Harmony

A NEW WAY OF LOOKING AT OUR WORLD

HRH THE PRINCE OF WALES

TONY JUNIPER IAN SKELLY



Blue Door An imprint of HarperCollins*Publishers* 77–85 Fulham Palace Road, Hammersmith, London W6 8JB

www.harpercollins.co.uk

Published by Blue Door 2010

987654321

Copyright © AG Carrick Ltd., 2010

HRH The Prince of Wales, Tony Juniper & Ian Skelly assert the moral right to be identified as the authors of this work

A catalogue record for this book is available from the British Library

ISBN: 978-0-00-734803-9

Set in Adobe Garamond by Birdy Book Design

Printed and bound in Great Britain by Butler Tanner and Dennis, Frome, Somerset

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publishers.



FSC is a non-profit international organisation established to promote the responsible management of the world's forests. Products carrying the FSC label are independently certified to assure consumers that they come from forests that are managed to meet the social, economic and ecological needs of present and future generations.

Find out more about HarperCollins and the environment at www.harpercollins.co.uk/green

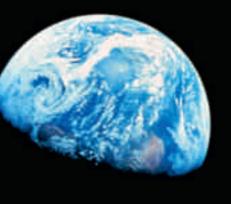
- 1 Harmony 1
- 2 Nature 29
- 3 The Golden Thread 85
- 4 The Age of Disconnection 143
- 5 Renaissance 185
- 6 Foundations 257
- 7 Relationship 293

Acknowledgements 326 Index 327

Picture Credits 330



Harmony 1





Finds tongues in trees, books in the running brooks, Sermons in stones, and good in every thing.

WILLIAM SHAKESPEARE

his is a call to revolution. The Earth is under threat. It cannot cope with all that we demand of it. It is losing its balance and we humans are causing this to happen.

'Revolution' is a strong word and I use it deliberately. The many environmental and social problems that now loom large on our horizon cannot be solved by carrying on with the very approach that has caused them. If we want to hand on to our children and grandchildren a much more durable way of operating in the world, then we have to embark on what I can only describe as a 'Sustainability Revolution' — and with some urgency. This will involve our taking all sorts of dramatic steps to change the way we consider the world and act in it, but I believe we have the capacity to take these steps. All we have to see is that the solutions are close at hand.

The Earth's alarm bells are now ringing loudly and so we cannot go on endlessly prevaricating by finding one sceptical excuse after another for avoiding the need for the human race to act in a more environmentally benign way — which really means only one thing: putting Nature back at the heart of our considerations once more. But that is only the start of it. We must go much further. 'Right action' cannot happen without 'right thinking' and in that simple truth lies the deeper purpose of this book.

For more than thirty years I have been working to identify the best solutions to the array of deeply entrenched problems we now face. I have tried to do this, for instance, by demonstrating the principles of what I believe to be truly 'sustainable' agriculture through organic farming. I have tried to demonstrate the principles of 'sustainable' urbanism which can add social and environmental value to towns and cityscapes through mixed-use development, by placing the pedestrian at the centre of the design process, by emphasizing local identity and character and by the use of ecological building techniques. For many years I

PREVIOUS SPREAD:
The Earth seen from
Apollo 8 as it orbited
the Moon on 24th
December 1968. As far
as we know Earth is
the only place in the
Universe that harbours
any life. This image
is credited with
inspiring the modern
environmental
movement.

LEFT: 'As our planet's life-support system begins to fail and our very survival as a species is brought into question, remember that our children and grandchildren will ask not what our generation said, but what it did. Let us give an answer, then, of which we can be proud.' Part of my keynote address to world leaders at the UN Conference on Climate Change in Copenhagen, December 15, 2009.

The 'slash and burn' method of farming widely adopted in places like South Sumatra, Indonesia, clears virgin rainforest trees by burning them, producing 17% of Man-made CO₂ emissions every year.

have been working to create effective partnerships between the private, public and non-governmental organization (NGO) sectors, not only to address the serious threats posed by climate change, but also to create major initiatives to try to save what is left of the world's rainforests, as well as other major natural ecosystems – such as oceans and wetlands – which are now under dire threat of collapse. I have also tried for twenty-five years to encourage social and environmentally responsible business; to suggest a more balanced approach to certain aspects of medicine and healthcare; more rounded ways of educating our children and a more benign, 'whole-istic' approach to science and technology. The trouble is that in all these areas I have been challenging the



accepted wisdom; the current orthodoxy and conventional way of thinking, much of it stemming from the 1960s but with its origins going back over 200 years.

Perhaps I should not have been surprised that so many people failed to fathom what I was doing. So many appeared to think – or were told – that I was merely leaping from one subject to another – from architecture one minute to agriculture the next – as if I spent a morning saving the rainforests, then in the afternoon jumping to help young people start new businesses.

What I have actually been trying to demonstrate is that all of these subjects are completely inter-related and that we have to look at the whole picture to understand the problems we face. For not only does it concern the way we treat the world around us, it is also to do with how we view ourselves.

In all my efforts I have tried to make it clear that all these subjects suffer the same problems because they have become detached from important basic principles – the principles that produce the active state of balance which is just as vital to the health of the natural world as it is for human society. We call this active but balanced state 'harmony' and this book is dedicated to explaining how harmony works.

It is a book in which I hope to share the results of much thought, observation and reflection over the past thirty or forty years. I want to show what I have gained and achieved from studying the essential principles of harmony – how they work in Nature and how, if we ignore or flout them, the Earth's precious life-support systems start to wobble and eventually may collapse. In some cases they have already fallen into a perilous state.

That is why our journey begins with a look at just what we are doing to our life-giving Earth after some two and a half centuries of intensive industrialization. We all hope for solutions and that is why I want to end this journey by offering what might turn out to be a few of them, but the solutions must be understood in their proper context. I know from experience that if any solution is not deeply rooted in the right principles it will be of no use in the long term. In fact, quite the contrary, it will tend to compound the problems we already have. That is why I also want to put our present situation in its true historical context. We have to realize that we are travelling on the wrong road, but we need to understand why.

