientific findings and Buddhist explanations are complementary". He feels that an awareness of the importance of consciousness and the inner world is increasing along with the deepening knowledge of external matters.

The relationship of scientific and spiritual development was raised again in a televised interview with Bernard Levin (BBC2 April 24th), when the Dalai Lama stressed the importance of paying attention to the inner world and making an equal effort to develop it along with the outer world in a more balanced way. By the inner world he referred to basic human needs and 'good qualities' such as compassion and altruism. He said that there is nothing wrong with science and technology in themselves since they are a human necessity but "human values must be above all these factors".

In the same interview, he made the point that national boundaries have been broken down by the interlinking of the world economy so that, in order to understand our own position, we have to consider the entire global economic condition. Similarly, "when we think about the benefit of humanity, we have to think about entire humanity. We cannot stop at one particular nation or one particular

continent". He gave the example of a hand where the different fingers represent science, technology, money, politics, even religion. Whilst the palm of the hand can function in a limited way without the fingers, the fingers are entirely dependent on the palm which is likened to humanity and the respect of human values. The fingers only have meaning in so far as they benefit humanity as a whole.

Whilst fulfilling his responsibilities as a religious leader in explaining and sharing his experience of Buddhism, he says that he does "not think of converting others to Buddhism or merely furthering the Buddhist cause." He has often pointed out the fundamental similarities between world religions (such as the basic precept of unselfishness) but he says he does not advocate one particular religion at the expense of all others, nor does he seek a new 'world religion'. "We cannot hide the doctrinal differences that exist among various faiths, nor can we hope to replace the existing religions by a new universal belief". He maintains, however, that "whether one believes in religion or not, there is no one who does not appreciate love and compassion."

The precedence he gives to the feeling of humanity and respect of human values could lead one to assume that he is a

humanitarian and no more, and to wonder where God comes in. 'God' is not easily translated into Buddhist terms since any concept of God is regarded as a hindrance to truth. However, the teachings he gave at the Westminster Central Hall on April 6th - 8th bore witness to his deep spirituality. He spoke, through an interpreter, of the emptiness of mental phenomena, saying that "the only thing that exists is ultimate truth". He emphasised the importance of properly understanding what emptiness is and explained that in order to be protected from falling into nihilism, emptiness is to be understood in terms of 'dependent origination'. From the point of view of ultimate truth, all phenomena are uniform in terms of non-existence and the multitude is spoken of from the point of unity, or 'single taste'.

Wisdom is to be achieved through emptiness since that non-conceptual state eliminates delusion, so that only uncontaminated wisdom or clear light remains. Through vigilance and 'mindfulness' our minds can be brought to such a subtle level that there is no possibility of distraction arising: "in a system where emptiness is possible, anything is possible".

As far as the various religions are concerned, the Dalai Lama recommends that it is better not to concentrate on the differences of dogma which may be ascribed to differences of time and circumstance as well as cultural influences, for "although we can find causes for preferring certain interpretations of religious truth, there is much greater cause for unity, stemming from the human heart". Whilst acknowledging the need for the variety of religions, the Dalai Lama does not appear to confine spirituality to religion since he emphasises the importance of love and compassion which is irrespective of belief and beyond all mental concepts of God. It indicates sheer Being which is known of itself directly and experienced as compassionate love.

"The most important thing," he says, "whether for the believer or the non-believer, is love and compassion – this is the universal religion." This approach is not towards the unification of religions but from the essential unity where all religions and beliefs originate and on which they depend. The nature of this dependency can only be understood by realising fully what it is to be human.

Cecilia Twinch

The Opening of the Samyé-Ling Temple



The Samyé Temple, still under construction in June 1988. Courtesy of Samyé-Ling.

This summer sees a remarkable event – the opening of a traditional Tibetan Temple in the Borders of Scotland. The Temple, which has been built at the Samyé-Ling Buddhist Centre at Eskdalemuir, will be officially opened on 8th August by the Rt. Hon. David Steel, MP, and is the culmination of more than ten years' work. It is intended as a spiritual resource for both Buddhists and non-Buddhists and the opening celebrations, which began on July 15th and continue until mid-August, reflect this wide intention; as well as official ceremonies, they include an Arts Festival with contributions from both Eastern and Western sources and a three-day Inter-Faith Symposium which will draw together representatives from all the major religions – the first such event to be held by the Tibetan Buddhists.

The Temple is only the first phase of the larger Samyé-Ling Project, which will take twenty years to complete and eventually provide Europe with its largest Buddhist temple and study centre, including lecture, therapy and translation rooms and two libraries – one for English works and one for Tibetan.

The joint founder and present head of Samyé-Ling, the Venerable Akong Rinpoche, says of the project, "The whole purpose ... is to blend Tibetan and Western traditions of study and practice, so that they are no longer contradictory but rather, complement each other and provide a basis for the growth of spiritual understanding between nations and cultures".

Samyé-Ling was founded in 1967 by Dharma Akong Rinpoche and Vajracarya Trungpa Rinpoche, who had settled in England after they were forced to flee Tibet in 1959. It was the first Tibetan centre to be founded in the West and they named it after 'Samyé', which was the first Buddhist monastery and study centre to be firmly established in Tibet in the 8th century.

The Centre presented, for the first time, the Mahayana and Vajrayana Buddhism to a wide range of people in the West and has seen a great surge of interest in Buddhism in general; there are now over 200 Buddhist centres in the UK alone, including Zen and Theravada. The main teaching followed at Samyé-Ling is the Kagyu tradition, one of Tibet's four main schools whose head is His Holiness the Gyalwa Karmapa. (The Dalai Lama is head of one of the other main schools, the Geluk school.) Akong Rinpoche is the head of studies – Trungpa Rinpoche having left within a few years to complete his life's work in America – and many wise and eminent teachers from all over the world have visited to take courses.

The Centre now houses a small monastic community and offers retreat to both Buddhists and non-Buddhists, with over 10,000 people visiting each year. There is a programme of study, meditation and practical work in the vegetable gardens, the farm and the dairy.

Samyé-Ling has also become a centre of artistic excellence. One of Tibet's greatest art masters, Sherab Palden Beru joined the centre near the beginning of its

life, and he continues to work and train others in the art of Thangka Painting (religious paintings done on canvas or silk). There are workshops for wood-carving, sculpting, gilding, carpet-making, printing and pottery.

The practice of these traditional arts is not only to preserve and pass on the rich heritage of Tibet; it is also to the benefit of all humanity through the development of compassion. The Venerable Akong has said, "Even the animals are able to provide shelter and food for their young. You, as human beings, must do more than this. You must find a way to work and express the fullest human potential of which you are capable, for the benefit of others. You can do this – anybody can – if you keep trying and don't give up. It doesn't matter what things you make or do, as long as you use your human intelligence".

The Temple has provided a great challenge in the understanding of compassion through creative hard work and coopera-

tion. Nearly all the work, including the major construction and services, has been carried out by volunteers and the project has been sponsored entirely by donation. The temple itself consists of a Shrine room, accommodation for visiting Lamas, including an audience room, and a room to house relics. Inside, it is beautifully and richly decorated in vibrant colours. There are elaborately carved pillars encrusted with gold, 400 silk-screen prints of dragons and mythological birds adorning the vast ceiling, whilst 1000 golden Buddha statues look down over all. Fourteen huge *Thangkas* depicting key figures in Buddhist history flank the walls.

All four of the current highest teachers of the Kagyu tradition will be present simultaneously for at least some part of the opening ceremonies, which end on August 18th. The first two weeks of the celebrations are taken up mainly with Bud-

dhist commemorations and initiations, with the consecration of the Temple taking place on July 24th. The weekends of 30-31st July and 6-7th August are devoted to an Arts Festival. The opening ceremony itself on August 8th is expected to be attended by around 2,000 people.

The three day inter-denominational symposium, beginning on August 15th, will be entitled "Compassion Through Understanding" in line with the overall aim of Samyé-Ling. Representatives from Christianity, Judaism, Islam and Hinduism will meet with teachers from the Buddhist tradition for a conference which will be open to the public on August 17th. Speakers include The Khenpo Tai Situpa, Patriarch of the Karma Kagyu; Dom Sylvester Houédard, Benedictine monk from Prinknash Abbey; Mr Mahuk Ally, first holder of the Prince of Wales readership in Islamic Studies at Lampeter College; and Peter Young, Director of the Beshara School of Intensive Esoteric Education. *Jane Clark*

Swedenborg 300th Anniversary

This year marks the 300th anniversary of the birth of one of Sweden's most remarkable sons. Born into the age of science (in the year following the publication of Newton's 'Principia') Swedenborg (1688-1772) was himself an eminent scientist. He published over 70 scientific treatises and his discoveries laid the foundations for the sciences of metallurgy and crystallography. Contradicting the theories of his leading contemporaries, he anticipated many later findings such as the wave motion of light, the molecular basis of magnetism, the nebular origin of planetary systems, and the nature of the atom. He wrote in 1746,

"Divine Providence has ruled the act of my life since my youth...so that by means of the knowledge of natural things (through science) I might be able to understand the things which lie deeply concealed in the Word of God, and thus serve as an instrument of laying them bare."

Even in his early philosophical physics of elementary particles and vibrations he postulated an infinitely energetic, all-pervasive Source, contrary to the developing physics and medical science of his day and later.

"Behold and see how small a speck thou art in the system of heaven and earth; and in thy contemplations remember this, that if thou wouldst be great, thy greatness must consist in this – in learning to adore Him who Himself is the Greatest and the Infinite."

(Principia, 1734)

At the age of 56 Swedenborg experienced a powerful opening of consciousness that revealed to him inner worlds, changing the direction of his life:

"From that day I gave up the study of all worldly science, and laboured in spiritual things...so that in the middle of the day I could see into the other world, and in a state of perfect wakefulness converse with angels and spirits."

In the remaining 27 years of his life Swedenborg wrote many volumes of visionary theology, signing most of his books simply, "a servant of the Lord".

Swedenborg is best known in connection with William Blake, who adopted Swedenborg's terms and adhered to his doctrines throughout his Prophetic books. Blake said of Swedenborg that he was "a divine teacher", and his writings "the Universal Theology". Swedenborg was the first to speak of the New Age – a term

taken over by Blake – which he saw as an inner spiritual event whose meaning will gradually become apparent in the outer world (1).

The Swedenborg Society, whose purpose is to make the works of Swedenborg widely known in the present day, have arranged a programme of events throughout the country to mark the tricentenary, which will continue until the end of the year.

Hilary Williams

(1) The matter of the "Universal Theology" is treated in Kathleen Raine's masterly essay on Swedenborg, to be found in 'Blake and Swedenborg, Opposition is True Friendship'. Ed. Harvey F. Bellin and Darrell Ruhl and published by the Swedenborg Foundation.

Mind and Nature

Conference

World Conference for the Future of Human Civilisation

This week-long conference, which took place in Hanover, Germany, during May, attracted two thousand participants from all over the world. It was addressed by 60 speakers from disciplines as diverse as physics, music and philosophy, and by representatives of all the major religions. A full report in Issue 7.



Modern Jerusalem from the Mount of Olives. In the middle can be seen the Mosque of the Dome of the Rock and to the left the Al-Aqsa mosque.

Photograph by Adam Greene. Courtesy of the Britain/Israel Public Affairs Centre.

Recent events in Israel have highlighted once again the deep divisions which exist in the Middle East; divisions which widen with the sense of anger, despair and frustration that all parties seem intent on nursing. Coinciding with the 40th anniversary of the State of Israel on 14th May this year, its coming of age so to speak, amid the rumblings of the Palestinian intifada (uprising), many of the dreams

which inspired its inception have been given renewed expression – in particular the dream which is cherished by people on all sides as the ultimate goal in the Middle East. This is a vision of the land, not as Israel nor as Palestine, nor even as a binational state, but as a country where respect and honour is given to the rights of all who live there, a vision of Terra Sancta (the Holy Land).

Terra Sancta - The Abrahamic Tradition

A Comment by Stephen Hirtenstein

Within the context of the wider ecumenism that is beginning to develop globally, as evidenced by the meeting of world religious leaders at Assisi in 1986 and recent dialogues reported in BESHARA, it may seem increasingly inappropriate that there should continue to be such antagonism in the Middle East between great religious traditions which flow from the same source and venerate the same shrines. The city of Jerusalem, for instance, with the Dome of the Rock, is sacred to the Jews as the synthesis of all their past glories and their future hopes; to the Christians as the place of the Last Supper, the Crucifixion and the Ascension of Jesus; and to the Muslims who call

it simply *Al-Quds* (the Holy).

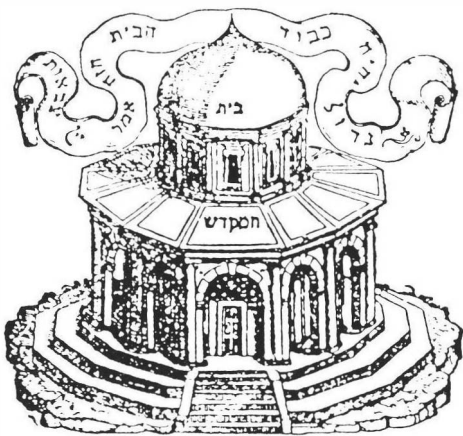
All three great religions of the West look back to the Patriarch Abraham as their father. Through his son Isaac has descended the line of Judaism and later Christianity; through the line of his elder son, Ishmael, has come Islam. Each of these spiritual streams runs in its own distinct course but they are linked by their origin and each has as its orientation a sacred site established by Abraham. For the Jews and the Christians this is Jerusalem, towards which all churches originally faced. For Islam, it is Mecca with the Black Stone of the Ka'ba which is the direction of the *mihrab* (niche of orientation) of all mosques.

The roots of the modern divergence and apparent incompatibility can be found in the Biblical and Quranic stories: Abraham and his wife Sarah were childless and without much hope of children as they were both old. One night, Abraham was taken from his tent and shown by God that his seed would be as numerous as the stars in the heavens. So, at Sarah's insistence, he took her Egyptian handmaiden, Hagar, as his second wife and she gave birth to his first son, Ishmael. Thirteen years later, Sarah, despite being over 90 years old, herself gave birth to and breastfed the second son, Isaac, who thus became the official heir.

As there was great difficulty between

the two mothers over the rights of inheritance. Sarah made Abraham send both Hagar and Ishmael away. The Biblical account, which basically tells the story of the Jewish line, reveals a jealousy and rivalry on both sides; yet it is known that both children were blessed by God and that both together buried their father in Hebron. What better example could there be of reconciliation? Now situated on what is called the West Bank, Hebron (which originally means 'confederacy') is considered the burial place of Abraham and Sarah, and also of Isaac, Jacob and Joseph. Yet as an Arab town in an essentially Arab area, many Israelis confess to being extremely wary of ever setting foot there and their presence is mainly military. Hebron today expresses the deep and seemingly insoluble problem of the Middle East – to whom does the land in fact belong? who has the right of inheritance?

When Abraham sent Ishmael and Hagar away, his natural distress at having to 'sacrifice' his child (an act which was to be repeated in the redemption of Isaac by the ram) was mitigated by God's assurance of his safety. So mother and son travelled south into the desert and were soon in dire need of water. Hagar called out to God and "God opened her eyes and she saw a well of water" (Genesis 21.20). This well, Zamzam, the counterpoint of



The Mount of the Rock on Mount Moriah in Jerusalem from the Hebrew tradition (c1545). The Dome of the Rock is a sacred site to all three Western religions: the traditional site of Abraham's sacrifice of the ram instead of Isaac, it was for many years the focus of all Jewish spirituality in the form of the Temple built by Solomon. It has been the place of prayer for many prophets, including both Jesus and Muhammad.

the wells that Isaac later opened in Canaan, became the site of the Ka'ba, the sacred building which was built by Abraham and Ishmael together when Abraham went to visit his son towards the end of his life, and whose eastern corner was built upon the celestial Black Stone which Abraham received from an angel.

The well at Zamzam was later covered over and forgotten until the time of Muhammad's grandfather, who was ordered to dig for it. Muhammad himself always insisted that the religion of Islam, which cast the idols out of the Ka'ba, was a return to the purity of the religion of Abraham, just as Jesus insisted that "...your father Abraham rejoiced to think that he would see my day; he saw it and was glad." (John 8.56)

So what is this tradition of Abraham to which both sides profess to belong and which provides the link between all our Western culture? In many ways, the Abrahamic line is the most profound source of Western civilisation, far more so than the Greek which many modern scholars promote as our distinctive origin. There are two fundamental principles which constitute the well-spring of humanity: first and foremost the tradition of monotheism, which lies at the heart of every culture in the world. In the West, since the time of Abraham, the Singularity of God has been more or less openly proclaimed, but it has often been understood as the doctrine of the One Transcendental Being, the 'jealous' God, who transcends all and will not tolerate the worship of any other being than Himself. Those who claim sole access to the truth have often appealed to this notion, and countless wars have been waged to prove their point.

But Unity does not necessarily imply an exclusivity of any kind. Just as the number one does not exclude all other numbers, but is the very principle of number itself (thus without 1 there could be no number 2 and so on), and so is to be found in every number, in the same way God does not exclude the reality of this world, since He is the only reality it has and He is to be found in all things.

A true understanding of the Unity of God implies an all-inclusiveness, where love predisposes to compassion. And this is the second great Abrahamic principle. It was said of Abraham that he loved his people and nowhere is this more clearly

demonstrated than on the occasion when he was told that Sarah was to have a son: his natural reaction was to become afraid for Ishmael because he knew of the law of inheritance. He prayed: "O that Ishmael might live before Thee!" and God promised him that Ishmael, too, would be blessed.

The Abrahamic heritage is precisely that unification that allows for divergence, and through whom it is blessed – a confederacy of equal partners which recognises that the difference in the streams has been determined by the lie of the land, not by the water in them.

If we are to be heirs to this tradition, our task must be to re-educate ourselves from the standpoint of the centre – the Unity which integrates and respects the different ways without being identified with merely one of them. Then perhaps we shall have made the quantum leap that physicists now tell us the world is making all the time.

And only then will the dream of *Terra Sancta* be realised; for the real *Terra Sancta* is not one specific place in this world but lies dormant in every place, waiting to be recognised in the temple of humility that houses the heart of man. For it is essentially a matter of 'cognition' or 're-cognition' that the world is itself sacred, a manifestation of the Divine, a veritable garden of Eden.

Muhyiddin Ibn 'Arabi, brought up in the medieval Spanish culture where the great streams of Judaism, Islam and Christianity coexisted in harmony, wrote:

***"O marvel! A garden amidst the flames!
My heart has become capable of every form:***

***It is a pasture for gazelles
And a convent for Christian monks
And a temple for idols and the pilgrim's
Ka'ba***

***And the tables of the Torah and the book
of the Quran.***

***I follow the religion of Love:
Whatever way Love's camels take,
That is my religion and my faith."***

*from the Tarjuman al-Ashwaq.
Poem XI. From the translation by R.A.
Nicholson, published by the Theosophical
Society, 1911, 1978.*



Frontispiece from Blake's 'Songs of Innocence', 1789

The Puer Eternus

by Kathleen Raine

These pages are part of a chapter on Jung taken from the fourth part of my Autobiography, to be published under the title 'Found at the Close'. The chapter is an acknowledgement of my indebtedness to Jung, but concludes with a passage on the puer eternus in which my own experience of the archetype is described. Although critical of what seems to me Jung's failure to understand this figure with the same fullness with which he has understood the anima, the 'shadow',

the 'trickster', the senex and others, I recognise that it is only in the context of Jung's contribution to thought on the world of the psyche that these things can be discussed at all. I am not a professional psychologist, nor in any way qualified to discuss Jung's thought in professional terms; but belong to a generation experiencing for the first time the opening of the long-closed door into the inner universe of Imagination, which Jung made possible.

The one archetypal presence that has accompanied me throughout my life as a poet – the *puer eternus* if such beings may be named – seems to me to have been misconceived by analytical psychology, Jungian practitioners, and Jung himself, read this numinous figure as representing an un-grown-up man, a state in fact of immaturity and imperfection. Yet pantheons – archetypes – are not concerned with the imperfect and the partial, but with eternal aspects of reality. True, any god, be it Apollo or Hermes or Aphrodite or Artemis or Athene or Hera, can present beneficent or destructive aspects according to the votary's attitude towards the particular archetypal reality. Ecstatic Dionysus ripped rational Pentheus to bits after all. This double aspect is understood likewise in the Tibetan Book of the Dead, as it was by Blake, whose mythological narratives (if narratives they may be called) are concerned with the harmonizing of the archetypal world which falls into confusion when the energies seek to usurp supremacy, which belongs only to 'Jesus the Imagination', the divine Presence in 'the eternal man'; in Eastern terms, the Self.

