

**Mindfulness,
Here and Now:
How to Wake Up**

Wally Barr

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Adonais

Peace, peace! he is not dead, he doth not sleep -
He hath awakened from the dream of life -
‘Tis we, who lost in stormy visions, keep
With phantoms an unprofitable strife,
And in mad trance, strike with our spirit’s knife
Invulnerable nothings.

Percy Bysshe Shelley, 1821

Zen Buddhism, the way of instantaneous awakening

... it seems that our life is all past and future, and that the present is nothing more than the infinitesimal hairline which divides them ... But through 'awakening to the instant' one sees that this is the reverse of the truth: it is rather the past and future which are the fleeting illusions, and the present which is eternally real.

Alan Watts (1978) *The Way of Zen*.

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For more details about this book and other work by the same author please see www.mindfulnessnowandzen.com

Foreword

How do you wake someone who dreams they're already awake?

This book is intended to accompany my first book on this subject, entitled *Mindfulness, Now and Zen: The Sceptics Guide to Ultimate Reality*.¹

There's quite a stress here on the benefits of mindfulness meditation, so if you haven't yet tried it, you might do best by having a go at this first (there's a simple guide to the practice of mindfulness meditation in Chapter 5). This emphasis on meditation reflects my belief that it is one of the fundamental practices by which we can awaken to the true nature of reality, hence the title of the book. And it's in this book, *Mindfulness, Here and Now: How to Wake Up*, that I describe some of the fundamental ideas expressed in the earlier book, but here I aim to summarise these and to expand on some others. I'll be talking about ideas that purport to answer every question you can think of regarding the nature of reality - quite a task. These ideas are not just about the origin of the universe, but the origin of everything for everyone at every moment. In other words, I'll be proposing a very extensive Theory of Everything, though perhaps not the one your average scientifically inclined enquirer might be thinking of.

¹ Barr W (2017) *Mindfulness, Now and Zen: The Sceptics Guide to Ultimate Reality*, Lulu Press. Freely available from: http://www.mindfulnessnowandzen.com/resources/MNZ_freely_available.pdf

Here you'll be introduced to a number of ideas new to the discussion. Among these will be the Hypothesis of Elemental Patterns and the Hypothesis of Latent Explanations. The book also describes over a dozen paradoxical scenarios and Exercises in Cosmic Thinking, thought experiments to help in stretching the mind. In addition you'll meet a couple of ideas that might be familiar if you've read *Mindfulness, Now and Zen*, in particular the concepts of Ultimate Reality and Everyday Reality. The Hypothesis of Unhappening also features, as does the Hypothesis of the Holographic Universe and the allied concepts of timelessness and unity. It's this idea of unity that the book really aims to describe. Unity is the sound of one hand clapping. It's the one-ness and inter-connectivity of everything to everything else. Words cannot convey the essence of this because it is transcendental. (You can find further definitions at the end of the book).

Many of the ideas in this book require you to believe in nothing you haven't already experienced for yourself. However, they're not necessarily evidence-based in a scientific sense, nor do they purport to reflect reality as you might expect it to be. Sometimes ideas are presented to assist in negotiating concepts that are not amenable to description in words, because not everything that can *be*, can be said in words. So, sometimes the ideas I propose are simply a means to help in understanding these non-describable things.

While not all the ideas discussed in the book are necessarily *real*, the concepts outlined give an ultimately enlightening slant on what we call 'reality'; their role is to guide our thinking. The arguments made do not require faith in anything you can't reason out for yourself, and they can be seen to follow from their first principles in a rational

manner. But let's remember, rationality is a man-made concept that has its limitations and it's good to sometimes think a little outside the box.

Wally Barr
August 2023

CHAPTER 1

Elemental Patterns and the Theory of Everything

Summary

The concept of a Theory of Everything is an idea most generally associated with physics, but here we will broaden the remit and look well outside these conventional limits. A Theory of Everything is here taken to refer to a single thread of reasoning that can provide a coherent theoretical understanding of the entire universe. This includes every aspect of existence and of human experience at every moment, from the beginning to the end of time (and beyond).

The chapter begins with philosophy and describes how the search for a Theory of Everything dates from at least the time of Moses through to the Greek philosopher Plato in the fifth century BCE and on to the present day. Moving on from philosophy we'll see how both religion and science have themselves approached the idea.

It will be suggested that in our modern, evidence-based, times many people might doubt the value of philosophical claims. Even the religious teachings of Christianity, Islam and Judaism, whilst united on the idea of one God, seem unable to agree on the details. Of course, scientific endeavour continues to pursue a Theory of Everything, but science too has so far failed to devise a single theory that will unite ideas around the minutely sub-atomic world with

a vast astronomical phenomenon like gravity. In the end we are left wondering if a more novel and speculative approach might help.

The essential proposal running through this chapter is that absolutely everything fits together in a perfect unity. This includes literally everything, not just the big things, but every single moment - all the minutiae throughout the cosmos, from the vibration of every single quark, atom and molecule to the orbit of every planet around its star and every galaxy around its black hole. But it also includes those seemingly irrelevant thoughts, episodes and adventures we each experience minute-by-minute every day. The contention is that a true Theory of Everything should allow us to understand how this rather evasive unity and perfect interconnectedness of everything could underlie every aspect of our experience.

The chapter concludes with the notion that the unity of Ultimate Reality is timeless and unchanging. Perhaps the real Theory of Everything is to be found in this mystical unity?

Patterns make sense of making sense

So, let us begin at the beginning, specifically your beginning. From at least the moment you were conceived to the final moment of your life you will be bombarded with data. This emanates not only from the physical sensations around and within you but also from the information you glean from the social world. You need to make some sense of this welter of information if you are to survive in human society.

Much of the physical information we receive through our senses is dealt with unconsciously, but in our everyday lives

we also make sense of the vast inflow of data by linking together those aspects that seem to be similar to each other. These linkages can be seen as connecting lines between the numerous and varied elements of our experience. As they grow over time the linkages form an enormous system, a virtual network, of interlocking patterns. These patterns are our way of making sense of experience at a very nitty gritty level. They simplify incoming data and allow us to manipulate it in the form of ideas, and because they are so very fundamental to our existence, I refer to the patterns as being elemental. Elemental patterns offer a way to package the vast inflow of information into user-friendly chunks so they can be consumed by us and put to a useful end. I demonstrate how the concept of elemental patterns can be used to extend the boundaries of scientific exploration into the less tangible fields of metaphor and symbolism - very much not the stuff of science to date but very much of relevance to a serious exploration of a Theory of Everything.

Patterns here, patterns there, we all see patterns everywhere

The suggestion is that everything follows a series of patterns wherein every aspect of the universe symbolically reflects everything else in a single totally harmonious unity. At first glance this may seem to be a difficult idea to accept given the obvious differences between just about everything you can think of. However, consider the concept of the fractal. Fractals are patterns that endlessly repeat at very different magnitudes in a sort of expanding symmetry.² Fractals can be seen as physical entities, such as the patterns created by the branches, stems and twigs of a fir tree or the

² I first came across the term 'expanding symmetry' on this website: <https://light-in-leaves.blogspot.com/2016/07/expanding-symmetry.html>

inlets and promontories of a meandering coastline. Whether you zoom in or out, these manifestations of nature have similar patterns at every scale and endlessly repeat at very different magnitudes.

The contention I'm making here is that the reality underlying everything we know (and everything we don't know) - what we might call Ultimate Reality - is itself an entirely simple and perfect unity that is one single infinitely connected collection of numerous parts. The difficulty with words is that whilst Ultimate Reality can be thought of as being this single collection of parts, in the light of duality it is also very much not this. For now let's focus on these elemental patterns and how they could help us to know Ultimate Reality.

We make sense of the world by connecting parts of our experience together and this process creates or relies on elemental patterns. In a sense any line of thought is an elemental pattern. An example is any stream of consciousness where each idea along the way connects to at least one other, so uniting the one from where it originated and the one to which it leads. Another example of this is the concept of cause and effect, though there are frequently many more parts to this linkage between events and objects than a simple cause and effect dynamic. From birth we have routinely made connections between so many aspects of experience that the process has become more-or-less unconscious to us and is therefore often extremely difficult to identify. It's to help us to get our heads around these rather esoteric ideas that I refer to the interconnections between everything as forming elemental patterns. These patterns need have no essential reality but are a handy way of thinking about something that is otherwise extremely slippery to grasp. Elemental patterns are to be seen all

around us in our everyday lives; they link everything to everything else and are the virtual structures upon which we hang our understanding of the world and our experience of it. They allow us to create a sense of meaning in our lives.³

Whilst there may be numerous elemental patterns, all patterns have one other pattern in common: that of duality, itself a sort of archetypal elemental pattern. The argument in this chapter is that through these patterns we can form an understanding of what duality is and how it can lead us to mindfulness meditation, through which we may come to experience unity for ourselves. Unity is the final Theory of Everything; it is timeless, transcendent and ego-free; it is the dimensionless present moment. It is Ultimate Reality, the world as it really is where nothing is separated or differentiated from anything else.

Before going into detail on this however, it will be useful to have a closer look at what a Theory of Everything could look like.

All you need to know about the Theory of Everything

Writing in the tradition of Plato, the ancient Greek philosopher Plotinus noted that whilst we routinely see the world and universe as consisting of numerous different objects and events, this is an illusion. He believed that in reality there is only a single, unchanging, one-ness. He said:

... all souls are together, not collected into a unity but springing from a unity and remaining in that from which they sprang; or rather they never did spring from it, but

³ I'm not aware that the idea of elemental patterns has been discussed elsewhere, but if you, dear reader, happen to know more of this I'd be happy to hear from you (please email the author at mindfulnessnowandzen@yahoo.com).

were always in this state, for nothing There comes into being, and so nothing is divided into parts; it is only the recipient who thinks that it is divided. ⁴

Whilst Plotinus might today be thought to be a rather antiquated and irrelevant writer, modern day science is in fact involved in a search for the unity of which he speaks, though the accepted terminology has evolved by now into the search for a Theory of Everything.

Elemental patterns in the fabric of reality

The search for a Theory of Everything has been around for a very long time and though it continues, some claim to have found it, not through science but through meditation and mystical understanding. Our everyday experience as humans is that innumerable objects and events make up a constantly changing universe. But in this discussion, I describe how the change and diversity apparent throughout the entire cosmos could be an illusion and how there may be only one thing, a unity, which is unchanging.

As Plotinus says, nothing is divided into parts. It may be no coincidence that this philosophical stance is a dominant theme in Zen Buddhism as well as a common feature of mystical experience. Rather than being separate, it is said that absolutely everything is somehow the same as everything else. To put this another way we might consider everything to be symbolically representative of, and related to, everything else.

Although the idea that there could be myriad interconnections between everything in the entire cosmos seems to go against common sense, here we need to suspend

⁴ Plotinus, *The Enneads* (204/5-270 C.E).

our disbelief for a short while. The interconnections appear to create elemental patterns but the patterns themselves need have no essential reality. They are rather a handy way of thinking about something that is otherwise extremely obscure. Patterns offer a way of thinking about the enormous array of objects and events in the universe, from moment-to-moment occurrences at a subatomic level to those at an astronomical level right now and across all of time. Despite their surface differences, it's surprising how many points of similarity can be identified between seemingly unrelated phenomena, and it's when we connect these points that a pattern emerges, much like ley lines emerge from apparently unrelated points on a map. The elemental patterns I talk about need to be no more real than ley lines to serve our purpose here. Their role in this discussion is simply to illustrate how linkages can be made between seemingly utterly different entities and ideas regardless of their content and magnitude.

Where did elemental patterns come from?

All sentient beings on planet Earth are continually bombarded with stimuli in the form of heat, cold, light and all manner of sensory information, social stimulation and so on. This is no doubt most manifest in humans, but maybe all organisms ultimately have a need to simplify the enormous influx of data to which they are subject moment-by-moment. For humans certainly, no sense could be made of the world without the categorisation and reduction of data because by processing only certain stimuli and consciously or unconsciously ignoring others we can group incoming information into meaningful, bite-size, chunks. By grouping external stimuli into patterns we are able to make sense of the world. This process of pattern formation and identification seems to me to be largely unconscious. It's hard to identify the process perhaps because it's

unconscious and we're immersed in the patterns, which may be why we tend to see the detail within the patterns rather than the over-arching pattern itself.

What's the point of elemental patterns?

The value of elemental patterns is that they allow us to bunch together large amounts of data that share some commonality, and some of the simple patterns to be discussed here are seen all around us. For example, you can find the same pattern in the way trees branch out from one single trunk, the way rivers fork from small tributaries into larger streams and, in a more metaphorical sense, in the way our conception of the evolution of life began with one life form that over time evolved into numerous forms. All these concepts, whether physical or metaphorical, share the same elemental pattern: that of branching.

Thinking of the world as a series of interconnected patterns may be a novel idea to us because we take them for granted, having grown with the idea of these patterns being all around us from childhood. It seems likely elemental patterns have evolved quite naturally in cultures and times across the world because they serve a useful purpose: they simplify the vast and otherwise confusing inflow of information we each have to deal with in life. The task of processing this information becomes far easier when we reduce the diversity of experiences, events and occurrences into a smaller number. Patterns therefore represent a way of making sense of experience at a human level. And whilst there may be numerous patterns, all patterns share one other pattern: that of duality.

Duality

Duality is the archetypal elemental pattern. Everywhere you look in the world and in the universe, you will find the

interplay of opposites. These are seen not just in our everyday activities but at the astronomical scale, such as in the orbit of planets balanced between outward forces and the inward pull of gravity (the centripetal force), and at the subatomic level in the forces that both attract and repel the particles that are the building blocks of matter. Every concept has both positive and negative characteristics. Whilst this duality may have an independent existence outside of human thought, it very much guides the way in which we think. The up/down, sharp/blunt, living/dead conceptualisation of the world is the way in which we make sense of our experience and it works very efficiently when we simply wish to get on with our everyday lives. But this is in a sense artificial and takes us no nearer to whatever it is that lies behind these outward appearances. This, it is suggested, is Ultimate Reality, which is the unity that is itself beyond the opposing characteristics of duality.

We can form an understanding in our minds of what duality is and it is through this that we may reach unity: the Theory of Everything. However, though reflecting on duality will not take you there itself it will take you to the brink of something beyond itself, which is where unity is to be found. You'll still need to make the jump, the leap of faith from duality to unity. This is not an intellectual task: you cannot think your way out of duality, and in this discussion it's suggested that meditation offers an opportunity to dissolve the thinking process gently, and naturally to reveal the Ultimate Reality that is unity.

Unity

Unity is the final Theory of Everything. It is timeless, transcendent and ego-free: it is the dimensionless present moment. In fact, the unity I describe is itself just a way of

talking about the essence of Ultimate Reality, which is impossible to describe in words.

Throughout this discussion I will make reference to the book *Mindfulness, Now and Zen* which has given a much fuller account of these ideas. If you're interested in finding out more there's a copy of the book here:

http://www.mindfulnessnowandzen.com/resources/MINDFULNESS, NOW AND ZEN_freely_available.pdf

In the beginning

It's been said that in the beginning God created the heaven and the earth,⁵ but it seems this was only the beginning of the debate. This simple statement raises distinctly more questions than it answers: questions like, if Heaven and Earth were here from the start, where did they come from? How did the universe begin? And why it does it work as it does?

Here I will look at these questions from both a scientific and non-scientific standpoint, and will build on some of the ideas described in the book *Mindfulness, Now and Zen*, focusing especially on the concept of unity - how it could be that everything is linked perfectly to everything else in every possible (and impossible) way.

The search for one-ness

The German-born author and spiritual teacher Eckhart Tolle, has alleged that:

⁵ *King James Bible Online*, Genesis 1:1, <https://www.kingjamesbibleonline.org/Genesis-1-1/>.

... the essence of everything that ever has been and ever will be is eternally present in an unmanifested state of oneness and perfection – totally beyond anything the human mind can ever imagine or comprehend. In our world of seemingly separate forms, however, timeless perfection is an inconceivable concept. ⁶

It's this unmanifested state of oneness that is remarkably like the unity Plotinus was talking about eighteen hundred years ago. To me it describes a Theory of Everything. Modern interest in one single theory that could describe how everything is connected to everything else has grown steadily since James Lovelock proposed the Gaia Hypothesis in 1972,⁷ so it's perhaps not surprising that elements of the idea have found their way into New Age thinking.⁸ However, the concept of unity - a harmony and one-ness at the heart of everything - does have a more mainstream heritage in our long-held cultural traditions both spiritual and secular.

There are a number of very well-known religious teachings on this whole subject, and whilst there is much debate in the three largest Abrahamic traditions - Christianity, Islam and Judaism - there is at least agreement on one thing: that there is only one God. This one-ness is an important tenet in the belief systems of these religions, but also seems to be equally important for physicists in the ongoing search for a Theory of Everything.

⁶ Tolle E (2005) *The Power of Now*, Hodder and Stoughton, p.82.

⁷ Lovelock J (1972) Gaia as seen through the atmosphere. *Atmospheric Environment*, 6 (8), 579-580.

⁸ See for example <https://www.thelawofattraction.com/12-spiritual-laws-universe/> for a more detailed description of *The Law of Divine Oneness*.

When it comes to science, our problem in establishing a unifying dynamic at the heart of reality is that it rapidly leads us into some very complex mathematical logic, far beyond the understanding of most of us and certainly beyond the scope of our discussion here. Suffice to say, science has still got some way to go before the issue is resolved. However, a brief summary of what is widely believed within scientific circles includes the idea that there could be a number of explanations to account for the existence of the universe, including the Big Bang theory, steady state cosmology and the cyclic braneworlds model. To the lay mind perhaps the most intelligible of these and the one with which you're likely to be most familiar is the Big Bang theory, which offers some splendid opportunities for speculative thinking on a grand scale.

Alongside these hypotheses concerning the essence of existence, modern thinking in science tells us that the universe is held together not by one, but by four fundamental forces.⁹ Three of these are known under the general term of quantum mechanics, the first and second of which are the strong and weak forces that govern subatomic interactions, and the third is the electromagnetic force, responsible for radiation such as light, radio waves and chemical interactions. Moving from the very very small to the very very large, the fourth force, gravitational interactions, operates on the astronomical scale and is known under the framework name of general relativity. Modern physics rests on the theoretical frameworks provided by both quantum mechanics and general relativity,

⁹ Although more recently it has been suggested that a fifth force also exists; see for example, <https://www.firstpost.com/tech/science/scientists-may-have-discovered-a-fifth-fundamental-force-of-nature-theyre-calling-it-x17-7710261.html>

but it is widely accepted that ultimately (at most) only one of these hypotheses can be correct because at the subatomic scale they are mutually incompatible.

Understandably there is now a search in physics to find a single theoretical framework that will unify gravity with the other three interactions. This search for a Theory of Everything is based on the suspicion that the four forces are all aspects of one phenomenon. One hypothesis, known as M-theory, posits the idea that the fundamental particles of the universe might be small strands of vibrating energy that tie together string theories with relativity and quantum concepts. However, an acceptable Theory of Everything remains particularly elusive within theoretical physics, and we are left wondering if scientific analysis is the only way forward.

A new way of thinking about a Theory of Everything

I suggest perhaps one problem is that, despite some rare examples like neuroscience, the scientific method of enquiry tends to treat the question of 'how things work' as if it is somehow separate from 'how humans understand'. One of the chief ways in which we make sense of our experience and give meaning to our understanding is through making connections between the objects and events that we repeatedly observe to occur together or on repeated occasions chronologically across time. When we apply heat to water it gets hotter and eventually boils. The link we repeatedly identify between the application of heat and the boiling of water in this chronological sequence constitutes a sort of pattern which in time has become widely accepted as the basic scientific tenet of cause and effect. Patterns of linkage between objects and events are everywhere around us; we identify similar objects or events being repeated over time and drop these into the context provided by our

personal and cultural experience. So it is that we use elemental patterns to construct our subjective reality and the entire network of meaning within which we live. However, as we will see, unlike the example of boiling water, not all elemental patterns necessarily have to have an observable cause and effect relationship. Furthermore, they need not be composed of tangible physical objects because the linkages within each pattern can be symbolic or metaphorical.

It's assumed that the underlying reality behind everything that science is trying to get at through the identification of a Theory of Everything, will be understandable to at least some human beings (namely theoretical physicists). But what if reality turns out to be beyond recognition as a pattern or network of connections: would this not place it beyond rational human understanding? In these circumstances if we see it at all, it will appear to be nonsensical so we will never be in a position to identify it as meaningful. An example of this is the element of transcendence: if Ultimate Reality turns out to neither exist nor not exist, to be both true and false, we will not entertain the possibility of it because it will be beyond rational understanding.

However, by the time you reach the end of this discussion I hope you will come to see that Ultimate Reality may well be beyond our rational grasp but not beyond the grasp offered by meditation. Mystics and sages have claimed this very thing for many centuries but science, with its reliance on the man-made concepts of logic and rationality, has repeatedly missed this point. An understanding of transcendence may be exactly what we need to move our thinking on to a more productive path.

The Way of Unity

In a triangular glass prism we can see that a beam of white light is separated into its constituent spectrum of colours. But look at this in a different way: shine the rainbow of coloured light into the prism and it emerges as a single beam of white light. So it is that the many can become the one.

In this discussion I will use the elemental pattern of which this dispersion of light by a prism is a part, to propose some distinctly non-scientific ideas that might broaden our thinking on how a single Theory of Everything can be found and how the apparent diversity and differentiation seen in our everyday experience could actually be only one thing, that is, a unity.

The really interesting thing for us here is that scientific study has so far found that the four forces mentioned earlier that appear to lie behind the entire universe, are not reducible to fewer, more basic, interactions. The question immediately raised is, *why four?* Why not five, fifty, five hundred or only one? And this is where we depart from a reliance on scientific theorising and move to a much more speculative arena, building on the very nebulous evidence arising from philosophy, spirituality, religion and mystical experience.

Of course, there is a certain logic to the idea that a single theory could account for everything. Even if the reality behind everything is an infinite multiverse of overlapping realities, this is still the *one* reality behind everything: in the case of the multiverse hypothesis the one reality, the one truth, would be that there are multiple realities. So there is only ever one Ultimate Reality. The idea that there could be just one force, just one idea behind everything, perhaps also has an appeal because it seems to simplify things and,

interestingly, perfectly parallels reports given by many who claim to have known Ultimate Reality. In *Mindfulness, Now and Zen* the personal experience of Ultimate Reality was referred to as Cosmic Consciousness, and the accompanying sense of unity, of the essential interconnected *sameness* of everything, is one of the fundamental understandings frequently reported following this very personal experience.

In *Mindfulness, Now and Zen*, unity was described in various ways, but all contain the core idea that:

*... Ultimate Reality is a unified whole, a 'oneness'. This is not simply to say that the fundamental nature of Ultimate Reality is one, but that it is ONE taken to the extreme: Ultimate Reality is nothing but oneness. It's the embodiment of what 'one' means. In this unity, everything within Ultimate Reality is connected to everything else in every possible way, and so, of course, nothing - no 'thing' - is separate.*¹⁰

To put this a different way, think what we mean by 'one' in mathematics. The concept of number one has no meaning on its own: it requires the concept of zero if it is to make sense. Furthermore, as abstract concepts, the meaning of multiples of one (like two, three, four and so on) and parts of one (like a half, quarter, twentieth and so on) rests on an understanding of the concept of 'one'. This is what is meant by the description of Ultimate Reality as 'one taken to the extreme'. Ultimately, 'one' not only contains zero, it also lies at the heart of all multiples and fractions. In a logical sense it must have its being or essence before any other conceptualisation of quantity, and in this sense must stand

¹⁰ Barr W (2017) *op cit.*, p.142.

alone as the primary base of all other quantities. This idea that some concepts are fundamental to the existence of other concepts may be unfamiliar to many of us, though this mathematical example demonstrates the process in practice.

The application of this, the fundamental place of the concept of 'one', is rather complex when we apply it to our understanding of the entire cosmos and claim that this is an undivided and single unity. Common sense tells us that it is clearly rational that we should routinely assume reality to consist of innumerable bits and pieces that interact with one another in ways too numerous to imagine. The suggestion that everything is a part of everything else flies in the face of this: obviously things are not all the same thing or we would never perceive them to be different. A car is not a cornflake and a cat is not a mouse, moose or microscope. So, what could it all mean?

The answer, perhaps surprisingly, is very simple; it nevertheless will take some time to begin to outline how this could be so.

What it all means

Cosmic Consciousness is the term used here to refer to the personal encounter with Ultimate Reality, an experience that might be referred to as 'seeing the light'. In reports of Cosmic Consciousness it is frequently said that the universe itself is neither good nor bad, that it neither exists nor does not exist, that it is a simplicity beyond simplicity, and an undifferentiated and united one-ness beyond one-ness and multiplicity. It's as if Ultimate Reality follows an infinitely self-similar pattern, a unity where every part is symbolically representative of every other part, no matter how minute or massive, tangible or abstract, real or imagined they may be.

Clearly, the concept of Cosmic Consciousness is not an easy one to grasp. However, here I propose a description of how we can conceive of this from within Everyday Reality, that is, from the standpoint you and I share at this moment rather than the standpoint of the enlightened Zen Master. And my description will not be based on scientific evidence, mathematical modelling, faith or wishful thinking, but on imaginative reflection. This sort of blue-sky thinking may be just what we need to help us to suspend our disbelief.

Cosmic counting

The essential difficulty we're dealing with here is the vast array of human experience. This runs from the moment-by-moment diversity of every interaction between atoms, organisms and events across time on Earth, to the interactions of the stars and planets and beyond. Just how can we crunch this seemingly endless hodgepodge of multiplicity down to its essence and reduce it to one thing?