It is very strange that we carry on behaving as we do. If we were on a walk in a forest and found ourselves on the wrong path, then the last thing we would do is carry on walking in the wrong direction. We would instead retrace our steps, go back to where we took the wrong turn, and follow the right path. This is why I feel it is so important to offer not just an overview of our present

situation and not just a list of the solutions. I certainly want the world to wake up to the fact that we are travelling in a very dangerous direction, but it is crucial that we retrace how this has come to be, otherwise we will not head onto a better path in the future.

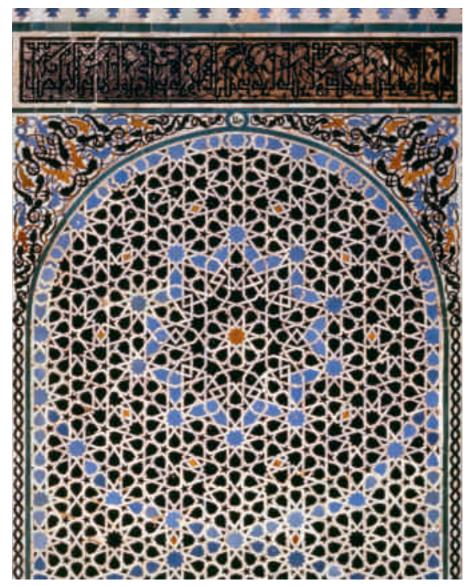
Crisis of perception

I would suggest that one of the major problems that increasingly confronts us is that the predominant mode of thinking keeps us firmly on this wrong path. When people talk of things like an 'environmental crisis' or a 'financial crisis' what they are actually describing are the consequences of a much deeper problem which comes down to what I would call a 'crisis of perception'. It is the way we see the world that is ultimately at fault. If we simply concentrate on fixing the outward problems without paying attention to this central, inner problem, then the deeper problem remains, and we will carry on casting around in the wilderness for the right path without a proper sense of where we took the wrong turning.

That is why I wanted to put this book together. With Tony Juniper and Ian Skelly's help, I want to demonstrate that we have grown used to looking at the world in a particular way that obscures the danger of a very disconnected approach. All of the solutions I want to suggest depend for their success upon looking at the world in a different way. It is not strictly a new way and that is why we will travel back in time to see the world as the ancients saw it, but it is a way of seeing things that stands very much at odds with what has become the only reasonable way of looking at the world. If that reaction starts to grow then I urge you to hold onto one important fact, that this timeless view of things is rooted in the human condition and in human experience.

It may be a bit daunting if I suggest at the outset that I want to include in this journey a brief tour of 'traditional philosophy' but I can assure you that such an explanation will be painless and that everything will be explained simply. Not least because it *is* simple.

Perhaps it is worth remembering what that word 'philosophy' means. It is a combination of two Greek words: one meaning 'love of' and the other meaning 'wisdom'. So, to be a 'philosopher' is to be a lover of wisdom, and the wisdom this refers to is human wisdom, of the sort that has been handed down from generation to generation in all societies throughout the world. Until quite recently, this time-honoured wisdom framed the way all civilizations behaved. It emphasized the right way to see our relationship with the natural world, it taught in practical ways how to work with the grain of Nature rather than



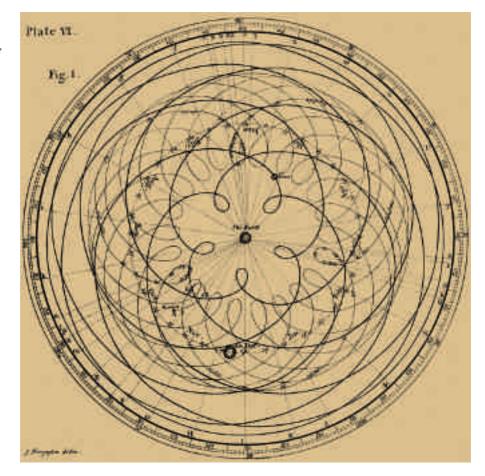
Islamic patterning depicted in the Attarine Madrasa Fes. This geometry is found throughout the natural world and is demonstrated in the relationships between planetary orbits and their proportions. As we shall see, it is the grammar that underpins the whole of life.

against it, and it warned of the dangers of overstepping the limits imposed by Nature *on herself*. In short, this wisdom emphasized the need for, and the means of maintaining, harmony.

Ancient wisdom

As I first struggled to understand what age-old thinking like this could teach us, I began to notice a curious connection between the many problems our modern world view had created and a subject that increasingly fascinated me.

The five-petalled rose pattern traced over 8 years in the skies above Earth by our nearest neighbour, Venus, depicted 400 years ago by the German astronomer, Johannes Kepler. It is the source of the familiar five-pointed star found in many natural forms and in the world's sacred architecture.



It was a surprising subject. It was the design and symbolism of the architecture of the temples, mosques, and cathedrals of the world. The more I learned about it, the more I became aware that there was a similarity between the way ancient civilizations built their sacred structures and the way the natural world itself is structured and behaves. The ratios and proportions that define the way natural organisms grow and unfold are the same as those that underpin the structure of the most famous ancient buildings. I was among a number of people who began to piece together a great jigsaw which revealed, much to my surprise, a profound insight into what really lay at the heart of ancient thinking. I shall explain this with lots of images in the section called 'The Grammar of Harmony' in Chapter 3, which gives context to the history of modernity, simply because there is a direct relationship between the patterns that inspired the builders of all those great masterpieces of sacred architecture and the way the natural world operates when it is in a healthy state of balance. The two speak with the same 'grammar'.