Jung, who with Kerényi wrote so beautifully of the child-archetype as entering or leaving this world, as a figure of the threshold between being and not-being, does not in that essay describe the child as an un-grown-up man! But the *puer eternus* is not the Babe of the Incarnation. The Infant Jesus – or any other Nativity-child – is another archetype, one of great beauty indeed; the infant who enters the world *multum in parvule*, through 'the innumerable centres of the birth of life', the mystic *punctum* of Boehme and Blake, through which the eternal enters time. So small, vulnerable and helpless, yet the Christ-child is being absolute. Profound and beautiful though that symbol is, it presents a different archetype from the figure of the *puer*. That youth lies in no mother's arms, nor is he born of any woman, but has a self-fulfilled perfection. Every archetype represents a total perfection; there could be no 'god' representing incompleteness or imperfection, as of a man who has failed to grow up, an immature adult.

Youth is itself an archetype, which I venture to suggest represents (in contrast with the archetype of the *senex*, or 'wise old man' to which Jung seems himself to have had an especial devotion or affinity) innate knowledge that owes nothing to

experience and yet is perfect: as Adam on the day of his creation. If the *senex* is knowledge of experience, the *puer* is the innate knowledge which inspires such poets as Shelley, the music of Mozart or Schubert, taught by none. To me the living presence of the *puer* has been my lifelong companion-daimon, my invisible instructor perfect in eternal youth and wisdom of a pre-sexual or trans-sexual kind. The Biblical figure of Elihu in the Book of Job, the Islamic figure of 'el Khidr', the young man who appears as guide and instructor (as the 'teacher' of Rumi was the beautiful youth Shams al-Din, a human mediator of that archetype) is something altogether different from the nativity-child or Eros the lover, the Lord Krishna with his flute-music that draws Radha from home and husband to meet the god in the forest of Brindavan.

Blake and Jung are at opposite poles in relation to this archetype: Jung's 'Philemon', the *senex*-figure who was his guide, is Blake's Urizen, blind and anxious personification of the rational mind, who in an emblem is shown clipping the wings of Youth. This youthful genius—an archetype any poet can recognise and understand—is again depicted in the wonderful twelfth plate of Blake's Job engravings. Job's friends—senexes all—have exhausted their store of wisdom; Job himself has exhausted his long protest. The beautiful figure of Elihu, his left hand pointing upwards to the stars, his right extended in a gesture that commands attention to the instruction he is about to give. Elihu comes as a prophet, to 'speak for God'. "I am young and ye are very old", he says. "But there is a spirit in man, and the inspiration of the Almighty giveth them

understanding". He brings his words, he says, "from afar" — from far regions of the inner worlds, from the still uncreated and unknown, not from the accumulated wisdom and experience of the past and the known; for the innate wisdom of the Imagination owes nothing to experience. The wisdom of youth is inspiration; the poets have at all times spoken from that unlearned knowledge which owes nothing to experience. Shelley, Mozart, Schubert — whence came their wonderful works? My personal refusal of what has been written by Jung and his followers on this archetype may perhaps stand as a protest on behalf of all poets, musicians, artists of every kind who are given their poetry, their music, by the Spirit that "knoweth all things"; while in our limited human personalities we know almost nothing of those regions from which come truth and beauty recognised by all who hear that music or read that inspired word.

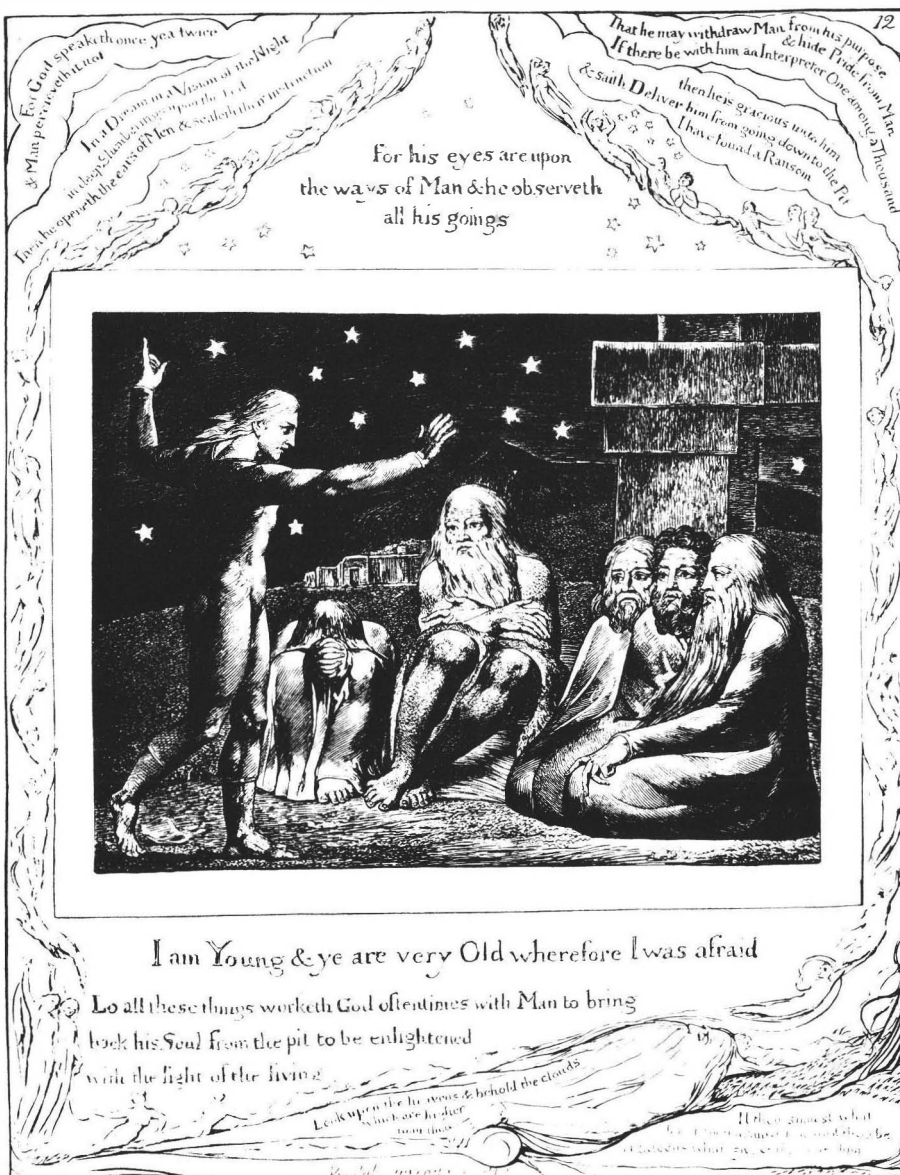
'The inspired man' *par excellence* was, for Blake, the poet Milton, who comes 'in the grandeur of inspiration' to triumph over the rational mentality which had come to seem supreme in England through the still prestigious figures of Bacon, Newton and Locke, culture-heros of the materialist culture Blake laboured to dispel. Welsh mythology knows the same figure of the inspired youth in the Bard Taliesin, who like Elihu brings his knowledge "from afar". In Vernon Watkins' beautiful paraphrase of Welsh bardic poetry Taliesin tells:

*Before men walked
I was in these places.
I was here
When the mountains were laid.*

*I am as light
to eyes long blind,
I, the stone
Upon every grave.*

*I saw black night
Flung wide like a curtain.
I looked up
At the making of stars.*

"Ask my age, / You shall have no answer" Taliesin proclaims. But it is not those inspired ones who are likely to seek help from analytical or other psychologists; high as may be the human cost to the poet who was there at the making of stars, his knowledge is beyond doubt.



Blake's engraving for *The Book of Job*, 1825

Indian mythology, profound in its insight into the fontal nature of Imagination, ever-new, represents the first-created individuation from the Vast (Virat) who "expresses himself with matter for his speech and sea and land as the pages of his tale", as Hiranyagarbha, the golden child. "He is the author of thought and dream, leader of the inner roads, builder of secret, uncreated worlds. He is the carrier of the hidden fire, the invisible hunter of the light, the conqueror of the kingdoms of the soul. He is the intuition that lives in a glance of love or in the poet's eye that glances from heaven to earth. It is the lightning leap of his glance that makes the unknowable knowable. He is the individual divine. The irreducible essence to which you may reduce each atom or star, the integer that survives when all that makes an object shrinks to its zerohood. When the instrumental self lifts its hood like a Kalia Naga, the serpent king, it is Hiranyagarbha, the golden child, that dances on it and crushes it". (1)

Adam too came from the hands of God in eternal perfection, made in the divine image and carrying within himself the spirit of all knowledge. "Man is born like a garden ready planted and sown" Blake wrote; for we bring with us each our own paradise. This, the greater knowledge, must in its nature be symbolised by man on the verge of life, who possesses divine knowledge in perfection without dilution or contamination from experience. Adam's experience is the cosmos itself. It may be that the archetypal *senex* so dear to Jung, and experienced by him in the figure of Philemon, signifies the immeasurable age of the universe of wisdom on which we draw; the Biblical 'ancient of days'; the figure the Indian myth-makers called 'grandfather'. Philemon would not in this respect correspond to Blake's Urizen, who is the purblind wisdom of reason and experience. Yet the eternal youth of Adam newly-created – Taliesin, el Khidr, Elihu, Milton type of 'the inspired poet', Hiranyagarbha – signifies a power to which Jung (who seems to have had no particular interest in the arts) was curiously blind. Doubtless many patients who seek the help of psychologists suffer from immaturity and must be very tiresome to wives or family, but a pantheon lacking some figure of the inspired bard – the true *puer eternus* – is defective.

Yet how impossible it would have been to conceive of this figure before Jung's

writings re-opened those very worlds of the collective unconscious, pool of human knowledge from time immemorial. Even as I write my marginal comments on the *puer eternus* it is in the margins of Jung's own great works on those inner regions that I write them. But as to Jung 'Philemon' was a reality present to him, so to me my lifelong companion-daimon untouched by age.

In two of my dreams – memorable dreams that have guided my imaginative life when I have not turned away to lesser concerns – the figure of that youthful inspirer has appeared. In the first of these dreams (I have recounted it elsewhere and it was the inspiration of a group of poems, 'Northumberland Sequence' written many years ago) the youth was asleep at

"... the unwritten is more ancient, more perfect than all human knowledge; the uncreated source and spirit of life itself."

the foot of the World-Tree, which grew from his dream. I call it a dream, yet in fact it was rather a waking reverie that unfolded itself before me. The second – much later – dream (a true dream this time, remembered from sleep) was no less significant and unforgettable after many years. These dreams have been to me epiphanies of such sacred knowledge as has been given to me by that spirit of Imagination itself, which gives to each such symbols as are appropriate to us. To others, other revelations, other symbolic emblems, no two alike. It is indeed to Jung that we owe the re-opening of that sacred universe in which such symbols are shown, as in the ancient Mysteries, to each according to our situation and our need, and not thrust upon us from without, weighed down with Church doctrine and boredom.

In this second dream I was given the unwritten scriptures themselves, and by the *puer eternus*. A mountain, in China or maybe on its borders. I with a small company of pilgrims, led by a young Chinese; in modern dress, not at all archaic. Among the company my old friend the Shakespeare scholar Muriel

Bradbrook, and my son who once was interested in the Chinese books of wisdom. Half way up that mountain was the shrine we had come to visit; an outer cave, and beyond, an inner cave-temple. (The dream came many years before I had set foot in the cave-temples of Ajanta and Ellora, or knew their structure). All remained in the outer shrine with our guide except Muriel Bradbrook and myself, who passed through into the inner sanctuary. There she kneeled, and I prostrated myself. There I was shown the four holy things: first, a rock, and running through the rock a great vein of opal; a rainbow of opal light within the rock, within the very primal substance of the earth. Then, a bull – whether living or of sculpture I do not know – caparisoned with ornaments: Nandi, ancient animal power. Then, a great statue of the Lord Buddha, in all the splendour of high art, a supreme work of Eastern civilisation, unsurpassable.

And last of all the *puer*; who gave me ceremoniously a simple white cloth or scarf, with no writing on it; and said to me, "This is the scripture I wrote before I was..." and although the sentence was unfinished – or perhaps it was finished – he made me understand "before I was vein in the rock, or power of the animal, or the great image of the Buddha enthroned in gold and adorned with all that civilisation has attained". I was made to understand that the unwritten is more ancient, more perfect than all human knowledge; the uncreated source and spirit of life itself.

These, and a few other 'great dreams', have brought with them an inner enlightenment and sense of the holy – the numinous; a depth of meaning the symbols of the Christian religion have never brought me, however much I may have wished or tried to relate to these. I have never dreamed of any figure of the Christian Mysteries, nor experienced towards the beautiful figure of the Christ-child the recognition and awe in which I experienced the presence of the inner avatar of the *puer eternus* in the guise of the Lord Buddha; doubtless because Christian symbols have long been too familiar and spoiled for me – as surely for many others – by being thrust upon us in a purely external manner. As Jung himself saw, the great shortcoming of the Christian religion is that its symbols are "all outside". The inner worlds

KATHLEEN RAINE

The Presence

POEMS 1984-87

The Presence is Kathleen Raine's tenth volume of poetry and the first since her Collected Poems of 1981. Here the poet's vision comes full circle; the interpenetration of the world of nature and the human world is seen with the naked wonder of the child but bearing the weight of human experience.

cloth bound £7.50

Published in June on the occasion of the author's 80th birthday

Selected Poems

This is the first time a selection from the whole range of Kathleen Raine's poetic *oeuvre* has been published. The author has chosen work from among her earliest poems up to and including poems written in the last year. She has written a Foreword especially for this collection which should not only bring pleasure to those who are already committed to her poetry, but should serve as a timely and welcome introduction to her work for those who have yet to discover its unique, paradisaical vision.

paperback £7.95

For details of a special, signed edition of one hundred copies, write for a prospectus to:

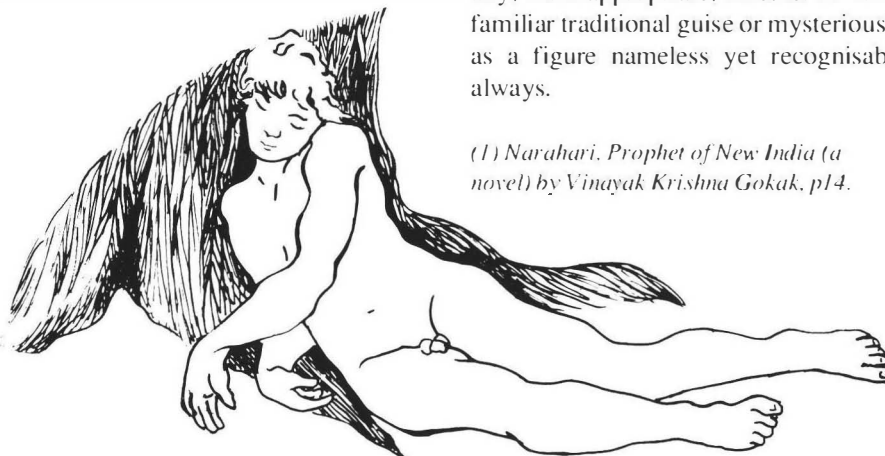
GOLGONOOZA PRESS,
3 CAMBRIDGE DRIVE,
IPSWICH,
SUFFOLK IP2 9EP, UK

are subject to no rules or laws but those of reality itself. These things simply are, like sun and moon and stars.

That my dream of the *puer* took Buddhist rather than Christian form I must accept. Doubtless the symbol could be transposed into Christian terms, but for myself I see no reason to do so or to refuse any part of what was given me from the imaginal world itself. Neither, on the other hand, do I see the dream as an indication that I should 'become' a Buddhist. How indeed does one 'become' anything other than life in all its complexity has made of one? Many of my friends have told me of Christian dreams no less numinous for them than were my non-Christian symbolic forms for me. It is to Jung we owe the realisation that all symbolic forms are relative, only reality itself is absolute. Only once did I receive a 'great dream' which, if not Christian, yet seems to derive from and fit with my Christian culture. Years ago it was, and concerned a sword of light, brilliant and pure. In the dream I found this sword in my hand; I was holding it upright, rather like the little nickel-silver figure of Jeanne d'Arc I loved in my childhood that stood on my grandfather's mantelpiece in long ago and far away Northumberland. I was amazed and awed at the sword's brilliant light and knew in my dream that it was a sacred gift. Not, indeed, the gift I would have expected to receive, and it seems that at the time I did not know what to do with it, for in my dream I slowly and thoughtfully sheathed the sword in a shabby old scabbard. A mistake perhaps? Yet it was St. Paul's 'sword of truth' from 'the whole armour of God' described in words I knew well long ago. It seems to me now that the invisible Instructors knew better than I what gift it was fitting I should receive.

and it is that sword, in my critical writings and in my work on 'Temenos' that I have wielded in the Great Battle after all. With great delight, I am bound to say. What the sacred world gives us is never given in vain.

How trivial the obvious interpretation in terms of sexual symbolism had I been a Freudian! The banal and superficial interpretation of sword and scabbard in no way corresponds to the realities of the *mundus imaginalis* as understood by Jung. As I write of those dreams I do so in the light of Jung and the revolution he wrought – although doubtless a professional analytical psychologist might discern other meanings. However, none knows what a dream 'means' better than the dreamer, that meaning being the experience itself. But Jung it was who has sent us in search of sacred meaning in such experiences. He has changed the context, the climate, the light in which we are now able to receive and to use such epiphanies of the 'eternal worlds'. Or to receive them at all and not, as my parents' generation would have done, either dismiss them altogether or been (like my mother, who was a great dreamer) unable to make use of them in the better understanding of the living of a life. I see in Jung the term – the flower – of the Protestant tradition of the Inner Light, the opening of what my old friend the mystic Gay Taylor was shown as 'a church in the hearts of men'. (Her visionary dreams, unlike mine but like some Rosamond Lehmann has described in her 'Swan in the Evening', often took Christian form). I find it most wonderful, and infinitely liberating to those of us irked by the prescribed iconography of Church and creed to have been shown by Jung that the forms assumed by the Holy Spirit are for each of us that which is for us, individually, most appropriate; whether in some familiar traditional guise or mysteriously as a figure nameless yet recognisable always.



(1) *Narahari, Prophet of New India* (a novel) by Vinayak Krishna Gokak, p14.

It would be in no way an innovation to suggest that the 'new' should be coupled with the 'old'. This is an old idea. Novelty is, after all, as old as the world. What then is the justification for a new discussion of 'the new'?

This is an age which is self-consciously a new age, an aquarian age, which has given rise to great innovations styled 'the New Physics', 'the New Biology', 'the New Economics' and so on. Yet if this newness were not rooted in tradition, or oldness, a hiatus would have developed, a hiccup of incomprehensibility allowing no connection with previous forms of thought. That which is new cannot appear independently of that which is prior to it, or old. It takes but little imagination to see that continuity, memory, experience, order, knowledge, recognition and beauty would be banished by the metaphysical severance of the old from the new.

Following Einstein's axiom that "everything is relative, one to another, *ad infinitum*" and applying this to the two qualities of old and new, we would find, were we able to observe it, that in infinity the old and new are not relative to one another, but have literally disappeared in the non-appearance of their distinctive qualities. Yet, infinity is Being Itself, and we know of it without knowing it; and, knowing of it in some measure, we are able to pursue our lives without total chaos, because we are nourished by the knowledge of it with those qualities without some measure of which we could not subsist: to wit trust, certainty, patience, resolution and veracity. We recognise and affirm that infinite state of being when we recognise a new-born baby as the same reality who in later years receives a birthday greeting from the Queen. Where is the resemblance?

The baby is clearly not the same as the old man, and yet we affirm that it is the same person. Consequently, if we are veracious, we also affirm that that person *is* in the infinite state of being in which old and new are the same as each other.

However, old and new are not devoid of their respective meanings, but are qualities which point to that same infinite reality. The new-born baby is not in itself the essence of newness since it is certainly older than it was at the moment of birth; correlatively the octogenarian has an ap-

THE NEW

by Peter Young

"In my beginning is my end"

T.S.Eliot

pearance different, and therefore new, from that which he had yesterday. Ancientness cannot itself appear in a temporal dimension as itself because of the very relativity of temporality, and if it does so it is always coupled with newness. Consequently we must look to a different dimension to find these pure qualities by which we recognise phenomena and name them old and new.

What then if we consider another, 'vertical', dimension; that which links non-appearance to appearance? For this, considerations of relative time must be removed, for only at this point is the pure quality of Ancientness to be found. Here the quality of the Ancient is that of non-temporal primordiality, an ageless ancientry belonging to the very being of the Ancient, which does not appear to anything other than itself. Yet from this total, unique appearance to Itself is derived all that is 'new'. In short, from the Ancient appears the new. In this newness there is no invention, but the continual overflowing into form of the development of new expressions of that which is Ancient in Itself. In this appearance there is youth, vigour and verdant knowledge. That which is truly new is also complete, and, albeit a new form, its newness resides not in form but in its own essential quality of being the immediate appearance of the Ancient.