Chapter 3 will be dealing with this in detail but, briefly, it's worth noting that previous attempts to resolve the issue from a philosophical standpoint are identifiable from at least two and a half thousand years ago. This has been mentioned already but it's important because it was Plato who really developed the theory of *Forms* in the 5th century BCE. He held that non-physical Forms lie at the core essence of all things, whilst the various objects and entities that we experience in the physical world are merely examples of these core realities. So, for example, when you see a table or a tree it is not the only uniquely real table in the universe or the single uniquely real tree, each of which is a Form that exists transcendentally and consists solely of the essence of 'tableness' or 'treeness'. What you experience is merely an imitation or an example of the real,

underlying, object of which there is only one. Each Form was seen by Plato as having been created by God as a single entity and there was considered to be a Form for everything - all animals, objects, emotions and so on. So each animal or object you see is only an example of the true Form of that entity. Exactly how many Forms there might be remains debateable, but there must certainly be considerably fewer than there are *examples* of Forms in the shape of actual tables, trees and so on.

If the concept of Forms is new to you it might help to think of the elemental pattern of branching mentioned earlier. The particular shape of a branch typically leads from a single entity to a growing number of smaller diverse elements, but the essential shape is seen in very many unrelated areas. So, not only do trees branch but so too do rivers, streams and, less tangibly, the way we conceive of evolutionary development, from simple single cells to increasingly complex organisms. Behind all is the ubiquitous pattern of branching, which seems to me to be very much like a Platonic Form.

The downside of elemental patterns

The summary above outlines what elemental patterns are and perhaps moves us a little nearer to the idea of an underlying unity. Elemental patterns simplify our experience by reducing the vast inflow of information we deal with on a daily basis. They allow us the opportunity to identify linkages between the numerous experiences of everyday life, and so to construct meaning. However, this process does have a downside. The patterns that result from making these connections form a sort of virtual network that comes to surround our understanding and permeate every aspect of our sense of reality. This activity is largely unconscious and is frequently so pervasive that even when

we are aware of it, we are so much on the inside of this network that we are unlikely to see the gains to be made by looking outside of it. Indeed, we may not even realise there is an outside. The point is, there may be another way to understand our experience of life and of the world that does not involve making these numerous connections. This would not only allow us to escape the entrapment of a web of elemental patterns but would offer an opportunity to see the world from outside the usual man-made limitations imposed by rationality, logic, common sense and the confines of what can be tested scientifically.

It might help to envisage this web of elemental patterns as a fishing net: when we make a link between two different reference points, we join up one object or event to another with a strand of virtual netting. The netting is clearly not constructed of anything tangible but is made of the meaning we attribute to the link concerned. Think of a simple cause and effect relationship - you hold an apple in your hand and let go. Gravity makes itself known immediately and the apple drops to earth. This is an example of the beginning of a particular elemental pattern: that of cause and effect. The pattern develops as the falling apple becomes the cause of another effect: maybe it lands on an insect with fatal consequences. The body of the insect now rots down and becomes food for other insects and micro-organisms, and so on. Throughout the world, cause and effect are very closely attached to each other to the extent that as the pattern develops over time each cause becomes an effect and each effect becomes a cause. In time, like the neural network of inter-connected cells that makes up our brain, the pattern created by cause and effect comes to take on further connections and inter-connections with other patterns until it resembles a globalised web of inter-connected elemental patterns. However, unlike the example

of falling apples, not all patterns necessarily have to follow observable cause and effect relationships. Furthermore, they need not be composed of tangible physical objects: some may be symbolic or metaphorical.

In respect of just one person, this process of inter-connectedness can be imagined as a vast spherical network of inter-related strands, with the individual at its centre. The individual does not themselves experience separate linkages in the network because they conceive of themselves as one entity - an individual human consciousness. Ultimately, they perceive each strand as a part of a matrix, and this is the essence of the single consciousness. This virtual sphere surrounds the individual - they are very much inside it and it is every bit who they are. It is with them at all times and enables them to function in the physical environment of the world and the social environment of human society. So it is that we construct our subjective reality and the entire network of meaning within which we live. It constitutes everyone's very being and provides our sense of self, our ego. This is not however ego in the Freudian sense: it is our sense of separation from all other egos and from the cosmos, our sense of time and crucially, our sense of difference and differentiation. This all-pervasive network of patterns is simply one way to conceive of the human condition. It is the position of each of us and of our sense of individuality and separation from the world.

However, the global network of elemental patterns that virtually surrounds each of us also traps us within its mesh. In a way we are ensnared within the meanings we have constructed, within elemental patterns and within a particular way of thinking. This is especially true of duality because it holds pride of place as the archetypal elemental pattern. The structure that meaning takes in our lives runs

along specific lines of reasoning, and though this works perfectly well when we are seeking to get by in life, it constitutes a hindrance when we wish to see beyond the network. And this brings us to the core argument. The Theory of Everything that I'm suggesting in this book lies outside the network of meaning that we have each constructed. It cannot be reached through rational argument or reasoning: as I've said before, you cannot think your way out of duality. A number of alternative approaches have been suggested over the ages, from fasting through to prayer, faith, yoga and drug consumption. But the approach I am advocating is mindfulness meditation.

Summary of this chapter

Here we have seen that the search for a Theory of Everything did not begin with science; the idea that there may be a theory that could account for everything surely goes back to the concept that there is only one God. This God is by definition responsible for the creation of everything.

You have also read about an imaginary structure that I suggest we are each adopting to help form our sense of what is real. It is this that gives meaning to our experience. The structure can be thought of as a virtual network of inter-connected ideas and it arises quite naturally when we say that something is *like* or is *caused by* something else, or whenever we identify a linkage between two or more objects, events, ideas and indeed any human experience. The ideas forming this network of inter-connections I have called Elemental Patterns. These offer a sort of virtual scaffolding upon which and through which our sense of reality is built. It has been argued that ultimately all elemental patterns are themselves reliant upon one

archetypal elemental pattern: that of duality. And behind duality lies unity, indescribable and sublime.

The Scientific Approach (and why it's going nowhere)

It's worth noting that since Plato's time there has been considerable philosophical debate around the idea of Forms, more commonly known as the problem of universals. Moving from this philosophical base to more scientifically guided thinking, in recent centuries the idea of Laws of the Universe has evolved. This development has reduced the immeasurable diversity and multiplicity of the universe to very few essential elements that might lie at the core of everything. More recently again, scientific advancement has reduced reality yet further to the four fundamental forces described earlier. However, we're still far from getting at the unique single basis for everything, and in the next chapter we'll look at just what it is that science is not doing.

CHAPTER 2

Big Black Holes in Scientific Thinking

Summary

This chapter describes, quite unscientifically, how science has not yet exhausted every possible avenue in the search for a Theory of Everything. In light of the opportunities arising from consideration of the elemental patterns described in Chapter 1, five patterns are discussed here. Whilst each of these elemental patterns is easily identifiable, so far as I am aware the wider implications have not yet been generally accepted as worthy of - or susceptible to - sustained and rigorous scientific examination. The five patterns include latency in an array of explanatory ideas, fractal structures, the movement of energy, the transformation from simplicity to complexity, and duality. It is suggested that ultimately behind all duality is a unity which is indescribable and inconceivable in terms of rational discourse. This unity is nevertheless said to be available to each of us through a range of practices that lie outside of rational thought. The specific practices discussed in *Mindfulness, Now and Zen* included prayer, fasting, parables, koans, haiku, mandalas, simple faith, psychoactive drugs and meditation. In this book however, the focus is specifically on mindfulness meditation.

Why we should go where science fears to tread

The failure of science to capture the vast breadth of reality within one compact theory has not been lost on those

persuaded by more recent New Age thinking. Here, the *Law of Correspondence* has been devised and I suggest it can be used to describe how elemental patterns of varying magnitude repeat throughout the universe.¹¹ This chapter will not be examining this particular idea, though it does become more attractive when we look a little closer at the way scientific exploration works. We see, for example, that science itself has not yet examined every possible approach in the search for a Theory of Everything.

Science has yet to explore, for instance, some of the core patterns that we can easily identify behind the reality we experience every day. We are familiar with the classification of something as a pattern when it's possible to identify regularity in design, but as Chapter 1 suggested, the process of patterning is also entirely applicable to abstract ideas. So, whilst the word 'pattern' is commonly used to describe the regularly repeated factors in a physical design of lines, shapes and colours, patterns can also be discerned in the way in which something is organised or naturally occurs across time. In this sense any cause-and-effect relationship and even the basic laws of physics can be seen to be patterns, as exemplified by the ubiquitous habit of bodies to be drawn to Earth by gravity everywhere in the world and with cause and effect operating in the usual chronological sequence more-or-less throughout the universe.¹² Although these repeated events and phenomena vary enormously in content, magnitude and time, they nevertheless constitute elemental patterns. However, there are serious limitations to the scientific method of examination and discovery:

¹¹ See for example <https://www.thelawofattraction.com/12-spiritual-laws-universe/>

¹² Yes, there are exceptions like Black Holes.

The scientific method adopts a procedure '... that has characterized natural science since the 17th century, consisting in systematic observation, measurement, and experiment, and the formulation, testing, and modification of hypotheses'.¹³ On this basis it's quite reasonable that the scientific method should exclude from its remit anything that's inherently untestable. Conditions 'before' the Big Bang, the concept of Unhappening or the eternal existence of ideas like 'truth' ... are beyond the scope of science because their existence cannot be measured, experimented upon, tested or re-tested. Does this then mean that they couldn't possibly be true? Of course not. It simply means their existence cannot be established by the scientific method. It's also worth bearing in mind that the very untestability of some hypotheses may itself be a clue as to the true nature of reality - why should only those things that are amenable to scientific testing be real? ¹⁴

This idea that something is hypothetically possible but essentially unprovable will be considered further in these pages. In the sense that these ideas have neither been developed nor made manifest I have referred to them as being latent. However, for now it's pertinent that history teaches us that scientific exploration is more likely to find recognisable and familiar characteristics than it is to find characteristics that are not familiar. Science also tends to find 'natural laws' - that is, patterns - where it looks for them and not where it doesn't. So, we look and repeatedly find that in a whole range of environments the boiling point of water varies in accordance with atmospheric pressure. Similarly, we repeatedly find that antibiotics inhibit the

¹³ Oxford Dictionaries Online.

<http://oxforddictionaries.com/definition/scientific+method>

¹⁴ Barr W (2017) *op cit.*, p.179.

growth of bacteria whenever they come into contact with each other.

However, there may well be patterns of association that science has not explored simply because they fail to fit within the narrow parameters that have come to be accepted as meriting scientific exploration, or that are otherwise not open to scientific testing. The significance of this is that in recent centuries scrutiny based on the scientific method has become our most widely accepted means of revealing the nature of reality. The absence of scientific enquiry signals that a particular area is possibly not worthy of examination. In many cases this may be true of course, but it does mean the potential relevance of some elemental patterns to the nature of reality remains unknown because their contribution to our knowledge of what is real is never even questioned.

Below are five elemental patterns that have yet to be explored scientifically. Each is easily identifiable but not (yet) widely accepted as potentially real:

1. Elemental Patterns in Latent Explanations
2. Elemental Patterns in Fractal Structures
3. Elemental Patterns in the Movement of Energy
4. Elemental Patterns in the Transformation from Simplicity to Complexity
5. Elemental Patterns in Duality

1. Elemental Patterns and the Hypothesis of Latent Explanations

One pattern of associations that has yet to be explored by scientific examination is what here we're calling the *Hypothesis of Latent Explanations*.

The absolute possibilities

When you were a child did you ever debate with your friends whether it was possible that there is no physical world in the way we usually think of it, but that everything we experience is simply happening in God's mind: that the world and universe are no more than an idea in the mind of God? Maybe a version of this, updated for the digital age, would be to conceive of us as characters or avatars in some sort of computer game of the future, as yet to be invented. These characters would have to have been given a sense of their own existence, an ego, but they would still of course only exist in the computer game.

Children and adults can see the humour in this 'mind of God' idea, but in fact it has been taken rather more seriously by philosophers. The updated version of the hypothesis - that we are generated by some sort of software program being run by aliens as a simulation of reality - is outlined in a paper by the Swedish philosopher Nick Bostrom.¹⁵ Nevertheless, most of us will reject the whole concept as rather weak-minded thinking. Of course the world is real! We can touch it, see it and be seriously injured if we think of it as being anything but deeply real.

On the other hand, our childish selves may have had a point. How can we be so certain that we're not simply an idea in the conceptual framework of a vastly intelligent supernatural being? And even then, whether we are a thought in the mind of God or not, which of the above interpretations is true is irrelevant at the level of our experience because what we experience, our subjective reality, will be exactly the same under each set of

¹⁵ Bostrom N (2003) Are You Living in a Computer Simulation? *Philosophical Quarterly*. 53, 211, pp. 243-255.

conditions. If God is imagining you, imagining your sense of personal identity and imagining your belief in your own existence, He will be producing exactly the circumstances under which you would experience exactly what you do experience in life every day.

Of course, an untestable assertion like this can equally easily be dismissed, though there just might be a bit more to this than we think. For a start, it's one of those areas that demonstrates the limits of the scientific method. What's being suggested is that vastly different explanations of reality would give us the same subjective experience. And what's more, innumerable examples of this variety of potential explanation are to be found wherever we look. Readers of *Mindfulness, Now and Zen* will be familiar with many of these, from the reality/unreality of tangible objects (whereby the entire universe could be simply an idea, constructed from whatever it is that ideas are made from) through to the presence/absence of a spirit world and the existence/non-existence of God. The possibilities are only really limited by our imaginations: what if there is only you and God? Would your experience of life be any different from that which it now is? And what if the Zen concept of time as a succession of static moments is true? Perhaps as we experience the world, so we create it; maybe there are gaps in time, where time ceases to exist and then returns to existence; and perhaps there are an infinite number of parallel universes within the entirety of reality. Again there are so many examples of latent explanations that an underlying pattern is clearly discernible, and it is this elemental pattern that is evident in the Hypothesis of Latent Explanations.

And remember, while many of these may seem to be highly unlikely, some do serve the very valuable role of generating

plausible hypotheses. One such idea that comes to mind is that of dark matter. The existence of dark matter is a latent explanation, that is, it remains to be proven, being a hypothetical construct currently outside the limits of scientific testing. Nevertheless, most experts believe it to have a powerful influence and to account for perhaps 85% of the matter in the universe and perhaps one day scientific evidence may arise that will definitively support this belief.

However, before our imaginations carry us off into the realms of fantasy, we should exercise some caution. Latent explanations can very readily take us well beyond even the most basic common sense. Bertrand Russell provided a fine example of this in his speculative anecdote of the Celestial Teapot. This particular teapot, Russell hypothesised, may, for all we know, be at this moment in orbit around the sun somewhere between the Earth and Mars. This assertion fits into the definition of a latent explanation since it is neither absolutely impossible nor scientifically disprovable (the teapot being too small to be revealed by even the most powerful telescope).¹⁶

Suffice to say, latent explanations can serve a purpose, even if many may be quite ludicrous on the surface.

How we re-create reality

The Hypothesis of Elemental Patterns proposed here in Chapter 1 is itself a latent explanation of course, and written history indicates that some date back many millennia. A very early example of an elemental pattern was considered by the ancient Greeks when they looked at the reality of ideas. This debate is carried out in relation to the reality of

¹⁶ Russell B (1952) Is There a God? In Slater JG (ed.), *The Collected Papers of Bertrand Russell, Vol.11: Last Philosophical Testament, 1943-68*. (pdf). Routledge. pp.542-548.

our everyday understanding of the tangible, physical stuff of the universe: whilst we readily assume that that which can be touched, moved, measured and manipulated is necessarily real, we rarely think beyond this. But when one of our five senses detects an object, this experience of the external world passes through our body to our brain in the form of an electrical/chemical impulse. At this point, which is replicated every single time one of our senses is stimulated, our perception of the outside world will be changed and transformed from whatever ‘tangible’ may mean into a sort of digitised, electrical/chemical, signal. Our cognitive processing then condenses it back to deliver meaningful content to us. So, our awareness of any aspect of the tangible, physical world, has always been through a digitised system before we ‘know’ anything at all; we’re never actually experiencing the thing-in-itself but always some reconstructed version of what is out there.

And there’s a distinct sensory time-lag here, albeit only for a split second, because the outside world is coming into being a moment before we are aware of it. To put this another way, from our individual subjective point of view in ordinary, everyday, reality, the present moment is the future. This is because of the sensory time-lag in our perception which necessarily follows the external event. It follows because all the electrical/chemical messaging, from our first sensory experience through to the comprehension of this in our consciousness, takes time. By the time you catch up with the present moment it’s moved on, so you never do catch up with it via your senses.

Mindfulness, Now and Zen raised a number of questions about this, one being how do we know that what we perceive through our senses - tangible stuff, matter - is real? How do we know that what we encounter in everyday life

is there at all and not simply the idea of itself?¹⁷ Our subjective reality is a reconstruction of the external world based on the influx of stimuli we receive each moment through our sensory network. But this does not mean that the source of the stimulation, the 'external world', is necessarily tangible. When you encounter a kitchen table you feel its presence as a tangible, hard, wooden object and see it in front of you. But, like the ancient Greeks, how can you be sure your free-floating consciousness has not simply encountered the *idea* of a kitchen table somewhere within a universe consisting solely of the ideas of things? After all, such a 'world of ideas' would surely be a simpler way to account for our experiences than is the notion of the so-called tangible world? For one thing, ideas have no need for material substance - they occupy no space.

In this way we can see that maybe the tangible world or even the concepts it represents need have no objective existence at all. Indeed the world and entire universe might well be no more than a shared way of thinking about things so that you and I can communicate meaningfully. The point is that it makes no difference which of these is real, that is, whether the world is made of tangible objects or whether it is made of the *idea* of tangible objects. If the idea of touching a cup on the kitchen table is exactly the same as actually touching a cup, then one of these is redundant. But it doesn't matter which. Much like your childish self, debating whether existence is real or simply something played out in the mind of God, it really doesn't matter because whichever possibility is true is irrelevant at the level of your subjective experience. And it's this quality, this irrelevance, that is central to the Hypothesis of Latent Explanations, and it's this that constitutes a pattern to be

¹⁷ Barr W (2017) *op cit.*, p.39.

repeated over and over again. All latent explanations share one quality and this links them all together despite huge differences in their content and context. What they share is the potential for being true: no matter how unlikely, each one is possible and not a single one can be confirmed or disproved by use of the scientific method. And ultimately, if we can't say something is absolutely impossible then we must accept that, in theory at least, it's absolutely possible. This idea is familiar to particle physicists, who might consider that in a universe with unlimited possibilities *everything that can happen does happen*.¹⁸

Before we leave the Hypothesis of Latent Explanations two further examples come to mind, and these - the Universe as a Hologram and the Hypothesis of Unhappening - are ideas you can try at home.

The Holographic Universe as a Latent Explanation

As noted earlier, the ancient Greeks were enthused by the notion that the world of ideas is where reality lies, and perhaps they had a point. Much like the kitchen table I've already mentioned, we might reasonably ask what is the difference between a specific tree and the idea or concept of that specific tree?

Near my house is a small piece of quiet woodland. As I walk along a path through the wood, I approach a large tree by the side of the path. Try this yourself at home: I walk around the tree and as the different parts of tree trunk come newly into my view, I consider the possibility that only then are they coming being. I stand a few yards away from the tree and focus on its bark. I picture it as an apparently three-

¹⁸ See, for example, Cox B and Forshaw J (2011) *The Quantum Universe: Everything that can happen does happen*, Penguin Books, London.

dimensional object set against a two-dimensional background. In other words, in my imagination I picture the tree as the only 3D object I can see. This helps with the sense of it being a hologram - that is, something that's not really physically tangible but very much appears to be so because the background shifts as I move. As I walk towards and around the tree, keeping my focus on a patch of bark, I notice how it changes but still happily complies with the sense of being three-dimensional. The tree does not, as we usually assume, necessarily have to exist in its entirety, either as a three-dimensional or even two-dimensional tangible and physical form, because until I perceive it its existence is irrelevant to me. Similarly, as I look at the tree, the trees I believe to be behind me don't actually need to be there at all. The trees I see could simply be brought into existence at the moment I perceive them. How would I know whether they are really there or not, and what difference would it make to me anyway?

And of course, to follow through on the rationale of this, we don't have to restrict ourselves to trees. Anything and everything in the phenomenal world - the world of the senses - will do just as well. And if everything could be a hologram, would it matter anyway? Surely our subjective reality when we experience the hologram would be the same whether it is pure fantasy or reality? It's this perspective on the tangible world that I'm calling the Hypothesis of Latent Explanations.

So, what does all this mean?

The holographic principle - the idea that the universe is a vast and complex hologram - was first proposed by Gerard 't Hooft, a Dutch theoretical physicist. It was further developed in relation to string-theory by fellow physicist Leonard Susskind in the 1990s, so it is not without credible

scientific advocates. Indeed, why should the world - the universe - not be in its entirety some sort of hologram, simulation or elaborate computer game?

Well, for one thing, it would require some serious computing power to conjure up an entirely holographic world. On the other hand, what are the limits on the computing power of Ultimate Reality? What's more, the sensory time-lag mentioned earlier would be irrelevant. The hologram idea operates in the present moment insofar as my seeing the tree bit by bit would in every way be the process of the tree coming into being at the very moment it is perceived by me. In other words, the time-lag involved in our sensory perception of the external world is irrelevant if the external world comes into being only at the moment our consciousness alerts us to its creation.

But perhaps most importantly, the Hologram Hypothesis requires nothing apart from consciousness in order for it to work. Actual trees - indeed the physical world in its entirety - need not exist. It's just our perception, our consciousness, that needs to exist. And if any aspect of our lived experience can be explained by two theories, then on the basis of Occam's razor (where the simplest of two explanations is to be preferred) we should take the simpler to be the most likely truth.¹⁹ Surely the existence of consciousness alone, as required by the hologram, is far simpler than positing the creation and continuing maintenance of a physical world *as well as* our consciousness of it? And of course, the consciousness doesn't have to belong to a human; it seems perfectly reasonable that any sentient being, animal, insect, microbe (or alien) could equally fulfil this role. Each

¹⁹ Barr W (2017) *op cit.*, p.292.

particular consciousness would simply experience its own personal hologram.

The value of the Hologram Hypothesis in helping us to conceive of the present moment also applies to another latent explanation, the one I'm calling Unhappening.

Unhappening as a Latent Explanation

If you have read *Mindfulness, Now and Zen* you will be familiar with the concept of Unhappening. Unhappening is another example of the elemental pattern seen in the Hypothesis of Latent Explanations and is described in more detail in that book.²⁰ Briefly, Unhappening can be thought of as something that could have occurred at the very first moment of the Big Bang - in fact, at exactly the same moment. Furthermore, it's seen as something that continues to occur moment-by-moment with the passage of time. In fact, it *is* the passage of time.

I suggest that at the moment of the Big Bang an equal and opposite Big Bang also occurred and continues to occur alongside the continual moment-by-moment change brought about by the regular Big Bang. This opposite Big Bang, however, is in reverse and in this 'reverse universe', time is travelling backwards and thus unravelling the universe that we conventionally assume to be arising from the Big Bang. In other words, the universe is itself 'unhappening' even as it happens. And of course, at the point where the positive Big Bang meets the negative Big Bang nothing is happening because they cancel each other out perfectly. At this point there is no change and so no time: this is the present moment.

²⁰ Barr W (2017) *op cit.*, pp.133ff.

It's also feasible that when we have a thought, we may also *at the same time* have an equal and opposite thought that is moving backwards in time. However, to account for our experience, we need only to be aware of one side of this, either the forward flow or the reverse flow of thought. This idea can be seen to be an example of the elemental pattern revealed in the concept of Unhappening.

Can we see Unhappening?

In the same way that the hologram idea relates to our subjective sense of the existence or non-existence of trees, indeed of all external phenomena, it makes no difference to our subjective experience that the universe might be unhappening at the moment it is also happening. What would it matter to our perception of the world if the passage of time were reversed? Would we not experience the same thing we experience now? Yes, cause would be effect and effect would be cause, but so what? If you're travelling backwards in time whatever happens first will, by the very act of chronological precedence, be considered to be the cause of whatever happens next. That's what a cause is, it happens first, immediately before its effect. Whilst everything that happens would be in reverse, our subjective experience would be equivalent to that we routinely experience at present.

Illusion, reality; happening, unhappening; time, timelessness: Let's move on to have a closer look at this interplay of opposites.

2. Elemental Patterns in fractal structures

The Danish physicist Niels Bohr (1885-1962) observed that we simply don't know whether there are meaningful connections between the orbit of electrons around the central nucleus of an atom and the orbit of planets around a

central star. His point was that science had yet to seriously explore the possible significance of these links.

Picture the universe in all its grand-scale massiveness. We know that there are galaxies and within these there are stars, around which planets orbit. This simple image is easy enough to grasp as is the other end of the spectrum where, at a lay level of understanding at least, electrons orbit around the central nucleus of an atom in a way that appears to mimic the behaviour of planets and stars. Clearly there are similarities here despite the tremendous differences in magnitude, and the emerging pattern, for all we know, may be meaningful.²¹

It's a stretch of the imagination, and maybe of credibility as well, but is it impossible that our own vast universe is itself subatomically minute in comparison with a massively larger universe of orbiting planets, or that the orbiting electrons of our own subatomic structures are themselves hugely - astronomically - larger than some other universe itself composed of orbiting planets, in a perhaps infinitely repeating fractal pattern? In the vastness of spacetime there really is no limit to what could be.