Seeing this, I began to realize that the great juggernaut of industrialization relies upon a somewhat aberrant kind of language – a man-made one – which articulates a world view that ignores Nature's grammar. Much of the syntax of this synthetic language is out of synchrony with Nature's patterns and proportions and this is why it so often jars with the language of Nature. This is why so many Modernist buildings don't feel 'right' to so many people, even though they may find them clever; or perhaps why we feel uncomfortable with factory farming, even though it makes economic sense because it supplies such a lot of food at such low prices; or why we feel something is missing from a form of medicine that treats the body like a machine and does not accommodate the needs of the mind or the spirit.

I find, by contrast, that if people are encouraged to immerse themselves in Nature's grammar and geometry – discovering how it works, how it controls life on Earth, and how humanity has expressed it in so many great works of art and architecture – they are often led to acquire some remarkably deep philosophical insights into the meaning and purpose of Nature and into what it means to be aware and alive in this extraordinary Universe. This is particularly so in young people and the results of such immersion are as heartening as they are surprising. They help to point to the changes in thinking that we need to make to achieve the wider vision of a Sustainability Revolution.

Essentially it is the spiritual dimension to our existence that has been dangerously neglected during the modern era – the dimension which is related to our intuitive feelings about things. The increasing tendency in mainstream Western thinking to ignore this spiritual dimension comes from a combination of the growth in cynicism during the latter half of the twentieth century and the wholesale dismissal of the big philosophical questions about our existence. The dominant world view only accepts as fact what it sees in material terms and this opens us up to a very dangerous state of affairs, not least because the more extreme this approach becomes, the more extreme the reaction tends to be at the other end of the scale, so we end up with two fundamentalist, reductionist camps that oppose each other. On the one side, a fundamentalist secularism and on the other, fundamentalist religions. This seems to happen in Christianity as it does in Islam and, wherever it happens, the more puritanical and literal the religious interpretation becomes, the more a culture abandons and then even attacks the age-old, symbolic interpretations of its own tradition - those teachings which actually emphasize the necessary limits to our behaviour. With so much emphasis on the historical accuracy of the origins of a religion, the search for mystery appears to give way to a vain search for certainty. What was a traditional attitude becomes a 'modern' and 'progressive'

one, all too intolerant of restraint, and so the limits – Nature's necessary limits – end up being overshadowed by dogma.

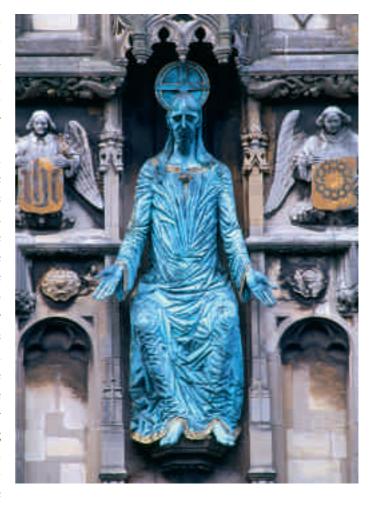
Has this come about as a result of one dimension of our outlook becoming too dominant in our thinking? And if so, what is the nature of that outlook? Having considered these questions long and hard, my view is that our outlook in the Westernized world has become far too firmly framed by a mechanistic approach to science, the one that has increasingly prevailed in the West for the past four hundred years. This approach is entirely based upon the gathering of the results that come from subjecting physical phenomena to scientific experiment. It is called 'empiricism' and it is, if you like, a kind of language. It is a very fine one, but it is a language not able to fathom experiences like faith and the meaning of things. Nor can it articulate matters of the soul. It is now the only popularly trusted level of language we may use to articulate our understanding of the world. Don't get me wrong, it has a very valuable role to play, but the trouble is, empiricism now assumes authority beyond the area it is capable of considering and, consequently, it excludes the voices of those other levels of language that once played their rightful part in giving humanity a comprehensive view of reality – that is, the philosophical and the spiritual levels of language. This is why it conveniently elbows the soul out of the picture.

Think of something as basic as the conversation that might take place in a biology lesson where a science teacher is called upon by pupils to address the moral and ethical questions of whether or not it is a good thing to manipulate genes. At that point, does the teacher act as a philosopher or remain a science teacher? I am pretty sure that the majority of teachers would certainly feel very uncomfortable about assuming the role of spiritual guide when such questions arise. The essential point here is, how far our empirical knowledge can go before it begins to encroach on territory it is not qualified to discuss. Let me be clear about it. Science can tell us how things work, but it is not equipped to tell us what they mean. That is the domain of philosophy and religion and spirituality.

Let me say again – empiricism has its part to play, but it cannot play all of the parts. And yet, because it tries to, we end up with the general outlook that now prevails. The language of empiricism is now so much in the ascendant that it has authority over any other way of looking at the world. *It* decides whether those other ways of looking at things stand up to *its* tests and therefore whether they are right or wrong.

This has not always been the case. A specifically mechanistic science has only recently assumed a position of such authority in the world and I want to show how this came to be: how its influence from the seventeenth century onwards spread, and slowly but surely excluded those other levels of language that were

once much more a part of the conversation. For not only has it prevented us from considering the world philosophically any more, our predominantly mechanistic way of looking at the world has also excluded our spiritual relationship with Nature. Any such concerns get short shrift in the mainstream debate about what we do to the Earth. They are dismissed as outdated and irrelevant because a thing does not exist if it cannot be weighed or measured. And so we live in an age which claims not to believe in the soul. Empiricism has proved to us how the world really fits together and how it really works and, on its terms, this has nothing to do with God. There is no empirical evidence for the existence of God, so therefore God does not exist. That seems a very reasonable, rational argument, so long as you go along with the empirical definition of God as a 'thing'. I presume the same argument can also be



applied to the existence of thought. After all, no brain-scanner has ever managed to photograph a thought, nor a piece of love for that matter, and it never will, so, by the same terms, thought and love do not exist either.