For the one to whom the new appears, complete humility is essential, for otherwise the pride and selfhood of, "I already knew that" dominates that which should dominate, and that which should dominate is the truly new. Fortunately for us,

the truly new has its attractive, compelling quality, as Muhyiddin Ibn 'Arabi explains in his *Fusus al-Hikam*: "Dost thou not see how the little child influences the adult by the attractive power which is innate in him, so that the adult puts aside his dignity to amuse the child, to make him laugh, and he puts himself at the same level as the childish intelligence. It is that he obeys unconsciously the power of the fascination of the child ... for the young one is more directly attached to his Lord, because of his primordiality, whereas the adult is more remote." (1). This is not the worldly-wise child who has already learned how to play the adult like a hooked salmon, but the beauty and innocence of that which is free from all notions of selfhood. Its effect is to bring about humility for the sake of appreciation. It is a mercy to us.

For Arjuna in the *Baghavat Gita*, news of the real state of affairs was brought by Krishna himself in the form of his charioteer. For Ibn 'Arabi, news of his own reality came in the form of the eternal youth as he circumambulated the Ka'aba, his position mediatory, informing from the Ancient and eternal in the person of the new. (2) The quality of reception of the new is all-important. Christ advised "Suffer little children to come unto me, for theirs is the Kingdom of Heaven", and Mohammed bared his head to the rain "because it comes fresh from my Lord".

Perhaps this, then, is the hope for the new age; that what is given as news in whatever province of knowledge is received with humility as direct indications from the Reality of Itself, of one's own reality and meaning, and as invitation to the knowledge of oneself as no other than the Ancient and Giver of news. If it be not thus, either in these pages of BESHARA (Good News) or the New Sciences, then that novelty would be simply that of a tawdry glass trinket bought in the market place today and crushed underfoot tomorrow.

(1) *The Wisdom of the Prophets*, transl. Angela Culme-Seymour from a translation by Titus Burckhardt. Chapter on Moses p97. Beshara Publications, 1975.

(2) See *'Sufis of Andalusia'* transl. by R.W.J. Austin, p37. Beshara Publications, 1988.

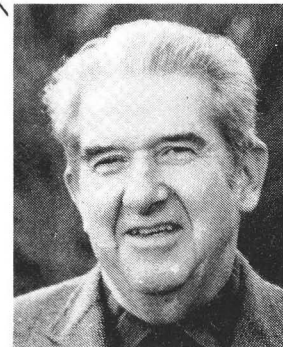
For a New Society – A New Economics



Dr Willis W. Harman

President, Institute of Noetic Sciences, California.

Edited extracts from an article first published in 'World Development Forum'



THE CHANGING CONTEXT OF HUMAN AND ECONOMIC DEVELOPMENT

The present world economic system did not result from someone's theory about how it should be. Rather, its basic pattern evolved at a time of dramatic societal change in Western Europe, and the theories came later. Expanding commerce, changing metaphysical assumptions and a new industrial ethos were creating a new society; the evolution of the economic system was part of that overall system change. Some such sea change is taking place again. This time it is worldwide, equally profound and happening faster. The changing face of economics is part of that, and if we are to understand the part, we must understand the whole.

Let us focus on three aspects of this broader context:

- (1) the emerging 'information society'
- (2) the spread of a global perspective and
- (3) changes in value perspectives and underlying beliefs.

What is happening in these three areas constitutes such a major shift that each alone would result in profound change in the world's economic and political institutions. The three together help to define a system change of consummate proportions.

THE INFORMATION SOCIETY

Over half the labour force in the United States, and an increasing fraction of economic activity, are now involved primarily with information handling activities. Less than a quarter of the work force is now occupied with the sorts of activities that shaped the economic system in its present form – mainly the growing, extraction and production of commodities, materials and things. Statements similar to these would hold true for other highly industrialised societies. Further trends in these directions are bringing changes whose implications are both controversial and not well understood.

We tend to overlook how basic is this shift to 'information society'. The funda-

mental concepts of business and labour, of employment and welfare theory, of liberal and Marxist analysis, are all based in *production-focused society*. It may have seemed to make sense in the past to think of economic production as the *de facto* goal of society – to think of an ever-increasing fraction of overall human activity as being treated as commodities in the mainstream economy; to assume that the individual's primary relationship to society is related to a mainstream-economy job (ie. having one, being married to someone who has, or training for one); to have social thinking dominated by concepts of scarcity, commercial secrecy and money exchange.

However, that is not necessarily the case for the future. The primary resource of future society is information, knowledge, learning, wisdom. But knowledge is not a commodity like tomatoes or automobiles – it cannot be priced and distributed in the same ways; it does not behave according to the same 'laws'. Thus the present signs of the inadequacy of past thinking should not be surprising. There is

no reason to expect old concepts to fit the new situation.

The fundamental problem is not how to stimulate more demand for information services, nor how to create more jobs in the mainstream economy. It is, rather, a basic problem of meaning. *What is the central meaning of advanced human society when economic production no longer makes sense as that central meaning because it is no longer a challenge (and because in the long run focusing on economic production does not lead to a viable global future)?*

GLOBAL PERSPECTIVE

It may have been feasible in the past to ignore the global-system aspects of much social and economic activity. That is no longer the case. Most medium-sized and large businesses are now transnational, at least in some sense. So are the problems – ranging from acid rain, toxic chemical concentrations and deteriorating water supplies; through widespread maldevelopment and long-term soil degradation by industrialised methods; to an assortment of economic ailments including spreading and possibly chronic unemployment, and the precariousness of the world financial system. Another new factor is the presence of an international labour market, with implications yet to be revealed. And enveloping all of this, made possible by a global communication system, is a global climate of public opinion.

It is now clear that the complex of global environmental, resource and species-extinction problems, contributed to by increasing industrialisation throughout the world, must be taken seriously. Problems become progressively more severe; they are highly interconnected with one another and with industrialisation and population concentration; and without major changes in the present trends the problems would become intolerably grievous by around the end of the century. The message between the lines is that the problems will not be resolved by 'technological fix' or improved management – a much more fundamental system change will be required, including a change in the overall network of economic incentives. While individual conclusions and recommendations in the various analyses can no doubt be challenged, the swing of informed public opinion is clearly towards considering the

problems to be real.

Another threat taken far more seriously in recent years is that of the nuclear 'balance of terror'. The unsolvability of the nuclear dilemma is perhaps the major factor making the public tolerant toward the possibility of a major restructuring of the global system.

At least equally significant with these two aspects of the new global perspective is the change in thinking which is taking place within the 'sleeping giant' known as the developing world. The giant is awakening. Those who had, for so long, accepted the role of privation, inferiority and servility are less and less willing to do so. For the two decades following World War II, political liberation and economic development were the two chief themes. Development was taken to be more or less synonymous with economic development – ie. with 'modernisation' and industrialisation. Increasingly, however, cultural leaders in the developing countries have come to see that the best development for them is not necessarily abandonment of their own cultural roots and adoption of the alien culture of Western industrial society. Thus there has been not only growing insistence on a different international economic order, but also on exploring alternative development paths.

The global dilemma can be simply stated. Of the easily imaginable paths of global development, those that appear to be economically feasible do not look to be ecologically and socially plausible, and those that appear ecologically feasible and humanistically desirable do not seem economically and politically feasible.

To illustrate this, imagine that all the developing countries were somehow to be successful in following the examples of the industrialised and newly industrialising countries: the planet would be hard-pressed to accommodate six to eight billion people living high-consumption lifestyles, and it is easy to imagine intense political battles over environmental and quality-of-life issues.

We may try to picture another path where the present high-consumption societies remain so, but the poorer countries stay low-consumption (ie. poor) with low per-capita demand on resources and environment; it is hard to see how a global system with such a persisting disparity of income and wealth could avoid vicious

'wars of redistribution' with terrorism as one of the main weapons.

A third conceivable path in which high-consumption societies voluntarily cut consumption to ameliorate some of the problems is equally difficult to make plausible, partly because of the severe unemployment problems those societies would face. A path to global social hegemony is apparently attractive to some developing nations, but totally unacceptable to the major capitalist nations.

What all this comes to is a basic challenge of past assumptions about the future of the globe. No consensus exists today on what constitutes a viable pattern of global development. It is increasingly clear that present trends do not. The Western industrial paradigm appears in the end to be incompatible with wise relationship to the earth and its resources; to produce systematically marginal people who have no meaningful roles in the society; to result in a society that habitually confuses goals with means (economic and technological advancement); and to persistently endanger the future of the human race with arms races which are an intrinsic part of the system.

Thus present economic, corporate and social policies are, by and large, inconsistent with viable long-term global development, and are being made without a picture of a viable global future in mind.

VALUES CHANGE

The third aspect of world change we want to explore is a shifting value emphasis visible throughout the industrialised world (particularly the English-speaking portion), and a far more profound, long-lasting and consequential shift in underlying beliefs. Essentially, this is a change in attitude toward our inner, subjective experience – affirming its importance and validity. Indications of a recent strengthening of 'inner-directed' values (ecological, humane, spiritual) and corresponding weakening of economic and status values, are fairly well documented by now. Underlying this value shift is a more subtle but more fundamental shift in *beliefs* – away from the confident scientific materialism of the earlier part of the century and toward some form of universal transcendentalism.

Paralleling this is a value-and-belief shift in the developing world which is again partial and indistinct; its direction is

away from Western materialism and towards a reassertion of the validity and truth in native cultural roots. In both developed and developing countries this shift represents a reversal of centuries-long trends. However, it is perhaps better viewed as an evolutionary advance. Throughout history, individuals and communities seem repeatedly to have come upon the creative factors and forces of the human psyche. Great philosophies and great religions have time and again come into being as an outcome of such discoveries, and for a while profoundly influenced the course of human events. But as often as the discoveries have been made, they have been lost or become inaccessible – at best preserved within some esoteric group.

For the past several centuries the power and prestige of the Western influence has been such as to cause a weakening of this element of traditional cultures. With the vogue of positivistic science in the earlier part of this century, the religious meanings associated with deep inner experiences were rather thoroughly debunked, and serious exploration of the creative unconscious processes was discouraged.

Recently, however, there has been a resurgence of interest, both in the broader society in various meditative disciplines and religious philosophies, and in the scientific community in research on consciousness. This latter development is well summarised in the following quotation from Nobel laureate Roger Sperry:

“Social values depend...on whether consciousness is believed to be mortal, immortal, reincarnate or cosmic ...localised and brain-bound or essentially universal... The new interpretation [in science] gives full recognition to the primacy of inner conscious awareness as a causal reality... Recent conceptual developments in the mind-brain sciences rejecting reductionism and materialistic determination on the one side, and dualisms on the other, clear the way for a rational approach to the theory and prescription of values and to a natural fusion of science and religion.” (1)

The practical significance of this shift in basic premises may not be immediately apparent. Modern industrial society, like every other in history, rests on some set of largely tacit, basic assumptions about

“...the world appears to be experiencing a ‘second Copernican revolution’ wherein the reassertion of the importance of inner, subjective experience is challenging the adequacy of positivistically biased science.”

who we are, what kind of universe we are in, and what is ultimately important to us.

The scientific materialism which so confidently held forth its answers to these questions a couple of generations ago is a dying orthodoxy. Its basic premises are being replaced with some sort of transcendentalist beliefs that include increased faith in reason guided by deep intuition. In other words, a re-spiritualisation of society is taking place, but one more experienced and non-institutionalised, less fundamentalist and sacerdotal, than most of the historically familiar forms of religion. With this change comes a long-term shift in value emphases and priorities which we shall look at in the next part.

A SHIFT IN ASSUMPTIONS

Few of us would doubt that the scientific revolution of the 17th century was one of the important watersheds in Western history – for that matter, in the history of the planet. The world perceived by the educated person of the year 1600 was still the world of the Middle Ages; by 1700 the informed person literally perceived a different reality. It was not just that men now believed that the earth goes round the sun. The change was far more fundamental. It consisted of a shifting of allegiance from the Scholastic authority system of the late Middle Ages to the authority system of modern science. The tacit metaphysical assumptions of medieval thought were being replaced by the metaphysical as-

sumptions of modern science.

The remarkable achievements of the scientific method of inquiry, as well as the perplexities it has encountered in some areas such as the study of consciousness, are related to a set of underlying assumptions at a metaphysical level. These include in particular: *positivism* – the assumption that what is (scientifically) real is what is physically measurable; and *reductionism* – the assumption that (scientific) understanding is to be found in the reducing of phenomena to more elemental ones (eg. explaining heat in terms of molecular motion, or behaviour in terms of response to physical stimuli).

All the same there remained a feeling on the part of many scientists (as well as non-scientists) that something important was being left out. After all, the only experience of reality that we have directly is our own conscious awareness. There seemed something unnatural about a science that appeared to deny consciousness as a causal reality when one’s everyday experience affirmed it as a most important causal reality. In such areas as psychosomatic illness, the effects of mind on healing or on the functioning of the body’s immune systems, neither the positivistic premise nor the reductionist one seemed to fit. (The concept of health, for example, is not reductionistic but holistic.) It was clear that besides the science of measurable information, quantified descriptions, deterministic models and reductionist explanations, these other aspects of human experience seemed to call for another kind of knowledge. That knowledge is the kind found useful in guiding human development, in making value choices and in humankind’s search for meaning. It is concerned with purpose and volition: it places emphasis on value issues and teleological explanations; it uses models and metaphors involving holistic concepts like health, purpose, love, trust; it places value on explorations of alternate states or ‘levels’ of consciousness, particularly the ‘deep intuition’.

One possible way of resolving the felt incompleteness of science in its present form is to think in terms of a complementary body of knowledge. Ultimately, in this approach, there are two basic kinds of ‘stuff’ in the universe. One is matter-energy stuff, explored so competently by science in its present form. The other is mind-spirit stuff – not physically measurable, but ‘real’ in human experience.

Besides this dualistic alternative there is yet a third possible kind of metaphysical assumption. When scholars looked carefully into the world's many different spiritual traditions, an important common thread appeared. The various religious traditions tend to have both exoteric or public versions, and also esoteric 'inner-circle' understandings. The latter typically involve some sort of spiritual or meditative discipline: they place primary emphasis on the individual's own inner access to the sources of wisdom and enlightenment. The exoteric versions of the world's religions are obviously very different one from the other. However, the esoteric versions appear to be essentially the same, and to represent a valuable body of experience it would not be prudent to ignore. Whereas the exoteric versions are often dualistic, the esoteric forms assert a monistic point of view: the ultimate stuff of the universe is consciousness. Mind or consciousness is primary, and matter-energy arises in some sense out of mind. Individual minds are not separate (although individual brains may appear to be); they connect at some unconscious level. The physical world is to the greater mind as a dream image is to the individual mind. Ultimately reality is contacted not through the physical senses, but through deep intuition. Consciousness is not the end-product of billions of years of material evolution: rather, consciousness was there all along, and its existence was not contingent on the development of neuronal cells within the human cranium.

At first thought the idea that science might be reconstituted on the basis of this third kind of metaphysic may seem as outrageous a proposition as the heliocentric universe did to many in early-17th-century Europe. The idea of matter emerging out of consciousness is foreign to the Western mind: at any rate it would have seemed so a quarter of a century ago. Any such idea as the phenomenal world being a thought in the Universal Mind seemed to belong with the philosophies of the East. However, a growing fraction of the professional, business and scientific world (as well as just plain people) have been quietly reporting that when they take their total experience into account, it is this latter metaphysic that feels most satisfactory.

The modern world long assumed that there was a fundamental conflict between science and religion. For a time this con-



Collating farm survey results in a Save the Children Fund office in the Sudan. Photograph by Jenny Matthews.

lict appeared as a series of battles over such issues as the age of the earth, the meaning of fossil records, evolutionary theory, the Freudian reinterpretation of the human psyche, etc. Religion always seemed to lose. Then as the world has moved well into the 20th century the conflict subsided, and people tended to live their religious lives apart from whatever they thought science was telling them about the nature of reality. The price paid for this schizophrenia was that neither science nor religion seemed to be satisfying the person's deep desire for some kind of understanding that would be secure enough to base one's life on. It now appears that what is happening is a resolution of this conflict in a somewhat unexpected way. There may indeed be a conflict between dogmatic exoteric religion and positivistic science. However, there is *not* an inevitable conflict between the esoteric 'perennial wisdom' of the world's spiritual traditions and a science based on the third kind of metaphysical assumptions identified above.

It has been necessary to dwell on this point because it is potentially so important, and an initial inclination may not take it seriously. Improbable as it may seem still to many persons, the world appears to be experiencing a 'second Copernican revolution' wherein the reassertion of the importance of inner, subjective experience is challenging the ade-

quacy of positivistically biased science. If this picture of a shifting metaphysical base proved to fit – that is, if this 'third metaphysic' continues to capture the allegiance of a widening group of people until it ultimately prevails, then the world of the 21st century may be as different from the present as modern times have been from the Middle Ages.

THE LEARNING SOCIETY

What comes after production-focused society? What is the central purpose of advanced societies when it no longer makes sense for that central purpose to be economic production? The answer becomes apparent from the emerging value emphases and beliefs about the nature of human beings. *It is to advance human growth and development to the fullest extent.* The Athenian model of Paideia applies. The primary function of society is to promote learning in the broadest possible definition. The motivations implicit in the emerging belief-and-values structure fit with this: they do not fit with mindless consumption, material acquisition and endless economic growth. In the 'learning society' the occupational focus of most people is learning and developing in the broadest sense. This focus includes a wider diversity of activities such as formal education, research, exploration, self-discovery and participating in

the community of concerned citizens to choose a better future. These activities contribute to human betterment and fulfillment. They are humane, non-polluting and non-stultifying. They can absorb unlimited numbers of persons not required for other work.

'Learning society' implies reversal of a number of aspects of the long-term industrialisation trend; it almost certainly involves something like the 'intermediate technology' concepts of E.F.Schumacher and others. These terms refer to technology which is resource conserving, environmentally benign, frugal in the use of energy, relatively labour intensive, and understandable and usable at the individual or community level. Such technology tends to complement a strong ecological ethic; strong identification with nature, fellow human beings, and future generations; a lifestyle characterised by voluntary frugality ('doing more with less'); appreciation of the simple life and simple virtues; and the kind of work that fosters these attitudes...

While it is important to see as clearly as

possible the long-term resolution of development-related problems, it is equally important to understand the constraints that will be operating during the transition period. It is not improbable that this period will see some sort of partial breakdown of the world economic system. This could be triggered by any of a number of factors, but the oppressive debt structure is a likely candidate. Such signs of fundamental change tend to be threatening to many people, particularly if they lack understanding of its cause. Response to perceived threat is likely to lead to non-constructive actions. There are two common forms of such response. One is an attempt to 'turn back the clock' and return to an imagined time when family and community values were strong, consensus was easily come by and, in general, things 'worked'. The other involves an irrational strengthening of faith in the old ways of dealing with problems – through new technology and new centralised management approaches.

Nothing could be more crucial to this time of transition than sharing the inter-

pretations of why the transformation is necessary or appears to be happening. There is no conversation more critical today than that around the question: what is viable global development? What is a 'world that works for everyone'? As this dialogue leads to deeper understanding of this major evolutionary change of direction, there can result an easing of anxiety and a lessening of the likelihood of large-scale human misery attendant to the transition. Men of action have often given the advice, "Don't just talk; get out there and *do* something." Perhaps the best advice for the short term is: "Don't just do something; get out there and talk".

(1) 1981 Annual Review of Neurosciences.

This article consists of edited extracts of a World Goodwill Occasional Paper, first published in 'Development Forum' (Vol XV Nos.3-5) published by the United Nations Division for Economic and Social Information.

Further information on WORLD GOODWILL can be obtained from : Suite 54, 3 Whitehall Court, London SW1A 2EF.

BESHARA Magazine

welcomes letters to the editor, comments and contributions from its readers. For Issue 7, please write before September 15th 1988 to:

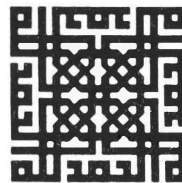
The Editor,
24 Sidney Street, Oxford OX4 3AG.

MOTILAL BOOKS

MAIL ORDER DISTRIBUTORS OF
INDIAN BOOKS

Religion	Philosophy
Language	Architecture
History	Art

Catalogue available from
52 Crown Road, Wheatley,
Oxford OX9 1UL



BESHARA PUBLICATIONS

The Stables, Sherborne, Nr Cheltenham, Glos
GL54 3DZ, England

Sufis of Andalusia

by **Muhyiddin Ibn 'Arabi**
Translated by **RWJ Austin**

One of Ibn 'Arabi's most immediately accessible works, 'Sufis of Andalusia' consists of biographical sketches of some of the contemplatives and spiritual masters amongst whom he spent his early years. It brings to life with great vividness a remarkable spiritual milieu and a group of individuals who manifest superlative wisdom in their intensity of devotion and service to Reality.

Soft cover, 176pp, £7.50.

FULL CATALOGUE ON REQUEST

Telephone Enquiries:
Oxford (0865) 243406

For personal orders in the UK, please add 75p per book for post and packaging. Overseas and Trade terms available on application.

The New Cosmology

by John D. Barrow

EXTRACTS FROM A SEMINAR GIVEN AT BESHARA SHERBORNE, 1988



The Horsehead Nebula in Orion

COSMOLOGY



... we must come to grips with either very microscopic things...