But, to return to the question, what is holding back the scientific examination of some maybe fanciful patterns that might nevertheless be real?

Well, for one thing, patternicity (sometimes called apophenia). This latter term was devised by the psychiatrist Klaus Conrad in 1958, and it describes the human tendency

²¹ The suggestion that a universe could be - in our terms - minute, brings to mind the film *Men in Black* (Columbia Pictures, 1997) where the tiny Aquilian Galaxy is found in Orion's belt, Orion being a cat and the belt being his collar.

to perceive connections between unrelated things. Conrad applied this to the early stages of schizophrenia, but over time apophenia has come to denote more generally the human propensity to identify patterns in random information. The point is, who is to decide what information is random and what is not? What if the similarity between the astronomical scale of planetary orbits and the subatomic scale of molecular behaviour is rather more than a coincidence? What if the essential way reality works is based on such repeated patterns? This might suggest that the universe, indeed reality itself, is built upon some sort of invisible but underlying structure, a virtual scaffolding along which all patterns run.

Another example of the pattern seen in the similarity between planetary orbit and subatomic behaviour is found in the fractal:

Fractals can be seen as physical entities, such as the patterns created by the branches, stems and twigs of a fir tree or the inlets and promontories of a meandering coastline. These have similar patterns at every scale. They are patterns that endlessly repeat despite their very different magnitudes. Clearly, examples from within nature, like the fir tree and coastline, are limited, but theoretically fractals can be considered to be infinitely self-similar. Nor are fractals limited to geometric patterns for they can also describe processes in time. In this way we can imagine how the patterns behind everything we experience through time can be essentially 'the same thing', despite their apparent diversity.²²

²² Barr W (2017) *op cit.*, p.147.

The dynamic behind fractals, itself an elemental pattern, shares much in common with Plato's Forms, which were touched upon in Chapter 1. He presents Forms themselves as the underlying pattern and the physical world merely as a collection of examples of this.

But to return to fractals, what on earth are they about?

Planets and positrons, possibilities and poppycock

As we've seen already, the pattern of the fractal endlessly repeats at very different magnitudes in a sort of expanding symmetry. We see fractals in many places - in snowflakes, trees, rivers and clouds, as well as in some abstract mathematical concepts.²³ Here I will suggest they can also be identified in ideas, and crucially, within the basic foundation of the universe and our experience of it. But first, let's have a look at why we so readily dismiss such obvious examples of the repeated patterns that are found in the orbit of both planets and electrons.

The concept of apophenia is quite persuasive. We humans do tend to read meaning - to see patterns - in all sorts of random events. Sometimes we call this science, sometimes superstition, coincidence or conspiracy theorising. And sometimes this tendency leads to credible results. The interdisciplinary work in chaos theory for example, has demonstrated that even within the apparent randomness of chaotic complex systems there are underlying patterns of interconnectedness.

There is some sign that scientific exploration may be moving towards the broader scope offered by elemental

²³ See for example
<https://mathworld.wolfram.com/MandelbrotSet.html>

patterns. In recent years two scientists, Franco Vazza and Alberto Feletti, have thought it worth looking at the similarities between planetary orbit and the behaviour of relatively tiny cellular events. A recent paper published in the scientific journal *Nautilus* reports that:

*... an astrophysicist and a neuroscientist have joined forces to quantitatively compare the complexity of galaxy networks and neuronal networks. They conclude that 'the complexities of the brain and cosmic web (are) actually similar, but so are their structures. The universe may be self-similar across scales that differ in size by a factor of a billion billion billion.'*²⁴

Patterns in everything

Given the work of Vazza and Feletti, perhaps there is some hope that the formerly narrow focus of the scientific method may be broadening, and there is certainly no shortage of material to look at. But maybe it's not just differences in magnitude that should concern us when we're studying these fractal-like patterns, because self-similarity can be seen everywhere in the concepts that underlie our everyday lives. The ideas that make up these concepts themselves follow patterns of self-similarity. For example, when a thought arrives in your consciousness it has arisen from former, albeit unconscious, cognitive activity. The emerging thought has followed a pattern of branching which is seen elsewhere, such as in the physical structure of trees and rivers. But rather than their differences being in magnitude - like fractals and the orbiting nature of planets

²⁴ Vazza F and Feletti A (2017) The Strange Similarity of Neuron and Galaxy Networks. *Nautilus*, 050, July 20th. See <http://nautil.us/issue/50/emergence/the-strange-similarity-of-neuron-and-galaxy-networks>.

and electrons - in the case of ideas the differences are in context and content. And this is perhaps where we leave science behind and follow our speculations instead - but be prepared, this may take a quantum leap of imagination ...

3. Elemental Patterns in the movement of energy

A third area that science has been slow to explore is the Buddhist concept of time. This provides a good example of how ideas can be self-similar and so produce patterns of interconnection. Zen teaching holds that there is no such thing as time: it is an illusion. The Sixth Patriarch of Zen, Dajian Hui-neng (638-713 C.E) is attributed with the observation that there is only the present moment, and that:

*In the present moment there is nothing which comes to be. In this moment there is nothing which ceases to be. Thus there is no birth-and-death to be brought to an end. Wherefore the absolute tranquillity (of Nirvana) is this present moment. Though it is at this moment there is no limit to this moment, and herein is eternal delight.*²⁵

Perhaps it is not so difficult to grasp the idea that the present moment is itself timeless and unchanging. However, what if reality consists of an infinitude of present moments or - in effect the same thing - one continuous unchanging moment? The Zen teacher Dogen (1200-1253 C.E), who founded the Soto school of Zen in Japan, wrote:

When firewood becomes ashes, it never returns to being firewood. But we should not take the view that what is latterly ashes was formerly firewood. What we should understand is that, according to the doctrine of Buddhism,

²⁵ Dajian Hui-neng. Quoted in Watts AW (1978) *The Way of Zen*. Penguin Books, Harmondsworth, England. p.220.

firewood stays at the position of firewood ... There are former and later stages, but these stages are clearly cut.

*It is the same with life and death. Thus we say in Buddhism that the Un-born is also the Un-dying. Life is a position of time. Death is a position of time. They are like winter and spring, and in Buddhism we do not consider that winter becomes spring, or that spring becomes summer.*²⁶

In other words, each moment can be thought of as fixed and unchanging. Our common view of time and moment-by-moment change in the world around us is that we are floating along and changing in a continuous stream. But it seems this is not the only way to conceive of time. The Zen understanding of time as one continuous moment or an unchanging series of static moments, is difficult for us because it is so very unfamiliar. But consider the way in which a film or cartoon works. If we watch a film our personal experience is the sensation that the images on screen are moving and changing through time. But of course, nothing on screen is actually moving. A film is composed of a series of tens of thousands of still images displayed for us one after the other at the rate of 25 frames per second (or thereabouts). Nothing in any single image is changing and nothing is moving, though our impression is that the projected images are moving because our awareness links together each passing still image to its neighbours. Although each frame is only shown for about 40 milliseconds, we perceive this as continuous motion. So what then is it that is changing? Another Buddhist tale may help:

²⁶ Dogen, quoted in Watts AW (1978) *ibid*, pp.142-3.

One day two novice monks were standing in their monastery grounds looking at a prayer flag waving in the breeze from the top of a tower at the corner of the compound. They were arguing and a passing Zen master walked over and asked them what they were arguing about. One novice said: "He says it is the wind that is moving, but I say it is the flag that is moving". The master replied: "It is neither the wind nor the flag; it is your mind that is moving".²⁷

So, from the Zen perspective of time, it is our individual consciousnesses that are moving through the unchanging landscape of the present moment. A more tangible example might be the Mexican Wave. In a large round or oval-shaped sports arena full of seated people imagine each person briefly standing up and putting their arms in the air only moments after the person to one side of them has done so, and then immediately sitting down. This creates the continuous wave-like motion through the crowd that is known as a Mexican Wave. It's a variation of the cartoon stills pattern described already and again gives the impression of movement (in the audience around the arena) despite the fact that nothing tangible is moving in the direction of the wave.

The bottom line is that in reality there is no need for anything to be changing in the world and universe: there is no need for time at all. The question remains however that if nothing is changing, why do we experience the sensation of time, and how could our individual consciousnesses pass through this allegedly unchanging present moment without

²⁷ Barr W (2017) *op cit.*, pp.78-9.

time?²⁸ An example from the natural sciences might help - have a look at Newton's Cradle in Figure 1.

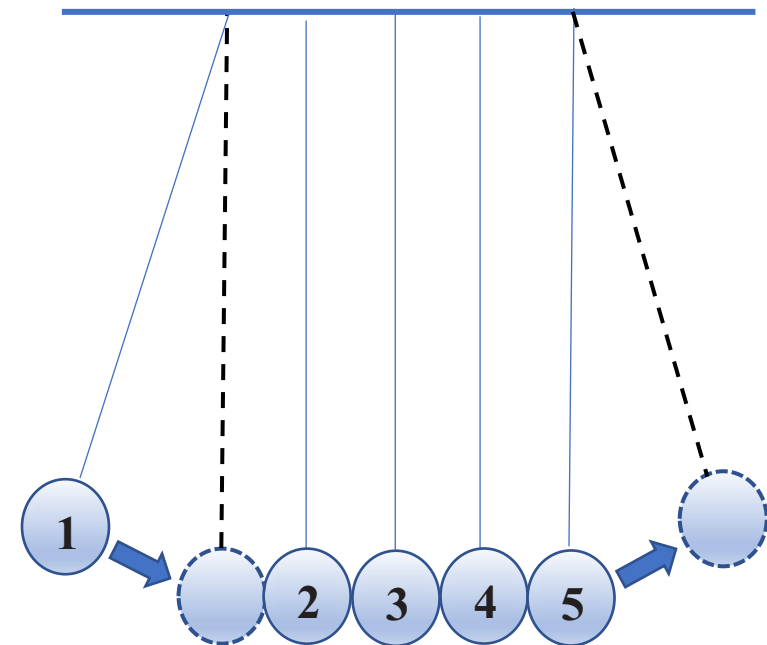


Figure 1. Newton's Cradle

When ball 1 is swung to strike ball 2, only ball 5 moves, the energy from ball 1 being transferred through balls 2,3 and 4 *without moving them*. In fact, if you look only at balls 2,3 and 4 nothing is moving at all and apparently nothing is happening to connect the movement of balls 1 and 5, but note that where the middle balls don't move, they do transfer energy. So it is with time. Maybe our

²⁸ An alternative explanation to the one here is offered in the concept of Unhappening. See Barr W (2017) *op cit.*, pp.133ff.

consciousnesses are moving through the continuous present moment like energy moves through balls 2, 3 and 4? This is clearly at odds with our usual conception of time but is entirely feasible.

These ideas, the unmoving balls in Newton's Cradle, the still images of a film or cartoon and imagined movement of consciousness through the unchanging present moment, share the same elemental pattern. Their differences are not of magnitude but of context and content, and this same pattern can be seen elsewhere. For example, it is found in all cases of the transference of energy where energy moves as a wave. Picture a stone dropped into a still pond. The ripples caused on the surface of the water will radiate outwards in a circular pattern. But what is it that is moving? In a transverse wave such as this, the particle displacement is perpendicular to the direction of wave propagation. That is, the only tangible material that moves is the individual particles of the matter through which the wave travels, and in water for instance, these particles move in tiny circles. The only thing that moves in the direction of the wave is energy as it is transferred through the water. In other words, it is the disturbance causing the wave that is transported along in the direction of the wave; the wave of energy that appears to move outwards in the circular ripples of the pond has no mass and yet we can see that it exists.

The pattern we see in Newton's Cradle is again seen here in the pond because, like balls 2,3, and 4, nothing is moving: it is energy that is passing through a static and unchanging essence. Similarly, electricity - itself a form of energy - moves through a wire without the wire itself moving, and this pattern repeats throughout the universe whenever and wherever there is movement of energy.

To sum up

So, to simplify and summarise, a wave of energy can pass through matter without the matter changing. The same pattern can be seen in consciousness, which could itself be imagined passing through the timelessness of each unchanging moment just as energy does through the static and unchanging balls of Newton's Cradle. And so we have the material world as we know it, passing through time and apparently changing as it does so. And yet nothing needs to be changing. Throughout the universe countless examples of this pattern repeat on innumerable occasions every moment, but despite this the core structure behind each example remains unchanged: there is only one elemental pattern. It may be easier to think of all the change, all the activities and events that we continually experience throughout our lives, as a lower order of reality than the patterns they follow. That is, they are only examples of the deeper reality, which itself is the elemental pattern that governs and directs their behaviour. Whilst elemental patterns can accommodate changes in magnitude (like planetary and subatomic orbits) as well as changes over time (like evolutionary developments) the patterns themselves lie entirely outside of space and time and do not change at all. Seen in this way, elemental patterns seem to be dictating the paths that our Everyday Reality takes. It's as if these patterns have laid down the infrastructure of the universe and it's this structure that is being followed in innumerable ways every moment by a myriad of actions and events across the universe. It's interesting to note that this hypothesis, though perhaps unlikely, is entirely feasible and is itself a latent explanation.

Whilst patterns can be seen everywhere we look, several basic patterns are particularly easy to identify. We have already considered latent explanations, fractals and the

passage of energy through material that itself remains unchanged; another identifiable pattern is the change from simplicity to complexity.

4. Elemental Patterns in the movement from simplicity to complexity

One perspective on the history of the universe as we know it is that it resembles a continuous movement from the simple to the complex, from unity to multiplicity. A prime example of this pattern is found in the Big Bang, an idea that has been developed from the observation that the vastly diverse universe we know, appears to be expanding. Extrapolating this backwards through time takes us to the start of the universe fourteen billion years ago in an infinitely small single point of immensely hot and dense pure energy. It is hypothesised that this singularity began to cool rapidly, and as it did so the unifying force that held it together emerged as what we know collectively as the theories of quantum mechanics and general relativity (which together include the four fundamental forces of the universe discussed in Chapter 1). Within a very short time these four forces differentiated the energy of the singularity into atoms and molecules, and the consequences of this are manifest all around us today in the innumerable objects, organisms and events that make up the cosmos.

The pattern of change from simplicity to complexity is clearly seen in the dynamic behind the Big Bang, but it can also be readily identified elsewhere. In evolution, for example, we see the physical manifestation of the pattern in the emergence of a simple cellular life-form around 3.5 - 3.8 billion years ago. This simple single-celled organism, the first and last universal common ancestor of all life on Earth, has evolved into the vast diversity and complexity of life that we now see. The context and content of this change

in living organisms from simplicity to complexity is different from the emergence of universal forces seen in the Big Bang, but the elemental pattern is the same. And again, the interesting thing is that we find this pattern almost wherever we look, for example in the dynamic behind branching.

Branching

Whilst the elemental pattern of movement from simplicity to complexity represents a sort of virtual framework or scaffolding upon which the development of both planets and life could be founded, this pattern of change also presents itself in a physical form in any progression that takes a branching structure. The essence of branching was identified by Leonardo da Vinci in the way the lungs fork from the main airways, the bronchi, into smaller and smaller passageways, the bronchioles. This is clearly fractal in its structure and indeed the great complexity of fractals is driven by simplicity, as has been noted elsewhere.²⁹ The branching pattern taken by the lungs is seen in rivers and trees and is a concept we regularly use to mentally visualise the development through time of numerous phenomena, such as the way the seed of an idea develops in the mind, from its birth to fruition in the form of any number of examples of human endeavour. The concept is similarly seen in the way genetic mutations peel away from their original source and die out or prosper to lead to further mutations. Branching is also seen in evolution in its entirety in the way species evolve along a phylogenetic tree based on the similarities and differences in their physical and genetic characteristics. In thinking about this we use a

²⁹ See <https://www.treehugger.com/amazing-fractals-found-in-nature-4868776>

mental visualisation of a branched structure to represent what would not otherwise be considered a physical entity.

But the point here is that branching takes the same pattern as anything moving from simplicity to complexity or its reverse. Almost wherever we look we can see examples of branching where a virtual or tangible single point has moved through time and space, or the imaginative creations of our virtual inner space, to become an increasingly complex structure.

The single consciousness

A tree forks from one single trunk through to several branches and so on to numerous smaller twigs. In a metaphorical sense this could be seen as a move from simplicity to complexity, from unity to multiplicity. It's an imaginative leap perhaps - and it will help if you can briefly suspend your belief in the passage of time - but consider the multiplicity of consciousnesses in the universe. We can probably all agree that all human beings have consciousness, and maybe some will feel this to be true of animals, insects, microbes and all sentient organisms. Is it possible that this multitude of consciousnesses can be tracked back through time to a single consciousness?

On the assumption that all human beings have consciousness, there are at least 7.8 billion consciousnesses functioning in the world today. Add to this all potentially sentient beings, animals and around 10 quintillion (10,000,000,000,000,000,000) individual insects³⁰ as well as countless more microbes, and we have a considerable multiplicity of individually separate units of awareness or

³⁰ According to the Smithsonian Institution. See <https://www.si.edu/spotlight/buginfo/bugnos>.

consciousness. In light of the argument mentioned earlier that the present moment is everlasting and there is only one present moment, we could also hypothesise that now deceased consciousnesses as well as all future consciousnesses should be thrown into this melee on the grounds that, like us, they too exist in the present moment. So, not just all those alive today but deceased and unborn human, animal, insect, microbial and perhaps alien consciousnesses must be included, and the numbers are certainly stacking up. This is much like the countless objects, events and entities that have multiplied since the single event of the Big Bang brought everything into being from nothing more than pure energy; that is, they share the same elemental pattern.

If we reverse the idea of the branching movement from simplicity to complexity and track backwards through time from complexity to simplicity, we find it repeated not only in the story of the Big Bang but also in the union of the sperm and the egg, where two very different genetic repositories become one. It's repeated in the act of meditation itself, where in developing mindfulness, we gradually refine the awareness of our everyday chattering internal conversation to a focused point of consciousness. And if we continue the reverse branching far enough through time, back from the present total of individual and separate consciousnesses within all sentient beings, we arrive at a single consciousness. Might this original and perhaps unending consciousness still lurk somewhere behind us all at this very moment?

The Singularity: A Single Reality?

The pattern evident in the move from simplicity to complexity implies the idea of a single essence at the source of all diversity in the universe. In terms of underlying

elemental patterns, this single essence is the equivalent to the minutely small single point of pure energy - the singularity - at the heart of the Big Bang. This single entity that unites all later differentiation and difference is the unity discussed in *Mindfulness, Now and Zen*.³¹ Whilst it's quite a substantial leap from our everyday experience, not only is this idea of unity consistent with the direction being taken by theoretical physics in the search for a Theory of Everything, it's also entirely in tune with reports of Cosmic Consciousness.³² Indeed, many teachers and writers on this subject - Zen masters, Christian mystics and philosophers across the centuries - seem to have been intent on impressing upon us the absolute unity and simplicity at the heart of Ultimate Reality.³³

5. Elemental Patterns in the movement from duality to unity

In this discussion I have alluded to the assumption that elemental patterns have developed along, or themselves represent, some sort of virtual scaffolding or structural lines. But how real are these patterns?

In the final analysis it seems feasible that we find elemental patterns simply because we look for them, so maybe they're not there at all - maybe patterns are themselves a complete illusion. Take for example the cause-and-effect dynamic, which seems to be more-or-less ubiquitous throughout the

³¹ Barr W (2017) *op cit.*, pp.141ff.

³² Cosmic Consciousness being the immediate, awesome, world-shattering internal explosion of awareness that comes with the personal encounter of uniting with, and awaking to, Ultimate Reality.

³³ For example, Chinese Zen Master Hui-neng, the medieval Christian priest and mystic The Blessed John Ruysbroeck as well as two very different philosophers, Plotinus and Immanuel Kant, all postulated a unity at the heart of reality. See Barr W (2017) *op cit.*, pp.141ff for a more detailed account.

universe.³⁴ If any two events repeatedly occur in the same chronological sequence, we quickly recognise a pattern and conclude that the first observed event must have caused the second. But remember the Buddhist take on this that was mentioned earlier:

*When firewood becomes ashes, it never returns to being firewood. But we should not take the view that what is latterly ashes was formerly firewood. What we should understand is that, according to the doctrine of Buddhism, firewood stays at the position of firewood ... There are former and later stages, but these stages are clearly cut.*³⁵

The interplay of cause and effect in the burning of firewood and the production of ashes perhaps seems only too obvious, but I would suggest this interpretation of causation is a cultural phenomenon rather than a given fact. For a start it involves the assumption that time exists, because only through time can one event lead to the existence of another event. The cartoon stills idea might help to understand the point being made here. As we saw earlier, nothing in any single still image in a cartoon film is changing, though our impression is that the projected images are moving on screen because our awareness links together each passing still image to its neighbours. So it could be with cause and effect. Furthermore, what we refer to as an example of cause and effect is no more than a selection of part of an unending sequence. When you boil a kettle to make a cup of tea a chemical reaction occurs that transforms electrical energy into heat energy; this heat is then applied to water that boils and gives off heat energy itself as well as steam,

³⁴ There may be an exception inside a Black Hole as this sucks in time itself (and so perhaps provides a route to the moment of Unhappening).

³⁵ Dogen, quoted in Watts AW (1978) *The Way of Zen*. Penguin Books, Harmondsworth, England, pp.142-3.

and the energy from both then goes on to influence further objects and events. The closed-event of cause and effect that we call 'boiling a kettle' is very much a projected meaning that we are giving to an unbroken series of events stretching back to the Big Bang and forwards to the end of the universe. In this sense it's illusory to identify it as a separate event.

But if cause and effect are no more than a pattern which is itself no more than an illusion, what's the alternative? Some might argue that it's that things just develop haphazardly or chaotically in a random fashion. But the same assumption applies to chaos: where does it come from? Is random chaos something or nothing? What would happen if all randomness, even the concept of randomness, were removed from the universe? Would we have total order? Could this even exist outside of human awareness?

Perhaps not. To us, order makes no sense without randomness and vice versa. Without its polar opposite neither has any meaning. And if we must have randomness as the other side of order in a dualistic way, did it come into being with the Big Bang or was it there already? If randomness was already around, where was it lurking? Remember, pre-Big Bang, before the advent of time and space, there was nowhere for anything to lurk. But maybe randomness and order are just another example of the pattern of duality and what we should be looking at is duality itself.

Duality as an Elemental Pattern

Duality was described in *Mindfulness, Now and Zen* as '*... the invisible structure upon which we hang our concepts and within which our cognitive processing takes place*'.³⁶

But what makes it an elemental pattern? The suggestion here is that the fractal-like self-similarity expressed through the patterns mentioned so far can also be seen in the way we construe our shared sense of meaning, which is through duality.

When we make sense of our ongoing day-to-day experiences we routinely think of the world in opposing terms: things are either up or down, black or white and so on. Even if something is in-between these extremes - maybe it's not black or white but is grey - even then its essential meaning requires our previous familiarity with the extremes of black and white for us to understand how it could be in-between anything. In this way we have a common structure in our conceptualisation of ideas. Of course, we are rarely conscious of this, and our understanding is far more subtle than the stark contrast suggested. We conceive of innumerable shades of grey between polar opposites, but these only make sense from within an understanding of the extremes that lie at either side of them - the ups and the downs, the blacks and the whites. As noted earlier, this same pattern can be seen in mathematics, where any of the infinite number of integers, fractions or decimals that are available to the mathematician only make sense in relation to the opposing concepts of zero and one. Indeed, our everyday mathematical understanding is based entirely on a familiarity with these concepts. This duality in the way we think is the framework we have each inherited, or maybe

³⁶ Barr W (2017) *op cit.*, p.300.

contrived in our development as individuals, to enable us to make sense of our experiences. It allows the growth of a shared reality between us which is the reality that in *Mindfulness, Now and Zen* was called Everyday Reality.³⁷

The idea being developed here is that duality may be the same pattern repeating itself throughout the cosmos. This duality appears to us not only in the enormous diversity of concepts, objects and events that we experience, but also in the extraordinarily divergent scales of magnitude that we observe from the subatomic to the astronomical. Although the context and content of examples of duality may vary enormously, duality remains the elemental pattern seen in them all. This is because duality shares with all elemental patterns an endlessly repeating self-similarity that manifests itself in the same way despite sometimes hugely different magnitudes, content and context. So, for example, at the very smallest level, in the first moments after the Big Bang, there was only pure energy. This pure energy is one that we can think of as positive but is itself cancelled out by negative energy in a dualistic way. As Stephen Hawking has observed, the total energy of the universe is zero:

The matter in the universe is made out of positive energy. However, the matter is all attracting itself by gravity. Two pieces of matter that are close to each other have less energy than the same two pieces a long way apart. This is because you have to expend energy to separate them. You

³⁷ Having the concept of opposites, of duality, is a form of reasoning, a way to structure thoughts with a sense of rationality about them. However, this doesn't rule out alternative approaches that are not based on duality. Think, for example of the Zen approach to firewood mentioned above. Once you take the concept of time out of the equation, duality makes no sense at all.