That may appear flippant, but my point is that this is the consequence of doggedly following Galileo's line that there is nothing in Nature but quantity and motion. Over time it has added up to a serious situation where we are no longer able to view the world much beyond its surface and its appearance. We are persuaded, instead, to follow a way of being that denies the non-material side to our humanity even though, contrary to what is supposed to be a growing popular belief, this other half of ourselves is actually just as important as our rational side, if not more so. It is our means of relating to the rest of the natural world and this is why I have long felt so alarmed that our collective thinking and predominant way of doing things are so dangerously out of balance with Nature. We have come to function with a one-sided, materialistic approach

Behind the familiar images of sacred sites like this figure of Christ on Canterbury Cathedral in England, is a symbolism that goes beyond the particular culture and time in which it was created.



At work at Highgrove, my home in Gloucestershire, England, laying hedges using age-old traditional techniques. Hedgerows are not only long-lasting, sturdy ways of keeping stock in fields, they are havens for wildlife and are a time-honoured way of stopping the erosion of top soil.

that is defined not by its inclusiveness, but by its dismissal of those things that cannot be measured in material terms.

This is peculiar to the history of the West. In general, people from elsewhere in the world do not understand how Nature has become so secularized. Even many people in the West fail to recognize that so much modern science is not simply an 'objective' knowledge of Nature, but is based upon a particular way of thinking about existence and geared to the ambition to gain dominion over Nature. The way in which this has happened has a lot to do with the numbing of our vital inborn or 'inner tutor', the so-called human 'intuition'.

Our intuition is deeply rooted in the natural order. It is 'the sacred gift', as Einstein called it. Many sacred traditions refer to it as the voice of the soul: the link between the body and mind and therefore the link between

the particular and the universal. If we were to recognize this, we would perhaps once again begin to see our existence in its proper place within creation and not in some specially protected and privileged category of our own making. That is hardly likely to happen as long as scientific rationalism continues to turn people away from any form of spiritual practice or reflection by perpetuating what seems to me to be a widespread confusion. It often comes to light during one of those typical interrogations of a person who experiences faith. They are expected to give empirical proof that God exists. As I hope will become clear later, this question can only be taken seriously when faith and the Divine are regarded as material objects.

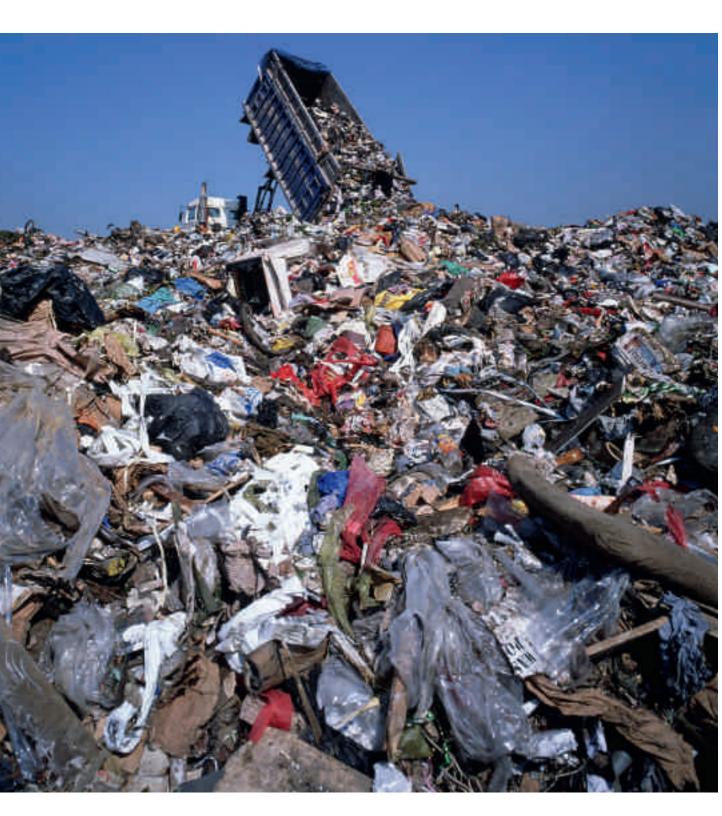
A much more integrated view of the world and our relationship with it existed throughout ancient history and right up to that critical period in seventeenth-century Europe when Western thinking began to take a more fragmented view of things. It is not so much the fragmentation, but its causes that I have come to see are the linchpins of the problem and that is why I feel

it necessary to explore, in the lightest way possible, how the modern world was born and how we came to regard the world in the overtly 'mechanistic' way we do today. By persisting in this view, we ignore, abandon and waste the wisdom, knowledge and skills that have been built up over the entire course of human history. It is, perhaps, not so understood as it should be that so much of the wisdom I am referring to came to humanity from revelation. Revelation is not deemed possible from an empirical point of view. It comes about when a person practises great humility and achieves a mastery over the ego so that 'the knower and the known' effectively become one. And from this union flows an understanding of 'the mind of God'. I cannot stress it firmly enough: by dismissing such a process and discarding what it offers to humankind, we throw away a lifebelt for the future.

If people are encouraged to immerse themselves in Nature's grammar and geometry they are often led to acquire some remarkably deep philosophical insights.

I was born in 1948, right in the middle of the twentieth century, which had dawned amid the gleaming Age of the Machine, the very engine of colossal change in the Western world. By the 1920s the overriding desire in every leading nation was for the new and the modern: perhaps a natural reaction as people struggled to recover amid the debris of a shattered world after the Great War. The same thing happened in the wake of the unimaginable horrors of the Second World War as, once again, industrialized nations had to find their feet, and quickly. Such was the sense of a fresh start that, by the mid-1950s, a frenzy of change was sweeping the world in a wave of post-war Modernism, and that created a new age of radical experimentation in every major field of human endeavour. By the 1960s the industrialized countries were well on their way to creating what many imagined would be a limitless Age of Convenience. For those who found themselves riding the juggernaut, life became more comfortable, less painful, and lasted longer.