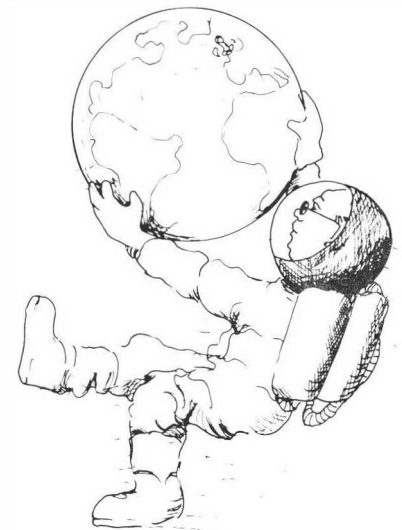
We human beings sit almost mid-way between the scale of the sub-atomic world of elementary particles, where the subtleties of quantum theory make things rather counter-intuitive, and the extreme of the astronomical world where curved space and General Relativity dictate what happens. Our view of the universe is coloured by the fact that our experience is of rather small and everyday lengths, masses, sizes and times. If we are really to unravel the deeper structure of the universe, we must

come to grips with either very microscopic things, or things which are very, very large – or better still, both.

Until a few years ago it was believed that the world of elementary particles had little or nothing to say about the structure of galaxies, and vice versa, but in the last five or six years there has been something of a small revolution within cosmology. People have come to appreciate that the structure and the reasons for the existence of galaxies and clusters of galaxies are bound up with aspects of the very smallest particles of nature. And vice versa, the only way, perhaps, that we can test our ideas about the very tiniest elements of nature – the smallest elementary particles, superstrings, or whatever one thinks they might be – is by using astronomy and cosmology. It is too expensive to build accelerators that can attain the very, very high energies at which the most interesting aspects of particle physics emerge. However, the 'Big Bang' provides us with a sort of theoretical laboratory where arbitrarily high energies were attained, and so we can explore the consequences of our theories in the past history of the Universe and see whether they have observable consequences for the present.

Cosmologists talk about the Universe in a very general way. Their goal is not to

explain why the Earth exists, or why we are sitting here now or why Halley's comet exists: questions that are so specific cannot be answered by the subject. We are interested in the 'coarse-grained' structure of the universe: why it is roughly the size it is, the density it is, the age it is and so on. The Oxford English Dictionary defines cosmology as 'the science or theory of the universe as an ordered whole and of the general laws which govern it'. This definition can encompass different levels; you might be interested in all the possible sorts of laws and descriptions



...or things which are very, very large

you could have of the universe: or just in a very particular account, which you might view as the 'best buy' model – the big-bang cosmological model: or you might have a wider interest in a branch of metaphysics dealing with questions about the world as a whole – the laws of nature and structure of nature, including the astronomical world.

Cosmology is unusual as a science in a number of ways, not least in its connection with other subjects. Let me remind you of four traditional topics where cosmology, unlike many other sciences, has wider implications for philosophy, or even theology.

First of all there is the traditional argument for the existence of God which goes by the name of the 'Cosmological Argument', over which there have been arguments for many, many centuries.

Secondly there is the tradition of the heat-death of the Universe. This is the idea that if one is sitting in an expanding universe governed by the second law of thermodynamics, then disorder is continually growing at a microscopic level. This means that all ordered forms of energy – like atoms or people – are being degraded down into rather uninteresting forms of energy like a smooth sea of radiation. In the 1920's and 30's, physicists like Eddington and Jeans played a role in popularising the idea of the heat-death and this had a dramatic and pessimistic effect upon the philosophers of that era, particularly Bertrand Russell who took it as confirmation of a pessimistic, humanistic view that everything was going to come to an inevitable and rather anti-climactic end. More recently Teilhard de Chardin developed a somewhat mystical picture of the future of the Universe spurred on by the idea of the heat-death, and his desire was to turn it into a more optimistic view.

Thirdly, the astronomer Carl Sagan has been a very vociferous propagandist for the SETI (Search for Extra-Terrestrial Intelligence) project, which to date has done a lot of searching, but has not yet found a lot of intelligence. Clearly, if this project were successful it would have enormous ramifications for our picture of who we are and what our role is in the universe relative to other beings.

And lastly there are the anthropic principles in their various forms, some of which are covered in the book I wrote in

collaboration with Frank Tipler, 'The Anthropic Cosmological Principle' (1).

As a science, cosmology has some unique features which are not often mentioned, but have a dramatic effect on the way one pursues the subject.

First of all, unlike most sciences, cosmology and astronomy in general suffer from the problem of not having enough data. In most sciences there is so much data that any theory has to be extremely good just to get off the ground because there are so many facts it has to incorporate and explain from the word go. In astronomy there are not so many facts. People think they have a good theory in



...we are not observing the universe as it is today – we are observing it as it was

Einstein's Theory of General Relativity, and that it is a good description, as near as makes no difference, of how the universe behaves today; but what we really want is more data to test its predictions in more detail.

Secondly, unlike most sciences, we cannot carry out experiments on the universe – we just have to take what is on offer. In experimental science, one tries to isolate the inessential factors by holding a particular factor constant and changing the others. In cosmology we cannot do that, so we do not really know which are the fundamental things about the universe that need to be explained and which are accidental aspects. There are two ways cosmologists and astronomers get round this restriction: one is to build computer simulations of the universe in a very 'coarse-grained' manner, and compare those predictions with observation. The other is to look for *correlations*. This means that if one has a theory which

predicts that all the bright galaxies ought to be the big ones, then one just looks at lots and lots of bright galaxies to see if they are also the biggest.

However, the problem with correlating as a method is that, as in all forms of science, we cannot base what we know of the world on observation alone because of what scientists call 'selection effects': that is, the fact that every observation one makes is inevitably subject to some sort of bias. For instance, if one were to draw up a census of all the galaxies and stars in the universe, noting their brightness, to get a picture of whether there tended to be more bright galaxies than faint ones, it is almost certain that you would find relatively more bright galaxies than faint ones in your census. And the main reason for this is that bright galaxies are so much easier to see. Astronomy above all sciences is totally beset by this sort of 'selection effect'.

A third factor is that the Universe, the object of study, is unique. This is clearly a rather peculiar aspect for the scientific method, which is based upon the whole idea of repeatable experiments and studying many different systems which are supposed to be the same in some ways. Because of its uniqueness, we cannot necessarily expect that laws of nature which apply to sub-systems within the Universe also apply to the Universe as a whole. Nor is there any reason why one should expect an explanation of something about the structure of the Universe as a whole to have any application in any other area. And so there is no reason to doubt that very special types of explanation might have to be brought into play to explain such things as why the Universe came into being 15 billion years ago.

Another aspect of this uniqueness is that often one will want to say things like "the universe has a special feature – it is expanding at the same rate in every direction" and go on to consider whether this is probable or improbable, whether, had one started the universe in some random way, one would have expected this property to arise. What does it mean to use words like 'probable' or to say 'if the universe had been different' if it is by definition unique?

A further problem is one that is usually glossed over in popular accounts. It is that one ought to be very careful to discriminate between the Universe as a whole, which may be infinite, and the *visible*

universe, ie. the part of it which we have had time to see in 15 billion years. All our deductions and observations are concerned with a sphere of radius 15 billion light years about us which we call the visible universe, and it is only by introducing an axiom of faith that the Universe is the same outside the boundary as inside that we can say anything about the Universe as a whole. This is a fundamental difficulty and clearly, the question of whether the Universe is finite or infinite has a big psychological effect. If we think the Universe is infinite, then we can observe as much as we like but we will never see more than an infinitesimal part and will never, by our observations, be able to learn anything about the Universe as a whole. If it is finite, it can still be bigger than the horizons of our visible universe but our observations will nonetheless tell us something about a finite part of it.

Another very interesting factor which distinguishes cosmology is that in most areas of science we are used to types of explanation where things at one point in space and time are a result of other things that are also local and nearby. In cosmology this is probably not true. There are large-scale, global features of the structure of the universe which affect things that we observe here and now.

And lastly, when we look at distant galaxies and stars we are not observing the universe as it is today – we are observing it as it *was*, because light takes a finite time to reach us. All the observations we have of the universe, of things at different distances, are really a sort of montage of pictures of the universe at different times in the past.

THE EXPANDING UNIVERSE

Until 1965, there was only one fact in cosmology – one real observation – which occurred in 1929, when Edwin Hubble made what I believe to be the most important discovery of twentieth century science. He discovered that the prejudice that people had held for many thousands of years – that when you look out of the window, all the changes in the heavens, the planets, stars and comets moving around and changing in time, are taking place against a completely static background stage – were wrong. Hubble observed (and Alexander Friedman had predicted this in the early 1920's) that there is no such static background stage:

everything in the universe is in a state of dynamic change, and this state of dynamic change is one of overall expansion of the universe.

Hubble made this discovery by noting that there is a 'red-shift' in the frequency of the light transmitted by distant objects, which indicates that they are moving away from us. By measuring the amount of the shift, one can calculate their velocity relative to us and their distance from us can be gauged from their apparent brightness. Hubble discovered a remarkable correlation, which is shown in Diagram 1. This has come to be known as Hubble's Law. The vertical axis shows the speed at which things are receding and the horizontal axis shows how far away from us they are. One can see that this is a pretty good straight line by scientific standards; the slight deviations are due to the fact that the universe is not expanding perfectly smoothly; locally, galaxies will have their own small local motions, one around the other just like the Earth and the moon.

Operationally, Hubble's Law is quite simple, and it means that if you were to measure the distance separating two very bright clusters of galaxies today and then again tomorrow, you would find the distance to have increased. But in fact the idea of the expansion is very subtle in General Relativity. It is worth asking, what is it that is expanding? If you ever saw the film "Annie Hall" you will remember that it begins with Woody Allen on the psychiatrist's couch having just discovered, by reading a cosmology book, that the universe is expanding. He tells the analyst that therefore Brooklyn must be expanding, *he* must be expanding. The analyst did not really know the answer to this problem but just told him



... just told him not to worry about it

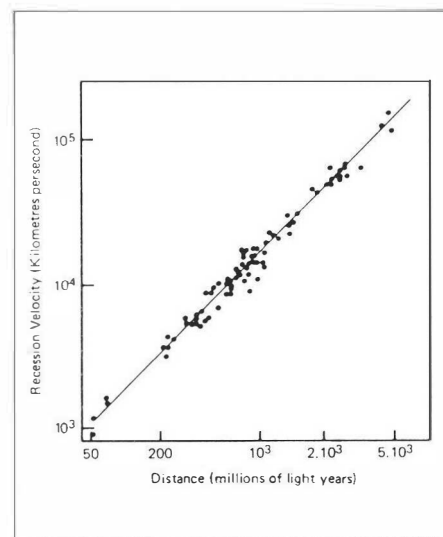


DIAGRAM 1
Hubble's Law – Observational Data

not to worry about it.

Well, the answer is simply that objects like ourselves do not participate in the universal expansion because we are held together by forces of nature that are much stronger than the force of the explosion, as it were. In fact, galaxies, even small groups of galaxies do not expand; you have to go up to clusters of galaxies before you find objects which are actually participating in the expansion. Rather like raisins in a raisin cake, the raisins all move away from each other as the dough expands, but they themselves do not expand as they are held together rather more strongly than the dough.

The main lesson is that one should not really think of it as an expansion *into* space, but as an expansion *of* space. This is not like an explosion to which there is a boundary, so that the explosion is going on into space and there is a region which the expansion has not yet reached which is outside the universe. The best one can do to get an accurate picture of what the mathematics is telling us is to pretend that we are in a universe of two spatial dimensions rather than three, and to represent it by the surface of a sphere. If we were to mark two points on the surface of the sphere, then the expansion of the universe is like the inflation of a balloon – as it expands the two points would get further apart. If we were to run over the surface of the balloon, we could keep running for ever but nonetheless the surface area of the balloon is finite. Also, the fact that we see Hubble's Law obeyed from our vantage point does not mean that we are at the centre of the universe. On whatever point

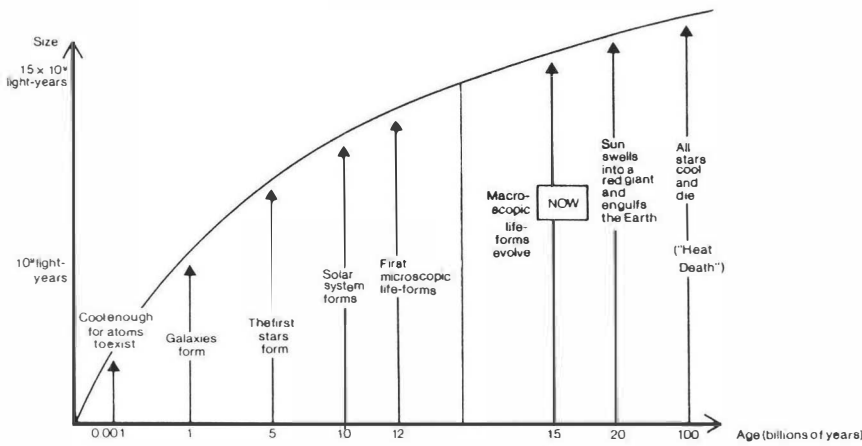


DIAGRAM 2
Schematic picture of key events in the expansion of the universe up to the present (Time dimension not to scale)

on the surface we sat, we would always see all the other points going away from us as though we were the centre – we would see the same law.

You will notice from this example that the centre of expansion does not lie on the surface of the balloon. And this is the point: this is why expansion is not *into* space. The centre of the expansion of the universe does not lie in our three-dimensional universe, just as the centre of expansion of the balloon does not lie on the surface of the balloon.

Diagram 2 gives a picture of the overall view which this model gives. The interesting thing about this is that unlike the past prejudice for a universe which is static and always the same, this picture is continuously unfolding. The universe gets bigger and bigger as it gets older and older, and becomes sparser and cooler, so that in a particular epoch dramatic things can happen. It has to wait until it is about 1 million years old before it is cool enough for atoms to exist, then longer for the first galaxies and stars to form. All our observations of the oldest fossils on earth, the age of the solar system, the age of the galaxy, give independent evidence that points towards us living somewhere between 13 and 18 billion years from the start – the uncertainty is again a consequence of the selection effects on some of the observations, so that we have to allow an uncertainty to compensate for some of the biases which may be occurring.

Our observations show that the first life forms appeared on earth about two billion years ago. The future prospects look

rather pessimistic: in about 20 billion years the long-range forecast is that the sun is going to swell up to an enormous size and engulf the inner planets and vaporize the Earth, Mars, etc., whilst in about 100 billion years, all the stars will have cooled and will probably not be able to support atomic life-forms such as ourselves and our computers.

IS THE UNIVERSE INFINITE?

The long-range forecast for the whole universe is uncertain. If we think of an ordinary explosion with a particular amount of energy, then there are two generic situations that could occur. Either the explosion could have sufficiently large kinetic energy to enable it to expand forever, or the kinetic energy in the explosion would be too low and eventually the material would fold and start to come

back in. This is rather like launching a rocket from Earth: if you want to escape the Earth's gravitational field and go into orbit then you have to launch it with a speed greater than the 'escape velocity'. A universe that 'runs away' – a so-called *open universe* – is one that starts off with a speed bigger than the escape velocity. One that starts off with speed less than the escape velocity – the so-called *closed universe* – is rather like throwing a stone in the air; it comes back to a 'big crunch' in the future. In between there is the 'British' compromise universe which has the escape velocity and can just escape all the way to infinity doing the least possible amount of work. It continues to get bigger for ever but its speed goes down, so that it reaches infinity with zero speed. This is sometimes called the *flat universe*. I shall call it the *critical divide*.

Diagram 3 shows these three situations graphically. The little shaded portion is the period when life can evolve, if it is going to. We would not expect to be around observing the universe until all the stars have formed, because stars produce the building blocks of life. And we could not expect to evolve when all the stars have died out, so this is a little niche in cosmic history where life can exist.

Now one of the peculiar things about our universe is that we live very, very close to the critical divide (2) – we might even live right on it – and as a consequence of this, we still do not know which of the two options is the long-range forecast for us. In one way, it is not surprising that we live close to the critical divide, as we couldn't have expected to exist if we did not. Universes which started to ex-

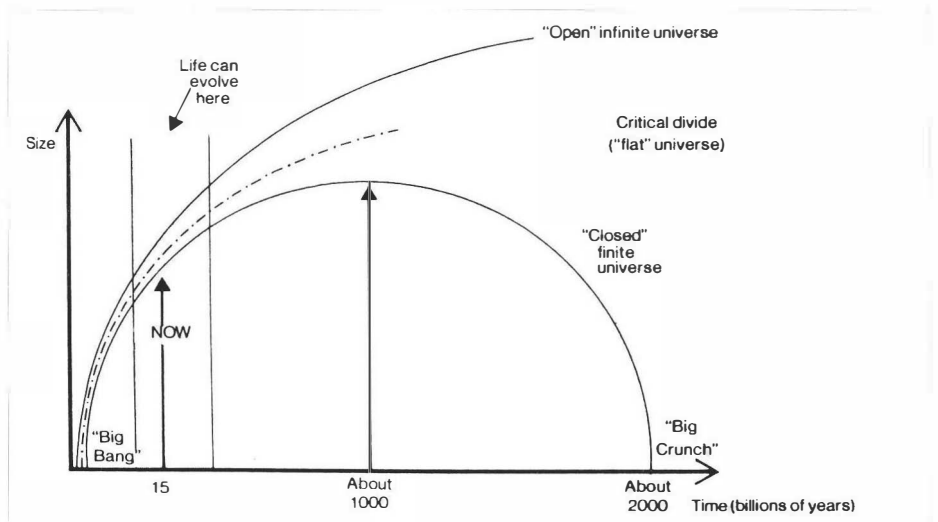


DIAGRAM 3
The three possible types of expanding universe.

pand very, very slowly would have collapsed before any stars formed. And universes which expanded very, very fast would never have allowed galaxies and stars to condense out. So it is only a universe quite close to the critical divide which allows life to evolve.

So what determines whether the universe has an infinite or a finite future? The critical divide here is determined by how much matter there is in the universe, and so we can, in principle, by measuring the total mass or density, determine by observation on which side we are sitting. If we count all that shines in the dark or emits measurable radiation then it looks as if we are well and truly in the open universe. However, there is very good reason to believe that the amount of material that does not shine in the dark – dead stars, elementary particles, black holes – is at least ten times bigger than the amount of visible material (because the way visible material moves indicates that it is sitting in a gravitational field twenty times stronger than could be created by just the material that can be seen), and this is enough to put us in a closed universe. So the question of whether the universe is open or closed, is open!

One of the interesting general points for a person with philosophical inclinations is the big difference between the closed and open universe. The open universe is infinitely large, apparently, in space and is going to live for an infinite time, whereas the closed model is finite in size and finite in age. If you read cosmology books from Einstein onwards, you will find that most

cosmologists have a very strong philosophical prejudice for one of these models: Einstein, for example, regarded it as axiomatic that the Universe was closed. There are various reasons for this prejudice; one is the fact that mathematicians really like finite universes because you can prove theorems about them and there is lots of work to do; another is one we mentioned earlier on – that if the Universe is infinite, then we are always just looking at an infinitesimal part and we will never, by observation, be able to learn anything about the Universe as a whole.

But the situation is not quite so simple as this. If we were to observe that the density exceeds the critical level in an attempt to prove that we are looking at a finite universe, we have to remember that this is only true if the bit of the universe that we have not seen is the same as the bit we have seen. It could be that the bit we have seen is like a little dense bubble sitting in a much bigger Universe that has very low density and will keep on expanding for ever.

Alternatively, if the observed density is less than the critical density, it does not necessarily mean that space goes on for ever in every direction. We could be a sparse region within a very large Universe of greater than critical density. But there is a further complication to consider. If we think of the universe of space as being a sheet of paper, it is quite permissible for a universe where the density is less than the critical level to have the ends of its sheet glued together to form a cylinder (Diagram 4). In this case, the size of the universe is actually finite, but if you kept moving on it you would never come to an

end. This is what we call a different topology, rather than a different geometry. If you were to glue the other ends together you would have a sort of ring doughnut and this is quite possible. Some mathematicians and physicists think it is actually quite likely that the universe has a topology like this. So just because we observe the density to be less than the critical value, it does not mean that space is infinite: it could still be finite if the topology is one of these complicated shapes.

The fact that the expansion is proceeding at a rate so close to the critical divide is one of the key problems which cosmology has been trying to solve. The reason that this is such a mystery is because as time goes by, one would expect it to diverge from such a very critical state. The fact that we are still so very close after this enormous period of expansion – 15 billion years – means that the initial starting conditions back there near the beginning must have been picked with fantastic accuracy – one part in 10 followed by 75 noughts – for us not to have collapsed by now, or run away from the critical divide completely. Our universe is like a rocket which has been launched with a speed which equals the speed necessary for escape to within an accuracy of 10 followed by 35 zeros, and this is quite extraordinary. What was it that arranged the starting condition like that?