*have to pull against the gravitational force attracting them together. Thus, in a sense, the gravitational field has negative energy. In the case of the whole universe, one can show that this negative gravitational energy exactly cancels the positive energy of the matter. So the total energy of the universe is zero.*³⁸

Whilst this is reminiscent of Unhappening, wherein the total positive and negative energy in the universe cancels out, the pattern of duality is seen here again. This is manifest in the milliseconds following the Big Bang as the universe cooled and expanded, so producing equal amounts of particles of both matter and antimatter. Duality is also evident in subatomic particles of matter and antimatter because each has properties opposite to the other so, for example, their electrical charges are reversed. Furthermore, subatomic particles are considered to be present as peaks and troughs rather than as an absolute sense of single pointedness - that is, they appear to behave in a dualistic way, as a peak or a trough. And again, the strong nuclear force that holds atoms together is countered by an electromagnetic force that pushes them apart. So fundamental is duality at this subatomic level that inside the atomic nucleus all nuclear behaviour is due to a dynamic balance between these opposing forces. At a rather larger scale duality can be seen all around us in the natural world: in the diurnal cycle of day and night, in the simple rhythm of waking and sleeping and so on. Even Sir Isaac Newton's Third Law of Motion holds that *for every action there is an equal and opposite reaction*.³⁹ And at the greatest level of magnitude, the astronomical, we conceive of space as expanding at an accelerating rate. We can grasp what this

³⁸ Hawking S (2002) *The Theory of Everything: The Origin and Fate of the Universe*. New Millennium Entertainment.

³⁹ See Barr W (2017) *op cit.*, p.126 for a further discussion.

means, at least to some extent, because we each have a sense of what the opposites to expansion and acceleration are. Without duality none of this could even begin to make sense to us. And so, at every magnitude, duality can be thought of as the elemental pattern that underlies the very foundation of our understanding. Though we rarely know it's there, duality is every bit as fundamental as the presence of gravity.

The profound role played by duality in our lives is reflected in a number of religious traditions. Nevertheless, duality is most frequently identified in Hindu and Buddhist texts, especially in discussion of the yin-yang dynamic, and Christianity seems to place less emphasis on it. All the same, it is clear that duality is very much at the heart of some of the most well-known Christian creation myths. Think, for example, of how the Bible throughout posits the opposition of good and evil, or how the story of Adam and Eve uses the positive and negative elements of the universe to account for all creation.⁴⁰ It's relevant too that the Bible begins with the clear statement in Genesis 1(4) that '*... God saw the light, that it was good: and God divided the light from the darkness.*'⁴¹

So, what on earth is going on?

The identification of duality as an elemental pattern raises questions of its own. Like all elemental patterns, we must ask whether duality is really out there or whether it is only in our heads; whether the many positive and negative elements that we identify throughout the universe have a separate existence or are no more than the way we make sense of our experience.

⁴⁰ Barr W (2017) *op cit.*, Chapter 10, especially pp.116-7.

⁴¹ Taken from <https://www.kingjamesBibleonline.org/Genesis-Chapter-1/>.

It's tempting to say the latter: that the whole concept of duality is only our way of making sense of our day-to-day world. It offers us a route by which we may categorise a vast and confusing array of seemingly random objects and events so that we have some sense of control over our lives and can communicate this to others with whom we share the idea of duality. On the other hand, it certainly seems to be the case that there are real examples of duality out there. Even if abstract concepts (like up and down and in and out) exist only as theoretical tools used to manipulate the world, this doesn't account for the very tangible elements that seem to have an existence quite independent from us, like matter and anti-matter and the positive and negative forces that act at a subatomic level. True these latter examples are so tiny they are invisible to us, but the sense of reality possessed by some dualistic features can be seen by us all in the world around us, in the reflections provided by mirrors, in the variation between day and night and in simply switching a light from off to on.

And yet, how often do we reflect on duality? How many people have ever considered the possibility that the concept plays any part in our understanding? The truth is that something so fundamental to human thought as duality, arguably the very scaffolding upon which we hang our experience and from which we create meaning from apparent chaos, is hardly ever noticed. It may seem surprising that duality is almost invisible to us, but of course it's all we know and all we have ever known. We see it all around us every day of our lives so why would we ever notice its existence?

There are these two young fish swimming along, and they happen to meet an older fish swimming the other way, who nods at them and says, "Morning, boys, how's the water?"

*And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes, "What the hell is water?"*⁴²

Unity: The hidden Theory Behind Everything

The argument here is that our unreflecting acceptance of duality as an arbiter of the way in which we conceive of experience, actively prohibits serious consideration of anything that may not be encapsulated within duality. In other words, because we are so profoundly familiar with organising our thinking along the lines dictated by duality, we can't see or even conceive of anything that does not fall into a dualistic pattern. What, for example, do we have if something is neither true nor false, or is both true and false at the same time?⁴³

Most of the time this is perfectly fine: maybe the sense of duality that we have evolved is all we need to get by in our everyday lives. However, let's move beyond this and ask what happens when we question the essential nature of reality and whatever might lie behind duality. The thing is, it's just possible that the underlying reality behind everything, what we're calling Ultimate Reality, does not itself follow a dualistic pattern. It's possible that our wonderful but limited brain power - what Buddhists might call the egoic mind - has so far only conceived of a 'within duality' universe. The question is, could there be something beyond this? Could there be an alternative way to think about Ultimate Reality that does not confine itself to a dualistic understanding?

⁴² An old Hindu tale retold by David Foster Wallace. See: <http://alanashley.wordpress.com/2011/07/28/this-is-water/>

⁴³ This puts me in mind of the elemental pattern seen in the physical world in the unfortunate cat in Schrödinger's thought experiment. See https://en.wikipedia.org/wiki/Schr%C3%B6dinger%27s_cat

And it's this thought that leads us to a Theory of Everything via the almost magical realm of unity, a transcendental concept that can neither be conceived of nor described in words. The conclusion we reached above is that duality is the pattern to rule them all: it is the archetypal elemental pattern. All elemental patterns have something in common - they all rest on the interplay of two polar opposites: planets and positrons, the forces of attraction and repulsion, the movement of energy through Newton's Cradle, the single tree trunk and multiple branches, cause and effect, simplicity and complexity, movement and stillness, single-pointedness and multiplicity. They all have duality at their core, and at the core of duality is unity.

The contention here is that duality is an illusion: it is a construct of human imagination. There can be no 'up' without 'down', no 'in' without 'out', so in essence these apparent opposites are one and the same thing, two sides of the same coin. And if dualistic concepts such as those of relative spatial position like 'up' and 'down' are entirely the work of human thought, do they have any sort of external independent existence at all? To put it another way, if human beings and all sentient life were to disappear tomorrow and so to cease the constant projection of hypothetical concepts onto the world, would all dualistic concepts like up and down, in and out, time and timelessness, still be around or would the world revert to simply being an unchanging present moment? If no sentient being is around to perceive and categorise the world as if it consists of innumerable parts, it can simply get on with being whatever it has always been - an uncategorised unity.

But perhaps this is a bit much. It makes no sense to talk like this, or at least no sense to those of us who have yet to become enlightened Zen Masters. Maybe we're all living in

a sort of virtual bubble where we only see the world as up or down, in or out, and fail to recognise that this is just one way of making sense of experience. We've already posed the question: If there's no such thing as duality what is the alternative? So, what is on the other side of duality and what do we have if we go beyond and behind 'up' and 'down'? And crucially, how do we go about seeing unity for ourselves?

You can't think your way out of duality ...

... you'll just get interminably caught up in dualistic thinking.

The problem with looking for a transcendental unity is that straight away with no effort at all we're into the type of thinking that's constrained by duality. We're looking for the polar opposite that represents non-duality, which is dualistic thinking at its stickiest. It's so hard not to get caught up in duality, because whenever we try to look outside, beyond and behind it, we naturally use the principles of duality in the search.

So, how best to proceed? One approach is meditation, which is a way of experiencing without reasoning, in fact without thinking: a way of being aware without duality. Duality is a good example of an elemental pattern, and you can see it everywhere you look. Whilst it clearly follows set rules and behaves in the predictable way of all patterns, duality points the way to something beyond itself, something that unites the yin and the yang, the ups and the downs. This something is unity, the concept of one-ness, and it was given its own chapter in *Mindfulness, Now and Zen* because it's rather a difficult idea to summarise in a few

short paragraphs.⁴⁴ It is that which neither exists nor does not exist and might be thought of as the hypothetical present moment that exists transcendentally between the opposites of the past and the future, the point where Unhappening meets Happening and that itself has no dimensions or existence through time.

It might clarify this to think what it is that we know of the present moment. By definition the present moment lasts for no time at all. Tomorrow morning, you can sit and look at your kitchen clock and wait for it to become noon. You will see that as you watch the clock in the here and now, you and the present moment pass through noon and it becomes afternoon very quickly. In fact, so quickly that you cannot say for how long it was noon. It must have been noon for some time for it to have been noon at all, but for how long? Was it a second? A split second? A millisecond? Or no time at all? And of course, this applies to all times of the day; in fact, it applies to all present moments. They each last for no time at all, which suggests quite strongly that time does not exist or is at the least, a very different beast to that we think we know.

But we digress

It's tempting to get caught up in specific examples of patterns when they are tangible because their physicality gives them a sense of reality. But to spotlight any particular example comes at a cost, as does the scientific focus on the four fundamental forces. The cost is to miss the greater reality of which they are a part, namely the deeper dualistic pattern along which they are manifest and ultimately the unity behind it all.

⁴⁴ See Barr W (2017) *op cit.*, pp.141ff.

If everything is one thing, why do we see so many patterns?

It was suggested earlier in this discussion that humans have a tendency to see patterns wherever they look. We can cut and slice the world in any way we wish and will always find patterns that link up, and maybe this is because the whole universe is an infinitely complex network of interconnected patterns. But of course, because we have the capacity to see patterns anywhere we seek them, we are almost inevitably going to see them running in all directions, including those exactly counter to each other - so we can identify patterns moving from complexity to simplicity just as easily as simplicity to complexity. If this is true then it's rather easy to jump to the conclusion that we actually have no valid sense at all of what's really going on in the world and universe. After all, if we can see patterns and so create meaning wherever we look, maybe it's just a matter of chance *where* we look. This would at least account for the very many wild and wonderful myths, legends and entire religions of earlier centuries that in more modern times might be thought to have been clearly erroneous.

And yet, though we may nowadays pride ourselves on our rational take on reality, we continue to find elemental patterns, linkages between experiences, objects and events, laws of the universe, mathematical proofs and so on wherever we look. Patterns are not restricted to science and academic pursuits of course and are to be found in all aspects of human endeavour including art. Take the landscape painting, Picture No. VI, Composition No. II, painted in 1920 by Piet Mondrian. This painting is simply blocks of colour where the straight lines represent nature: the vertical lines denote trees and windmills for example, whereas the sea, sand dunes and so on are represented by horizontal lines. The blocks of colour (black, grey and the

three primary colours) represent the varied colours of nature. My suggestion is that this visual image is the same elemental pattern as nature itself. Nature is more generally portrayed in art as a more defined collection of living entities like animals, flowers and trees, or as inanimate objects like the sea, sky and sun, all of which are generally far less stylised than in Mondrian's later images. In the paintings leading up to Composition No. II Mondrian seems to be reducing the defining characteristics of nature - like 'tree-ness' or 'sky-ness' - down to the simplest elements, but still retaining some sense of tree that mark it out as a tree rather than anything else. This block painting has left nature behind completely, having distilled it to its barest essentials whilst retaining the critical features of that elemental pattern.

Interestingly, we rarely reflect on the patterns around us nor question them until someone points them out. Take the example of ley lines, a form of pattern debated for many years. Ley lines are alleged to be straight alignments that connect a variety of ancient structures or natural landmarks. Some have argued that these take a route along Earth energy lines; others have extended this argument to conclude that the lines form a guide for alien spacecraft. What archaeologists and statisticians have shown however is that a random distribution of enough points on a plane will simply - by chance - create alignments between some of the points. Select any two points of related interest on a map and draw a straight line through them and beyond, and eventually that line will inevitably run through some other related point of interest. The result will appear to be a pattern of connections linking these varied points. We find what we look for - it's a human trait perhaps; apophenia in action. But the significance of this is that whilst the identification of patterns like ley lines is superficially

rational and can even have a supernatural appeal, they may ultimately be arbitrary categorisations that we are projecting onto an undifferentiated reality. And this includes the pattern of cause and effect.

Patterns make sense of the world

The final question is whether the patterns we've been discussing here actually exist or whether they are really no more than a way of thinking about something that is difficult to describe. They point the way to something beyond themselves - to unity - whilst themselves occupying no space or time. In doing so they share a sort of virtual existence whilst apparently still influencing human affairs.

Making links between objects, events and experiences is how humans make sense of the world, it's how we construct what is real to us. And making links is making patterns. In other words, patterns are the essence of our ongoing construction of reality. There are patterns everywhere we look, and this is no mistake. There are patterns everywhere because we create them, much like we see significance in ley lines; in fact, it may well be that much of our time is spent in projecting meaning in this way onto an otherwise neutral world.⁴⁵

The conclusion drawn here is that if we can so readily create patterns wherever we look, then it's pretty much up for grabs *where* we look. We could look at apples falling to the ground and find this pattern demonstrated elsewhere with similar examples of falling objects, or we could look at the similarities between planetary orbits and the structure of the atom.

⁴⁵ See Barr W (2017) *op cit.*, pp.118-9.

Perhaps you're thinking this is all rather too random, but maybe that's the point. Maybe seeing elemental patterns is only a superficial thing whereas underneath and behind the patterns there lurks an absolute reality, a unity, just waiting to be discovered when we look a little bit more deeply and allow ourselves to dismount the wild horse of dualistic thinking. And of course, if this unity of all things, this interconnectedness of every thing in every way, is really behind it all then why would we not see some of these linkages as patterns? Patterns cut across each other and overlap in as many ways as we can imagine; however, there is no 'right way' to see them. Unlike the stance taken by scientific exploration - that there must be one correct way to interpret the constant interplay of objects, organisms and events - there is no conflict in the differing ways that patterns can be constructed. There is no 'right way' to interpret patterns because they are all the right way. And behind them all is unity.

Unity makes sense of patterns

But what is unity if it is what lies behind all the elemental patterns that we seem to be able to identify everywhere and anywhere? Is it somehow the source of all patterns? Certainly, on the basis of the 'simplicity to complexity' branching pattern we might expect to find an incredible simplicity at the source of the vast number and complex diversity of the patterns that we experience every day. We need only to track back this diverse complexity to its origins.

The suggestion here is that unity is the interconnection of everything to everything else in every possible way, a sort of infinitely repeated self-similarity. It is this unity that provides an alternative Theory of Everything, perhaps not quite what the physicist might have expected, but with a

certain appeal nevertheless. This unity can be thought of as a single element repeating itself in innumerable ways, but nevertheless remaining a single element. The apparent nexus of innumerable objects and events, from the subatomic to the astronomical, the earthly to the cosmic, ultimately boils down to an absolutely simple single essence, beyond thought, beyond conceptualisation and beyond rationality. The scientific search for a Theory of Everything will no doubt continue but, like an ongoing spiral that continues its journey inwards forever whilst never actually reaching its centre, what it will unearth is simply more and more elaborate linkages. What it will not find this side of the transcendental, is unity.

The Cosmic Steam Train

If the reality underlying everything is transcendental and by definition ungraspable, how can we know it in our everyday lives? Intellectual reasoning will not work: no amount of thinking will take us outside of thought. Whilst the unity behind duality - indeed behind everything - is transcendent and cannot be conceptualised or reached by the intellect, it can still be experienced by the mind, though not in the usual way. And so we come to meditation.

With practice, meditation allows us to experience an intense state of mindfulness and offers an alternative to thinking but in full consciousness. It is extraordinarily simple and enables our usually noisy and chattering minds to gradually quieten. Despite the vast array of interconnections in the diversity of objects, events, ideas and concepts in the universe, the suggestion here is that all function as one timeless and absolutely simple entity. It's like some sort of cosmic steam train. Take each separate nut, bolt and piston apart, lay them out on the ground and the resulting

complexity appears daunting. Yet when assembled, these function perfectly as one unit - the cosmic steam train.

Meditation is not however the only means by which we may approach the simplicity of unity: many other methods have been suggested, including prayer, parables, koans, haiku, mandalas, simple faith and of course psychoactive drugs. The advantages of meditation are that unlike prayer it requires no religious belief, unlike fasting it requires no physical hardship, and unlike psychoactive drug use it requires no external neurological stimulus. With meditation, everything comes quite naturally from within.

Mindfulness meditation makes sense of unity

Meditation allows us to learn to experience 'non-change', to learn how not to hold on to thoughts and to let go; to be not just conscious of 'something', but conscious of consciousness itself, unchanging and timeless. But to achieve this we must stop thinking completely and in so doing open ourselves to whatever Ultimate Reality may be. The process involved is itself rewarding; frequent practice of mindfulness meditation allows us to repeatedly bring our awareness back to 'the same place' every time we realise it has wandered off into a thought. To assist in returning awareness to the same place in meditation, a mantra is repeatedly brought to mind. In the Mindfulness of Breathing (as described here in Chapter 5) the mantra is the focus on the breath as it enters and leaves the nostrils, rather than being a word, sound or image as in many other forms of meditation. There's nothing magical or mysterious about this; focusing on a mantra is a thought like every other thought, but it's different in that it remains constant and does not develop into a related thought. In other words, rather than bringing us swirling into yet another elemental

pattern it brings us back to the same place, where we are no longer led on to further thoughts.

In meditation, as in everyday life, there are times when we're conscious that we're conscious, when we're aware that we're aware. But because we continually return to the mantra in meditation these times are more frequent and protracted, which can give us the sense of something unchanging. This is an experience of that which continually *is* rather than that which continually *is happening*; it's not constrained by time so does not 'happen' in the conventional sense of the word. To 'happen' would imply coming into being and ending. When you can retain a focus on the breath and experience the sense of being 'in the same place' throughout a period of several minutes, you have an indistinct sense of being outside of time. At this place you are unmoving and anchored in the moment. When this experience is continuous, you are at one with unity, where the Theory of Everything becomes reality. As Stephen Hawking has pointed out:

*... if we do discover a complete theory, it should in time be understandable in broad principle by everyone, not just by a few scientists. Then we shall all, philosophers, scientists and just ordinary people, be able to take part in the discussion of the question of why it is that we and the universe exist. If we find the answer to that, it would be the ultimate triumph of human reason - for then we should know the mind of God.*⁴⁶

⁴⁶ Hawking S (1996) *The Illustrated A Brief History of Time*, Transworld Publishers Ltd., London, p.233.

Summary of this chapter

This chapter has described, quite unscientifically, how science has not yet exhausted every possible avenue in the search for a Theory of Everything. In light of the opportunities arising from consideration of the elemental patterns described in Chapter 1, I have discussed five patterns of association that science has yet to explore in the ways described here. Whilst each of these patterns of association is easily identifiable, none has yet been widely studied, perhaps because they are not susceptible to further scientific examination. The five patterns included latent explanations, fractal structures, the movement of energy, the transformation from simplicity to complexity and duality.

Finally, it was suggested that behind all duality is a unity which is indescribable and inconceivable in terms of rational discourse. This unity is nevertheless said to be available to each of us through a range of practices that take us outside of rational thought. The specific practices discussed in *Mindfulness, Now and Zen* included prayer, fasting, parables, koans, haiku, mandalas, simple faith, psychoactive drugs and meditation. In this book however, the focus is specifically on mindfulness meditation.

CHAPTER 3

Number Crunching on a Cosmic Scale

Summary

In this chapter our experience of reality is explored along with the value of meditation that was outlined here in Chapter 2. In particular this third chapter describes how, through mindfulness meditation, each of us may see beyond duality and awake to the transcendental unity and timelessness of Ultimate Reality.

What's really going on behind Life, the Universe and Everything?

Here we look at some of the really big questions. What do we actually know for certain and what *can* we know about the nature of reality beyond our personal whims, beliefs, dreams, hopes, fears and wishful thinking? How far can we trust religious dogma and scientific theorising to communicate to us the truth behind everything? And how far *can* they get to the truth?

The ideas in *Mindfulness, Now and Zen* originated not just in the teachings of our greatest thinkers - they're also found in accounts given by the most ordinary of people. What was proposed in the book is that the reality we so fondly assume to be *it*, can be thought of as some sort of illusion or at least as a rather pale reflection of what's really going on. This is not necessarily saying the world as we know it doesn't exist at all, just that our conventional, everyday, understanding

of reality is not the whole story. Whilst our five senses can be seen to provide only very limited, misleading and sometimes quite erroneous information about the world, the really significant illusions arise from the way we think.

Mindfulness, Now and Zen described what this means and looked especially at the way we deal with the world by classifying and categorising objects, experiences and events. This categorisation process seems to work well enough in everyday life. Indeed, it is so obvious and so utterly suffused with common sense that even questioning it might seem foolish. However, it's based on a couple of seriously suspect assumptions. One is that reality is inherently divisible in the way we each divide it up - an approach based on the unwritten and unacknowledged premise that the universe consists of innumerable but separate bits and pieces - chairs, cars, stars, thoughts, people, and so on. The second suspect assumption is that the dualistic categorisation of the world - as consisting of shades of grey within the limitations of two polar opposites - is the only rational way to proceed. This includes the assumption that the inherent meaning of every object, experience and event we encounter, is identifiable not only from its individual characteristics but also from the characteristics that it does not have. Thus we know what 'dark' means because it's not only black but is also not 'light'. The argument I'm making here is that although it enables us to get by in the world, thinking in this dualistic way, within a structure based on the oppositional concepts of yin and yang, may not bring us to an understanding of the deeper reality behind the world and universe.

Added to this is the fairly universal assumption that not only does each of us exist as an independent entity, but also that time exists somehow on its own, quite independently from

us and our understanding of it. The perception we each hold of ourselves as isolated egos and of time as consisting of the past, present and future are so very much ingrained in our everyday way of thinking that they are rarely questioned.

The resulting (mis)understanding of life, the universe and everything is known as samsara - the illusion of maya - in both Hindu and Buddhist thought. In the modern world, however, in recent centuries positivist scientific endeavour has traditionally had a powerful influence and the idea that human understanding could be mistaken on such a cosmic scale is hardly ever considered. There's no problem with this of course. The use of a word like 'illusion' suggests we're somehow being misled or even wilfully choosing this erroneous path (a view that has spawned a plethora of religious doctrines around the concepts of temptation and sin). But *Mindfulness, Now and Zen* did not suggest there is anything wrong with the way we see the world; in fact, the world as it is and the way we see it is perfect. What it did suggest was that there is a greater, universal, indeed cosmic, understanding behind our everyday understanding, and that it's possible for every single one of us to experience this.

Realistic possibilities

Mindfulness, Here and Now looks at this possibility that behind the world as we know it, lies an Ultimate Reality that's both beyond description and beyond ordinary conception. This Ultimate Reality is not made of anything, has no parts, was never created or caused and is not going anywhere. It seeks no final end for mankind, nor does it select only the saintliest, nicest and kindest of us: we can all unite with Ultimate Reality.

In support of the assertions made in *Mindfulness, Now and Zen* the various chapters within the book outlined a number

of possibilities. In the chapter, What's Really Real? we were introduced to the idea that the entire universe could be no more than an idea - far simpler than thinking of it as somehow tangible - and this assertion has been touched upon a number of times here in *Mindfulness, Here and Now*.

The next chapter in *Mindfulness, Now and Zen* dealt with illusions and outlined the possibility that everything we believe to be real may only be a screen, a veil of appearance that could fall away to reveal Ultimate Reality. Another chapter described how the assumed existence of time itself may be quite erroneous because the only time there is, is now, and it's here and gone within the same timeless moment.

One way of thinking about timelessness was mentioned here in Chapter 2. The suggestion is that the Big Bang is continually 'happening' in reverse as well as in the usual way we think about it. This reverse Big Bang - Gnab Gib, where time goes backwards - exactly mirrors the usual Big Bang. If the two were to come together (as they do all the time) they would negate and annihilate each other (as they do all the time). And it's within this timeless moment of now, at the point where the yang of the usual creative Big Bang annihilates the yin of the reverse un-creative, Unhappening, Big Bang, that we exist. Within this moment of now is not just everything we know but everything the universe is, was and will be.

This idea of Unhappening accounts for what each of us experiences of the universe. It means there really is nothing happening. Just as +1 and -1 together equal nothing, and despite all appearances, nothing is happening: no universe exists and so there is nothing to question ...

... Well, maybe, but of course, the whole notion of Unhappening is mired in dualistic thinking, and as *Mindfulness, Here and Now* argues, duality is part and parcel of the illusion of samsara. Nevertheless, the concept of Unhappening is not proposed because it necessarily reflects a correct understanding of the universe. It's mentioned because it might help us to envisage how the present moment could look and how our experience of time might come about.

Insight into duality can show us that neither the absolute present moment nor its counterpoint, infinity, need to exist in Ultimate Reality, because rather than being independent entities both the absolute time of *now* and the unending time of infinity are functions of the way in which evolution has programmed us to think. In fact, in Chapter 2 you will have read how it's possible that our patterns of thinking are everywhere constrained by the limitations of duality. The other side of this, the transcendental unity of Ultimate Reality, was posed as an alternative. The concept of unity demonstrates how it could be entirely possible that, whether we believe it or not, in the end absolutely everything 'fits together' perfectly. Not just the big things, but every single moment - all the minutiae - from the vibration of every single atom to those seemingly irrelevant thoughts, episodes and adventures we each experience minute-by-minute every day or only once in a blue moon.

Two chapters in *Mindfulness, Now and Zen* - Seeing is Believing and Do-It-Yourself - described how the possibilities mentioned so far are only knowable through an intuitive and personal encounter with Ultimate Reality. This is because logical thought, rational analysis, the whole edifice of the scientific method and indeed any attempt whatsoever to 'make sense of things', can never lead us

outside of our entrenched patterns of dualistic thinking. These patterns guide our interpretation of every experience and fashion our every expectation of what reality can be.