I remember that period in the 1960s only too well and even as a teenager I felt deeply disturbed by what seemed to have become a dangerously short-



sighted approach. I could not help feeling that in whichever field these changes were taking hold, with industrialized techniques replacing traditional practices, something very precious was being lost. In many cases it was not so much being lost as wilfully destroyed. I also recall the gleeful, fashionable cries of 'God is dead', perhaps the epitome of this short-sightedness. It certainly offered an early clue as to what had happened to our collective view of the natural world.

Such was the dogma of the day that when eventually, in the 1970s, I began to raise these concerns publicly, I had to face an avalanche of criticism that was nearly all based on a very basic misunderstanding. Most critics imagined that I somehow wanted to turn the clock back to some mythical Golden Age when all was a perfect rural idyll. But nothing could be further from the truth.

My concern from the very start was that Western culture was accelerating away from values and a perspective that had, up until then, been embedded in its traditional roots. The industrialization of life was becoming comprehensive and Nature had become 'secularized'. I could see very clearly that we were growing numb to the sacred presence that all traditional societies still feel very deeply. In the West that sense of the sacred was one of the values that had stood the test of time and had helped to guide countless generations to understand the significance of Nature's processes and to live by her cyclical economy. But, like the children who followed the Pied Piper, it was as if our beguiling machines, not to say four centuries of increasingly being dependent upon a very narrow form of scientific rationalism, had led us along a new but dangerously unknown road - and a dance that has been so merry that we failed to notice how far we were being taken from our rightful home. The net result was that our culture seemed to be paying less and less heed to what had always been understood about the way Nature worked and the limits of her benevolence, and to how, as a consequence, the subtle balance in many areas of human endeavour was being destroyed. What I could see then was that without those traditional 'anchors' our civilization would find itself in an increasingly difficult and exposed position. And, regrettably, that is what has happened.

This is why, ever since those disturbing days, I have expended vast amounts of energy to help save what remains of those traditional approaches. I knew they would be needed for a 'rainy day' which I fear is now close by. However, back then I realized that what mattered was to prove their worth. It was no use arguing about the theory or trying to persuade people that so many of these traditional ways are rooted in a deep-seated ancient, philosophical outlook. That would have to come later, when the world was more sensitive to what had so swiftly been consigned to the shadows. No, the point was to emphasize the principles of harmony that we had lost sight of. I wanted to do this in a

LEFT: According to UN figures, the US alone buries 222 million tons of household waste a year. China is fast catching up with 148 million tons. As the rubbish degrades it gives off landfill gas, 50% of which is methane and up to 40% is CO2. Methane is 20 times more effective at trapping heat within the atmosphere, making landfill sites one of the biggest producers of methane gas in the world.

contemporary way – to find as many ways as possible of reintegrating traditional wisdom with the best of what we can do now so as to demonstrate how we might make this age fit for a sustainable future.

It is probably inevitable that if you challenge the bastions of conventional thinking you will find yourself accused of naivety. And all the more so if you challenge the current world view in all of the important areas of human activity — in agriculture and architecture, education, healthcare, in science, business, and economics. In those early years I was described as old-fashioned, out of touch and anti-science; a dreamer in a modern world that clearly thought itself too sophisticated for 'obsolete' ideas and techniques, but I could see the stakes were already far too high in all of these areas. Even back at the end of the 'swinging sixties' the damage was showing through, and I felt it my duty to warn of the consequences of ignoring Nature's intrinsic tendency towards harmony and balance before it was all too late. What spurred me on was an essential fact of life, an undeniable law: that if we ignore Nature, everything starts to unravel. This is why, from the very beginning, I kept pointing out that it is vital we seek ways of putting Nature back in her rightful place — that is, at the centre of things, and that includes in our imagination as well as in the way we do things.

So what are these timeless 'principles'? Fashions may change, ideologies may come and go, but what remains certain is that Nature works as she has always done, according to principles that we are all familiar with. Nutrients in soils are recycled, rain is generated by forests, and life is sustained by the annual cycles of death and rebirth. Every dead animal becomes food for other organisms. Rotting and decaying twigs and leaves enrich soils and enable plants to grow, while animal waste is processed by microbes and fungi that transform it into yet more vital nutrients. And so Nature replaces and replenishes herself in a completely efficient manner, all without creating great piles of waste.

This entire magical process is achieved through cycles. We all know how the seasons follow one another, but there are many more cycles within those overarching ones and so many of them are interrelated so that the life cycles of many animals and plants dovetail with one another to keep the bigger cycles moving. For instance, in Spring some songbirds time the hatching of their eggs to coincide with a population explosion in the caterpillars that they feed to their chicks. Built into these many cycles are self-correcting checks and balances whereby the relationships between predators and prey, the rate of tree growth, and the replenishment of soil fertility are all subject to factors that facilitate orderly change and progress through the seasons and keep everything in balance. No single aspect of the natural world runs out of proportion with the others – or at least not for long.

What is more, Nature embraces diversity. The health of each element is enhanced by there being great diversity or, as is now commonly called today, 'biological diversity' or 'biodiversity' for short. The result is a complex web made up of many forms of life. For this web to work best there is a tendency towards variety and away from uniformity and, crucially, no one element can survive for long in isolation. There is a deep mutual interdependence within the system which is active at all levels, sustaining the individual components so that the great diversity of life can flourish within the controlling limits of the whole. In this way, Nature is rooted in wholeness.

There is one other principle or quality I would draw attention to. I will refer to it a lot throughout this book because, in my view, it is extremely important. It is the quality of beauty, which has inspired countless generations of artists and craftsmen. 'Beauty is in the eye of the beholder', it is said, but I have always felt that, because people are as much a part of the whole system of life as every other living thing and because beauty is to be found in the fabric of all that we are, the truth is the other way around. Our ability to see beauty in Nature is entirely consequential on our being a part of Nature Herself. In other words, Nature is the source, not us. In this way, if we do not value beauty then we ignore a vital ingredient in the well-being of the world. This is just as important to recognize as the other elements in my proposition because none of us can survive for very long if the underlying well-being of the planet is destroyed.