CREATIO EX NIHILO



“There is nothing in this box”
I have indicated that one of the predictions of big-bang cosmology under particular conditions is that there must be a beginning to time. But we don't have any explanation as to how the universe came into being at that moment, although most cosmologists assume that it must have been associated with some point of infi-

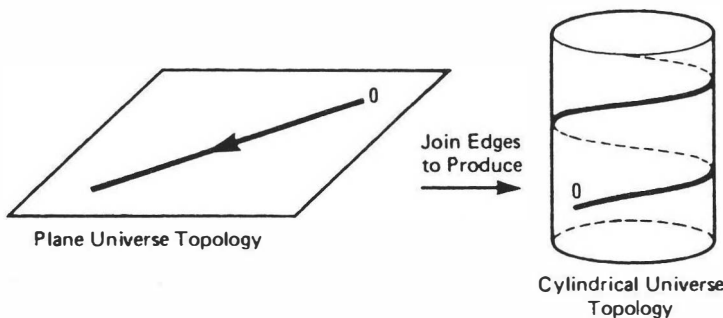


DIAGRAM 4

nite density. Now in the last two or three years there has been something of a revolution in what sort of questions cosmologists are willing to approach. The reason for this is that we have tried to build a more and more detailed picture of what happens farther and farther back into the past, closer and closer to this apparent beginning where things were hotter and denser. To do this we need perhaps to start using the latest ideas in elementary particle physics. At the same time, particle physicists have joined the enterprise because, as I indicated before, they see that they might be able to test their ideas by working them out in the early universe.

As a consequence, papers have begun to appear in the major scientific journals dealing with questions which traditionally one is told fall outside the province of science. I have brought two with me to show you: one is called "Creation of Universes from Nothing" in which there is an attempt to produce a mathematical description of how the universe appears: "...this model does not require any big-bang singularity and does not require any starting conditions to be specified..."; the other is the same type of idea, trying to explain the universe as a sort of quantum event, appearing out of literally nothing.

Well, what is this about? What does creation out of nothing mean and how does it work in the scientific description? In a sense there is a cheat here, because 'nothing' means something a little different to quantum physicists than it does to the ordinary man in the street. Classical, traditional physics of the sort one learnt at school has an extremely simple picture of the vacuum – it is nothing, pure and simple. Quantum theory does not allow you to have such a definite picture of things. One could never countenance a statement such as "There is nothing in this box" because there is radiation everywhere. In order to determine that there is nothing in the box you would have to make an observation, and this necessarily introduces uncertainty into the picture.

This uncertainty of measurement is embodied, as I am sure you know, by Heisenberg's Uncertainty Principle. One form of this says that when you are trying to measure an interval of time, Δt , using light or some other type of process that involves a certain amount of energy, ΔE , then in order to be able to observe the event, the product of the uncertainty in the time and the uncertainty in the energy has

to be greater than some small number, known as Planck's Constant (h) divided by 2π . This can be expressed like this:

$$\Delta E \times \Delta t > h/2\pi \text{ (Equation A)}$$

Now this is always the case, whether the systems are big or small. But in everyday life it does not matter, because Planck's Constant is very small indeed, of the order of 10^{-27} egs units. But at the level of elementary particles it becomes important,



...eventually there may be one which amounts to having a very large universe

and it has consequences for the picture we have of the vacuum. The quantum vacuum is imagined to be a sea of particles and their opposite anti-particles, which are their sort of mirror-images. When a particle hits its anti-particle, the two annihilate one another and go back into energy according to Einstein's famous equation $E=Mc^2$. Diagram 5 shows you a schematic picture of this process; the vertical axis is space and the horizontal axis is time, and Δt is the time that the particles live before they are re-annihilated. Now if, during this process, the energy and the time interval, Δt , are such that their product is less than Planck's Constant, as explained above, then the event may happen but it cannot be observed individually, and physicists call this a *virtual process*. An event which exceeds the equality and which can therefore be observed is called a *real process*.

So our picture of the vacuum is of a whole sea of these particles continually appearing and disappearing in such a way that they cannot each be observed. What is implied is that in Nature, energy is not actually completely conserved, but it is conserved in such a way that you cannot see it being violated. Nature does not mind you borrowing energy from the

vacuum to make two particles, so long as you pay it back again within a time which satisfies Equation A. You can see that the more energy you borrow, the shorter the time you have in which to pay it back; and vice versa, the less energy you borrow the more time you have in which to pay it back.

Now, this sounds somewhat mystical, and you might think that if you cannot observe these particles, why bother about them at all? Well, although you cannot observe them individually, you can discern their collective effect. This has been done experimentally – first of all by Willis Lamb, who won a Nobel Prize for his work – with the result that this picture of the vacuum has been verified by the most accurate observations in physics, with something like 14 places of accuracy of agreement between observation and theory.

This leads to a very interesting speculation – that if there exists some primordial vacuum and all possible vacuum fluctuations occur at some time, then eventually there may be one which amounts to having a very large universe, even though such a thing is extraordinarily improbable.

Clearly, in this type of picture, the 'nothing' that the universe is created out of is actually something rather complicated. It requires the existence already of ideas like space and time, quantum mechanics, fields, particles and so on. So people are really just using the term 'creation out of nothing' to attract your attention.

There is also a phenomenon in quantum mechanics called tunnelling. According to Newtonian mechanics, however many times you drive your car up Mount Snowdon, you will never go through it. But according to quantum mechanics, if you drive your car up Mount Snowdon 10^{30} times, once you should actually go all the way through it. This is a rather outlandish example, but it appears – and maybe this is just a curiosity – that one can arrive at a mathematical description of the universe which looks like one which has tunneled into its present state through some effective barrier, but it has tunneled from nothing. Some people take this rather seriously to indicate that it may be evidence that you could have a description of the universe which came into being from literally nothing except the notion of space and time plus the laws of nature.

One's first reaction to the idea of having a scientific description of creating the universe out of (almost) 'nothing' is the gut feeling that it must be violating some sort of conservation law: that if at one moment there is nothing and at the next something, there must be some principle that stops this happening. In ordinary physics we are familiar with things like the conservation of energy, conservation of momentum, conservation of electric charge. These are quantities which in everyday processes we can re-arrange and re-distribute, but when we come to do our accounting at the

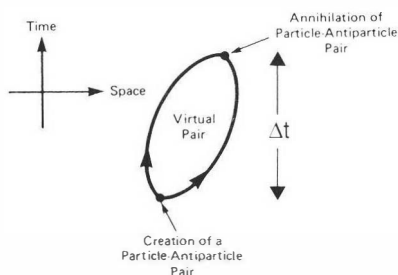


DIAGRAM 5

The creation and annihilation of sub-atomic particles in a quantum vacuum

end of the day, we cannot alter the number at the bottom of the bill. The remarkable thing about the universe, judging by our present observations, is that all the conserved quantities may be zero overall. It does not appear to carry any net electric charge; it does not have any discernible spin which would have to be conserved; the total energy seems suspiciously close to zero. The more one looks at it, the more it appears that there would not be any inconsistency with the laws of nature if the universe were brought into being at one moment of time. In a very curious way the appearance of the universe seems to slide past all restrictions.

To get a little more definite; it does appear that if one wants to have a description of the Universe coming into being from literally nothing, then the Universe itself has to be finite – so it has to be one of those models that are closed, or even one with the doughnut topology for instance. This is in a sense a prediction, for if observations eventually indicated that the universe had a density lower than the critical divide, then this would be significant evidence against creation out of noth-

ing theories.

These ideas are in a very hypothetical state, and there are few definite results, merely these speculative avenues I am following here. What I want to emphasize is that, for the first time, cosmologists are starting to take seriously the idea of producing a description of how the universe came into being. Whether it will succeed or not is another story, but it is a new development. Contrary to what has always been said – that science deals with how things change, not how they originate – there is now a growing tendency amongst cosmologists to talk seriously about the creation of the universe as a scientific topic.

(1) *Oxford University Press, 1986. See review on p32. Further discussion can be found in 'The World Within the World' by John D. Barrow, to be published in August '88, also by Oxford University Press.*

(2) *One of the most promising cosmological theories currently – that of the Inflationary Universe – predicts that we actually live within one part in 10^4 of the critical divide.*

Drawings by Julia Dry.

Letter to the Editor

Dear Sirs,

Reading through Michael Shallis's article in Issue 5 of BESHARA, I feel prompted to bring up the following considerations.

There is, in the current intellectual climate, a definite movement towards a conceptual 'unity of nature' which will supposedly reconcile, or bring into harmony, the theories of modern science and the sacred sciences (esoteric doctrines). However, such a conceptual unity is not unity at all in reality – it is but 'food for the intellect' – and it could pose a great danger, that of becoming trapped in an alternative conceptual picture which has no direct bearing on our being.

Whilst the increasing reaction against scientific 'progressism' presents us with a golden opportunity for fruitful self-examination, and so for a real step forward in our quest for higher awareness, it could be that we may yet wrap ourselves up in theory and speculation. It is of crucial importance, therefore, that the differences between the two disciplines in question be given due attention, lest we

rob traditional science of its value as a guide to what is sometimes called 'self-realisation'.

The great achievement of modern science has been to harmonise within ourselves thought and sensory experience. Where it has failed us, however, is in its outright denial that the universe can offer deeper experiences than those derived from sensory perception. Traditional teachings, on the other hand, derive from a deep 'inner' experience of the one-ness of all existence. As such, it speaks from the standpoint of true Unity, and we must always be mindful that its teachings are rooted in the sacred idea of 'microcosmic man', and that traditional methods were aimed at inducing within the student a state of consciousness which would make him or her a suitable vessel for the inner experience of its teachings. And surely, this inward assimilation of esoteric ideas is the only way in which they can be understood?

Therefore, when we study, with a view to unity, the parallels between modern scientific theory and traditional metaphysical doctrine, we are attempting the

impossible, and we should realise that the fundamental error in this approach is the assumption that ancient teachings can be understood with modern man's uniquely developed intellectual apparatus. This merely reflects our pride and our egoism. That parallels exist between traditional and modern thinking is hardly surprising bearing in mind the inescapable unity behind all diversity, but to think that we can come to terms with this unity without the discipline and rigorous self-interrogation of the traditional path is somewhat fool-hardy.

Taken as a guide towards harmonising his own fragmented being, traditional teachings could be the saving grace that modern man so desperately needs, but should he take them out of context – i.e. in isolation from a path – there is a terrible danger that in his search he will simply suck the life from them as he denies the Life in himself, and the consequent denigration of sacred ideas might just be the final seal of his fate.

R.G. Ball
(Chelmsford)

BOOKS

The Cosmic Blueprint

by Paul Davies

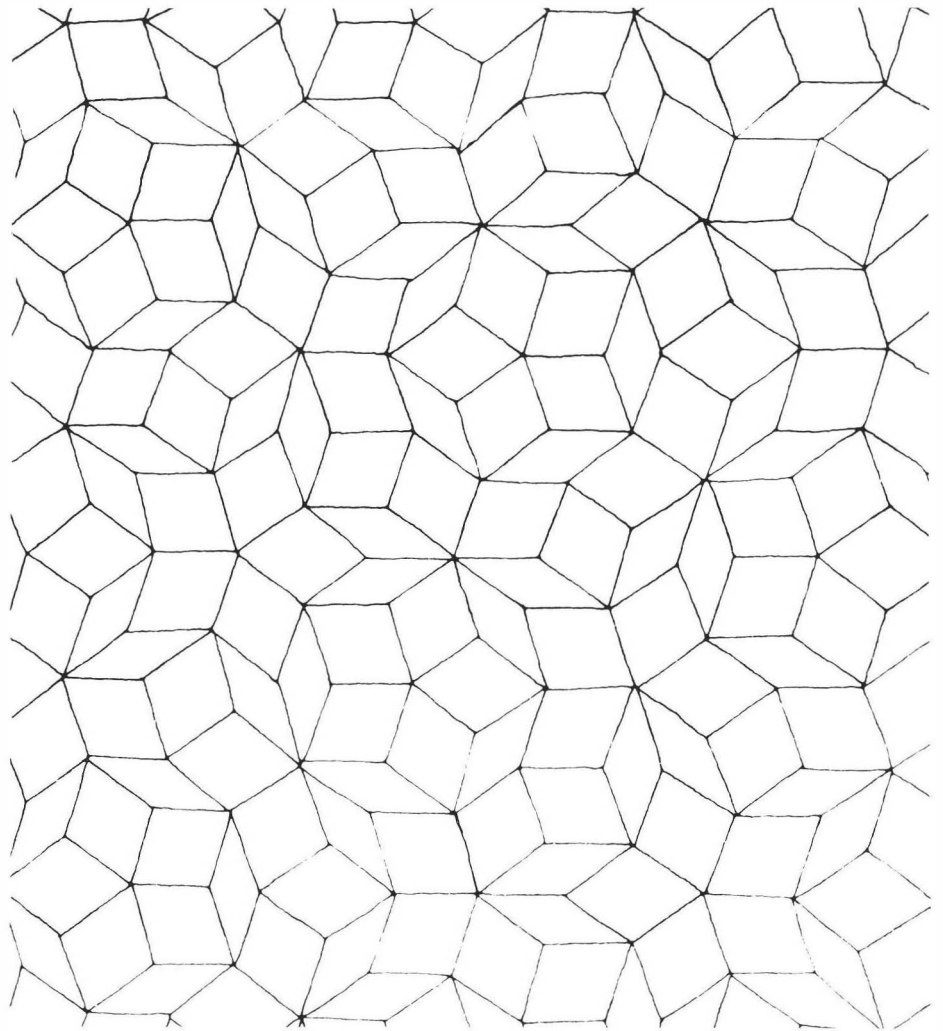
Heinemann, London 1987.
Hardback, pp 223, £12.95

Reviewed by Richard Twinch

The Cosmic Blueprint' by Professor Paul Davies sets out to answer fundamental metaphysical questions such as "Are the seemingly endless varieties of natural forms and structures ... simply the accidental products of random forces? Or are they somehow the inevitable outcome of the creative activity of nature? ... does this imply that the present state of the universe is in some sense predestined? Is there, to use a metaphor, a 'cosmic blueprint'?"

The book is written from an admittedly 'scientific' (his quotes) viewpoint and presents what Davies (who is Professor of Theoretical Physics at Newcastle University) calls the 'new paradigm' in which the process of creation is seen as continual and ever-present rather than confined to some arbitrary point in the historical past. This paradigm is 'optimistic', since it allows for an ever-increasing complexity and self-organisation based on free-will – in contradistinction to the 'pessimistic' paradigms of the Newtonian mechanistic universe, where everything is fixed according to eternal laws in the context of a 'heat-death' scenario implied by the Second Law of Thermodynamics. The arguments put forward by Professor Davies are clear and concise, embracing the full gamut of current scientific understanding, including cosmology, biology and neurophysics. The overall effect must be to leave even the most diehard pure reductionist wilting somewhat in the profusion of expert views and detailed evidences.

Much of the book is taken up with a review of Davies' own research, which shows how increasing complexity leads to patterns of self-organisation. A crystal such as salt is a simple 'ordered' system exhibiting regular symmetry but no freedom of movement. Davies demonstrates that with an increase in complexity, order breaks down and freedom to move increases, whilst at the same time new levels



Penrose's Tiling Pattern. Using only two shapes, the entire plane can be covered without gaps to produce a remarkable pattern that has five-fold symmetry and long-range order, but no periodicity. p80

of organisation arise spontaneously. He gives as an example a pan of water heated evenly: here the water molecules are quite free to move independently, but at a certain point in the process the random convection of the water molecules suddenly 'switch' into a co-ordinated hexagonal pattern. Similarly, in a laser beam, billions of light photons conspire instantaneously to form a beam of co-ordinated intensity where the wavelengths, rather than cancelling each other out, reinforce the whole with such force as to carry the beam thousands of miles. A prime example in cosmology is the rings of Saturn which are highly sophisticated, 'shepherded', rings of dust and small particles.

One particular species of self-organisation described by Davies is that of chaos. A good example of a chaotic system is when a waterfall suddenly breaks from smooth flow to become a white mass of foaming water droplets hurled hither and thither in the desperate plunge to earth. A

simple chaotic system investigated by Davies' team of researchers is that of a pendulum damped by friction and driven at intervals by an external force. Its movement changes from simple to complex, ordered behaviour, then suddenly switches to random behaviour when certain conditions are met.

It is illuminating to be shown that chaotic systems exhibit regularity. This regularity is not in terms of what they will do next, which remains uncertain, but in terms of when such a system switches from well-ordered to apparently random motion. For a number of quite diverse systems this has been found to be controlled by the 'magic' numbers 4.669 201 ... and 2.5029 ... which have been named as Feigenbaum numbers after their discoverer.

Another example of such behaviour is found in weather patterns, which are well-known to be highly unpredictable. The weather is so delicately susceptible to

initial conditions that what is known as the 'butterfly effect' comes into play, because (to quote Davies) "the future pattern of weather might be determined by the mere flap of a butterfly's wings".

Unpredictability arises due to the inability to determine the *exact* starting conditions. So even when simple equations (such as in fluid flow applied to water or convection currents in the atmosphere) are applied to a given situation, the results can deviate radically from those predicted to the degree by which the initial conditions were undetermined. The sad news for weather forecasters is that however much computing power they have, they will not improve much on current performance!

Paul Davies goes on to describe how such apparently irregular events have their own logic when examined in terms of fractal (1) geometry, an abstract, and (until recently) heretical branch of mathematics that had originally arisen out of the need to measure the wiggleness of the British coast line (by the uncle of Sir Ralph Richardson). This mathematics regards the complex and irregular as natural and the linear and regular as exceptional, and has only been able to be utilised since the advent of powerful computers. Prior to this scientists had to concentrate on linear systems (such as a piece of elastic stretching uniformly with applied weight) since they lacked the tools to cope with multi-faceted situations.

'The Cosmic Blueprint' is packed with such thought provoking material. One of the best and most exciting chapters in the book is The Quantum Factor, which brings to the fore Paul Davies' thorough grasp of ideas and clear exposition. One engaging property he tackles is that of non-locality. Recent experiments (founded on a thought experiment proposed by Einstein and colleagues, known as the EPR Experiment) have shown that a 'particle' once 'split' into two, shows remarkable correlations beyond the scope of relativity theory (which forbids information interchange at faster than the speed of light). Paul Davies goes on to say:

"The lesson of EPR is that quantum systems are fundamentally non-local. In principle, all particles that have ever interacted belong to a single wave func-

tion – a global wave function containing a stupendous number of correlations. One could even consider (and some physicists do) a wave function for the entire universe. In such a scheme the fate of any given particle is inseparably linked to the fate of the cosmos as a whole, not in the trivial sense that it may experience forces from its environment, but because its reality is interwoven with that of the rest of the universe."

Earlier Professor Davies describes how Jung picked up on this fundamental idea to explain unusual coincidences and acausal relations. Jung termed this phenomenon 'synchronicity'. Davies is quite happy to go along with examining what the idea of a universal wave function has in relation to physics, but dismisses Jung in the following words: "However, whereas acausal associations in, say, bio-systems might be reasonable, it is quite another matter to extend the idea to events in the daily lives of people, which was Jung's chief interest". This seems to fly in the face of another important feature of quantum mechanics which Davies mentions: that of the nature of the observer as an integral factor in defining exactly how the quantum wave function 'collapses' at any time and place, thereby affecting the entire universe. Why should not the same principle carry over into the daily lives of the observer? Might not the flap of a butterfly's wings change the world's weather?

This line of thought is too interesting to leave, despite other pressing matters. In quantum mechanics, the idea of separate particles is replaced by the concept of wave functions, which can appear either as particles or as waves depending on how they are viewed. Davies outlines the views of Niels Bohr who regarded these as complementary aspects of a single reality, saying, "Bohr's principle of complementarity demands a fundamental reappraisal of the nature of reality, in particular the relationships between the part and the whole, the observer and the observed." Quantum theory postulates that an infinite number of possibilities are present in a given wave function. What appears in time is the 'collapse' of the wave function into one possibility, and this depends in part on the nature of the observation; ie. on the observer (2)

Once a wave function has 'collapsed'

(as pointed out by Davies) it is an irreversible process which is 'time-asymmetric'. Here then is an alternative time 'arrow' for the optimistic paradigm, to counter the pessimistic 'thermodynamic' time arrow which is dominated by decay and disintegration (3). As Davies further points out: "The wave function represents not *how* the system is, but what we *know* about the system"

This implies that the witnessing of the world is dependent on knowledge, ie. what we perceive is what we know. There are no fixed boundaries to reality, the only limitation is that imposed by ourselves. It is important to note that this is a view long held by what have been described as mystics who do not in any way hold 'anti-scientific' views, but are concerned solely with seeing the reality as it is in itself. The traditional wisdom is that 'Knowledge is identical with the thing known'; if science arrives at similar conclusions it is to its benefit and those of its adherents, and a sign that what was known previously by the few has become the birthright of the many.