What's more, it's possible that rather than being simply how we do things, our constant attempt to make sense of our experience is actually what we are. Outside of this way of thinking there is nothing more, no me and no you because, as the chapter in *Mindfulness, Now and Zen* on ego explained, the belief that each of us is an individual and separate entity is a complete illusion. Nor can we expect to read a clear account of these rather peculiar claims because the whole thing is beyond words. But all is not lost: tried and trusted methods of approaching the personal experience of Ultimate Reality have been passed down to us across the ages. Whilst simple faith may be accessible to the few and the use of psychoactive drugs may appeal to others, the approach of meditation, based on the very simple technique of mindfulness, is available to all who wish to use it. A simple description of the practice of the Mindfulness of Breathing is given here in Chapter 5.

Talking about the way the universe works

Whilst words have their limits in describing the nature of reality, symbolism, allegory and metaphor have the power to indicate the nature of that which may be otherwise indescribable. Furthermore, these approaches can have a simplicity of their own.

The value of simplicity - touched upon earlier - is clearly demonstrated in the concept of Occam's Razor. This holds that in deciding between two competing hypotheses, the one that makes fewer assumptions should be favoured. In other words, so long as both theories account for the phenomenon we're interested in, the simpler one should be

adopted over the more complex one. In *Mindfulness, Now and Zen* the ideas behind samsara and nirvana, duality and transcendence were outlined. They were discussed in an attempt to describe and account for our usual experience of reality - our Everyday Reality - in terms that do not require the acceptance of assumptions about the prior existence of a God or gods, of demons or an afterlife. Within the book it was suggested that the illusion of samsara, with ourselves and our attachment to dualistic thinking at its heart, offers the most feasible explanation for what we experience. Not only does this account for everything we each know, but in the spirit of Occam's Razor it can be seen to be the simplest explanation for what we know of the way the universe works.

The simplicity of symbolism is itself a valuable characteristic in enabling us to grasp that which is otherwise indescribable. Take the concept of samsara for example. This Sanskrit word can be seen to encompass some profound religious teachings from across the globe and across the centuries. Whether or not you personally believe these teachings to be literally true is not important. We can all see that there are symbolic elements within the story of Adam and Eve, for example, that duplicate elements at the heart of yin-yang. This is another way of saying that they share the same elemental pattern. Similarly, the symbolic aspects of some Hindu teachings echo this constant interplay between opposites. For example, the major spiritual text the Bhagavad Gita reports a conversation between Krishna and Arjuna. Krishna is a Hindu deity who is widely considered to be the supreme god. Arjuna is a warrior and the image shown in Figure 2 depicts Krishna at the reins of the chariot in which Arjuna rides to war. The horses leading the chariot are held in check by Krishna, who

is steering the chariot into the middle of two fighting armies.



**Figure 2. Krishna and Arjuna:
Journeying through life**

This simple picture uses art to signify a deeper understanding, an elemental pattern representing everything that is contained in life for each one of us. It is to be used to train our minds and senses. The chariot represents the human body and Arjuna the individual's soul making its way through life. Krishna is the Self or the higher intellect that leads the body into the middle of two armies, one army being demonic and the other divine. The battlefield is the inner human conflict between good and evil, with the reins representing the mind and the horses our unruly five senses. What is being symbolised here is our daily battle between two opposing forces - our demonic and

divine sides. The destination of the chariot is what I refer to here as Cosmic Consciousness, which is the experience of waking up to the perfection of Ultimate Reality.

It seems clear that these differing approaches to describing the essence of reality - the Christian story of Adam and Eve, the Hindu story of Krishna and Arjuna, and the Buddhist conception of yin and yang - are all examples of the same elemental pattern. Nevertheless, the ideas behind these various sets of teaching stem from very different religious traditions and are ostensibly unrelated. Whilst *Mindfulness, Now and Zen* drew out some similarities between these conventionally unconnected narratives, it made no suggestion that these similarities are necessarily intentional. And interestingly, the parallels between the dualistic ideas expressed in these stories can work just as well for those who take a literal interpretation as they can for those for whom the narratives are purely allegorical. This itself demonstrates the versatility of using the concept of elemental patterns to describe the linkages between ostensibly unrelated aspects of human belief.

It's also worth remembering that many of these ideas are used in the text here for their value as heuristic devices, as a means to facilitate our enquiry into that which cannot be said in words. So, for example, the existence or non-existence of time, the occurrence or not of Unhappening and the literal understanding behind Adam and Eve are not the issue. Creation myths were used in *Mindfulness, Now and Zen* as a metaphor or exercise to aid the identification of a greater truth, and so it is with specific words that were used in the text. The Hindu term samsara has proved to be most useful in pithily summing up a whole range of ideas, but this doesn't mean Hinduism is necessarily the most potent religion. Indeed, whilst *Mindfulness, Now and Zen*

leaned heavily on several specific religious traditions, especially Zen Buddhism, it never sought to endorse or refute any particular teaching, whether religious or not. Furthermore, which religion is 'most right' is not the point: whatever helps us to understand the ideas being discussed is what matters.

The paradox of duality

So how do we know an Ultimate Reality of the sort described in this book really exists behind all the layers of illusion that appear to hide it from us? The answer is, not surprisingly, that this is an unanswerable question, an attempt to describe the indescribable and conceive of the inconceivable. *Mindfulness, Now and Zen* aimed to demonstrate the case for something that neither exists nor does not exist, that neither *is* nor *is not*. The point is that in our usual analytical mode of thought we can only conceive of something as either existing or not existing. This is the conceptual framework within which we carry out our daily lives and we have difficulty in conceiving of anything other than that which is within these dualistic parameters. Dualistic thinking is how we think, *what we are*, we cannot use it as a means to understand that which is neither *nothing* nor *something*, neither *nothing* nor *not nothing*, neither *something* nor *not something*. And because logic is itself part and parcel of this way of thinking, it cannot take us outside of duality - if something is not logical then it is illogical in our dualistic world. But what if it is neither logical nor illogical? The way around this is to turn our attention to some of the alternative approaches, especially prayer, fasting, faith, meditation and, controversially perhaps, psychoactive drugs. Some or all of these may enable us to surmount the constraints imposed by dualistic thinking and to transcend their limitations.

What can we really know if everything we think we know is a product of the way we think?

To summarise the argument so far, could it be possible that behind all appearances - *despite* all appearances - in reality there lies a timeless and changeless unity that is inherently beyond both words and concepts? *Mindfulness, Here and Now* argues that this Ultimate Reality is not made of anything, nor is it made of nothing. It's bound by no rules of reason, logic or natural laws. It's not been created so needs no creator. It will never end because it has never begun. It's neither bound by time nor outside of time: it is transcendental. Because it encompasses everything, Ultimate Reality contains illusion - samsara - and this is us. It's us who inhabit an Everyday Reality where the differentiation of objects and events is so much a part of experience that we're conceptually blinded to anything beyond the duality of yin-yang. We spend our time wandering and wondering on the ways of the world, on cause and effect, real and unreal, on salvation and damnation, all the while missing the obvious - that everything we think we know is a product of *the way we think*. And the way we think is dualistically. Indeed, we *are* dualistic thinking. There's no-one to whom dualistic thinking is happening: *we are it*. It's duality that helps us to structure our conscious experience of the world and duality that is the core element of our nature. It's what makes us ask: 'Who are we?', 'Why are we here?', 'Where are we going?' Indeed ...

... Why is there anything at all?

The concept of *Unhappening* raises doubts about our common-sense assumption that *anything* is actually happening. If everything that comes into being simultaneously reverts into non-being, then surely everything that seems to us to exist will simply immediately

be cancelled out. But perhaps there's more to the question 'Why is there anything at all?' than simply concluding that nothing is 'happening' anyway.

Mindfulness, Now and Zen suggested that questions of this sort are founded on our unwritten and almost universally hidden (and erroneous) assumption that the essential nature of reality, Ultimate Reality, must be based within the parameters of logic and reason, cause and effect, the passage of time, and so on. These are questions that could only arise within a cognitive set constrained by dualistic principles. Questions such as 'What was there before the Big Bang?', 'What caused the Big Bang?' and 'Why is there an Everyday Reality anyway?' are seen to be meaningless outside of our dualistic world-view. Ultimate Reality stands outside all that is relative and outside all that is absolute: it is transcendent.

How do you wake up when you're dreaming you're already awake?

The elemental pattern of duality is the virtual structure upon which we hang our concepts and within which our cognitive processing takes place. Dualistic thinking in the everyday understanding of life is an important stage of learning for infant children; we seriously doubt there could be an alternative to it because it's all we know and all we have ever known. We see it all around us every day of our lives; why would we ever think it might not be reality in its entirety? But imagine a world in which all humans, like some animals, could only see in shades of grey rather than in the spectrum of colours we are used to, which themselves are only a part of a much wider spectrum.

In such a world, no doubt we would have developed a detailed language to describe the finer gradations in the

range of shades we see, but all would nevertheless lie between black and white. Now imagine someone coming along and pointing out that in fact all the London buses so familiar to millions of Britons are not grey at all but are actually red. Clearly, no-one would know what they were talking about because everyone knows London buses are grey, and 'red' - whatever that is - would be a concept beyond anyone's understanding. We would seriously doubt that there could be an alternative to shades of grey because grey is all we know and all we have ever known. We see it all around us every day of our lives; why would we ever think it might not be reality in its entirety? So it is with duality. Indeed, the 'shades of grey' metaphor and duality share the same elemental pattern. If you only know a world of up/down, black/white and yin/yang, you only expect, and only see, a world of up/down, black/white and yin/yang. This duality is the framework we have each developed to enable us to make sense of our experiences and to communicate with each other in meaningful ways. Duality facilitates the development of an Everyday Reality that can be shared between us, but the downside is that this actively prohibits serious consideration of anything that may not be encapsulated within duality. And this is where non-duality comes in, along with those who claim to have experienced this. The question is, are they ...

Saints or sages, self-obsessed or psychotic?

Nearly two and a half thousand years ago the ancient Greek philosopher, mathematician and mystic, Plato (c.428-348 BCE) proposed the analogy of the cave. He likened those who have not seen the truth of Ultimate Reality with prisoners who have spent their entire lives in a cave, able only to look deep within the cave because they are held in irons. Behind them is a fire and in front is a wall upon which they see only their own shadows cast by the fire and the

shadows of any objects passing behind them in between themselves and the fire. They have no reason to think the shadows are not reality in its entirety and have no notion that the objects whose shadows are cast on the wall have any reality other than what they can see. One day one of the prisoners escapes from the cave into the sunlight. For the first time he is able to see real objects and realises that hitherto he had been deceived by the shadows. When he returns and tells his still imprisoned comrades of the reality he has seen, they regard him as being quite stupid.

No doubt we'll differ in the plausibility we each accord to those people who tell us they have seen beyond the constraints of dualistic thinking. Certainly, in past times 'seeing God', 'communing with the universe', 'escaping the confines of the ego' or whatever, might have rapidly provoked a stunning range of reactions, from reverence through to bemusement, rejection, psychiatric intervention and martyrdom on the cross.

But why is this so? Perhaps one serious strain on our credulity has been the apparent inability of many of the individuals concerned to describe in simple terms what they claim to have witnessed. Somewhat surprisingly perhaps, it turns out that Ultimate Reality, the ground of our being, is completely indescribable in words. The chapter in *Mindfulness, Now and Zen* headed 'Describing the Indescribable' considered this in some depth and attempted to explain why efforts to communicate the dynamics of dualistic thinking have frequently been couched in analogy and metaphor. Here the idea of elemental patterns has been developed for the same reasons. Some of the most authoritative attempts were described in *Mindfulness, Now and Zen* but we don't need to rely on the words of religious teachers or philosophers and sages from bygone ages to see

what they were talking about. We can each see examples of duality all around us wherever we look. Indeed, so universal is our experience of duality that we might well conclude that we're somehow entrapped within it. But are we really trapped, and would it matter if we were? In *Mindfulness, Now and Zen* we saw that everything is just fine as it is (in the chapter on Absolute Perfection) and maybe we're quite happy with our life anyway and have no desire to escape the illusory experience of duality.

But those who choose otherwise are offered the possibility that Ultimate Reality really can be found outside the usual dualistic way we navigate our cognitive framework. It's said that when we transcend our usual way of thinking we can each know the sense of vibrant reality that is brought by Cosmic Consciousness. This is the personal experience of Ultimate Reality and it is accompanied by an immeasurable intellectual illumination and a deeply personal, profoundly loving, unconditional acceptance of the self.

The message of many who have known Cosmic Consciousness frequently bears testimony to the overwhelming sense of love, acceptance, mercy and beauty the experience has shown them. Does this mean these are actual characteristics of Ultimate Reality or, like Plato's returning prisoner, are they the nearest that words can come to communicating the experience of Cosmic Consciousness to those within Everyday Reality? Perhaps the description of Cosmic Consciousness as being one of overwhelming reality, love, joy and unconditional acceptance is the best we can do to describe the ineffable experience of transcending all conceptual understanding? This Cosmic Consciousness is essentially an experience of the pre-conceptual, within which all concepts, thoughts and ideas

originate, but inevitably when we come to communicate it to others, we have no way to do so other than by translating the experience into concepts and words. And straight away we're into the world of Everyday Reality, of samsara, with all its inherent characteristics, categorisations, differentiation and duality.

The Ultimate Latent Explanation

Maybe Ultimate Reality is right in front of us all the time - the illusion being that we think we're not seeing it when, in reality, we are. It's as if we're on the side of Ultimate Reality that doesn't know itself, unlike the side called nirvana that knows both sides as one (rather like the sound of one hand clapping). Unlike anything else real or imagined - atoms, unicorns, gravity, flightless birds and fairies - the existence of Ultimate Reality is in a rather unique position. For one thing, it completely defies description, and for another its actuality remains untestable. When it comes to judging the evidence for and against a hypothesis the usual approach might be to weigh up those factors that identify the characteristics of the phenomenon under investigation and to assess whether experiment and experience confirm or deny the presence of these. For most things this methodology is perfectly acceptable, but it makes very little sense when what we're looking at is *everything*. As mentioned earlier, the entire idea of Ultimate Reality being promoted here is a latent explanation in itself.

However, one aspect that we should consider in assessing the likeliness of the sort of Ultimate Reality being posed here is *why* such a thing might exist. We must nevertheless bear in mind the idea that Ultimate Reality is neither a 'thing' in time nor a 'thing' outside of time. Nor is it subject to the laws of cause and effect. Indeed, it's not a 'thing' in any sense. While it can be described as a unity, as absolute

simplicity and perfection, these are not separate characteristics because they are all part and parcel of the unity. Nor should we assume that Ultimate Reality must envisage a final destiny for the universe that would provide a justification for the existence of mankind. Perhaps humanity has no final destiny because we're there already: in a timeless state, nothing is changing so nothing is going anywhere anyway. Ultimately there are no grounds for us to make any assumptions whatsoever about the 'intentions' of Ultimate Reality. All such ideas are firmly rooted in samsara and, in the timelessness of nirvana, they are seen to be mere illusions.

And we can all see beyond the illusion. Whilst many reports of Cosmic Consciousness have originated in wholly exceptional individuals, *Mindfulness, Now and Zen* pointed out that some quite ordinary people claim to have united with Ultimate Reality. This has apparently not always required them to have a particular religious background nor to be any more or any less virtuous than any other human being. Nor have they been any less egotistical or any more devout or deserving than any other person, which does suggest there is hope for us all.

The question is, if they did it, how can you?

How can you see Ultimate Reality?

One of the propositions made in *Mindfulness, Now and Zen* was that, despite all appearances, we seem to be literally living in the past. In relation to the present moment we are a sort of echo, a memory, a trace or a reflection.⁴⁷

⁴⁷ Barr W (2017) *op cit.*, p.304.

It's been suggested that the only way to grasp Ultimate Reality, to experience Cosmic Consciousness, is to do-it-yourself, and it's in this spirit that *Mindfulness, Now and Zen* emphasised the role performed by meditation in bringing us personally into the here and now. No claims are made that meditation is the only way to attain Cosmic Consciousness, nor that it's necessarily the best approach for everyone. Indeed, simple faith in God in the form of an intense and immediate belief in the unity of Ultimate Reality, may be a much more productive approach for some. Similarly prayer, in its numerous forms, might offer the most profitable way to achieve spiritual experience for many. But at the heart of each of these is the development of egolessness - the loss of that sense of self that makes us so certain that we are separate from each other, separate from the world and separate from the entire cosmos. It is this realisation that offers an escape from duality. And whilst some might argue for the use of psychoactive drugs, less controversial is the role played by simple acts of contemplation and reflection in the quietness of one's mind. The Exercises in Cosmic Thinking that were outlined in *Mindfulness, Now and Zen* and which are expanded here in Chapter 5 are intended to stimulate such musings in the anticipation that ultimately this will enable our thinking to be more versatile.

Is there anybody in there?

The bottom line is that in our search for Ultimate Reality maybe the most important thing we can do is to stop looking 'out there' and start by looking in the here and now. We are fascinated with science, and especially particle physics, as the route to knowledge of Ultimate Reality which here we're calling the Theory of Everything. This fascination is reflected in (and maybe arises from) our continual search for truth 'out there' in the world of tangible stuff, the world

of phenomena. We saw in Chapter 2 that in seeking Ultimate Reality in the material world the scientific method is seriously limited. It restricts our judgement of the acceptability of evidence for what *can* really be real to a tight set of rules, when we can't know in advance exactly which rules - if any - are relevant to the search for *knowledge of everything*. In other words, we have made an *a priori* assumption about the limitations and nature of Ultimate Reality before we know what Ultimate Reality may be. Add this to the exclusive focus on what is tangible and measurable, and you've imposed rigid and artificial boundaries on what sort of Ultimate Reality you can actually hope to find. It's also instructive to remember that the branching pattern discussed earlier runs in both directions - branching outwards from the single to the many and inwards from the many through to the few and on to unity. Absolute simplicity and absolute complexity lie at each extreme of the elemental pattern of branching. However, the direction of scientific enquiry in the search for a Theory of Everything is in effect towards increasing complexity, which is a branching pattern based on the principle that the more powerful your microscope the more you will see. This book recommends meditation as an alternative approach where the direction is always towards increasing simplicity.

The final message of *Mindfulness, Now and Zen* was this: Stop looking out there. When Jesus said *the Kingdom of Heaven is within*, he was affirming a particular piece of wisdom that's been passed down to us through the ages from many different religious and philosophical traditions. And those who have spoken of this have always brought the same message... **leave your ego behind and look within.**

In simple terms: practise meditation. As mentioned earlier, it is not like prayer because it requires no religious belief; it is unlike fasting because it requires no physical hardship, and unlike psychoactive drug use because it requires no external neurological stimulus. With meditation, everything comes quite naturally from within.

Summary of this chapter

This chapter covered many of the ideas outlined in *Mindfulness, Now and Zen*. It described the concept of Ultimate Reality and how, through mindfulness meditation, each of us can grasp its timelessness, seeing beyond duality to the transcendental unity behind everything.

In using the word transcendental I am indicating that which is essentially indescribable, beyond our everyday experience and beyond our way of thinking. Something that is transcendental is not likely to have been consciously encountered by most people and cannot be experienced by the ordinary reasoning process, though it is ultimately knowable through processes outside of thought, like mindfulness meditation. So transcendental unity refers to Ultimate Reality, the reality to which we must awake. Nirvana is Ultimate Reality. It's the world as it really is, unlike Everyday Reality, which is life as we know it. Ultimate Reality is found everywhere in everything, in ideas as well as in that which is tangible. In the unity of Ultimate Reality, nothing is separated or differentiated from anything else. Separation and differentiation are typical of the thinking processes referred to as being dualistic.

CHAPTER 4

More REAL than Reality

Summary

This chapter looks at how some of the most influential thinkers from various religious and scientific traditions have answered the most basic questions we can ever ask about the universe and our role in it. We've seen here that the grounds upon which we must each rely to form and to answer such fundamental questions are ultimately based entirely on our five senses - touch, hearing, sight, smell and taste. These are the only means by which we can directly know anything at all about the external world. The reliability of our senses is however distinctly debateable. The chapter moves on to look at a number of theoretical scenarios, each of which is a latent explanation that is also paradoxical, and whilst maybe not literally true or scientifically verifiable, may be seen as a pointer to something that can't be described in words.

Ultimate Reality

Mindfulness, Now and Zen was about everything. More precisely it was about the reality that lies behind the entire cosmos from start to finish. Though you may not have a name for it, this is the source and true nature of whatever is behind our moment-by-moment experience of life, not just yours and mine but the total experience of everything at every moment. It's not just the mass and matter of the universe but the experience of every living thing that has ever been, every single aspect of life from the minutiae to the massive for everything and everyone forever. Some

people will call this 'God' but many won't. Whatever it is we'll need a name we can all agree on, and my best offering is 'Ultimate Reality'. So that's what this chapter is about, the ultimate one and only whatever it is that's behind everything that is, everything that has been and everything that ever will be.

And why, you may well ask, should you take any notice at all of my opinions on this rather dramatic and mysterious subject? In my experience, by adulthood most people have fairly firm views on what Ultimate Reality is: there is a God, there is no God, we can't know whether there is a God or not, religion has the answers, science has the answers, there are no answers ... and so on. But whatever you believe, or know, or believe you know, it's rather important who you listen to here. As the British-born philosopher Alan Watts has pointed out, when you confer spiritual authority on another person, you must realize that you are allowing them to pick your pocket and sell you your own watch.

So, are you interested in buying a watch?

My only justification for so impertinently imposing my opinions on you in this book is described in Chapter 6. It's based on my belief that once I came face-to-face with Ultimate Reality. To be fair, this was a one-off experience and it happened 50 years ago, in 1973 when I was 21. Nevertheless, for me this was every bit the momentous, life-changing experience that you might file under the 'Seeing the Light' category. Since that time I've tried to put the experience into words on many occasions, but it's always ended up sounding like rather pompous gibberish. At first, I was surprised that I couldn't describe my recollections of Ultimate Reality, but I have since discovered this to be a common thing so I put a chapter on this into *Mindfulness*,

Now and Zen. In practice this indescribability means that nothing written here is to be taken as being literally true or correct. It's simply the nearest I've been able to get at describing the indescribable ... and whether it's pompous gibberish or not I'll leave you to decide.

I realise this is all quite ridiculous of course: normal people can't go around seeing Ultimate Reality and expecting to get away with it. And in any case, I'm not asking that you believe that I have really encountered Ultimate Reality, only to hold it in your mind as a possibility. If you're a believer in the 'Ultimate Reality is God' idea, then that's what it was that I saw; if not, then it was that too. More detail on this is given in Chapter 6.

The crux of the matter is that both my books on this subject - *Mindfulness, Now and Zen* and *Mindfulness, Here and Now* - are a personal take on everything. They are about what makes sense to me in response to the questions, Is there a God? Why are we here? What's it all about? and Why is there anything at all? In this chapter I'll attempt to show how both of these books have provided answers to these questions.

The meaning of life

Of course, there are plenty of ideas around that purport to answer the basic questions about the meaning of life. Pretty much every religion and mainstream or alternative belief system provides some sort of answer, and to an extent so does science. It's acknowledged that a search for the meaning of life is not necessarily the primary aim of science. However, the rationality behind scientific exploration has an attraction to those who find the sometimes blind faith of religion to be a hindrance. But much as organised religion is not for everyone, nor is

scientific theorising. Nevertheless, science aims to tackle head-on some of the issues around the beginnings of the universe and the beginning of life, through Big Bangs, evolutionary development and so on. These aims were not opposed in *Mindfulness, Now and Zen* and in some ways the book was an attempt to seriously consider and make sense of both the religious and the scientific explanations of it all; to see if their teachings are necessarily diametrically opposed and whether Jesus, Buddha, Plato, Charles Darwin, Stephen Hawking and others could be describing the same thing but in very different ways, whether they knew it or not.

The reality behind it all - what I'm calling Ultimate Reality - was described in *Mindfulness, Now and Zen* in ways that used ideas from a range of different sources. While it was based on personal experience, the book employed the teachings and words of many previous thinkers to illustrate the assertions being made. The aim was to make the book understandable to other people and to answer the sorts of questions I have found myself asking that I think any reasonably open-minded, rational enquirer would ask. These are the usual questions like, is there a God? Why do so many terrible things happen? Why is there evil? Where did everything come from? Where is everything going? And, of course, why is there anything at all?

Unacknowledged beliefs

These rather vague questions are a fair start and there can't be many religions that don't offer some sort of answer to them. My problem with religiously based answers is that almost all rely on belief or acceptance of something *before* the enquiry actually begins: the presumption of an ultimate meaning to life, a God of love, a just God, a judgemental God, the unquestioned truth of a particular religious text,

and so on. These beliefs are not always explicitly stated of course, and in fact many of our assumptions about the core nature of reality are never really acknowledged or become conscious to us - whether we're religious or not. For example, how many of us are really aware of the common assumption that an essential rationality, logic or meaning must lie at the heart of things? For the less religiously inclined, like the late Professor Stephen Hawking, science too has its unwritten assumptions. Hawking himself for example appears to have held the view that gravity must have been around even before the start of it all since he supposes the existence of gravity to have been a pre-condition of the Big Bang.⁴⁸ Whilst unwritten assumptions are frequently unquestioned, they lie behind many of our difficulties in seeking whatever is really going on and in coming up with a workable Theory of Everything. And that's before we even begin to question the existence of time.