I find that the world view which prevails today in Western societies, and in an increasing number of others who are following its flawed logic, pursues priorities that are almost diametrically opposite to those I have just described. There is an emphasis on linear thinking rather than seeing the world in terms of cycles, loops and systems, and the intention is to master Nature and control her, rather than act in partnership. Our ambition is to seek ever more specialized knowledge rather than take a broad or 'whole-istic' view. Nearly all we do generates masses of waste almost as if it is an automatic consequence of how we have to live. Monocultures of crops, of brands, and ideas have come to dominate and crush diversity in our farming, in our culture – and in our business too. Instead of a large number of small actors, we have a small number of huge organizations that now dominate many parts of our economic activity. And, in all we do, we load the atmosphere with those gases that build up a kind of insulating blanket around the Earth, so-called 'greenhouse' gases which accumulate in entirely unnatural quantities which then makes the world ever warmer, thus disturbing the balance that the Earth seeks to maintain. We carry on doing this as if we are immune to the consequences – as if somehow we have

Late Spider Orchid.
This rare plant flowers
in England during
June and July.



isolated ourselves from the inevitable checks that in the end govern all life on Earth.

When I began pointing all this out in those early years when there was not quite so much scientific evidence to back up what my intuition was telling me, it proved a particularly unrewarding occupation. I am relieved to say that now the story is a little different. For one thing, I no longer have to theorize. Now I can point, not only to a vast body of evidence that describes the consequences of our behaviour, but also to an array of successful practical examples of how better to approach matters. These examples, relating to everything from farming to town-planning, are healthier, more beautiful, more human-centred and much more 'sustainable' – although I prefer the word 'durable'. It is these that I plan to explain.

Having also travelled widely in those years and been fortunate to meet and discuss these issues with a large number of people, many of them leading experts in their field, from whose wisdom and knowledge I have benefitted, I also want to share the achievements I have witnessed. We will discover great work being done all over the world, from the UK and the United States to Australia and China, and my hope is that in so many vivid ways it will become clear just what goes wrong if we abandon traditional knowledge and practices and turn away from how Nature behaves.



'Knowledge is power' is a dictum behind much science and experimentation, but is there value in widening the scope of science teaching so that it seeks a deeper understanding of the wholeness of Nature?

The contrast between the way these more harmonious approaches work and the way things are done in the mainstream will, I hope, reveal the many deep cracks in the veneer of our Age of Convenience. These are already becoming more obvious, exposing just how flimsy its foundations really are. We may still enjoy plenty of convenience for now and, of course, it would be marvellous if we could somehow maintain the whole edifice without suffering the eventual consequences of deliberately excluding Nature from the equation in every field known to humankind, but the costs to both the natural world and our own inner world are very severe. We are beginning to recognize the outline of what we have really engineered for ourselves. Not an age of limitless convenience after all, but a much more disturbing 'Age of Disconnection'. That is to say, we have systematically severed ourselves from Nature and the importance to us, as to everything else on Earth, of her processes and cyclical economy. As a result, we are beginning to fall seriously out of joint with the natural order. And there is order. Whether we choose to be part of the process or not, everything in truth depends upon everything else. Whether it is the bee to the flower, the bird to the fruit tree, or the man to the soil, we depend upon them all – and we neglect this simple principle at our peril. It stands to reason: take away the bee and there can be no flower; without the bird there will be less fruit; deplete the soil and very soon people will begin to starve.

Such obvious relationships are taught in these simple terms to small children in primary schools and yet, by the time they reach adulthood, a strange transformation appears to have taken place. It is almost as if they have gone through a subtle brainwashing that encourages them to follow the rest of the merry throng and dance without question to the Pied Piper's tune. Like everyone else they become persuaded to think that we *can* do without everything else and that we *can* ignore the essential rhythms and patterns of Nature; that, indeed, nothing is sacred any more, not even that mysterious ordered harmony which ultimately sustains us.

There is little question in my mind now that this is a dangerous course. And that we no longer have a choice. If we could exist independently of Nature and her underlying principles, that would be splendid, but we can't – certainly not if we retain a modicum of interest in our children's and grandchildren's future on this threatened planet. The thought of them has been, for me, the main driving force for this book, regardless of how it may be greeted, and if it moves others to reflection, then let this book be a means of exploring what has caused us to think that we can abandon Nature's rhythmic patterns. We have done so, not just in the mechanized processes we use to grow our food and treat our farm animals, or the way in which we design and build our homes, towns and

cities, or the way in which we deny the crucial relationship between mind, body and spirit in healthcare. We have also done so in the way we fail in our systems of economics to measure and put a proper value on Nature's vital services, and even in the manner we teach *out* a proper whole-istic understanding of the fact that we are a *part* of Nature not apart from Her when it comes to our children's education. For they all follow an approach to life that places the greatest value on a mechanistic way of thinking and a linear kind of logic. But carrying on in this way as if, fundamentally, it is 'business as usual' is no longer an option. We cannot solve the problems of the twenty-first century with the world view of the twentieth century.

Terms used in this book

Before we begin our journey there are a number of key words and terms that I will use throughout that I feel I should explain. One of these terms is 'mechanistic thinking'. This stems from what happened in Western thought from the seventeenth century onwards, after the great pioneers of empirical discovery like Descartes and Francis Bacon laid down the principles of the Scientific Revolution. Nature began to be understood in the more clinical terms of its mechanics, as we shall see. This is because, in the main, our science has been based on a 'reductionist' approach. Organisms are broken down and their separate parts are studied in mechanical terms. Hence in schools today children are generally taught to see the human heart as nothing more than a pump, the lungs as a set of bellows, and the brain as some sort of very clever computer with the human mind conveniently explained away as the product of an electromagnetic effect of brain function. Despite the incredible leaps that Quantum Mechanics and Particle Physics and the lessons on the interconnectivity of matter they so readily offer us, it still appears odd that many people seem not to have a knowledge of these things. Is this, perhaps, why things start to get a bit fuzzy in the schoolroom when it comes to defining consciousness in mechanistic terms or, for that matter, the imagination. Quite where the resonance we feel for the beauty of things or, ultimately, love is anybody's guess. The consequence of this outlook is that we have amassed an extensive database of how the world works that has enabled us to increase the speed and adaptability of many elements of the natural world, but in doing so we have lost a valuable and ancient perspective.

in crates, reared all their lives in sheds and fed on a diet of corn and growth hormones disconnects even the creatures we rely upon for our food from the natural world. Factory farming is said to be the only way to feed the world, but this ignores the massive hidden costs and the need to give back to Nature as much as we take. There are better ways to produce food than this.