Professor Davies, in bringing forth these proofs and evidences, is aware of the import of such meanings and quotes the physicist John Wheeler, who said that "Physics is the child of meaning even as meaning is the child of physics". However at other times he hangs back as if clinging to outmoded forms in a nostalgic attempt to return to pre-quantum materialism. For instance, in the earlier parts of the book, he examines in detail how simple 'ordered' systems evolve into higher level organisms, which, despite losing symmetry, are capable of generating new dynamic patterns of organisation. Where do these patterns arise from? His answer favours a 'dialectical materialist' approach which sees pattern mysteriously welling up from the depths of matter. And towards the end of 'The Cosmic Blueprint' he says:

"If life were discovered elsewhere in the universe, or created in a test tube, it would provide powerful evidence that there are creative forces at work in matter that encourage it to develop life; not vital forces or metaphysical principles, but qualities of self-organisation that are not contained in – or at least do not obviously follow from – our existing laws of physics"

With all that quantum mechanics has shown us, it no longer seems necessary to hang on to the belief in a universe of matter which can have properties, albeit of self-organisation. The mystical, and perhaps more rigorously 'scientific', view is that matter *per se* does not exist, except as an illusory image of its reality. Such an understanding, applied to the appearance of new forms or patterns, would indicate that their appearance is time-dependent and that time exists by virtue of observation implicit in quantum theory. Observation is witnessing, and what is witnessed – to quote Davies – is "the subtlety and beauty of nature". If Nature is understood to be the image of a singular reality, rather than having any reality in itself, then what evolves is the outward expression of the beauty of the reality. This reveals itself in forms of knowledge according to how we know ourselves – knowledge being dependent on the known, as mentioned above. (4)

Thus the traditional wisdom tells us that the sole purpose of the 'world of witnessing' is to bring man to the truth. Davies, despite his protestations to the contrary, has a feeling for the enormity of this situation, for at the end of 'The Cosmic Blueprint' he refers to the dignity of man, saying, "Yet the knowledge that our presence in the universe represents a fundamental rather than incidental feature of existence offers, I believe, a deep and satisfying basis for human dignity"

But he leaves questions of meaning open. To quote the final paragraph:

"The very fact that the universe is creative, and that the laws have allowed complex structures to develop to the point of consciousness – in other words that the universe has organised its own self-awareness – is for me powerful evidence that there is 'something going on' behind it all. The impression of design is overwhelming. Science may explain all the processes whereby the universe evolves its own destiny, but that still leaves room for there to be a meaning behind existence."

It may be that Professor Davies underestimates the role of science here, which could be far greater than that of merely explaining processes, which is in any case a rather bland affair and carries with it the

danger of reducing an infinite, singular and unlimited reality to a series of propositions – whether they be self-organised networks, as Davies proposes, or reduction to purely mechanistic sub-atomic processes. Whereas the awe-inspiring vision of 'the subtlety and beauty of nature', mentioned by Davies as the inspiration for many scientists, is an intuition which is fundamental to the profundity and dignity of man's position.

The possibility for man is not only to be an 'an observer' but to be the 'eye-pupil' – the self-awareness – through which Reality sees itself, and through which the universes are created and maintained. Science is imbued with meaning to the extent to which it participates in such vision – from which follows the responsibility to expound and expand that meaning in the most universal context. There can be no end to meaning, and so physics (science), as the 'child of meaning', equally has no end. 'The Cosmic Blueprint' itself bears witness to this expansion and, despite the few reservations mentioned above, is highly recommended to those wishing for a clear summary of how this possibility is unfolding in our times.

1. *The term 'fractal' was coined by Benoit Mandelbrot in his book 'The Fractal Geometry of Nature.' W.H. Freeman, 1982.*

2. *This has its parallels in traditional metaphysics which describes the nature of the possible and impossible, whereby all possibilities are present at each moment, what appears as necessary depends on what is known, otherwise the possibilities are impossible.*

3. *'The Direction of Time' by Stephen Hawking (New Scientist 9th July 1987)*

4. *The sudden apparent 'jumps' noted by Davies, when points of 'bifurcation' in complex systems appear are perhaps to do with the process of imaging of the reality which takes its form according to the view of the observer, and appears as random and unpredictable because each person and each instant is unique and a separate face of beauty is appropriate for that moment. The apparent contradictory opposites, which in fact as Bohr would undoubtedly say are complementary points of view, are thus the poles of order and organisation. The latter allows the inherent dynamic qualities of life to be better expressed, while the former exhibits complete concordance of 'things' with their nature, without possibility of deviation.*

Books on Zen

Reviewed by Martin Notcutt

The Method of Zen

by Eugen Herrigel
Arkana, London, 1988
Paperback, pp102. £3.95

Hara - The Vital Centre of Man

by Karlfried Graf Dürckheim
Mandala, London 1988
Paperback, pp208. £4.95

The Way of Transformation

by Karlfried Graf Dürckheim
Mandala, London 1988
Paperback, pp106. £4.95

Zen Culture

by Thomas Hoover
Routledge and Kegan Paul, London, 1988
Paperback, pp262. £5.95

Eugen Herrigel is well known as the author of 'Zen and the Art of Archery', whose title alone stimulated many other books. 'The Method of Zen' was compiled from the many unpublished papers found after his death in 1955.

The book seems aptly named, for in Herrigel's view that which distinguishes Buddhist mysticism from all others is the emphasis it lays on a methodical preparation for the mystical life. The selections have been arranged to describe the schooling and transformation of those who enter the Zen monasteries of Japan. Here a series of stern traditional disciplines are applied under the guiding vision of a master.

When Zen Buddhism enjoyed cult status in the West in the 1960's as the doctrine of immediacy and spontaneity, few people appreciated how formal and rigorous that training was, or that although it put little reliance on words and doctrines, this way made the student dependent on the master to an extreme degree. "What keeps them going is not direct faith in ultimately reaching the goal, for that is far off and as yet without effect. But it becomes effective through the Master; and thus faith in the Master is, indirectly, faith in the goal." (p15)



Noh Theatre Masks. Photograph courtesy of the Japanese Embassy.

Nonetheless, this book encompasses the point where method becomes no-method, where the student cannot question the teacher "for he has dropped the reins ... Any further advance must be made without help or advice ... If the pupil finds the way ahead the pinnacle will be reached. If not, he will remain a mere technician. Over and above all technique, genius must break through."

Beyond the particularities of Zen, there are gems in this book. Distinguishing man from other beings by his constitution, Herrigel says, (p80):

"On man, however, a new and unprecedented law is enjoined: to fulfill what was promised in his nature by inclining himself to all things, and enveloping them in love where and whenever he meets them; in love which does not reckon or calculate, but squanders itself and only grows richer and deeper in the squandering. Only in this way can he succeed in freeing himself, step by step, from the narrow prison of individuality in which he, like the animals and plants, is confined. In the end he is restored to himself as he really is: as the heart of existence, in which Being is made manifest."

Like Herrigel, Dürckheim was a German who worked in Japan between the two world wars, and gained his knowledge of Zen through study with traditional teachers. But while he also clearly admired the Japanese way of life, the two books reviewed here, re-issued in paperback, are addressed to the needs of a western readership without access to traditional teachers.

"Hara" is the earlier work. *Hara* means literally belly, but in this case it implies "the whole man in full contact with the nourishing, begetting, conceiving, carrying and re-generating root-forces of life. Hara is the region where the Primal Oneness of life is to be found. When a man can preserve his union with it under all circumstances he will remain completely at one with the Great Life within him."

The first sections of the book explain the meaning of *Hara* in the life of the Japanese and its general significance. They introduce the description of *Hara* as practice, beginning with attention to posture, breath and tension. An appendix contains translations of three short Japanese texts.

It is an introductory work, reflecting Dürckheim's experience as a psycho-therapist. Where Herrigel emphasises the

fertilising action of *satori*, Dürckheim lays stress on the need for integration. There are three things necessary, he says, in order to realise the possibility of a living faith: Experience, Insight and Practice.

'The Way of Transformation' takes the theme of practice and develops the idea that man's most important task is none other than himself, the making of himself into a true man. It has as its subtitle, 'Daily Life as a Spiritual Exercise.'

Underlining the kind of attitude required, Dürckheim says, "Daily life seems to be an obstacle to spiritual life, but this is only true if one does not know how to use it". In fact, daily life is the opportunity man has for this transformation. Correct practice has two essential conditions: constancy of repetition and service. "When all that we know and do becomes a means for the revelation of Greater Life in the world, then the Way may be attained and the ordinary day itself may become one single field of practice".

In this work, Dürckheim outlines a simple metaphysics, but the focus of attention is still on the action of the individual, rather than on the Reality which is individuated.

What elevates the books by Herrigel and Dürckheim is not just the love which has ripened in them for the expressions of Zen Buddhism – for Herrigel "Zen is perhaps the most beautiful and mysterious blossom of the uncanny creativity of the Chinese genius" – but their directness.

'Zen Culture' covers the origins of Zen Buddhism in 6th century China, the pinnacles of expression which were achieved in the 13th and 14th centuries and its enduring legacy in modern Japan. There are chapters on archery and swordmanship, the landscape garden, painting, architecture, Noh theatre, the tea ceremony, haiku and flower arranging.

The book succeeds in conveying the permeation of the spare and vigorous aesthetic throughout Japanese society, and its subsequent impact on art and design in the West in the 19th and 20th centuries. First published in 1977, this is an interesting overview, though the material is not original and many comments are on the verge of platitude.

Recent Books on Meister Eckhart

Meister Eckhart: Teacher & Preacher

Editor Bernard McGinn with collaboration of Frank Tobin & Elvira Borgstadt.

Preface by Kenneth Northcott.

Paulist Press NY, 1986. Classics of Western Spirituality. SPCK.

Paperback pp xviii, 420. £13.95

The Way of Paradox: Spiritual Life as Taught by Meister Eckhart by dom Cyprian Smith.

Darton Longman & Todd, 1987. Paperback, pp x, 134. £3.95

Meister Eckhart: The Man from whom God hid Nothing

Edited by Ursula Fleming.

Collins Fount Paperbacks, 1988. pp.160. £2.95.

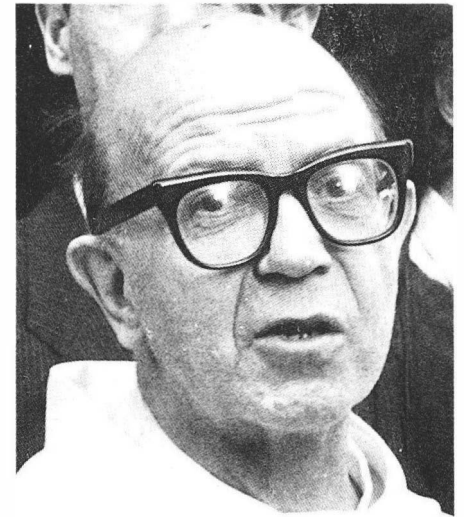
Reviewed by dom Sylvester Houédard

The first volume of Eckhart published in the Classics of Western Spirituality Series, in 1982, with Sermons, Commentaries and Treatises, together with the Defence and the Bull *In Agro Dominico*, included introductory sections on the Life of Eckhart by Edmund College (21 pages) and on his thought by Bernard McGinn (38 pages). This second volume has the whole Commentary on Exodus, selections from three other commentaries (Wisdom, Ecclesiasticus, John), translations of 24 German and 6 Latin sermons and includes an Appendix giving the entire Sister Catherine Treatise because the 'text is so deeply marked by Eckhart's thought'. And confused by it? When the spiritual daughter, speaking 'so much about God', is told by her confessor to 'speak on', she tells him so much 'he loses his senses', and when he regains them 'after a long time' she says 'you are not prepared for it', and adds he won't be till he is (a) accustomed to moving 'up and down...in and out' and (b) prepared for recognising the difference between God and the Godhead 'by learning the difference between Spirit and Spirituality (geistlichait)'. The need not to get stuck in ecstasy: the god/godhead difference and being both Mary and Martha (in and out) at once are Eckhartian, but spirit/spirituality is not, and though Eckhart may sometimes skate over the 'it', some confusion seems evident when Catherine does so here. As well as the usual double index there is an 18 page Glossary of Eckhartian Terms (Latin and German) with page references to both volumes: a model for future books on Eckhart to develop.

What readers of BESHARA may find of special value in this volume is the section (only 24 pages: it could have been 66 if the Catherine had been left out, in which case loose ends could have been tidied up and a sharper focus obtained) by Bernard McGinn, entitled 'Meister Eckhart: On Speaking About God'. The middle way that treats the names common to things and to God as neither univocal nor equivocal is analogical, even though (the 1215 definition of Lateran IV) 'every similarity between creature and creator implies a far greater dissimilarity'. McGinn balances the contrast between Eckhart and Aquinas that results from the type of analogy each preferred, with a warning that the contrast must not be 'oversimplified'.

At the risk of just that, my impression is that we can profitably view the contrast as psychological: some people tend, like Eckhart, to get a little intoxicated with delight in Gregory of Nyssa's world of paradox, where (paradox of paradoxes) bride or mind is simultaneously both lake and river (the solid and the liquid in pseudo-Denis) while others like Aquinas (at least till he called his writings 'straw' compared with what he was granted then to contemplate, and stopped work on the Summa) tend to remain sober since paradox just happens to be the foundational nature of reality.

Both in theology (knowing God) and theological discourse (knowing about God) we start with things, with creation, but (to use the convenient buddhist terminology of the Two Truths) the non-para-



Dom Sylvester Houédard

doxical, tautological, and *conventional* truth (that things are as they appear to be) is not the paradoxical, non-tautological and *ultimate* truth (that things are empty of 'inherent existence'). Things, including mind, are not beings but becomings. Aristotle's static logic does not apply since nothing is ever merely itself, but a process of self-transcendence, of self-modification, and God is not 'a being' (least of all an Ultimate or The Absolute) but being.

Each of the two truths enables us to talk about God, but in different ways, with different types of analogy, even when remembering that language itself is invented for conventional truths. Being is what we nowhere encounter and yet is given in the fact of every encounter because, as Maximus says (I), God creates by giving substance to that which he eternally knows as able to receive it, and (as Aquinas says) he knows this by knowing the truth (himself) of every possibility, namely the truth that it is possible. Hence the 'double nature of nothingness': *strict nothing* (which, as Melhuish says, never has been and never can be the case) and *prior nothing* (which has the possibility of being 'exchanged' for something). The one, single, unique and solitary Absolute Nothing alone would be *other* than God, and were it able (*per impossibile*) to know its nothingness, it would have negative knowledge of the essence of God ('god beyond god') dwelling in inaccessible light as *the* 'negation of negation'. Nothingnesses being many (the emptiness of one thing is not the emptiness of another thing, to use the Tibetan phrase) each of these that is able to know its own nothing-

ness (the only thing, Ibn 'Arabi says, that is its own) has negative knowledge of God as (again in Ibn 'Arabi's phrase) *its* Lord.

'God beyond god', or (as Aquinas says) the formal object of our worship, is necessarily inaccessible but, from even the material object (even when supremely known as that which we *know* we cannot know) we need detachment ('god rid me of god') or we drift from theology (Mary) into theological discourse (Martha): from *batin* (hiddenness) into *zahir* (appearance) instead of maintaining (like a cup) the inside (Mary) inside the outside (Martha). *Dhikr* (remembrance of God; ie. of our own nothingness/emptiness) has to be maintained in market and pub: rising-leaving-returning-sleeping (Moses and Buddha have identical phrases); we must carry the *dhikr* (or *rigpa* in Tibetan) of our *humilitas* (as Benedict says at the top step of the gold ladder) in '*batin-plus-zahir*' out to garden-road-field-everywhere, sitting-walking-standing; carry it back (as Augustine says of the fourth journey of mind) into the world where words again have beginnings. Buddha and Bernard talk of this under compassion or mercy.

Such, it seems to me, is the sort of rough sketch that, based on Eckhart, and itself oversimplified, would indicate the sort of ground or vantage-point from which we can speak about speaking about God without oversimplification of all the contrasts between all the types of analogy; between analogy and dialectic; between the levels of knowledge in predication, in negation, in the excessus and in epectasy; between even the sorts of talk appropriate to each of the four journeys of mind. Of all the wide-reading scholars, McGinn is the one who could best organise such a panopticon on a firm Eckhartian basis. But not in twenty four pages. Perhaps sixty six in the third volume?

The writings of Eckhart, like those of Ibn 'Arabi, are not easy reading and both authors have been misunderstood and condemned on the basis of that misunderstanding, accused of ditheism and pantheism; both are only now being properly understood by western scholars and spiritual directors, and each has impelled our generation to establish a Society (2) for the study and dissemination of his thought. In the case of Eckhart, it is only now that academic work is reaching the

point where we can distinguish authentic from spurious works. One result is that scholars can now discuss his thought with confidence and a second result is that his thought can now be presented to the wider audiences addressed by these two other books.

Readers will note that it was Marco Pallis, the doyen of English tibetologists, who suggested to Ursula Fleming the initiative that led to Simon Tugwell approaching the Master General of the Dominicans to consider the rehabilitation of Meister Eckhart (3), and the founding of the Eckhart Society after a Spode Symposium (organised by Conrad Pepler) on 'The Man from whom God Nothing Hid' (Collins ruin the whole rhythm of this by inverting the two last words). This included a paper, of critical importance to the wider ecumenism, presented by the Chime Tulku as the first serious step ever taken by Tibetan Buddhism to understand the spiritual tradition of Abraham.

Having spent many years in the study of Eckhart, dom Cyprian can offer us the first (if not final) really successful attempt at a clear and complete presentation of Eckhart's teaching on the spiritual life, a more practical guide than the recent book by Richard Woods (4) who devoted equal attention to Eckhart as Friar, Master and Preacher. Where Ursula Fleming differs is that, though she has achieved the same results, she has done so not in her own words but by assembling, with luminous skill, brief extracts from the authentic works into a logical and helpful sequence. As a consequence these two books complement each other perfectly.

The publishers insult their authors, however, (and their paying readers) by refusing an index, though Collins does give a glossary of Eckhart's definitions which, with a minimal effort in their office, could have included page references. With so many new translations coming out it is good to see the extracts taken from an older one.

McGinn calls Eckhart a 'good neoplatonist' and his non-analogical way a neoplatonic 'dialectic': but there is energetic (semitic) neoplatonism whose father is Philo (with Saccas, Origen, the Cappadocians, Maximus as descendants) and there is static (anticreationist) neoplatonism fathered by Plotinus. Dialectic seeks the static *coincidentia oppositorum* in something higher, but there is nothing higher in which creator and creation coincide. Dom

Cyprian is perfectly right to prefer *paradox* (the antinomies) to *dialectic*. No becoming can become the unbecome, our deification is epectasy. As Aquinas preferred to name the unnameable with a verb (to be) rather than a noun (isness), so Eckhart urges us to be aware that we are *adverbs*.

Existing as possibles in the mind of God from timeless eternity, it is *actus purus*, or God, to-be or isness, that imparts *himself* as self-gift in the act of actualising us in time, and it is in the *now* of mind that future and past (the not-yet and the no-longer) meet without a gap for 'is' and 'am'. Here at the *apex mentis* (intellectus, now or ground) at the conscious point of contact between becoming and being, the perpetual influx of isness and its unceasing extinction are *simultaneous*. The perpetually enduring now of mind is a geometric point of zero duration.

This paradox of instantaneous influx and extinction, the mystery of efficacious causality, of 'boiling over', continuous creation or mercification (5) is treated by Eckhart in the commentary on, not Exodus, but Ecclesiasticus (6): They shall eat me and hunger. In his jewelled saying so reminiscent of Tsong-Khapa on the Two Truths, he says "The truth of the analogy of all things to God is fittingly expressed in this saying from Wisdom since they eat because they are; they hunger because they are from another". Every path to God goes through creation but the direct path is through that bit of creation which our own mind itself is. Hence Antony says "unless you know yourself, you cannot know God" – not in the static Greek sense of the Delphic saying, but the older Hebrew sense of Ezechiel, Jeremiah and Jesus, ie. reading Torah on heart-of-mind we need no teachers. "Your own mind" the Dalai Lama said to monks preparing for exile, "will have to be your lama".

If we need a key to enter Eckhart's world of paradox it is in this hunger through eating God (the insatiable nature of mind in Gregory of Nyssa and (7) Maximus) since this is epectasy at the point or apex where mind, in perpetual self-transcendence of now, is particle and wave, lake and river, where its liquefaction ('melting') in detachment from even detachment means the material object of worship perpetually recedes, since the formal ceaselessly approaches; where our immediate contact with God lasts zero time yet does so perpetually. It is at this

zero point, with no gap for I am, that we 'breakthrough' to I AM, to the birth in us of Christ, whose human nature was perfect *because of* its lack of human ego. Hence the need for it to be lacking in us; the need, that is, for his mind to be in us, so that all can say I live but now not I: Christ lives in me.