Furthermore, although scientific enquiry really begins with the Big Bang, mainstream scientific thought is currently that the Big Bang itself was the product of a random event. The existence of randomness is therefore presumed as an underlying condition prior to the event of the Big Bang. But it is religion in particular that has a habit of requiring adherents to accept as given, some fundamental axiom or proposition that is considered to be an established or self-evident truth upon which all else must hang. This belief, which may not be explicitly stated, is required before the task of looking at what we know through our experience can even begin. In religious teachings these axioms

⁴⁸ Stephen Hawking and Leonard Mlodinow, *The Grand Design*. See http://www.dailygalaxy.com/my_weblog/2010/09/the-universe-exists-because-of-spontaneous-creation-stephen-hawking.html

frequently refer to what a non-believer might consider to be a mythical state of affairs such as a Garden of Eden, Original Sin or the existence of a Heaven and Hell.

But why should we accept anything as being fundamentally true in the absence of evidence?

It's tempting to say that we should base our questioning on only our personal or collective experience, since this at least derives from the evidence of our own eyes. But there again how solid is this? The brief description of duality given earlier in the book demonstrates how our minds are rather thoroughly entrapped within a way of thinking that allows only certain understandings to be acceptable, when underlying reality - Ultimate Reality - may well lie outside of this. The question is then, can we devise or discover some argument or explanation of what Ultimate Reality may be, that avoids the need for *a priori* faith in the unproven? This need not be strictly rational or logical because both rationality and logic are man-made concepts and here we're looking at things before man made anything.

Mindfulness, Now and Zen began by exploring what we really know with absolute certainty. It concluded that this is actually nothing at all: ultimately, and contrary to whatever Descartes may have thought, just because I can engage in the act of thinking (or, strictly speaking, doubting) does not necessarily mean that I can infer my existence is a reality. As we saw in Chapter 2, the conclusion that 'I exist' ignores the possibility that my childish notion was correct: perhaps I am in fact no more than God pretending to be me and my ego is no longer mine but is a product of the mind of God.

Our problem is that the ways in which we humans each gather information about the reality around us is in essence

through our five senses, and our senses are quite capable of letting us down.⁴⁹

Paradoxical Scenarios

The unreliability of our sensory information and the ways in which we routinely process our perception of reality, means the whole subject of deciding what is and what isn't real must be approached with a fairly open mind. To help in developing this broader understanding, the following anecdotes are offered. Framed as paradoxical scenarios, each can be seen to be a latent explanation. Whilst these have arisen from personal experience, they are given here without reliance on unproven axioms or anything you are not able to reason out or experience for yourself.

Paradox no. 1: We are trapped but we are free

An understanding of duality is very useful and will help you to get the hang of thinking outside your own particular box. So, what is duality? Duality has been mentioned many times in previous chapters so here I only give a very brief summary.

First of all, this is not rocket science! If you can read these words, you can grasp duality and understand why you can't think your way out of it. Imagine everything in the world - all the different things like animals, people, objects, events and so on. You don't need to have an animal, person, object or event in front of you to know what I'm talking about here. In other words you understand each of these as a concept, so imagine too that all these concepts have an opposite concept. Again, you can see that they must have an opposite because you must know what they are not if you are to know what they are. Consider how all this

⁴⁹ Barr W (2017) *op cit.*, pp.67ff.

multiplicity, divisibility and differentiation - how opposites - could then cancel out in the way that plus one and minus one cancel each other out. What's left when this happens? Mathematically, plus one minus one equal zero, nothing. But what is nothing? Nothing only has meaning in relation to its opposite - something - and when something and nothing are paired, as perfect opposites, they cancel each other out. When they do this, what is left?

Nothing! So here we are again: trapped in a web of duality. When the mathematical opposites +1 and -1 meet they lead us to zero, nothing. When nothing and its opposite meet, they lead us round and round in a dualistic dance. This looping effect puts each of us into the centre of a virtual sphere within which we can only think within certain boundaries. These boundaries are dualistic: we are unable to think outside of this. An example is to picture what might lie beyond existence and non-existence. The answer is transcendent: it is not a concept so cannot be conceived of.

Escaping from your ego

The sense of separation that results from living within the constraints of duality is part of the ego. This is not the ego of Freud but simply that which makes each of us conceive of ourselves as an individual entity, separate from each other and from the entire world. The assertion is that ego is why we perceive differentiation and difference in a universe that is essentially a unity. It's what Hindus might call the self, and it gives an illusory sense of what's really real. However, whilst we appear to be trapped within this mesh of dualistic thinking, there are ways to escape. Here I'm advocating mindfulness meditation above alternative approaches to freeing the mind, like prayer, faith and the use of drugs as entheogens (which induce spiritual experiences). The advantages of mindfulness meditation

have been discussed elsewhere in this book. They lie chiefly in the absence of a need for belief in a greater power, or for the physical hardship of fasting or the external neurological stimulation of entheogens. Meditation is free and available to anyone who can think, whatever their personal beliefs may be. It brings the benefits of relaxation and increased self-reliance into your life, but these are mere side-effects in comparison to its central purpose. This is to make way for your personal freedom from the unending internal conversation with yourself that we call thinking. Mindfulness meditation allows you to be free from dualistic thinking and to make the psychological jump from duality to unity: it provides the opportunity to wake up to Ultimate Reality.

Paradox no. 2: There is no God, but then again, maybe there is

We can't even begin on this one without first defining our terms: what you mean by 'God' and what I mean by 'God' could be very different things. So, what do we mean when we use the word 'God'? This is surely some sort of trick question for a supposedly brief discussion like this because at the very least, several volumes could be written in answer to it. Rather than attempting an examination of the definition of 'God', it may prove more beneficial to move on from the old, bearded man in the sky and the rather vengeful warlord God of medieval times. Let's just start with the thought that any God who created and maybe continues to create the world and universe could not be a 'thing' of any sort, neither created nor bound by time and cause and effect. Because such a God could not be made of anything, even a free-floating intelligence is ruled out. What about a single, universal consciousness? Again, where is this? Of what is it made? Even the idea of a

cosmic-sized guiding principle requires some essence if we are to take it seriously. So, where to go from here?

The bottom line is that we could spend considerable time thinking about what God is not. If He's not made of anything then presumably He's not even made of ideas, or concepts, or pure consciousness. But then, in the end, the possession of so many negative characteristics becomes a characteristic in itself (He has the characteristic of having no characteristics). You can easily see how we very quickly find ourselves caught up in semantics and a circular argument.

Maybe we should try a different tack altogether. In this book we've talked about a unity beyond duality, which is a transcendental concept and so is something we can't even imagine. This means neither you nor I really understand what the word 'transcendental' means, even though we use it and might think we understand. But this does not mean it cannot be real. What for instance, is something if it exists but also does not exist? It's transcendental, and this brings us back to duality and unity. If something is transcendental then it cannot be grasped by the rational mind. Holding two opposing truths in mind is akin to Schrödinger's cat being both alive and dead at the same time, and while this is an interesting mental exercise it cannot be understood through rational discourse. This is no problem outside of duality of course, where in unity all latent explanations can quite happily live out their truth and reside together regardless of any conflict between them. And, interestingly, quantum mechanics seems to be moving in this direction with its consideration of the many-worlds interpretation (MWI) since this allows every possible outcome of a quantum event to exist in its own universe.

In any case, in the light of unity, the statements ‘There is no God’ and ‘There is a God’ can both be seen to be equally true, which leads us on to paradox number 3.

Paradox no. 3: All opposites are equally true

No doubt this sounds like more ‘There is no God: there is a God’, and indeed it is, because this is duality. The assertion is that ultimately reality is beyond, behind and separate from all the opposing concepts that are implied by duality. However, Ultimate Reality also entirely incorporates these opposing concepts as well. In this sense Ultimate Reality is transcendent. Of course, the words through which we communicate these concepts - both in speech and written descriptions - are themselves trapped within duality. We can no more describe what is outside of duality than we can conceive of an Ultimate Reality that both exists and does not exist. There’s a long tradition of religious teachers talking symbolically - using metaphor and analogy - and I would suggest this is because it’s impossible to describe in words what Ultimate Reality is like. If we seek to experience Ultimate Reality, to know Cosmic Consciousness, we must look to non-dualistic approaches like mindfulness meditation. This can lead us to the unity beyond duality, where all opposites dissolve into each other (what the psychologist Carl Jung might have called the point of enantiodromia).

Paradox no. 4: It’s about time someone pointed out that there is no such thing as time

This is a good one. Once you get your head around this, you’ll find a lot of things fall into place. Out of interest, the absence of time also clarifies many of the apparently obscure elements of Zen Buddhism and, as we saw earlier, once you take the concept of time out of the equation, duality makes no sense at all.

In *Mindfulness, Now and Zen* it was claimed that there is only the timeless present moment of Now, and that time in the sense of the past, present and future is an illusion. This assertion rests on a variety of notions, but in the end it doesn’t matter which of these you accept or reject. The issue is that you at least are willing to entertain the possibility that time does not exist; that you have an open mind. And by the way, whether or not time really exists is not the point here. All that is needed is for you to imagine what it might be like if time did not exist.

The time of our lives

All you know is the present moment. It’s pretty clear that the past is gone and the future has not yet happened, but what does this really mean? You can remember what you had for breakfast yesterday and reasonably conclude that eating breakfast is now gone and lies in the past. The fact that it happened and is no longer happening suggests change through time. But what do you mean when you say you remember having breakfast yesterday? What is memory and, crucially, *when* is memory?

The act of remembering anything at all, itself takes place in the present moment - now. The point of recollection of an event is when your consciousness energises a group of neurones and so re-ignites the memory. Consciousness only ever happens in the present, so again all you know is in the present, whether or not the ‘knowing’, the consciousness, relates to your ongoing moment-by-moment experience of life or the act of remembering. Similarly, with the future we imagine or predict what we believe might happen, but again, this act of imagination, of prediction, lies in the present. There is only the present moment, the moment of now; time does not exist. A useful analogy is that of a story in a book. As we read a novel our awareness moves through

the story as if it's unfolding through time, but of course the book and its story are always present in their entirety throughout, from beginning to end. Our sense of change, of movement through the narrative, is entirely due to the fact that we are experiencing the story a bit at a time. So it is with life. And this perception of change may be a function of our cognitive processing rather than a reflection of anything in the external world: time need not exist and if you have read Chapter 2, you'll see that what we're talking about here is another latent explanation.

The Latent Explanation of Unhappening

Unhappening was offered in *Mindfulness, Now and Zen* as an Exercise in Cosmic Thinking, a thought experiment that provides another way to conceive of the non-existence of time.

Science tells us that, like Newton's third law of motion, *For every action there is an equal and opposite reaction*. These opposing action/reaction forces effectively cancel each other out: as one occurs, so the other reacts in reverse because energy can neither be created nor destroyed.⁵⁰ This cancelling-out dynamic is seen in the natural world at the level of every action: fish swimming, birds flying, apples falling and so on at the everyday visual level, but also at the astronomical scale. As we discussed in Chapter 2, what if at the moment the Big Bang occurred an equal and opposite Big Bang also occurred? This Big Bang, however, was 'in reverse' so maybe 'unoccurred' would be a better expression. In this 'reverse universe', time is travelling backwards and this unravelling means the universe is itself 'unhappening' even as it happens. But not only did this

⁵⁰ According to the Law of Conservation of Energy first formulated in the nineteenth century and more recently taken to include mass (which can itself be considered to be a form of temporarily solidified energy).

occur at the time of the Big Bang, it continues to occur as the universe with which we're familiar continues to unfold day by day and moment by moment. That is, the universe in reverse also continues to unfold day by day and moment by moment and so unravels all events at the moment they happen. Time moves forward and time moves backwards in tandem; the result is the present and in this there is no time. The present moment is the point at which the two opposing universes collide, and of course it is timeless and indeed all there is. Or isn't.

The Latent Explanation of Time

And who's to say that when we have a thought we don't also at the same time have an equal and opposing thought, though of course, we're aware of only one of these? The effect of all this on our lives would be exactly zero. The net result of a reverse Big Bang would be exactly the same as the Big Bang we're used to but imploding inwards rather than exploding outwards and with time moving in reverse (which may be exactly what happens in a Black Hole of course). We shouldn't think of this as just 'not happening' because it's more than this - it's our customary universe positively unhappening: the universe may be disassembling itself even as we experience events changing and moving forwards through time. Of course, the unhappening element of this - the reverse universe - could just as easily be considered to be the positive element - whether time moves in the direction we conventionally consider to be 'forwards' or whether it's what we consider to be 'backwards' will presumably make no difference at all if we're in it and it's all we know. And of course, Unhappening is consistent with Newton's Third Law - for every action in nature there is an equal and opposite reaction. (In fact anything that follows this action/reaction

process can be seen to be part of the same elemental pattern). And one thing is clear: time need not exist.

What would no time be like?

The whole concept of cause and effect is rendered irrelevant if time is an illusion. If there is no time then everything in the universe must grind to a halt. Nothing can chronologically precede anything else - cause cannot precede effect and that effect cannot precede or cause a further effect, and so on. No time also means we have no further need of the seemingly tricky little question, 'Who created God?' or to be more in keeping with our argument here, 'Where did Ultimate Reality come from?'

An Unhappening universe running in parallel with our own universe would also answer the question 'What happened before the Big Bang?'. Whilst it could be said that time only came into being with the Big Bang (so the question of what happened *before* then is meaningless) an unhappening universe running backwards in sync with our own would render time non-existent anyway. Time running forwards and time running backwards cancel each other out in much the same way as anything else. There is no time; nothing is happening; the questions 'what, why and how?' are meaningless.

The ramifications of this are enormous. All questions 'Why?' - Why is there a God? Why is there duality? Why is there anything at all? - all become meaningless in the absence of time; 'Why?' only has any meaning from within time. The question inherently implies the existence of a past and/or a future, so some might say "God invented the world in order to test people for a future life in heaven or hell" or "There is a universe because of the Big Bang", but both religious and scientific accounts of existence make use of,

in fact rely upon, time. In philosophical circles these approaches are known as teleological and mechanistic questions. The former are common in religious questions, which frequently have been formulated by reference to final causes, and ask 'What is the purpose of such and such a thing?'. Those questions that ask, 'What earlier circumstances caused such and such an event?' are mechanistic.⁵¹ This whole argument brings a new understanding to the phrase, 'There's no time like the present'.

Paradox no. 5: Ultimate Reality is absolutely simple and absolutely complex

Ultimate Reality is so simple that the simple act of looking - of even thinking about it - obscures it. In this sense it's an example of the elemental pattern known in physics as the observer effect, where simply observing a system disturbs the system. (It was observer effects that led the physicist Erwin Schrödinger (1887-1961) to devise a thought experiment in which paradoxically a hypothetical cat can be considered to be simultaneously both alive and dead).

Though simplicity, perfection and unity appear to be separate concepts they are all part and parcel of a single Ultimate Reality. Of course, for us humans living in a world of duality and differentiation, it's hard to conceive of the universe being 100% simple. Indeed, it's hard to conceive of anything being 100% simple. We're so used to looking at the details, at working things out and reasoning our way through life that the very idea of total simplicity seems ludicrous. In the end we fall back on the argument made

⁵¹ See *Mindfulness, Now and Zen* Chapter 18, *Scientific Method*, pp. 181-2, and for a fuller discussion, Chapter 9, *Time*, p.94ff and Chapter 12 *Unhappening*, p.133ff.

earlier, that simplicity is ultimately only the other side of complexity in a dualistic sense.

The idea of perfection presents similar difficulties in that we have trouble in imagining anything to be 100% perfect. But again, we must ask from where does the idea arise that anything in the entirety of the cosmos may not be totally perfect as it is? For one thing it pre-supposes the existence of non-perfection and, like simplicity, is itself entrapped within duality. This is where the idea of unity comes in because it removes any concern that there is anything, any part, any differentiation between things whether they are material or conceptual. The idea that everything is one thing has been a frequent claim of mystics and religious teachers throughout the ages, along with the view that this transcendent unity is ultimately indescribable.

Of course, a short paragraph here can barely touch on these ideas so *Mindfulness, Now and Zen* allocated a chapter to each of the characteristics mentioned above (have a look at pages 137 (Simplicity), p.156 (Absolute Perfection), and p.141 (Unity).

Summary of this chapter

Here we have looked at the ways by which we may conceive of a greater reality than that which underlies our everyday sense of reality. This basic and absolute reality, whatever it is, I have called Ultimate Reality. It encompasses - but is so much more than - our individual egos. It is behind everything that has been, is now and ever will be throughout the entire universe. Uncreated and outside of cause and effect it occupies neither space nor time and yet is knowable by each of us because it is us and we are it. It is, however, indescribable in words because it

lies behind the concepts to which words apply. We are reminded that:

**Although we can say what Ultimate
Reality *is like*, we cannot say *what it
actually is.***

The chapter ended with consideration of a number of paradoxical scenarios. These were intended to smooth our transition from everyday thinking within the confines of duality, to an ultimate non-thinking state of profound mindfulness. The exercises in the next chapter have been designed to further develop this sense of non-duality.

CHAPTER 5

Exercises in Cosmic Thinking

Why does my thinking need exercise?

The word ‘Gedankenexperiment’ - thought experiment - was used by Albert Einstein to describe his unique approach of using conceptual rather than actual experiments in devising the Theory of Relativity. The Exercises in Cosmic Thinking given later in this chapter are just that, experiments in thought that you can carry out at home to help you to think about Ultimate Reality in a rather more lateral way.

These exercises are essentially cognitive meanderings whose aim is to help us imagine things outside the box. Exercises like this have been used for centuries to enable our thinking to become more versatile, which will be useful here since our aim is to identify and question the implicit assumptions we all make about the nature of reality.

The Mindfulness of not thinking

A word about meditation. In this chapter, Exercises in Cosmic Thinking numbers 1 and 2 describe how to practice two very simple forms of meditation: the Mindfulness of Breathing and the Mettā Bhavana. The first of these is focused on the cognitive process of thinking whereas the Mettā Bhavana is practiced to assist in the development of positive emotional states. It’s title translates from the sacred Pali language of Theravāda Buddhism, as ‘the development of loving kindness’.

Meditation practice is intended to develop mindfulness and takes many forms. The most common in the West is the focus on a mantra. A mantra can be a geometric image (perhaps in the visual form of a mandala), audible (as in the sacred sound Om, said out loud or silently to oneself), or other (as in the Mindfulness of Breathing where the focus is on the breath as it enters and leaves the body). But whatever form the practice takes, the aim is the same because the meditation is intended to facilitate the experience not of thinking, but of *being*. In this state of mind the individual is both highly aware and open to what is, without preconception, interpretation or intention.

Clearly, to the western mind this all comes over as a rather mystical thing, though the experience of focused mindfulness is entirely natural. As a prelude to learning the practice of meditation it might help to look at how you could go about recognising when you have mindfulness. Whilst meditation can help in developing the ability to generate and sustain a mindful state of awareness in everyday life, other approaches to mindfulness are entirely feasible. In the novel *Siddhartha*, Herman Hesse tells of the eponymous hero of the tale, who is a travelling monk in the days of the Buddha. The description Hesse gives when relating how Siddhartha sits for hours listening to the sound of a large river conveys something of the essence of mindfulness:

Siddhartha listened. He was now listening intently, completely absorbed, quite empty, taking in everything ... He had often heard all this before, all these numerous voices in the river, but today they sounded different. He could no longer distinguish the different voices - the merry voice from the weeping voice, the childish voice from the manly voice. They all belonged to each other: the lament of

those who yearn, the laughter of the wise, the cry of indignation and groan of the dying. They were all interwoven and interlocked, entwined in a thousand ways. And all the voices, all the goals, all the yearnings, all the sorrows, all the pleasures, all the good and evil, all of them together was the world. All of them together was the stream of events, the music of life.

When Siddhartha listened attentively to this river, to this song of a thousand voices; when he did not listen to the sorrow or laughter, when he did not bind his soul to any one particular voice and absorb it in his Self, but heard them all, the whole, the unity; then the great song of a thousand voices consisted of one word: Om - perfection.⁵²

This is mindfulness.

The next time you're out walking, preferably on a fairly level and uncomplicated straight track, pay attention to your footsteps as you proceed - right, left, right, left. As you walk, picture the movements in your mind's eye, rather in the way a cartoon of someone walking might look. Now stop walking, but keep that moving image in your head, walking, right, left, right, left ... Remain standing still for a few moments, but imagine you are about to start walking again with the idea of consciously attuning your footsteps with the imaginary 'you' that in your mind's eye is still walking. This imagined walker can be thought of as a constant 'stream' of walking. In a moment you'll be stepping directly into this stream by planting your own feet into the very footsteps of the cartoon image in your mind. Now, as you focus on the mental image of your walking, catch the moment when the image of your right or left foot

⁵² Hesse H (1973) *Siddhartha*. Pan Books Ltd., London, p.107.

is about to step forward and step into this with your actual foot, and so begin actually walking again.

The sense of walking that you retained in your mind's eye while you were walking and stationary was an increased sense of mindfulness, though it might not yet be called meditation. It becomes meditation when you forget all about walking and just walk: mindfulness is about *just doing; just being*. And while awareness of awareness is the start, you need an extraordinarily concentrated focus to be 'in the moment' because then you can put it aside and simply *be*. In the words of Eckhart Tolle:

Your outer journey may contain a million steps; your inner journey only has one: the step you are taking right now.⁵³

An alternative exercise to this 'walking mindfulness' is as simple as standing still. An open and empty field in the countryside is the ideal place to try this, preferably well away from the dominating sound of anything mechanical, like cars or tractors. Close your eyes and listen. Without attempting to focus on anything in particular, pay attention to whatever you can hear. After a minute or two turn ninety degrees and with your eyes still closed do the same, again turning after a minute or two until you've turned through all four quarters of the full 360 degrees. This very simply becomes the *Mindfulness of Walking* when you retain this focus on what you can hear and begin gently walking through the field.

⁵³ Tolle E (2005) *The Power of Now*. Hodder and Stoughton, London, p.73.

What's the point of all this mindfulness?

Through meditation you can develop your ability to achieve a more mindful state simply in order to relax, but this is a side-effect relative to the ultimate benefits of mindfulness. In repeated meditation practice we develop mindfulness to a far more concentrated degree, to the point where the act of being mindful, of not thinking but of simply being, is an experience beyond duality. At its most pure this is the experience of unity where only Ultimate Reality is known.

In Buddhist thought this state of unity is alluded to in the writings known as the Abhidhamma Pitaka, which give a sense of the value of meditation in allowing the adherent to experience consciousness of nothing other than consciousness itself:

The Buddha succeeded in reducing (the) 'immediate occasion' of an act of cognition to a single moment of consciousness, which, however, in its subtlety and evanescence, cannot be observed, directly and separately, by a mind untrained in introspective meditation. Just as the minute living beings in the microcosm of a drop of water become visible only through a microscope, so, too, the exceedingly short-lived processes in the world of mind become cognizable only with the help of a very subtle instrument of mental scrutiny, and that only obtains as a result of meditative training. None but the kind of introspective mindfulness or attention (sati) that has acquired, in meditative absorption, a high degree of inner equipoise, purity and firmness (upekkha-sati-parisuddhi), will possess the keenness, subtlety and quickness of

*cognitive response required for such delicate mental microscopy.*⁵⁴

But well before you enter this state of unity, of all-knowing, the benefits of meditation practice will become apparent in many other ways. Mindfulness meditation teaches us to gradually learn how to let go of thoughts. This applies outside of meditation, as in learning to let go of anger or grief, happiness even. Meditation gradually gives you greater control over letting go of emotions. This comes about quite naturally during the Mindfulness of Breathing meditation as you learn to let go of the thoughts that arise and to re-focus on your breath as an impassive observer.

The experience of repeated meditation practice and the consequent development of mindfulness delivers other interesting insights which are rewarding in themselves. For example, in meditation we are experiencing the thought we have at that precise moment (that is, the focus on our breath) but frequently we are aware of other thoughts in the background. This awareness of background thoughts conveys only a vague sense of their content but this clarifies gradually as the thoughts approach consciousness. In meditation these thoughts will not develop further because you will return to the mantra - your breath - as soon as you realise your awareness is straying from it. However, reflecting later on the experiences that we have during meditation, leads to the question whether this process is what we're doing all the time in our everyday lives. That is, whether the content of every thought that reaches our full consciousness is first grasped in its entirety, fully

⁵⁴ Quoted from *buddhanet*, the online Buddhist Education and Information Network. See <http://www.buddhanet.net/abhidh05.htm>.

understood and only then converted unconsciously into words.

Meditation practice allows us to observe these subtle cognitive processes in ways not experienced in our ordinary everyday lives. My suspicion is that before this conversion into words we have an instantaneous understanding of each thought - more like a sudden grasp of its meaning in one moment. The implication here is that the content of every thought we have is first understood by us in a moment, only a split-second before it is converted into words. By virtue of this conversion into a shared language the thought then becomes amenable to manipulation in our conscious minds. This almost instantaneous understanding of every thought is momentary of course and largely unconscious. However, the thought is delivered to our consciousness fully developed in one packet of understanding.

I suggest this is another example of an elemental pattern seen in the physical world, as described in the year 1901 by the German theoretical physicist Max Planck. There may be a parallel between our thoughts arriving fully-formed in our consciousness and Planck's assertions. He was researching the sub-atomic world of electromagnetic radiation and suggested that energy is absorbed or released in the minute, discrete packets he called 'energy elements' or quanta.⁵⁵ In much the same way, perhaps the thoughts that reach our full consciousness themselves manifest in our awareness as discrete packets of understanding in the split-seconds before we unconsciously convert them into words?