RIGHT: Animals kept

The eighteenth-century agenda of the Enlightenment, based predominantly on the pursuit of progress through science and technology, is so much a part of the furniture today that we do not even question it as an ideology. And yet it is as if we peer at the world through a letterbox, believing that what our science reveals to us is the whole picture even though science does not itself deal with the meaning of things, nor does it encourage a very joined-up way of working. As a result, time and again one problem is solved, but in its wake many others are created, often far worse than the one we set out to resolve.

To see this in action we only have to consider the way water companies in the UK have to spend around £100 million a year removing pesticides and other chemicals from the water supply. These chemicals are the fallout of a supposedly efficient form of industrialized agriculture – an agriculture that works according to mechanistic thinking. The same mechanistic response is applied in the US, where every year many more millions of dollars are spent blasting fresh meat with ammonia in enormous, gasguzzling chemical plants to cleanse it of the fatal *E. coli* bug that has blighted the food industry for decades. This bug is only there because of the intensive way in which cattle are reared on a diet of corn on vast 'feed lots' which are, to all intents and purposes, like concentration camps for cattle. Much of the E. coli bug could easily be removed from the gut of cattle simply by giving them what they are designed by Nature to eat, which is grass, but that does not automatically follow when mechanistic thinking is at work. The knee-jerk reaction is to use more and very costly technology to solve any problems that arise from the solution to an original problem, and so we spawn yet more problems, each one solved in the same isolated way. Nature has the simpler remedy, but she is excluded from the process. She is no longer involved in the cure.

This fragmented view of the world extends to the way people are expected to behave. I come



across many instances when the absence of this understanding of how we really fit within the great scheme of things forces people to censor what their intuition might be telling them, to the point where I sometimes wonder if there are a considerable number of people living an almost schizophrenic-like existence. The pressure can be enormous on individuals to draw a very clear line between their private feelings and their public, professional occupation. I have lost count of the number of people I have spoken with who tell me quietly of how, even though privately they may feel deeply anxious inside themselves about the consequences of this whole mechanistic approach, when at work they are expected to lock those feelings away and follow the corporate diktat, which so often reflects the mechanistic mindset that can be so destructive of Nature and her systems.

If we continue to engineer the extinction of the last remaining indigenous, traditional societies, we eliminate one of the last remaining sources of that wisdom.

This bizarre denial has far-reaching and serious consequences for the lives of millions of people, and all the more so if it manifests itself in those who effectively run the world. I intend to give graphic details of the ultimate price some of the poorest farmers in India have had to pay because of it. But it is not just the lives of those in developing countries. Many small-scale farmers in the US also find themselves up against the same might of a globalized system that allows only a few giant corporations to control more or less the whole food production and distribution system across an increasing proportion of the world.

I find it revealing that a substantial number of the people who work for such organizations can often feel instinctively anxious about what this current world view expects of them, but they dare not express their disquiet for fear of being considered old-fashioned, not 'on message' or anti-science. They can see quite clearly the long-term implications of what they are being asked to do in their professional lives, but even so, I suspect that if I asked them whether they have any sense of the inner value of things when it comes to the decisions they take,

or whether they look beyond the mechanics of Nature to obtain a true sense of what life consists of, the chances are they would feel obliged to accuse me of relying on 'superstition'. They would most certainly fight shy of agreeing that there may be such a thing as an invisible 'pattern' in which all manifestations of life take place. But if they were to realize how many people in the same situation felt the same way about the consequences of what they are doing, I wonder whether they would think again, or even have the confidence to stick their heads above the parapet. I would certainly welcome the company!

Even if words like 'spiritual' and 'sacred' are a step too far for some, anyone who stands back and considers what has been done to Nature by what is now the dominant approach could be forgiven for thinking that simple common sense has been abandoned. How else could we have embarked upon such a singular and self-destructive enterprise to prove beyond doubt that we can, indeed, do without the rest of the natural world? For that is what we are doing. We are testing the world to destruction and the tragedy – no, the stupidity – is that we will only discover the real truth when we have finally succeeded in completely denuding the world of its complex life-giving forces and eradicating traditional human wisdom.

If we continue to engineer the extinction of the last remaining indigenous, traditional societies, as is happening in so many countries today (where governments feel embarrassed because they make a country look less 'modern'), we eliminate one of the last remaining sources of that wisdom. For just as natural species, once lost, cannot be re-created in test tubes, so traditional, so-called 'perennial' wisdom, once lost, cannot be reinvented. This is the real damage being done by our disconnection, which is fast becoming all but complete in the modern world, all the while proving that the great experiment to stand apart from the rest of creation has failed.

This is why I have argued for so long that we need to escape the straitjacket of the Modernist world view, so that we can reconnect our collective outlook to those universal principles that underpin the health of the natural world and keep life's myriad diversity within the limits of Nature's capacity. In other words, we have to discover once again that in order for humanity to endure alongside the natural world (and the vast, as yet unnumbered creatures with which we share this miraculous planet) on which it so intimately depends for its survival, it is essential to give something *back* to Nature in return for what we so persistently and all the more arrogantly take from Her. Our approach cannot all be based on 'rights'. There have to be 'responsibilities' too. And my mentioning the word 'Modernist' brings me to one more term I need to define before we go any further.