This paradox of how time and the timeless touch at the point (the spark) where we can perpetually observe our own creation (our poverty and dependent origination), where privative and negative infinities meet (as human now and divine now) without meeting (because approaching eternally), is a pass key equally to the thought of Ibn 'Arabi (especially when he speaks of New Creation and Resurrection) since precisely here is where they both *enjoy* being at their most abstruse and obscure. This allows a final comparison between the two more recent books. Ursula Fleming has collected some of the most helpful passages on Time and the Now (8) and put them at the centre of her book; dom Cyprian, wisely preferring the task of dissipating the fog these passages cause when misunderstood, appropriately creates a subsidiary paradox: where Eckhart opts for the direct ascent, he guides the grateful reader to that same summit, the *culmen* of Benedict, along a winding path, an easier but more scenic route.

(1) *Chapters on Love* 4.4

(2) *The Eckhart Society was founded in 1987, and its first conference, on the theme 'Eckhart and the Christian Life' will take place in Leeds, UK, in September 1988. See Page 39.*

(3) See BESHARA 3.

(4) *'Eckhart's Way' by Richard Woods, OP. Dartman, Longman and Todd, 1987.*

(5) *God having revealed his name as I AM then reveals that I AM is named, as in bismillah, 'merciful and mercator'. Hence we are to "be perfect like god" having compassion or mercy on all, as he sends rain on the good and wicked alike.*

Commenting on Hosea 4.4, Eckhart cites 'a master' who plainly understood that boiling over and mercification are the same.

(6) 24.29. Cited again in *Sermon 43* (Pfeiffer 1857; Walshe, 1987, 3.31)

(7) *Chapters on Love* 2.48. "By enduring participation in this divine illumination, mind becomes wholly bright and turned to ceaseless desire, unceasing love".

(8) *Eckhart, like Maximus, sometimes uses 'now' for the whole of time, for all history, this world or age.*

Books on Science

The Rape of Man and Nature

by Philip Sherrard

Golgonooza Press, London 1987. Hardback, 124pp, £12.50

A Sense of the Cosmos

by Jacob Needleman

Arkana, 1988. Paperback, pp178. £4.95

The Anthropic Cosmological Principle

By John D. Barrow and Frank J. Tipler

Oxford University Press, 1986/1988
Paperback, pp 706. £9.95

Reviewed by Jane Clark

Philip Sherrard summarises the purpose of his short book in the first paragraph:

"It is to show, first, how modern science has its roots in certain prior developments in Christian theology which partially eclipsed the full Christian understanding of man and his destiny; and second, how the acceptance and implementation of this scientific worldview has resulted in an ever-accelerating dehumanisation of man and of the forms of his society, with the repercussions this has had, and is still having, in the realm of nature".

Philip Sherrard is a scholar and translator of repute and this book draws together four essays which were originally written between 1973 and 1975, with a newly written epilogue. In defining the true nature of man, he turns to the Greek patristic tradition from the 5th century onward, exemplified by people like Dionysius the Areopagite and St Maximus the Confessor, and continuing within the Orthodox church with St Gregory of Palamas. He considers first of all their ideas on Christology, ie. on the nature of the God/man, the man in union with the Divine. This, he asserts is the 'norm' against which all other concepts of humanity must be measured, saying (p40):

"... man is more than the microcosm, the homologous reflection of the created universe in which he lives. He is also the macrocosm. For...in the end it is the

Divine Logos Himself who is the true ground, the true and ultimate subject of human nature; and it is only through man's realisation of this ... that he achieves his true humanity and does justice to the cosmic implications of Christ's work of reconciliation".

He argues that this vision of the God/man began to be eclipsed early in the Western tradition – he identifies St Augustine as one of the first influences whose theology, emphasising man's helplessness and sinfulness, undermined the notion of perfectibility through union. But it was the reformulation of Christian doctrine according to Aristotelian logic – and in particular, the adoption of the Aristotelian theory of substance which replaced the Platonic vision of a 'great golden chain of being' – which did the greatest damage and opened the door for the radical dualism between spirit and matter, soul and body, man and God, which was established by men like Descartes and Galileo in the 17th century.

Examining the nature of the science which they engendered, Sherrard argues that, based as it is on a fundamentally dualistic vision, it distorts the true nature of man, and is therefore intrinsically corrupt. He dismisses the 'new science' along with the old, saying "Nothing can stop this process except a complete reversal of direction. And nothing can initiate a reversal of direction except a recovery by man of an awareness of who he is; the cure must go back to where the sickness started." (p89)

The great virtue of this book is that in putting union with God at the forefront, Mr Sherrard goes straight to the heart of the matter and his exposition of the Greek Patristic tradition is often beautiful and always at a very high level. But thought-provoking as his analysis is, his evaluation of our culture and our future is ultimately pessimistic. He sees our only hope in a renaissance led by the Christian church capable of overthrowing the scientific paradigm and consequently fails to consider the possibility of the sort of spirituality with which BESHARA is concerned, which is able to encompass all human activity, including science and his other *bête noire*, big business. One is left with the impression is that events are

overtaking many of Mr Sherrards conclusions – although not, clearly, his profound insights into essential matters, which are perennial truths.

Professor Needleman, whilst critical of its products, has a little more sympathy for our scientific world. At the end of 'A Sense of the Cosmos', he postulates that the initial impulse behind Western science was humanistic in the best sense of the word: that in a world in which wisdom had become dogma – dominated by great metaphysical truths – science reasserted the validity of direct sensory experience, and so led to a deeper understanding of reality. Its impulse, in other words, was the desire for greater human completion.

But, he goes on, we have been distracted by the power of our sensory understanding away from the greater task of "deepening the discovery of the meeting between sensation and thought" and this book is, in essence, a call for us to return to such a 'whole' vision. Published by Arkana, a new house under the auspices of RKP which has set itself the task of reprinting classics of spirituality, it originally appeared in 1975, the same year as Capra's 'The Tao of Physics'.

It is an interesting and perhaps important book. Professor Needleman's central point is that in studying the world, we are studying ourselves; that the cosmos is 'a teacher' which, if approached correctly, can nurture our progress to finer levels of perception. This theme is elaborated in chapters on cosmology, medicine, biology, physics, magic and psychology, and is to some extent a defence of the traditional sciences.

In his new introduction to this issue, Professor Needleman (who is Professor of Philosophy at San Francisco State University) takes issue with the physicists like Capra, whom he sees as proposing an 'intellectual unity' between science and mysticism, thus missing the whole point of the latter. He says, "My aim in this book, therefore, has been to speak not of the convergence of science and spirituality, but of the separation. As in nature itself, as in a rainbow made up of separate colours, organic unity is a reciprocal relationship among separate but interdependent entities. In human life as well, there can, I think, be no real unity except through the awareness of real divisions."

And he concludes the whole book:

"Throughout the history of civilisation, the great traditions have offered human beings a door, on the other side of which there stretches the long and difficult path to self-knowledge.... In the past this door has been well guarded by the institutions and forms of Tradition. What does it mean, then, that these guardians seem to have vanished in the present age?"

One feels that neither Philip Sherrard nor Jacob Needleman, writing in the '70's, could have conceived that within fifteen years practicing physicists would be discussing seriously such an important traditional idea as the centrality of man in the Cosmos. But such is the theme of 'The



Cover Illustration from 'The Anthropic Cosmological Principle', 'Raphaelesque Head Exploding', 1951 by Salvador Dalí.

Anthropic Cosmological Principle', an immense work – in terms of both size and scope – which draws together ideas from religion, philosophy, classical 'Newtonian' science and modern physics and biochemistry.

In their introduction, Barrow and Tipler describe how 'the anthropic principle', which was eclipsed in Western thought with the adoption of the heliocentric universe in the 17th century, has come to be re-considered by modern scientists (albeit on a speculative basis, there is no 'proof').

"One of the most important results of twentieth century physics has been the gradual realisation that there exist invariant properties of the natural world and its elementary components which

render the gross size and structure of virtually all its components quite inevitable. The sizes of stars and planets, and even people, are neither random nor the result of any Darwinian selection process from a myriad of possibilities. These...are the consequences of necessity; they are manifestations of the possible equilibrium states between competing forces of attraction and repulsion. The intrinsic strengths of these controlling forces of Nature are determined by a mysterious collection of pure numbers that we call the *constants of nature*. The Holy Grail of modern physics is to explain why these numerical constants have the particular numerical values they do" (p5).

The Anthropic Principle, appropriately enough, is one of the attempts to find this Holy Grail. It has various forms, which are referred to as WAP, SAP, PAP and FAP. WAP (the Weak Anthropic Principle) postulates that the values of the constants, if we observe them, must be such as to determine a universe in which we exist; it is basically an extension of what John Barrow calls 'selection effects' and is widely accepted. SAP (the Strong Anthropic Principle) is more controversial; arising from the large number of strong coincidences between values of the constants of nature, it postulates that **"The Universe must have those properties which allow life to develop within it at some stage in its history"**. The Participatory Anthropic Principle (PAP), a term first coined by John Wheeler, (who also wrote the foreword to this book) takes into account the findings of quantum mechanics vis-a-vis the role of the observer, and says that, **"Observers are necessary to bring the universe into being"**. FAP (The Final Anthropic Principle) goes even further; **"Intelligent information-processing must come into existence in the Universe, and, once it comes into existence, it will never die out"**.

The book examines the appearance of the Anthropic Principle throughout history, placing it in the context of the 'Design Argument' and teleological arguments (ie. that the world, things, have a purpose) as expounded from the Greeks onwards, including sections on Aristotle and Aquinas, non-Western cultures, Idealism, and the philosophies of Whitehead and Teilhard de Chardin.

It goes on to cover modern cosmology,

physics, quantum mechanics and biochemistry, whilst chapters 9 and 10 consider the question of extra-terrestrial intelligent life (they think there is probably none) and the future of the Universe.

Barrow and Tipler basically take a materialist view and so they are incapacitated from translating the meaning of the phenomena they describe to other levels. Some of their conclusions – especially in their interpretations of FAP – could therefore seem odd to those accustomed to viewing the world as a symbolic, multi-faceted reality. But for those who are content to let the meanings speak for themselves, it does seem that science is blessed as a medium of revelation in our age. From this point of view, 'The Anthropological Cosmological Principle' is an important book and its re-issue in more accessible paper-back form is very welcome.

Non-scientists, however, should be warned that although the authors indicate that they expect the book to be read by lay audiences, it is very technical in parts. (There are a lot of equations!). But it is full of fascinating information and carries with it a real sense of the mystery of what John Wheeler calls "marvel number one, this strange universe in which we live and move and have our being".

The Presence of the Past

by Rupert Sheldrake

Collins, 1988.

Hardback, pp 390. £15.00

It has taken seven years since the publication of 'The New Science of Life' for its sequel, 'The Presence of the Past' to appear in print. This new work has resurrected much of the passionate debate that the former work inspired in the scientific community. Since 1981, the term 'morphic resonance' has entered the common vocabulary to describe phenomena as diverse as creation, cattle-grids and vacuum cleaners! Love it or hate it, Rupert Sheldrake's work is indissolubly linked to the 'new' paradigm of science, and is perhaps as valuable for the questions it raises as for the answers it presents.

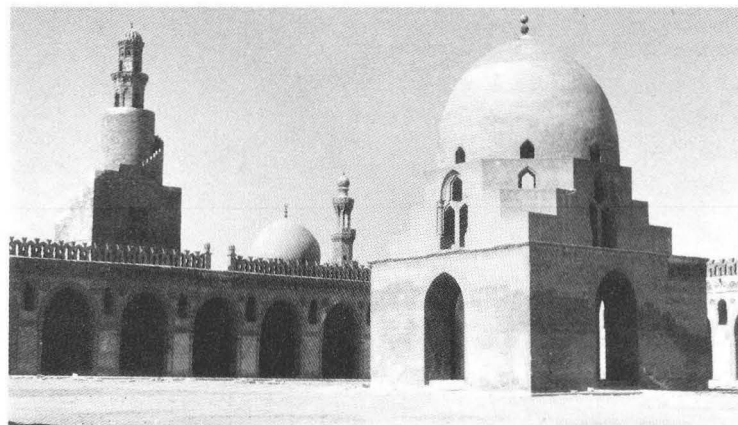
A full review will be printed in Issue 7

Islamic Art and Spirituality

by Seyyed Hossein Nasr

Golgonooza Press, 1987. Hardback, 213pp with 16 colour plates, £25.

Reviewed by Layla Shamash



The Ibn Tulun Mosque in Cairo, which "reveals in a particularly striking manner the tranquility and peace that characterise Islamic sacred architecture". p43.

The West is being reminded of the value and richness of Islamic art through an increasing variety of books and articles. These usually tackle the subject by describing its history, characteristics and style, often utilising criteria similar to those used for Western art whether they are appropriate or not. Styles are compared and the evolution of certain forms are traced through this or that influence. Few authors are able to explain how it is that Islamic art has been able to preserve its identity through so many centuries and in countries as varied and far apart as Spain and India. Even fewer writers attempt to relate it to its essential meaning.

Titus Burckhardt and Keith Critchlow – with whose work most BESHARA readers will be familiar – are amongst the few exceptions to this trend, and S.H. Nasr must be included in their company. His central theme in this book is how the levels of meaning are mirrored in the beautiful forms of Islamic art, and in particular its culmination in the sacred Arts. This mirroring is achieved through the revelation of the Quran – The Word – and the Reality of Muhammad – The Light. As he says "Without the two fountains and sources of the Quran and the Prophetic *barakah* (1) there would be no Islamic art". When its beauty is contemplated as Unity manifested in diversity, art serves as a reminder (*dhikr*) of both the centre and the origin, as in the Divine saying, "God is beautiful and He loves beauty".

Nasr guides his readers through the poetics of Arabic calligraphy, Islamic litera-

ture, music, architecture and the great contributions of Sufis like Attar and Rumi. With masterly insight he follows Rumi's teaching in trying to relate the form – *surat* – to its essential meaning – *ma'na* (2), resulting in a profound contribution to the subject of Islamic art and its universal nature. As he says on page 196: "...works of Islamic art continue to emanate their *barakah* as a result of their inner nexus to Islamic spirituality".

In the chapters 'The Principle of Unity and Sacred Architecture' and 'The Void in Islamic Art' Nasr shows how architecture can combine two sacred aspects of God, Unity and Void as expressed in '*La illaha il-allah*' (There is no divinity but the Divine) through its harmony and serenity. He describes how the call to prayer, the word of God, is proclaimed from the minaret (which means in Arabic 'the place of light'); how the profane is made sacred; how the real and the ideal, silence and speech, space and form, matter and light, immanence and transcendence, are united so that beauty can lift the soul of its contemplator to the other world.

This beautifully produced and illustrated book should be read not only by those interested in Islamic art, but also by those who care about the spiritual content of cultural forms in general.

1) *Barakah* being like grace or divine influx which flows in the arteries of the universe

2) *Ma'na* – commonly used as 'meaning' in Arabic and 'spirit' in Persian.

Temenos 9

A Review devoted to the Arts of the Imagination

1988, paperback pp 308. £9.95.
Distributed by Element Books.

Reviewed by Christine Hill

Temenos 9 invites us to glimpse again the 'precincts of the temple' (temenos) – the essential sacred source from which all art ultimately originates and which the finest illumines.

Kathleen Raine, renowned Blake scholar and poet, is the untiring editor of this most extensive review. She herself is among the 34 contributors, who come from many different continents and represent nearly as many different art-forms.

A major part of this issue is concerned with Friedrich von Hardenberg (1772-1801), known by his pen-name Novalis, who was one of the brightest lights of German Romanticism. Christopher Bamford, David Gascoyne and Salah Stétié all give sensitive insight into the profundities of his life and poetry, and there are translations of his work by Vernon Watkins and Arthur Versluis. Novalis was betrothed to Sophie von Kuhn, who was for him as Beatrice was to Dante "a divine archetypal figure contemplated in concrete form", (as Christopher

Bamford explains). On her death, at the age of 15, he "dedicated his life to the art of being human", attaining a mystical transformation, a higher kind of dying than the merely physical, and this suffuses his love poetry with a universal wisdom.

Other contributions, to select but a few, include an article by geometer Keith Critchlow on the 'eternal cosmology' in contemporary poetry; Sisir Kumar Ghose (Professor of English at Santiniketan, West Bengal) on 'Poetry and Liberation – a point of view', in which liberation is seen as the true nature of man; and John Tavener, an English composer, on 'Composing Sacred Music'. There is poetry from Olive Froiser, Jeremy Reader and Anne Ridler, and colour illustrations of striking oil painting by Biren De from Bangladesh, with a commentary by Keshara Malik. Book reviews include John Allitt on 'The Light of Early Italian Painting' by Paul Hills; Martin Lings on S.H. Nasr's 'Islamic Art and Spirituality' and Brian Keeble on 'Edwin Muir's selected prose'.

In his review of 'The Glory of the Lord – a Theological Aesthetics' by the late Hans Urs von Balthasar, Stratford Caldecott says, "... of the three Christian Platonic transcendentals, the True, the Good and the Beautiful, it is God the Beautiful who has been most neglected in recent centuries".

This sentiment is perhaps not only relevant to the arts, but is applicable to all as-

pects of life. In her finely-drawn article 'Nature, House of the Soul', Kathleen Raine exhorts us "not to shut out the unceasing sacred discourse which is nature" but rather, we should recognise that our faculties "...speak to us of realities of the soul which they serve to awaken. And of this discourse, poetry and the arts are the language."

In 'Work and the Sacred', Brian Keeble urges us to refine the 'organic unity' between work and the sacred; true work, he attests, "is for the sake of contemplation (of Beauty)". A more detailed articulation comes in Philip Sherrard's 'Presuppositions of the Sacred in Life and Art', which rewards careful reading. "We have forgotten", he writes, "that there is a sacred drama, and that unless we play our part in it we disrupt the harmony not only of our own lives but also the life of everything around us." He believes that the active agent in art "... must always be the Divine, so much so that in one sense man – the 'I' or 'ego' – does nothing", and quotes the young Gogol as saying "If Art does not accomplish the miracle of transforming the soul of the spectator it is but a transient passion..."

Clearly, this transformation is the aspiration and inspiration at the heart of Temenos, which makes its contribution to the art world, and to worlds beyond art, uniquely valuable. Originally intended to run for only ten issues, we are pleased to find that it will now continue to issue 12.

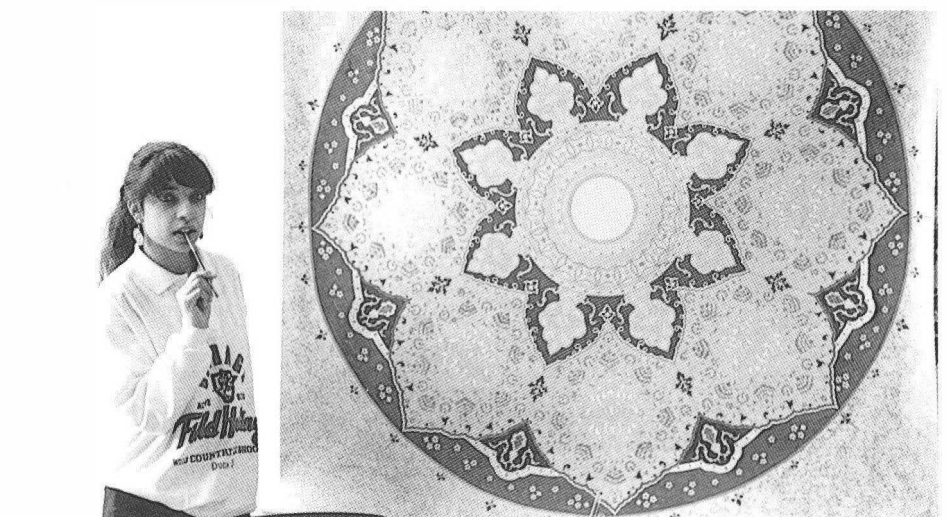
EXHIBITIONS

Visual Islamic Arts at The Fine Art Degree Show at the Royal College of Art.

June 1st - 11th 1988

Reviewed by Richard Twinch

A wind of change is blowing through the corridors of the Royal College of Art as witnessed by this year's degree show presentation in Kensington. Entering past the technically brilliant portraits of John Kirby and Christopher Lambert's surrealist images, one arrives upon a garden of repose and beauty as if transported to another country. At first glance this 'country' appears to be middle



Paramjit Takhar in front of her large piece 'Rag Vasaut'

eastern, and its art that of a pan-islamic formal revival. To stop at this level would be a mistake for the appearance of work of

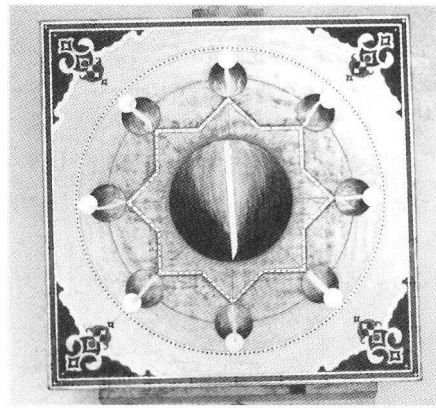
such high quality (by any standards) which is based quite unambiguously upon the appearance of beauty, represents a

quantum leap in the visual arts.