⁵⁵ Planck M (1901). Ueber das Gesetz der Energieverteilung im Normalspectrum (On the Law of Distribution of Energy in the Normal Spectrum). *Annalen der Physik*. 309 (3): 553.

This same elemental pattern is seen in the idea of an intermittent sound and a continuous sound. Imagine an intermittent beep note, let's say it sounds for one second and is then silent for one second and then repeats, on and off for periods of one second. If the frequency of the note is gradually speeded-up, through several beeps per second with corresponding shortened periods of silence in-between, the note will gradually cease to be perceived as intermittent and what we will hear will be a continuous note. Thus, what now appears to be one continuous stream remains in fact a number of discrete packets of sound; the note is simply being played more frequently than before. That which we know to be numerous separate intermittent packets of sound appears to be one continuous sound. This same elemental pattern can be seen in the cartoon stills idea mentioned in Chapter 2, where again we can identify the essence of duality as the archetypal elemental pattern.

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Exercise in Cosmic Thinking no.1

How to practise the Mindfulness of Breathing

The *Mindfulness of Breathing* involves a focus on the breath as it naturally flows in and out of the body, and this action is what we refer to here as the 'mantra'. This term is more usually applied to a word or sound that can be repeated to aid concentration in meditation, but there are many other types of mantras. These have been used in spiritual practice for millennia and can be any sound, word, phrase or visual stimulus that's used to focus attention. By directing your awareness to the process of breathing, your tendency to become distracted by thoughts unrelated to the breath is gradually reduced. Over time, with regular practice, you'll find your ability to retain your attention on

the breath improves considerably. And over the weeks and months, as your practice improves, you'll notice your concentration resting increasingly on the present moment of breathing. Through this development of mindfulness you are nurturing the states of meditative absorption known by the Sanskrit word 'dhyāna'. In these states of deep and receptive tranquillity you are most definitely not in a trance; in fact you are fully aware of your surroundings, your body and senses, but you've put them to one side and are not overwhelmed by their presence. You are not thinking; you are simply *being*.

In practising the *Mindfulness of Breathing*, each time you meditate you'll progress through four specific stages. It's a good idea for beginners to spend about five minutes on each stage, and to use an automatic meditation timer or have someone else ring a small bell or gong to mark the end of the five minutes. As you pass through the meditation, you'll notice that you are becoming progressively focused on a smaller and smaller area of awareness, which will be accompanied by an increasing intensity in the experience. The stages themselves are simple and easy to learn, and in each you should allow your breathing to take place naturally:

Stage 1: Sit in a position that is comfortable for you. Generally speaking this will mean your back will be vertical, though you can be seated on a chair, a meditation stool, a cushion or on the floor. (The full lotus position might be the most desirable pose but it takes years to master). In the first stage of this meditation you breathe in and out, and after the out-breath count 'one' silently to yourself. You then breathe in again, breathe out and count 'two'. You breathe in and out and count 'three', and so on up to ten or until the timer chimes. If you reach 'ten' before

hearing the timer you begin again at 'one'. If at any point you realise you are no longer focusing on the breath, simply turn your attention away from the thought that has hi-jacked you and return to counting the breath from 'one'.⁵⁶

Stage 2: In the second stage you take a more proactive role because you count 'one' *before* taking a breath. So, silently count 'one' and inhale, breathe out, count 'two' and take the second in-breath. Exhale, count 'three', take the third breath and so on again to ten, and then start again at 'one' until the timer chimes. During Stages 1 and 2 of the meditation your timer device will frequently sound whilst you're in the middle of the process of counting a particular number. When this happens, continue to finish counting the number and then gently move on to the next stage.

Stage 3: You no longer count the breaths in the third stage, but simply observe the breath as it is drawn in through your nostrils, down into your lungs and exhaled once again. Bring your attention to rest on the breath moment-by-moment as it passes through your airway. When the timer chimes you move on to stage 4.

Stage 4: The focus of your attention in this final stage will become even more narrowed. In this stage you concentrate

⁵⁶ And if you happen to experience an itch during meditation you should know that in the early days it's very difficult to ignore such a thing. Do not scratch yourself to relieve the itch but stroke your hand gently over the surface of the skin. This will generally be enough to relieve it, whereas full-on scratching is likely to inflame the tissue and lead to even more insistent itching. As your meditation practice deepens you may wish to simply ignore an itch. But beware, this is not for the faint-hearted! It's said the Buddha observed that anyone who wishes to know the experience of the ascetic need only attempt to sit completely still and unmoving for one hour. Ignoring an itch even for a minute or two can be exceedingly disruptive for anyone short of Zen Master status.

your awareness on the very subtle sensation made by the breath as it enters and leaves your nose, focusing specifically on the very tip of your nostrils. When the timer chimes, you have finished.

If you feel you need more assistance in developing this technique, most Buddhist Centres will happily teach the *Mindfulness of Breathing* for a voluntary donation or at no cost at all. There are also numerous websites that will demonstrate this approach to meditation.

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Exercise in Cosmic Thinking no.2

How to meditate on loving-kindness

The *Mettā Bhavana* is a practice taught within the Theravādan Buddhist tradition. Its aim is to extend feelings of loving kindness to all life-forms in the universe, accepting all sentient beings as they are, without judgement or limit. It's frequently taught alongside the *Mindfulness of Breathing* described above and the two approaches can be practised alternately on the same day, or on different occasions as you prefer. The *Mettā Bhavana* is not mindfulness-based but its practise in conjunction with the *Mindfulness of Breathing* is intended to help balance the personality.⁵⁷ The stages of this meditation aim to extend your positive feelings to include a gradually widening circle. It's sometimes referred to as 'the development of

⁵⁷ Yes, your personality - along with the rest of the universe - is already perfectly balanced, as described in the chapter on Absolute Perfection in *Mindfulness, Now and Zen*. But this is one of those many occasions when *Mindfulness, Now and Zen* and *Mindfulness, Here and Now* ask the reader to tolerate a little illogicality in order to make a point.

loving-kindness' because its name is derived from the Pali words *mettā*, meaning love or kindness, and *Bhavana*, meaning development or cultivation.

As with the *Mindfulness of Breathing*, the *Mettā Bhavana* follows a small number of stages. Again, it's a good idea for beginners to spend about five minutes on each stage, and for someone else or an automatic meditation timer to ring a small bell or gong to mark the end of the five minutes.

Stage 1: As with the seated pose described already, sit in a position that is comfortable for you. Starting with a focus on developing positive emotions about yourself, give yourself permission to feel warm about how you are and who you are. Consider the repeated thought 'May I be well; may I be happy'. Imagine that Ultimate Reality, the universe in its entirety, totally and unconditionally accepts you as you are, right now, warts and all.

Stage 2: Building on the same emotion, in the second stage focus your mind on a close friend and think what it is about them that you like. Again repeat to yourself the words 'May they be well; may they be happy'.

Stage 3: The third stage focuses on someone you have no strong feelings for or against - perhaps the person who sells you petrol at your local garage, a shopkeeper or someone you see around at work but have little contact with. As with the first two stages, they are again taken into your growing radiation of positive thoughts - 'May they be well; may they be happy'.

Stage 4: This penultimate stage is all about someone you actively feel negative towards. This could be only a mild dislike or you might think of them as an enemy. Once again

you call up positive feelings and seek to accept them as they are. Picture your positive emotions radiating out to them.

Stage 5: Now consider all the people you have pictured in your thoughts so far. Imagine all four of them together in front of you and recall the positive feelings you felt towards them. Hold these feelings in your mind and picture them spreading like energy waves ever outwards to include everyone in your building, your local neighbourhood, your town, your country, the entire world and universe. Think of all the people, all the animals, insects, plants, all life-forms and beings everywhere: 'May they be well; may they be happy'. When the timer chimes, you have finished.

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Exercise in Cosmic Thinking no.3

The Mindfulness of infinity

In a moment you'll need to close your eyes for a few seconds. As you read this, imagine a globe floating alone in outer space, like a simple round rubber ball. It has numerous spikes pointing outwards from its centre and these spikes go on and on, outwards, forever. Hold that image in your mind's eye. Now imagine the same ball with the spikes still pointing outwards forever, but now they're also pointing inwards and going on and on, inwards towards the centre of the ball but never meeting, forever. Briefly, close your eyes.

Do it now!

At the moment you experienced the outwards-inwards movement, if you're lucky you might have grasped the slightly startling sense of the ball turning inside-out and almost becoming a tube. A tube that goes on forever.

And that's not all: If you pictured those spikes as being stationary, you're right. They're not in any way *travelling* inwards and outwards forever. In fact, they're not moving at all. Because they're infinite they're already there. Nothing is moving. Nothing is changing. In a sense that's what Ultimate Reality is, it's there already *in the present moment*. It's timeless. We can see a similar elemental pattern in the Hindu belief that we are all reincarnated repeatedly throughout endless world cycles. If this is so, then each of us has already been incarnated as every other person and every living being on countless occasions. In other words, anything that is infinite *has already happened*. It's not an ongoing thing. A simple example: dividing 10 by 3 we get 3.3333 recurring. Our rootedness in time leads us to making the mistake of thinking that the recurring numbers are somehow 'still happening', as if they are continually being added at the end of a very long line of numbers that is by now somewhere near the edge of the universe. This error in our thinking lies in the cognitive mechanisms we use to examine concepts. That is, we understand 'infinity' to lie within our concept of time, whereas infinity, of course, is wholly outside of time. So within infinity all possible recurring numbers have already happened.

Just one more thing, the spikes outwards/spikes inwards analogy is another example of the elemental pattern expressed in the six words at the start of *Mindfulness, Now and Zen*:

BIGBANGEXPANSIONCONTRACTIONGNABGIB.

Have a look at Chapter 12, on Unhappening, for more on this.

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Exercise in Cosmic Thinking no.4

The Mindfulness of the Present Moment

The *Dichotomy Paradox*, which derives from the Greek philosopher Zeno (circa 490-430 BCE) holds that all motion is impossible because whatever is in motion between two fixed points must arrive at the half-way stage before it reaches its destination. Picture someone running to catch a bus that is waiting at a bus stop. Before they can get to the bus stop, they must run halfway there. But before they can get halfway there, they must get a quarter of the way there. And before going a quarter way, they must travel one-eighth, and so on. This splitting of the distance to travel continues breaking into half indefinitely. The result of this is that the individual concerned cannot ever move from their starting point since any distance whatsoever demands that they first complete half of it. Viewed in this way, the race to catch the bus is seen to consist of an infinite number of tasks and because of this it can never be completed or even begun. On this basis all motion can be seen to be illusory, and it is this conclusion that is paradoxical.

Apart from the *Dichotomy Paradox*, Zeno proposed several others to illustrate the illusory nature of our everyday sense of multiplicity and change through the passage of time. Whilst a number of arguments have been put forward in refutation of these ideas, they remain useful tools for us here because they enable us to think a little more imaginatively than our usual everyday sense of rationality and common sense might allow.

And an imaginative use of thought is certainly valuable when considering how paradox might demonstrate the nature of *the present moment*. In an extension of Zeno's ideas, though remaining within the same elemental pattern,

I suggest we might imagine the fixed length of time between the present moment now and the end of the universe, which will also be the end of time of course. For the sake of argument let's imagine the universe might end in around 50 billion years. Let's also imagine, for the sake of argument, that before we reach the 50 billion-year point, we (or whatever remains of the universe) will have to reach the 25 billion-year point. But clearly, before we reach the 25 billion-year point we'll have to reach the 12½ billion-year point. No problem so far. However, before we reach the 12½ billion-year point we'll have to reach the halfway point between now and then, and before we reach *that* point, we'll have to reach the mid-point between now and ... well, you get the idea. The nearer you get to 'now' the shorter the moments of time that must be halved become. Indeed, so short are they that the smallest possible moment of time must actually be infinitely small.

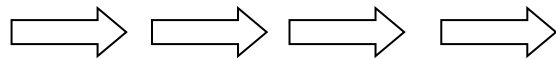
Science tells us that the shortest theoretical period of time is the Planck length. This is the shortest time measurement that is possible and relates to the amount of time it takes for a photon travelling at the speed of light to cover the Planck length, that is, 0.5×10^{-43} seconds. However, this little scenario about the end of the universe clearly shows us that far from being finite (as the Planck length would be) the shortest possible length of time must shrink neverendingly. And as we saw earlier, anything that is infinite has already happened so we're brought face-to-face here with the transcendental nature of infinity: if it has already happened it is absolute but if it is unending, it is infinite. You can be excused here for wondering if time means anything at all.

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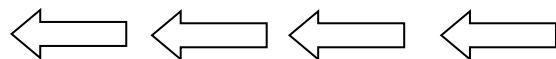
Exercise in Cosmic Thinking no.5

The Mindfulness of the Present Moment (again)

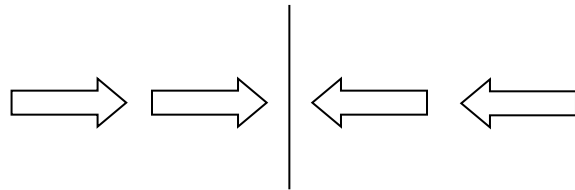
The concept of Unhappening suggests that time may be running both forwards and backwards *at the same time*. It's a tricky business imagining how time could be at once running forwards, like this ...



... and at the same time running backwards, like this ...



So perhaps it's easier to think of time as running in both directions together, the present moment being the point at which they meet, like this ...



present moment

To borrow a line from the Sandōkai, a poem by 8th century Zen master Sekito, *The absolute works together with the relative like two arrows meeting in mid-air*. For more on the experience of the present moment have a look at *Mindfulness, Now and Zen*, Chapter 11, on the Big Bang, or Chapter 12, Unhappening.

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Exercise in Cosmic Thinking no.6

The Mindfulness of no time

It could be argued that if time is to have any meaning at all then *something* must change. It follows then that if nothing is there to change surely there can be no time? Picture the universe in its entirety, with time passing as it does. Now, imagine all the stars, galaxies, planets, black holes, comets and so on being removed completely - all except the Sun, Earth and the Moon. In this imaginary scenario, let's imagine the Earth will still be spinning on its axis, the Moon will still be orbiting around the Earth, and time will still be passing as it does. Now remove the Sun and Moon and leave the Earth there on its own; time is still passing. Now, remove the Earth. There is nothing whatsoever in the universe. Is time still passing?

At this point you might well conclude that time must be dependent on matter for its being, and indeed this is the case for together they constitute spacetime. And all matter, which began in the Big Bang as pure energy, may at the end of the universe, in the depths of a super massive Black Hole perhaps, ultimately revert back to pure energy. This will then be all there is: no planets, no stars, no time, just one thing - energy. If this energy remains unchanged it will be timeless. But this timelessness is not simply an absence of time: it is wholly other than both time and no-time. It is beyond duality.

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Exercise in Cosmic Thinking no.7

The Mindfulness of no you

If you travel at the speed of light and hold a mirror up to your face, do you see yourself? Here's a clue: Imagine you're sitting on the top of a train carriage, steaming through the countryside. In your hand you hold a gun, which you point forwards in the direction in which the train is headed. You fire the gun. If the train is travelling at 100 mph and the bullet from the gun will normally travel at 200 mph, then the actual speed of the bullet will be the combined speeds. That is, it will leave the barrel of the gun at 300 mph relative to an unmoving observer standing by the side of the track. And so it is with everything. Everything except light, that is. Light has the rather special quality of always travelling at a fixed speed - the speed of light - so there is no combination of speeds. Hold a mirror to your face whilst you travel at the speed of light and the light will not leave your face, so you will not see your reflection.

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Exercise in Cosmic Thinking no.8

The Mindfulness of non-duality: The curved straight line

Mindfulness, Now and Zen began with a brief phrase: 'A History of the World in Six Words':

BIGBANGEXPANSIONCONTRACTIONGNABGIBBI
GBANGEXPANSIONCONTRACTIONGNABGIBBIGB
ANGEXPANSIONCONTRACTIONGNABGIBBIGBAN
GEXPANSIONCONTRACTIONGNABGIBBIGBANGE
XPANSIONCONTRACTIONGNABGIBBIGBANGEXP
ANSION and so on ...

The question is, what has this got to do with duality and non-duality? The phrase above is an example of an elemental pattern that is also seen in the spiked ball mentioned in Exercise in Cosmic Thinking no.3. The spikes that travel outwards forever and the spikes that travel inwards forever become one single transcendental unity, beyond the concepts of both outward and inward. This might give you a sense of the unity behind all apparent duality. An alternative parallel for non-duality is found in the way that gravity curves space, so that a truly straight line will always be curved because the space within which it exists is itself curved. In other words, despite the fact that we can imagine it, there is no such thing as a straight line.

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Exercise in Cosmic Thinking no.9

The Re-Mindfulness of Eating

In any meal no doubt it would be ideal if we could be mindful of every single mouthful of food we consume from the moment it first enters our mouth. But this is so very difficult: it's hard to remember that we even want to be mindful when we're eating because we're hungry, chatting or just thinking about something else. The result is that we will frequently be some way into a meal before we recall our wish to be mindful. So, rather than hoping to remember mindfulness from the very first mouthful of food, let the first mouthful become a trigger to remind you of your wish to be mindful. You will now focus not on the first but on the second mouthful of food. Allow your first taste of food to switch on the unconscious process that reminds you about mindfulness. This simple trigger will then enable the need for mindfulness to reach your consciousness in time for the second bite. Focus your awareness on the food in

your mouth as it moves around when you chew this second mouthful. And then simply eat.

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Exercise in Cosmic Thinking no.10

The Mindfulness of Standing Still

Stand about three feet away from a solid wall. Face the wall and put one hand up an inch or two from your face, flat palm towards you. Close your eyes and gradually bring your hand nearer to your face until it gently touches your nose. Now, keeping your eyes closed and your hand in front of your face, slowly take small paces towards the wall. At some point the back of your hand will gently touch the wall. Drop your hand to your side but remain standing with your eyes closed. What you are now experiencing is a raised mindfulness. This is the mindfulness of standing still.

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Exercise in Cosmic Thinking no.11

The Mindfulness of Dog Walking

Walking with a dog in a large field provides an opportunity to throw a ball and then very closely watch where the ball lands, say 50 or 60 metres away. It's likely your dog has by now retrieved the ball itself, but keep an eye on exactly where it landed and walk towards that spot on the ground. There's a sense of mindfulness about this focusing of attention on a limited amount of data - in this case, the place on the ground where the ball landed. As you walk it's very difficult to keep your eyes fixed on the point where the ball landed and not to occasionally check the ground to make sure that where you are about to step is safe. So, be aware

of your desire to occasionally check the ground where you're about to step. Whilst there is a sense of anxiety to this there is also a mindfulness. (Mindfulness of Breathing meditation is similar but without the anxieties of walking into a hole, so you can relax. You don't feel the need to look where you're going because you are not going anywhere).

.....

Exercise in Cosmic Thinking no.12

Opening up a receptive mind

In this book it has been suggested that a receptive mind, open to hearing what is not expected and maybe not even desired, is a fundamental requirement in the search for Ultimate Reality. This means a strong belief in the dogma associated with any specific religion or for that matter, scientific theory, theistic or atheistic philosophy, could be an obstacle to seeing whatever reality lies behind everything. It's with this in mind that I offer the little tale below.

If you're not really open to hearing an answer, then you're not really asking a question.

I recently watched an interview with Stephen Fry – you can find it here:

<https://www.youtube.com/watch?v=EVSZrnXRO3o>.

The rather pithy title of the piece seems to be 'God is an utter maniac'. Mr Fry poses his argument in far more elegant language than I'm using here but in essence he asks, 'How can there be a God of Love when there is such a horribly grotesque thing as bone cancer in children?'. This, the problem of evil, is an old question that just about

everyone must have asked themselves in some form at one time or another. It's also a very powerful point.

However, rather than working his way from a neutral position and then reaching the conclusion that there is no God of Love, it seems to me that Mr Fry is from the offset basing his argument on the premise that there *can be* no God of Love. In making his point Mr Fry argues very eruditely and with his usual persuasive skills as a very articulate orator. But notice how, as he elaborates his argument, it always develops from within the implicit but unacknowledged premise that there is no God of Love. This is not a neutral starting point.

My answer to the question he asks is that it is not a real question at all: it is actually a statement of belief. The belief is that there is no God of Love and the evidence for this is that children can suffer from bone cancer. So the initial premise of the statement is that there is no God of Love. My suggestion is to turn this around and rephrase it as an equally biased question. That is, to start from the premise that there *is* a God of Love, so the question is now, 'Despite the existence of a God of Love, how can it be that children suffer from such a horribly grotesque thing as bone cancer?'

Whilst my suggested premise is not neutral, it is no less unfounded than Mr Fry's unacknowledged premise that there can be no God of Love. It's also a latent explanation and, as is the case with all latent explanations, need not necessarily be correct. I'm simply floating the possibility that in turning the point around and beginning from a very different position, our thinking may take a very different route. Despite our starting premise remaining biased, my suspicion is that instead of the enquiry being founded on

anger and fixed conclusions, when we change our initial premise we open out our acceptance to whatever the answer may be. In doing so we no longer assume in advance the parameters or limitations of the answer but become receptive to whatever is. The value of this receptivity is that we make no *a priori* assumptions about the nature of Ultimate Reality. However, if we must begin with a value-laden premise then let's start with some assumptions that we might not ordinarily hold because this at least allows us a more receptive understanding. To summarise, receptivity is:

*... about not clinging onto our own ideas of what should be. It's about a willingness to suspend disbelief. The receptive mind is one that is, at least on the surface, emptied of expectation, ego and the limitations of what can be. Instead it's ready to experience whatever is. Receptivity of mind is a state of readiness, not a state of achievement.*⁵⁸

An old Zen tale illustrates the value of this position:

Nan-in, a Japanese (Zen) master during the Meiji era (1868-1912), received a university professor who came to enquire about Zen. Nan-in served tea. He poured his visitor's cup full, and then kept on pouring. The professor watched the overflow until he no longer could restrain himself. "It is overfull. No more will go in!"

*"Like this cup," Nan-in said, "you are full of your own opinions and speculations. How can I show you Zen unless you first empty the cup?"*⁵⁹

⁵⁸ Barr W (2017) *op cit.*, p.238

⁵⁹ Reys, P (1971) *Zen Flesh, Zen Bones*. Penguin Books Ltd., Harmondsworth, Middlesex, England, p.17.

So, my answer to Stephen Fry's apparently entirely reasonable question is to step back, to put aside the anger, make the completely unfounded assumption that there *is* a God of Love, and then to pose the question 'How can this be true?'. The onus is now on the questioner to find the answer.

CHAPTER 6

In the Beginning ...

Summary

In this chapter I briefly outline the origins of both *Mindfulness, Now and Zen* and *Mindfulness, Here and Now* and describe an experience I had nearly fifty years ago, when everything in the entirety of the universe suddenly and without warning became stunningly clear to me in an explosive burst of intellectual, emotional and spiritual illumination.



**Figure 3. Wheels Within Wheels I
(The Flammarion Engraving)**

This most extraordinary of extraordinary experiences meant I felt something like the chap in Figure 3 might have felt. I've called the image 'Wheels Within Wheels 1' based on a passage from the Bible that relates a religious vision (Ezekiel 1:16). The '1' suggests there are other ways to picture this experience, as you'll see in the next few pages.

Starting from scratch

Mindfulness, Now and Zen: The Sceptics Guide to Ultimate Reality was my first book on this subject, and the book you hold, *Mindfulness, Here and Now: How to Wake Up*, is my second and it builds on the first. In the first, I looked at what I think is really going on behind Life, the Universe and Everything. The book explored what we, the human race, know for certain and what we *can* know about the nature of Ultimate Reality – this being whatever it is that's beyond and behind our personal whims, beliefs, dreams, hopes, fears and wishful thinking. Many would call this God but many would not, and in the end the term 'Ultimate Reality' seems to cover everything, whatever that turns out to be.

In the present book I've framed my description of our attempts to answer the most basic questions of life as mankind's search for a Theory of Everything. Into this I've incorporated elemental patterns and latent explanations. The approach that seems most appropriate to me is one that makes no prior assumptions about the characteristics and limitations of Ultimate Reality. On this basis the description given need not involve intelligent design, a creator or the chosen few who have been saved for an eternal life in heaven. Nor does it require you to hold a specific set of beliefs or to have faith in anything you can't think through and experience for yourself. It rejects neither science nor religion but bounces off them, using them as a platform from which to build a more imaginative vision beyond the

limitations of the scientific method of inquiry. The ideas described here are broad enough to encompass everything there is. They nevertheless have no need for the man-made concepts of time, cause and effect, and many of the religious creation myths, stories and legends that have become familiar to us. These can frequently be seen to be no more than examples of the elemental patterns we use to categorise the world and our experiences of it. Nevertheless, the account offered here does recognise the value of myth as a device through which greater truths may be illustrated, though the role of myth here is purely metaphorical. In this book, scientific discoveries, the teachings of Christianity and Buddhism, and many myths and legends have been used as a fundamental springboard to our understanding of an Ultimate Reality that is inherently indescribable.

The ideas in my writings on this subject have originated in personal experience. However, to illustrate the points being made I have often quoted the work of others - some have been well-known religious leaders, some philosophers, and some, ordinary people. What is proposed is that the reality we so fondly assume to be *it*, can be thought of as some sort of illusion or at least a rather pale reflection of what's really going on. This is not necessarily saying the world as we know it doesn't exist at all, just that our conventional, everyday, understanding of reality is not the whole story. Whilst our five senses can be seen to provide only very limited, misleading and sometimes quite erroneous information about the world, the really significant illusions arise from the way we think, and we think within the confines of duality.