Modernism

Every time I use this word it provokes a storm of protest. Perhaps it is because, for many, 'Modernism' conjures up a certain kind of popular 'trophy architecture' associated with, for instance, Le Corbusier, who famously described a house as 'a machine for living in'. However, the Modernism I am referring to is a much more pervasive doctrine than the eye-catching and clever style of architecture created by a complex figure like Le Corbusier. He was a Modernist, of course. He certainly subscribed to the wider principles of that movement — its devotion to the machine, its love of speed, the rejection of beauty as being innate in things, and the denigration of traditional design and craftsmanship.

What we should remember is that what became an international movement and a far-reaching attitude began as a gross indulgence by the one-time avant-garde. You have only to take a look at Marinetti's famous Futurist Manifesto, published in Paris in 1909, to see what I mean. Even he called it 'demented writing'. His language, though, rings with a certain familiarity – for instance, when he calls for 'the gates of life to be broken down to test the bolts and padlocks' or when he urges humanity and technology to triumph over Nature. Marinetti did, at least, admit that he wanted to 'feed the unknown, not from despair, but simply to enrich the unfathomable reservoirs of the Absurd'. But that ambition seems to have been conveniently forgotten as the Modernist ideology tightened its grip.

Marinetti's historic prospectus was one of the statements that induced the wave of Modernism that would sweep the industrialized world throughout the first half of the twentieth century. Later I will be more specific in my definition of Modernism because its impact on our general outlook has been so pervasive, but for now suffice it to say that this is the movement that still, to my mind, underpins what has become the Establishment view. Modernism deliberately abstracted Nature and glamorized convenience and this is why we have ended up seeing the natural world as some sort of gigantic production system seemingly capable of ever-increasing outputs for our benefit. Modernism compounded what had already become a general attitude in industrialized countries towards the natural world and, as that definition has become more predominant, so the view we have of our own role in Nature's process has been reduced. We have become semi-detached bystanders, empirically correct spectators, rather than what the ancients understood us to be, which is participants in creation. This ideology was far from benign or just a matter of fashion. The Marxism of the Bolshevik regime totally absorbed, adopted and extended the whole concept of Modernism to create the profoundly soulless,

vicious, de-humanized ideology which eventually engineered the coldly calculated death of countless millions of its own citizens as well as entire living traditions, all for the simple reason that the end justified the means in the great 'historic struggle' to turn people against their true nature and into ideological, indoctrinated 'machines'. All this I will explain because the impact of the industrial mindset focussed by Modernism is key to the situation we face today. It is responsible for the loss of a deep experience of the interconnectedness of Nature, severing a meaningful relationship with the world we inhabit.

Making the shift so that we see things in a much more joined-up and deeply anchored way – the way things really are rather than as they appear to be – is the first stage of the Sustainability Revolution. But we must approach the challenge positively, regarding such a revolution as an opportunity rather than



Manufactured tower blocks rising above Dundee, Scotland, in the late 1960s. These buildings were built quickly to meet a housing need, assembled using a system of concrete panels made on a production line. They lasted just 40 years before they were deemed too old. This is not sustainable architecture in any sense, not least for the people unlucky enough to live there.

as a threat. We will all have to alter our outlook on life, but we could see this as an investment rather than as a tax. It will inevitably require a period of reassessment of our values and priorities and a realignment of approaches. But if it comes about, it must do so through interchange and discussion rather than by imposition or decree. It is my ambition that this book, the film that will follow it, and other initiatives that will accompany both, will help to facilitate that vital cross-cultural and international discussion and exchange.



The Yorkshire Dales where the buildings and walls are made from local materials, creating a unique landscape where the Man-made blends with the natural and works best for the harsh conditions found there.

My hope is that I have at least made it clear so far that in the twenty-first century we desperately need an alternative vision that can meet the challenges of the future. It will certainly be a future where food production and its distribution will have to all happen more locally to each other and be less dependent, certainly, on aircraft; where the car will become much more subordinated to the needs of the pedestrian; where our economy will have to operate on a far less generous supply of raw materials and natural resources. But it could also be one where the character of our built environments once more reflects the harmonious, universal principles of which we are an integral part. It could involve a way of teaching our children which offers a much more comprehensive view of reality — one which emphasizes our interconnected reliance on every other part of the whole and living system we call 'Earth'.

As it is, by continuing to deny ourselves this profound, ancient, intimate relationship with Nature, I fear we are compounding our subconscious sense of alienation and disintegration, which is mirrored in the fragmentation and disruption of harmony we are bringing about in the world around us. At the moment we are disrupting the teeming diversity of life and the 'ecosystems' that sustain it – the forests and prairies, the woodland, moorland and fens, the oceans, rivers and streams. And this all adds up to the degree of 'dis-ease' we are causing to the intricate balance that regulates the planet's climate, on which we so intimately depend.

My entire reason for writing this book is that I feel I would be failing in my duty to future generations and to the Earth itself if I did not attempt to point this out and indicate possible ways we can heal the world. I could not have contemplated producing it even two years ago, but I feel the time may now be more appropriate. I sense a growing unease and anxiety in people's souls – an unease that still remains largely unexpressed because of the understandable fear of being thought 'irrational', 'old-fashioned', 'anti-science', or 'anti-progress'.

We live in times of great consequence and therefore of great opportunity. This book offers inspiration for those who feel, deep down, that there is a more balanced way of looking at the world, and more harmonious ways of living. It will not only outline the kinds of approach that depend upon us seeing Nature as a whole, but also examine the great and practical value in seeing the nature of humanity as a whole. What I hope will become obvious is just how many answers we already have at our disposal, if our goal is to re-establish our rightful relationship with Nature and pull back from the brink of catastrophe. It is a goal I truly believe is achievable, if we remind ourselves of the essential grammar of harmony – a grammar of which humanity should always be the measure.