What was on show were among the first fruits of the Visual Islamic Arts unit, initiated and inspired by the energy, persistence and wisdom of Keith Critchlow. The work of this unit is (to quote): "based on certain objective principles, which covers the full spectrum of Islamic cultural life: from the local contributions of traditional Islamic cultures to its historical contribution to world/international art".

Inasmuch as it provides *local contributions* it is in keeping with S.H. Nasr's comment that: "it is only when the west awakens to the values of Islamic arts that interest will reawaken in the east". In keeping with this aim it is not surprising that the work on show has a strong 'traditionally Islamic' flavour. However in keeping with its *historical contribution to world/international art* there is much new and fresh being offered. It would be worth mentioning in this context that the term 'Islamic' does not in any way confine 'traditional' imagery/architecture to that of the Islamic religion *per se*. The show demonstrates that the 'traditional' encompasses Hindu and other art forms as well as the Islamic, the common thread being the unity of purpose and vision held within such 'traditional' cultures.

Saied Massroor's work pays homage to different styles. It is mainly inspired by Islamic calligraphy and illumination in Persia, and includes very beautiful traditional calligraphies such as 'The Divine Treasury' (*For each King there is a Treasury on earth. The heart of my believer is my treasury*) and 'Beauty' (*God is beautiful and loves beauty*). Even these innovate, since they use Coptic gilding techniques, passed on by Stefan René (one of the only three people entitled to paint Coptic icons). Other calligraphies break new ground, such as the "Bismillah", where the two circles containing the ritual phrases, historically separated, intertwine. Such outward expression of love and interdependence are also found in the calligraphy 'The Longing of Shams' from a poem by Jelalu'ddin Rumi. Some pieces strongly emphasise the geometry; in his desire to express "both an active and contemplative inspiration which can result in very different expressions." Massroor also moves into abstract forms, perhaps more universal in expression, in works such as 'The Sunnah', which shows arches suffused with



The Cosmological Aleph by Saied Masroor

light and 'The essential Alef', where the calligraphic icon repeated becomes as feathers falling softly from on high.

Paramjit Takhar's work is as joyous as it is beautiful, and, in keeping with her own background, is inspired by the Moghul (or Mughal) tradition of India. It has a more strongly decorative appearance and emphasis. The designs, based on geometric structure, are created from various different biomorphic forms. These forms seem to flow out of her, and go way beyond any concept of repetition or of mere restoration. Both "Rag Vasant" and "Rag Shri" are stupendous examples of such work at its best, with whirling mandalas of colour, light and form held in balance by the underlying geometry which guides the hand and reasserts the unity of the composition. The colours, painted throughout in gouache, are exemplary, clear, purposeful and subtle. Takhar's work is by no means otherworldly, as evinced by the profusion of decorative geometric, floral motifs and designs which could easily be transferred to textile or ceramic, as indeed she demonstrates. Among her small paintings was "Birds", whose abstract symbology owed as much to Paul Klee as to the Moghuls!

In a more rigorous vein, Sunand Prasad's doctoral work on the the North Indian house known as the Haveli was demonstrated in a number of clearly drawn, concise architectural plans and cut-away axonometries together with a slide show. Prasad is an architect working in London. His interest in the Haveli houses is cultural (it is the traditional house style of his own birthplace), historical (since such houses are rapidly disappearing) and seminal, since he is concerned with understanding the principles embodied in

such architecture so as to imbue his own work with greater depth and meaning.

The Haveli house is essentially a courtyard house, holding a special relationship to the street through its entrance, and to the city through its roofscape, while its heart resides in pure space – the courtyard around which family life revolves. Life is brought up on to the flat roofs, forming a city-wide 'piano-nobile' above the dust of the street. Space flows from the street through the courtyard, or courtyards, and passes unhindered through rooms. Prasad explained that in such dwellings the idea of rooms with doors is relatively recent! He vividly counterpoints the traditional with the modern, showing up the relative paucity and sense of isolation that pre-sages such a transition. He, however, has come to terms with such movement as a reaction against dirt and squalor as much as a flight to the 'western'. Perhaps in the spirit with which Nasr's comments was made, architecture may well be another area in which 'traditional' values must be wedded with 'modern' convenience in the west before the east will re-establish its own sense of the 'traditional'.

Traditional art has always been concerned with the integration of art and life, not just 'everyday' life but life lived in awareness of the unity. In this, even utensils participate, and the house and the city are re-seen as microcosms of the universe in which man may encounter his full dignity. Since such a vision includes all aspects of life, including that of commerce, and does not confine 'art' to something one hangs on a wall, it is interesting to note that the birth of the Visual Islamic Arts unit is happening at a time when the emphasis is shifting to 'useful & commercial' art at the RCA. What can be more useful than an alive art which has no boundaries of application and is as relevant on a soup-bowl or bathing towel as in a frame. It will be interesting to see how such an approach will affect the other modern artists, whose work is by no means all dour and distorted (I particularly liked Aurora Bengoechea's illuminated and exuberant landscapes) and also to see what will emerge from students of the Visual Islamic Arts unit whose backgrounds are more typically 'western' rather than 'eastern'. There is no doubt, however, that they have already been set a very high standard.

BESHARA TRUST NEWS

Seminars at Beshara Sherborne

This, the last seminar series in the present Sherborne Centre, has already covered a range of diverse and fascinating topics. John Barrow began the series with his seminar on 'The New Cosmology' and was followed at the end of May by Keith Critchlow, who spent a weekend exploring 'The Sacred Order' (reported below).

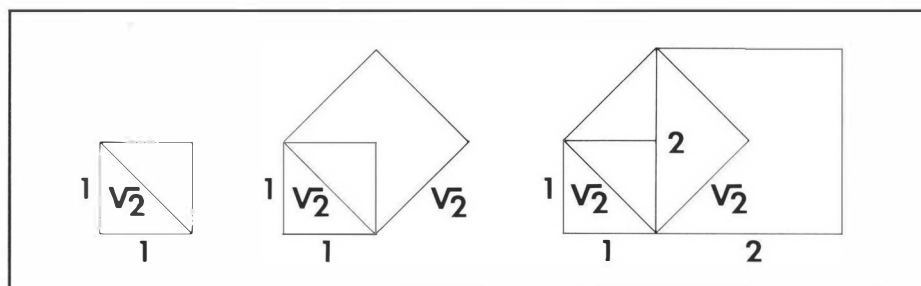
On June 23rd, Jonathon Porritt, Chairman of Friends of the Earth, visited to give an evening lecture on 'Dimensions of Deep Ecology', in which he stated his conviction that any future ecology must recognise the importance of the spiritual dimension. On June 25th, the distinguished biologist and theologian Dr

Arthur Peacocke gave a morning seminar on the theme 'God and the New Biology'. Still to come in August are Professor Jaki on 'Cosmology and Religion' and the embryologist, Dr Mac Wan Ho from the Open University.

The Sacred Order

**A seminar by Keith Critchlow
May 27th-29th 1988**

Unity of Being is hidden by its own image as the world of multiplicity. How the One inherently contains the many is a mystery which is hinted at throughout



'creation' in many different ways. Keith Critchlow brought many practical demonstrations – and his gift of correlation – to remind us of this beautiful mystery during his seminar. He showed us how what we call 'the visible world' – a world of overwhelming change and endless forms – in itself conforms perfectly to a set of ordered geometric relationships. From one point of view, these are like an unchanging archetypal grid from which all form emerges; from another they are like a doorway through which we can enter into the intelligible plane.

These archetypes, expressed as number and pattern, are clearly observable in the natural world; for example in the movement of planets, the growth of crystals, plants and animals and, of course, man. Apparently superimposing his 'own' order, man spontaneously responds to these innate archetypes, be it in creative or contemplative modes.

If we are granted the ability of abstraction, this sacred order reveals its true meaning to us, deepening our appreciation and leading us back to the primal unity.

One particularly striking example which Keith Critchlow brought was the geometric growth rate on the left.

Hans Von Koten

New Beshara Centre in England

On September 15th this year, the lease on the Stable Block at Sherborne, where the Beshara Trust has had a centre for many years, expires and activities in the South of England will move to another location.

The Trust is currently negotiating for new premises where the short introductory courses and seminars can take place. A property has been found about 8 miles outside Oxford which has all the required facilities and it is hoped that the purchase will be completed by September.

Activities will continue as normal over the summer at Sherborne, and arrangements have been made for the continuation of the mailing address and telephone number there for as long as required.

The Trust has some funds available for the purchase of a new centre, but it will have to rely upon loans and donations for

the full amount. Any help which can be given is most welcome. Please contact Beshara Sherborne.

Beshara Australia

Regular readers will be aware that a property at Canonach, Victoria, has recently been purchased in order to set up a Beshara School of Intensive Esoteric Education in Australia. Although long courses have not yet begun, Canonach is now able to receive visitors and to run short courses. There will be a weekend seminar 'Truth and Illusion in Psychoanalysis' by Dr Brian Muir and Rev. Trevor Moffat in July.

Beshara Australia is now constituted as a non-profit-making organisation, and is offering life-membership for A\$260 (£110). For further information about this and events in Australia, please contact Beshara Australia.

ADDRESSES

Beshara Sherborne

Stable Block
Sherborne, Nr. Cheltenham
Gloucestershire GL54 3DZ, UK
Tel: Windrush (045 14) 448

The Beshara School of Intensive Esoteric Education

Chisholme House
Roberton, Nr Hawick
Roxburghshire, Scotland
Tel: Borthwick Brae (045 088) 215

The Beshara Foundation

PO Box 42283,
San Francisco
California 94101, USA

Beshara Australia

Canonach R.M.B. 2060
Bells Flat Road
Yackandandah, Victoria 3749.
Tel: 61-60-27-1573

NOTES ON CONTRIBUTORS

Martin Notcutt grew up in South Africa and came to England in 1972. He is a Trustee of the Beshara Trust and currently works as a company analyst.

Cecilia Twinch (MA Cantab) gained a certificate of Education from the Froebel Institute. She has three children and works as a teacher in Ipswich.

Stephen Hirtenstein (MA Cantab) studied History at Kings College Cambridge. He is a Director of the Chisholme Institute, editor of the Muhyiddin Ibn 'Arabi Society Journal and currently teaches in Oxford.

Kathleen Raine is well known as a poet and a Blake scholar. Her most recent publications include 'Yeats the Initiate' (Dolmen Press, Dublin, George Allan and Unwin), and a new edition of her critical essays (Golgonooza Press); the third volume of her autobiography 'The Lion's Mouth' (French translation by Pierre Leyris) (Mercure de France 1987) and two volumes of poetry published this year by Golgonooza Press - 'The Presence' and 'Selected Poems'.

Peter Young (MA Cantab) studied archaeology and anthropology at Cambridge. He is Principal of the Beshara School of Intensive Esoteric Education at Chisholme House.

Dr Willis W. Harman was for many years senior social scientist at Stanford Research Institute International at Menlo Park and is now President of the Institute of Noetic Sciences in California. Publications include a number of papers on trans-industrial society and one book, 'An Incomplete Guide to the Future'.

John Barrow is a lecturer at the Astronomy Centre at the University of Sussex. He is co-author of 'Left-handed of Creation' (Barrow and Silk, Heinemann, 1988) and 'The Anthropic Cosmological Principle' (Barrow and Tipler, Oxford University Press 1986). His new book, entitled 'The World within The World' will be published in September 1988, also by Oxford University Press.

Richard Twinch studied architecture at Cambridge and at the Architectural Association. He currently runs a computer software business, is computer correspondent to **Building Design**, and acts as a consultant on building technology.

Dom Sylvester Houédard studied at Jesus College, Oxford, and St Anselmo College, Rome. He has been a Benedictine monk at Prinknash Abbey since 1949. He is a concrete poet who has had several exhibitions of his work, and is also a member of the Benedictine committee for dialogue with other traditions.

Jane Clark studied engineering and physics at Birmingham and Warwick. She currently works as a publicity consultant and is editor of Beshara Magazine.

Layla Shamash was born in Baghdad, Iraq and studied architecture in London. She now teaches architecture at Oxford Polytechnic.

Christine Hill graduated from Sussex University and has attended several courses at the Beshara School of Intensive Esoteric Education. She is a director of Beshara Publications and now lives in Gloucestershire.

BESHARA LONDON

Autumn Lectures

A series of introductory talks about Beshara

6th October
3rd November
1st December

Kensington Central Library, Phillimore Walk, London W8 at 7.30 pm

For further information about these or other events in London, please contact Beshara Sherborne on Windrush (04514) 448

EVENTS

Beshara School of Intensive Esoteric Education

Courses Autumn/Winter 1988/89

10-Day Introductory
10th-20th September

6-Month Intensive
October 1st '88 -
March 31st '89

6-Month Further Intensive
October 1st '88 -
March 31st '89

Fusus al-Hikam Readings
August 27th-4th September
September 17th-25th
October 22nd -30th
November 19th-27th
January 21st-29th '89
February 18th-26th
March 18th-26th

For further information, and for a prospectus, please contact

The Secretary
Beshara School of Intensive Esoteric Education
Chisholme House
Roberton, Nr. Hawick
Roxburghshire, Scotland
TD9 7PH
Telephone: Borthwick Brae
(045 088) 215

Why not advertise in BESHARA?

RATES

for black and white

Full page	£ 120
Half page	£ 60
Third page	£ 40
Quarter page	£ 30
Sixth Page	£ 20

Inserts also accepted.

Prices include setting.

Colour and photographs additional; quotation on request.

For full details of sizes and copy dates, plus bookings, please contact:
Beshara Magazine, 24 Sidney Street, Oxford OX4 3AG
Tel: 0865 243406

TEMENOS CONFERENCE

Art in the Service of the Sacred

13-17 October 1988

DARTINGTON HALL
Totnes, South Devon

Contributors include Kathleen Raine, Keith Critchlow, the Dagar Brothers, David Gascoyne, Kapila Vatsyayan, Brian Keeble, John Tavener, Joscelyn Godwin, & Hideo Kanze with his Noh Troupe performing from the Noh repertory

For brochures and information, contact
Marie Anderson, Elmhirst Centre, Dartington Hall, Totnes,
South Devon. (Tel: 0803 865551)

BESHARA SHERBORNE

Introductory Courses (weekend and 10 day) consisting of a balanced programme of work, study and meditation.

Seminars

5th-7th August

Rev. Professor Stanley Jaki
"Cosmology and Religion"

Mid-August

Dr Mac Wan Ho

Exploring the integration of science with human experience.

Visitors are welcome at any time.

*For further information, please contact
Beshara Sherborne, Stable Block, Sherborne,
Cheltenham, Gloucestershire GL54 3DZ
Telephone: 045 14 448*

The Eckhart Society Annual Conference

ECKHART AND THE CHRISTIAN LIFE

Speakers:

Dr Oliver Davies
Dom Sylvester Houédard OSB
Dr Lyndon Reynolds
Dom Cyprian Smith OSB

**TRINITY AND ALL SAINTS TRAINING
COLLEGE, LEEDS**
2ND-4TH SEPTEMBER 1988

Details from
Bro. Robert Pollock OP, Blackfriars,
Buckingham Road, Cambridge CB3 ODD
or Ursula Fleming, Flat 1, 25 Upper Park
Road, London NW3 2UN

Charity Link

We are pleased to announce the creation of a company which will be trading as Charity Link.

Its purpose is to act as an insurance broker and national estate agency. Insurance covered will include house, contents and motor insurance. The estate agents will place houses for sale with local estate agents.

All profits will be covenanted to the Beshara Trust, or an equal portion can be given to the Beshara Trust and the charity of the client's choice.

Applications are now invited for insurance cover (which, if preferred, may remain with your existing insurance company) and estate agency services.

Please write to:
Paul Finnegan
Charity Link
300 Balby Road
Doncaster DN4 0QF

McALLISTER TECHNICAL SERVICES

Manufacturers of surface analytical instruments and devices

McAllister Technical Services
2414 Sixth Street
Berkeley, California 94710 USA
Phone: (415) 644-0707
Telex: 9102501666 (McAllister UQ)

M.R.C.

**What you need to know
When you need to know it**

Commercial decisions rely on accurate and professionally assessed information at the right time.

M.R.C. provides the information and analysis combined in an unparalleled consultancy service. M.R.C. reports can cover any company, anywhere in the world, with special expertise in the shipping and oil industries.

M.R.C. provides an invaluable support to the decision makers at the top of the market.

Shipping – Oil – Industrial

M.R.C.
115 Magdalen Road, Oxford OX4 1RQ, England
Telephone: (0865) 245908 Telex: 875585 MRC OX Facsimile: (0865) 722103



commissioned KITCHENS
by
ELLIOTT & Co.

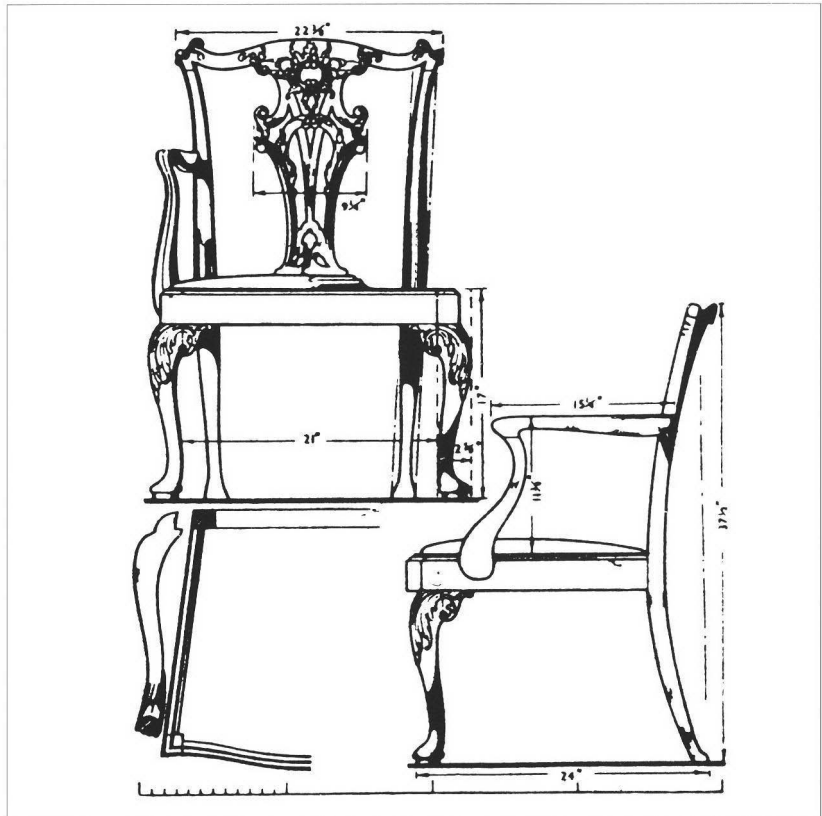
No environment is identical. Each of our kitchens is uniquely conceived and crafted to do justice to both client and home. Please telephone for an appointment.

Sherborne Gardens, Sherborne, Windrush (04514) 522
We also specialise in circular dining tables

Chisholme Antiques

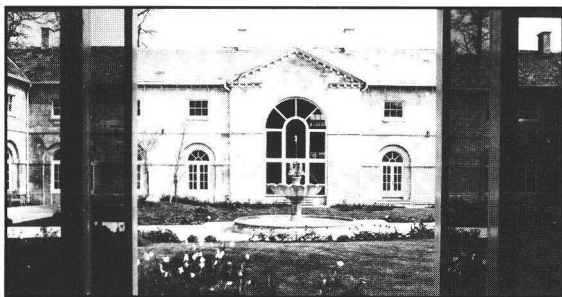
5 Orrock Place, Hawick,
Roxburghshire, Scotland
Tel: 0450 76928

For the restoration of fine
antique furniture and
cabinet making



PETER YIANGOU — ASSOCIATES —

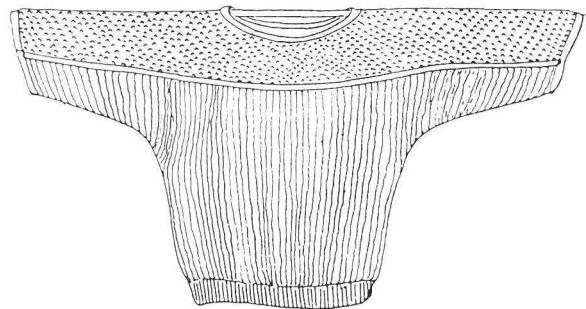
ARCHITECTS & SURVEYORS



*Specialists in
Cotswold Designs
and Country Properties*

Sherborne Stables, Sherborne,
Nr. Cheltenham,
Glos GL54 3DZ.
Tel: Windrush (045 14) 431/372
Fax: Windrush (045 14) 697

Port
Meadow
Designs



Hand knits and knitting kits
in quality yarns

For catalogue and samples send SAE to
23 Southmoor Road, Oxford OX2 6RF
Telephone: 0865-514488

BESHARA Magazine was produced on an Apple Macintosh computer, courtesy of Applitek, London. It was designed by Designers and Partners, Oxford, typeset by Design Types Ltd, and printed by Beshara Press of Cheltenham.