Both my books on this subject have dealt with questions that many feel neither religion nor science have managed to

adequately explain: the really big questions about life and consciousness, why there is a universe and why there is anything at all. Many of the ideas mentioned will have been familiar to you because they draw on widely known elements of philosophy, religion and science. However, the books have often considered these from a novel perspective, quite different to that of an orthodox understanding. The roots of this novel approach lie in my personal experience of Ultimate Reality, which I've attempted to summarise in the following sections.

.....

Seeing the light

Let me begin by telling you about the experience that has defined my entire adult life and lies behind my writing both books. For me, this experience was a one-off - it had never happened to me before and has never happened to me since.

On an ordinary evening fifty years ago, I was 21 and quietly smoking pot in my bedsitter with two friends, a popular and fairly regular pastime of mine in those days. Quite unexpectedly - in fact completely out of the blue - I had a remarkable encounter with Ultimate Reality (please note the capital letters). It seemed to me as if all my understanding of the world suddenly and without warning shattered into a million pieces, exploding in my head as my consciousness almost turned inside out. In an instant I understood everything in the entire universe - quite an experience for someone who had hitherto given little serious thought to religion or the nature of reality.

It's also quite a claim to make, and I should point out that it's far from common to experience this sort of thing when pot is smoked. In fact, it's probably extremely uncommon

and, as I say, it was the only time it's happened to me. But nevertheless, it's what happened and it was psychologically traumatic - in a wonderful and distinctly good way. It would be hard to overstate the significance of this experience for me at the time and also in later years. At the very least it was of cosmic proportions, despite the fact that it may have lasted only minutes. Subsequently it has taken some time to be able to assimilate it to the point where I could put anything into words. However, in the following year - 1974 - I briefly wrote some notes on what happened that evening, and excerpts from these are given below along with my more recent reflections on the whole thing.

To set the scene, imagine three young men - all friends and all students - rather high and peacefully lying around one evening listening to music in a darkened bedsitter lit only by a flickering candle. I'm lying on the bed with my eyes shut and my friends are similarly disposed around the room. Here's what I wrote at the time:

I followed my thoughts through and after what may have been 30 minutes I felt as if I were in a tunnel ... The tunnel was made up of rings of different colours and the more I thought, the faster I went through it. It was very much like travelling through space ... I became very afraid of whatever was happening to me and this fear seemed to be coming from the left side of the tunnel - on the right side was (all I can say is) 'goodness'. I felt that I was in the middle of two opposing forces, both taking turns (at the rate of what seemed like 10 a second) to 'grab' me. A record with a long loud and fast electric guitar solo was playing and I followed the path of the music ... I was constantly having to make 'snap-second' decisions (moral ones I think). My thoughts were so strong, confused and fast that I was afraid that I would never be able to think 'normally' again. I could

not reflect on any thought ... It was without doubt, the worst experience I can recall of my whole life ...

Looking back on this experience, it has always seemed to me like being torn through hell at a terrifying rate. I could in no way resolve my thoughts into any sort of coherence, nor had I the time to reflect on my 'answers' to these moral questions. I was entirely trapped within the duality of the tunnel and had no opportunity at all to escape from the terror of this (Figure 4).

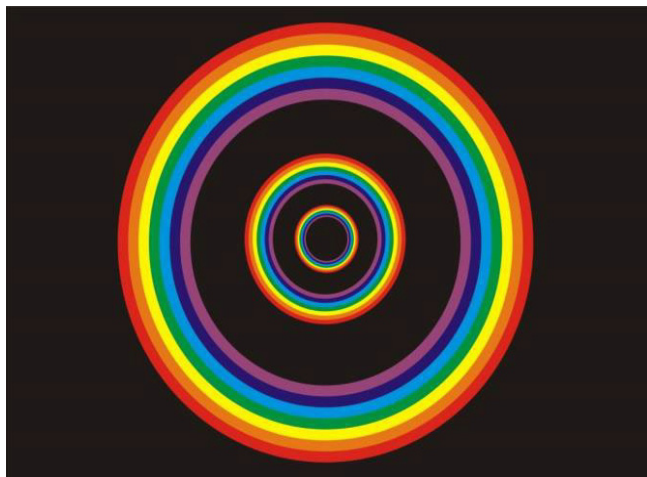


Figure 4. Wheels Within Wheels II

The Tunnel Experience

Some elements of this experience - like my sense of being drawn at speed through a tunnel that was comprised of rainbow-coloured rings - are not uncommon in reports of mystical experience and mythologies across the world. Indeed, the rainbow and the concept of a rainbow bridge have long been associated with connecting human and Godlike essences. Cultures as diverse as those based on the

Abrahamic, Norse, Japanese, Navajo and Māori traditions have all used the rainbow in their mythology, and one might question why this should be. In my own case the sense of hurtling along the rainbow tunnel and finally being blasted like a bullet from the grasp of my ego remains imprinted on my memory.⁶⁰ There are many metaphors for this experience which, by the way, can all be construed as examples of an elemental pattern. In the end the result was freedom from the ego and from the sense of self, and so freedom from separation and individuality: ultimately this was freedom from duality.

Things get considerably better

Despite the hellishness of my experience in the tunnel, things abruptly and without warning took a turn for the better ...

Suddenly - for no apparent reason - at the end of the tunnel I saw a red circle and I 'knew' it was the door to my subconscious... (I had the) sensation of being pulled through.

So, the questioning abruptly stopped and I floated out of the tunnel into a tranquil and very quiet sense of being in outer space. A hazy and indistinct red spherical glow grew in front of me and I gently floated into it.

I ... came through an arch into a vast 'arena' - on all sides were people cheering and clapping. I felt "Is God coming into the arena - where is He?" and then the truth dawned on me - they were all looking at me. I had won. I had found my soul. The truth. I was God!

⁶⁰ Barr W (2017) *op cit.*, p.271.

Clearly, this is where a profoundly strange experience became even stranger (and maybe I should make it clear at this point that it's not just me - we're all God).

No words can express the perfect ecstasy of this moment ... I understood everything I had gone through. I saw my whole life totally objectively. I saw all in front of me, every question and every answer which can ever be asked. I understood all philosophy and anything I wanted to. The words of the record (which was Bob Dylan) made total sense. I felt pure misery at the thought of all the misery on earth. I knew I was dead. Every word my two friends said made complete sense. I knew the whole cosmos was perfect - always. I knew the distinction between knowledge and belief. I had seen the light. I laughed wildly at my own stupidity and blindness on seeing that the truth is perfectly simple ... and perfectly complex ...

I felt an enormous sense of having arrived home in this universal Cosmic Consciousness.

I knew I could stay there - in heaven - forever, or come back to earth ... I compared myself to Christ - I fell very short of perfection. I must go back to earth until I deserve eternal life. I began to fall - like the fall of Milton's angels - I became bloated with my own ego.

And as I fell asleep that night, I forgot almost everything of the vastness I had been shown during the experience. When I awoke the next morning, I was back in my usual personality - the ego that continues to define me as an individual. However, I retained some exceptionally strong impressions that have stayed with me ever since. These include the sense that the universe is founded on unending and everlasting love and that it holds at its centre an

unconditional acceptance of each of us. In fact, at the time of the experience I felt I was passing through Christ - or him through me. In retrospect I think it was this physical experience, akin to a beautiful wave of energy slowly working its way through every muscle of the body, that was accompanied by the vivid sensation of being reborn.⁶¹

And I'm left with the sense that despite some very convincing evidence to the contrary, our everyday life is absolutely perfect as it is - in fact, we are already in paradise even if we don't know it. This underlying perfection is a metaphor for Ultimate Reality. We see the illusions of difference, division and differentiation in our everyday lives and conclude that they are what make up the universe. The reality is that the universe is simply a unity as it is: it is us who identify different actions, objects and events and us who distinguish the opposing elements that I have referred to as duality.⁶² The universe itself is neither good nor bad. It neither exists nor does it not exist. It is beyond simplicity⁶³ and beyond undifferentiated one-ness.⁶⁴

Mindfulness, Here and Now has described how the archetypal elemental pattern of duality itself points the way to unity. One way to conceive of this is that it's as if reality follows an infinitely self-similar pattern, a single entity where every part is symbolically representative of every other part.⁶⁵

⁶¹ Barr (2017) *op cit*, p.194.

⁶² *ibid*, pp.108ff.

⁶³ *ibid*, p.137.

⁶⁴ *ibid*, p.141ff.

⁶⁵ *ibid*, pp.200-1.

But maybe it really *was* all in my head!

So, what am I to make of this experience now? On the one hand, well, lucky old me! How nice to be personally selected by the universe to be one of the few to experience knowledge of everything, all at once, in one vast explosion of consciousness.

But it's not quite like that of course. The other side of this is that much as one may wish to impart to the world even the shreds of the fundamental Reality one can recall seeing, people doing so are rarely welcomed by others. In fact, nowadays they are less likely to be seen as saints or sages than they are as self-obsessed or psychotic. And in any case, I was - and remain - very far from saint or sage, so maybe it's not about that.

And much as I'd like to say I worked it all out for myself, I didn't. The whole experience was accompanied by an enormous sense of being led, my impression being that the fundamental truth of the universe was being revealed to me rather than this being my own discovery.

Quite reasonably, I hear you say, this is all very well but it was clearly all in my head - an illusion brought on by dabbling in recreational drugs. I should, however, point out that my many enthusiastic attempts subsequent to the initial cosmic experience have always failed to result in anything approaching the first. And whilst the validity of drug use in stimulating religious experience is contentious, it's far more debateable than you might think.⁶⁶

⁶⁶ See Barr (2017), *op cit*, pp.266ff.

There's also the point that regardless of the apparent cause of an intra-psychic event such as this, the essential content remains untouched. For me then - and still for me now - this apparently drug-induced experience was absolutely real, far, far more real than my everyday life. In fact, at the time the sense of Reality, with a capital 'R', positively screamed itself at me. There could be no doubting the truth of what I was seeing. So why, you may well ask, have I not spent the intervening years shouting my message from the rooftops? Perhaps cowardice is one answer, it being rather embarrassing for a proudly rational-thinking near-atheist to have a full-on religious experience. On top of this I'm aware that the views of religious proselytisers are much more likely to be dismissed if they make a fuss about what they have experienced, as if they have been chosen by God because they are somehow special. There is also the surprising realisation over the weeks and months subsequent to the experience that there was no way I could communicate it without sounding somehow unhinged, self-obsessed, or completely foolish. Unsurprisingly, words just don't seem to work when they're given the task of describing that which is indescribable.

Anything we can put into words is illusory

So it seems I must live with the knowledge that I am forever unable to describe what was the most tremendous experience of my life. I should also point out that you, dear reader, are to be excused from believing it has any reality outside of my own drug-addled imagination. It happened fifty years ago. Over time I've no doubt manipulated my memory of the experience, turning it over in my mind to get it to fit into some sort of coherent picture that I can understand and communicate within my everyday existence. In the months and years since this experience I have gradually come across writings that seemed to be

describing something similar to my own encounter with Ultimate Reality. Prior to the experience my understanding of philosophy, Christianity, Buddhism and other religious and secular literature on the nature of reality was distinctly limited, but over the years as I read more, many ideas have resonated strongly with what I experienced on that evening.

And as I have read, I have made notes and ultimately wrote these up into the book *Mindfulness, Now and Zen*. The book described reality - in fact, the Ultimate Reality, always with capitals - and rather grandly claimed to describe what's really going on behind our very limited understanding of the world. There are chapters in the book that enlarge on each aspect of the experience I had on that evening in a darkened bed-sitter. If you've read the book you should have some sense of the notion of Ultimate Reality that the book describes, even if it seems vague, foolish, or frankly ludicrous to you. Although the personal report you have read here is couched in religious terminology, this book attempts to move away from traditional Christian speech because words like 'religious experience' and 'God' are apt to turn many people off. Although they're a bit New Age for some, more secular terms like 'Cosmic Consciousness' and 'Ultimate Reality' might hopefully be more tolerable to the 21st century free-thinking mind. But in the end, it's all the same; it's an attempt to get at what's really going on behind the world we all know.

But what is this world?

What's really going on?

In attempting to make sense of the immensity of my experience that night, the elements that have stuck most persistently in my mind - a tiny fraction of the whole experience - have more-or-less coalesced into a handful of

very big ideas, most of which have been discussed in this book. I've mentioned the tremendously insistent sense of Reality that accompanied the experience, but the heart-melting awareness of love, of the totally unconditional acceptance conveyed to me by the universe, was another. This was accompanied by an intellectual illumination of stunning clarity, much like flicking on a gigantic light switch to instantaneously floodlight a vast landscape of darkness. The absolute perfection of all this - how my understanding of the entire world seemed to simply fold causelessly into itself and into nothingness - was itself beautiful beyond description. Six hundred years ago Zen Master Bassui Tokusho wrote to a disciple who was dying:

*What is the essence of this mind? Think only of this. You will need no more. Covet nothing. Your end which is endless is as a snowflake dissolving in the pure air.*⁶⁷

This whole idea of a nothingness beyond nothing is something I find impossible to describe in words. In *Mindfulness, Now and Zen* I referred to it as being transcendental, beyond duality, or rather what lies outside the cognitive set that we all share and that means we can only think within the parameters of duality. It is a unity beyond unity, something conveyed best perhaps by the visual image of the taijitu symbol of yin and yang (Figure 5).

And whilst the 'big ideas' of my experience are difficult to describe and were each given entire chapters in *Mindfulness, Now and Zen*, I'm still left with the need to make sense of the experience in my everyday reality. In that

⁶⁷ A widely quoted saying, cited here from the website:
<http://www.osho.com/shop/ShopDetailPage.cfm?ItemId=2839>

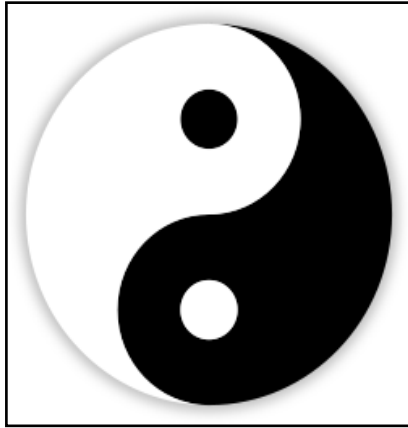


Figure 5. The Taijitu symbol

book I made the point that we frequently encounter varying explanations of 'what it's all about', be they religious or secular, scientific or mystical. My suggestion is that in our quest for an understanding of this, **whatever cannot be shown to be absolutely impossible, must be accepted as being absolutely possible.** So this must of course include every latent explanation described in Chapter 2, along with any others you can think of yourself.

And this leads me on to consider the implications of this for the experience I had of Cosmic Consciousness. The big question for me is, was it real? No doubt there are many psychological explanations for religious experience of the sort I've described, but what I saw screamed with Reality. And was it absolutely impossible? Is it absolutely impossible that everything in the universe - every atom, thought, object and action - seamlessly and exactly fits with everything else like one vast cosmic jigsaw puzzle? Is it absolutely impossible that we live within a constant state of perfection, or that the way we think - within a structure that

pre-supposes all sorts of set, dualistic, parameters - is not the only way to conceive of reality? I think not and have developed these ideas more thoroughly in both *Mindfulness, Now and Zen* and *Mindfulness, Here and Now*.

Summary of this chapter

Here I have described a mind-blowingly wonderful experience I had 50 years ago, when everything in the entirety of the universe suddenly and without warning became stunningly clear to me in an explosive burst of intellectual, emotional and spiritual illumination. It was this intensely personal experience of Ultimate Reality that finally led me to write both *Mindfulness, Now and Zen* and *Mindfulness, Here and Now*.

CHAPTER 7

How to Wake Up

The Story So Far

This book has described a novel approach to finding a Theory of Everything. In these pages it's been claimed that one single thread of reasoning, here called unity, can provide a coherent theoretical understanding of the entire universe. This includes every aspect of existence and human experience at every moment, from the beginning to the end of time (and beyond). Where this unity came from and where it's going have been shown to be meaningless questions in the light of duality and timelessness. It's been suggested that we think along routes laid down by numerous elemental patterns that provide a virtual network of inter-connected ideas. These, the book states, lie behind everything, all that is tangible like trees, cars and planets, as well as the more intangible elements of life like metaphor and symbolism. And behind each of these elemental patterns lies duality - one short step away from unity.

Whilst the idea of a cosmic unity may have seemed a far cry from the Theory of Everything envisaged by most physicists, there are signs of change. The traditional approach to the development of an understanding of the universe has been through a process of reductionism that involves disassembling the objects of enquiry into smaller and smaller parts. Arguably this approach ignores the wider picture, but recently the fact that the miniscule parts that make up the universe might function together as one vast single unit has come under scientific scrutiny. For example,

professor of theoretical physics Heinrich Päs has noted that when we apply quantum mechanics to the entire cosmos:

*... we may see that everything there is, including such seemingly fundamental things as space and time, fragment out of a unified whole ... that the universe isn't fundamentally made of separate parts at all, but is instead a single, quantum object.*⁶⁸

I suggest that the single quantum object - this unity of all space and time, matter and energy - is part of an elemental pattern that branches back to the single transcendental unity described in this book.

The book holds that the world we experience is merely a reflection of reality and the things we see, feel, smell, touch and hear are only examples of what is ultimately real. The Hypothesis of Elemental Patterns proposes a virtual scaffolding upon which these examples hang and this has been offered in order to provide one way of visualising the process through which we construct meaning in our lives. Elemental patterns are extremely effective in generating hypotheses about what might be reality but as yet remains to be proven, and the book has looked at several of these latent explanations. Furthermore, all elemental patterns are themselves reliant upon one archetypal elemental pattern: that of duality, behind which lies unity, indescribable and sublime.

In a sense the thesis of the entire book, with its emphasis on the Ultimate Reality of a transcendental unity, can be seen to be a latent explanation itself: whilst it could be true it is

⁶⁸ Päs H (2023) Reality Reconstructed. *New Scientist*, 8th July, pp.30-2.

as yet unverifiable using the usual scientific approaches of systematic observation, measurement, experiment and the formulation, testing, and modification of hypotheses. To aid our understanding of these rather esoteric notions the book has considered a number of paradoxical scenarios and exercises in cosmic thinking. These various thought experiments are provided to help free-up our thinking and enable us to see beyond our individual ego.

The Cosmic Jigsaw

If you're thinking all this talk of everything fitting together perfectly is somewhat unlikely, or if the various speculations offered in the book about the true nature of reality are very far from your experience of the tangible, physical world, you're in good company. From the ancient Greeks through to philosophical schools that emerged in the 18th century and beyond, there has been debate around these issues. It's hard to argue that whatever we can see, hear, touch, taste or smell is not possessed of some fundamental reality. But cast your mind back to Chapter 2, where we discussed what happens when one of your five senses detects an object. In a split second an electrical and chemical impulse passes through your body to your brain. Whatever triggered the initial sensory experience, be it a worm, wasp or wallaby, has therefore been transformed from its tangible essence into a sort of digitised, electrical and chemical signal.

To 'know' what this message relates to, your brain uses stored conceptual information to condense it back and deliver meaningful content to you. Whatever stimulated your personal experience of the tangible, physical world in the first place has always passed through a virtual digitised stage before you know anything of its existence. Not only that but it has undoubtedly 'happened' before you became

aware of it: you only know it as it was, never as it is in the moment it happens.

Because of this you never actually experience anything that is not a reconstructed version of what is out there. In other words, whatever you believe to be reality is always entirely based on your conceptual understanding: the world you know is and has always been entirely constructed of concepts and ideas and nothing else.

He hath awakened from the dream of life

In this book I've tried to illustrate my belief that despite the fact that we can never directly experience the reality of the physical world, we can nevertheless have access to the deepest reality behind it all, to Ultimate Reality. When you sleep you dream and when you dream it almost always seems to have been eminently real at the time. It's only when you wake up that you realise it was all a dream, and you believe this because the sense of reality in your waking state is far stronger than in your dreaming state. Imagine then what it might be like to wake up from your everyday waking state to transcendental Unity, a vastly more realistic state of awareness again, one where Reality has a capital 'R', where the volume knob on the reality button has been turned up to 11 and where reality positively screams its presence at you. This is Cosmic Consciousness: the immediate, awesome, world-shattering internal explosion of awareness that comes with the personal encounter of uniting with, and awaking to, Ultimate Reality. Whether you arrived at this state through prayer, fasting, recreational drugs or meditation is not the point: what you will believe is the state of mind possessed of the greatest sense of reality.

Perhaps the bottom line is that we need to retain an open mind: if you can't absolutely rule something out then you

should absolutely rule it in. *Mindfulness, Now and Zen* considered this point, which it referred to as the receptive mind,⁶⁹ and argued that this at least closes no doors on what may be real. This position has been reinforced in *Mindfulness, Here and Now*, and though psychoactive substances like cannabis or DMT⁷⁰ might help with this attitude of openness, I argue not for the widespread adoption of recreational drugs but for mindfulness meditation.

When you're trapped - like we are - in a way of thinking that takes you round and round but never out into non-thinking, you need a simple and safe technique to allow you to retain waking awareness but to experience a non-thinking, non-reflective, single point of consciousness. Mindfulness meditation offers this. As *Mindfulness, Now and Zen* pointed out, in our search for Ultimate Reality maybe the most important thing we can do is to stop looking 'out there' and start by looking in the here and now because the Kingdom of Heaven is within. And, as Timothy Leary has observed, those who have spoken of this:

*... have always told us the same message, repeated in a different dialect, using the metaphor of their time, using the vocabulary of their tribe, but it is always the same message. 'Turn off your mind. Step for a moment or two out of your own ego. Stop your robot activity for a while. Stop the game you are in. Look within.'*⁷¹

In simple terms: practise mindfulness meditation

This chapter has summarised many of the aspects of life and speculation covered by the book. It has reminded us of the

⁶⁹ Barr (2017) *op cit*, p.237ff.

⁷⁰ The hallucinogen N-Dimethyltryptamine

⁷¹ Leary T (1973) *The Politics of Ecstasy*, Paladin, England, pp.194-5.

fragility of sensory experience and the consequent limitations on our understanding of what is really real. The benefits of keeping our minds open have been discussed and the point made that when we consider the possible directions that reality may ultimately take, if something cannot absolutely be ruled out then it must absolutely be ruled in. This led us to the essential indescribability of Ultimate Reality and to the need for an approach to it that is outside of our usual rational discourse. This, it was suggested, is provided by mindfulness meditation. Mindfulness meditation is free and can be learned in a morning. It requires neither religious belief, physical hardship nor the artificial stimulation of drugs.

A simple how-to-do-it guide to the Mindfulness of Breathing is given here in Chapter 5.

I wish you well.

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DEFINITIONS

Ego: As used in this book the meaning of the term 'ego' is much broader than the Freudian sense or any other psychological definition. It's our individual perception of ourselves in an emotional, intellectual and spiritual sense, as well as all we feel to be true about our existence as individuals. It's our sense of self. It's what makes you think you are you, separate from all other people and from the world you experience.

Mindfulness: When we're daydreaming, we might say we are 'lost in the moment'. But of course if you're truly in the moment you're not lost at all, in fact you may be extraordinarily mindful and there's a huge difference between mindfulness and daydreaming. When you retain a consciousness of being conscious - when you're aware that you're aware - that's mindfulness; when you're not aware that you're aware, that's Everyday Reality, which in a sense is daydreaming. In meditation much is said of the need to be 'in the now', to be mindful and aware only of the present moment. The uniquely concentrated experience to which mindfulness can bring us, where awareness is reduced to a single moment of consciousness, is Cosmic Consciousness.

Cosmic Consciousness: This is the immediate, awesome, world-shattering internal explosion of awareness that comes with the personal encounter of uniting with, and awaking to, Ultimate Reality.

Ultimate Reality: Ultimate Reality is the reality to which we must awake. Nirvana is Ultimate Reality. It's the world as it really is, unlike Everyday Reality, which is life as we know it. Ultimate Reality is found everywhere in

everything, in ideas as well as in that which is tangible. It is the unity behind everything. In unity nothing is separated or differentiated from anything else. Separation and differentiation are typical of the thinking processes referred to as being dualistic.

Duality: Everywhere you look in the world and in the universe, you will find the interplay of opposites. These are seen not just in our everyday activities but at the astronomical scale, such as in the orbit of planets balanced between outward forces and the inward pull of gravity (the centripetal force), and at the subatomic level in the forces that both attract and repel the particles that are the building blocks of matter. Duality guides the way in which we think, and is the way by which we make sense of our experience. However, this is in a sense artificial and takes us no nearer to whatever it is that lies behind these outward appearances. This, it is suggested, is Ultimate Reality, which is the unity that is itself beyond the opposing characteristics of duality.

Unity: Unity is the sound of one hand clapping. It is oneness, an inter-connectivity of everything to everything else. Words cannot convey the essence of this because it is transcendental.

Elemental Patterns: Making connections between objects and events allows us to categorise them and make sense of an otherwise overwhelming and chaotic world. These lines of connection can be envisaged as a virtual pattern. We all know that a pattern can be a repeated similarity in decorative design but here the word is used in a novel sense. If repeated similarities between the characteristics of objects, events or abstract ideas can be identified, regardless of the magnitude or context of the similarities, this is an elemental pattern. Ultimately all patterns share in the

archetypal pattern of duality, and behind this is only transcendental unity.

Transcendental: Here, when something is referred to as being transcendental, it's essentially indescribable, beyond our everyday experience and beyond our way of thinking. Something that is transcendental is not likely to have been consciously encountered by most people and cannot be experienced by the ordinary reasoning process, though it is ultimately knowable through processes outside of thought, like mindfulness meditation.

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