

LIONEL SNELL

**MY YEARS
OF MAGICAL
THINKING**

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“Lionel Snell is, in my opinion, the most lucid, coherent and insightful intellect to emerge from British occultism for some several decades, and in *My Years of Magical Thinking* he presents his most considered and powerfully reasoned work to date.

With an amiable and amusing clarity, aimed at the mainstream rather than at an audience already persuaded to esoteric notions, Snell presents his fascinating models of human cultural development and provides his own convincing answer to that disenchanting modern query, “whatever happened to the Enlightenment?” Crackling with fresh ideas and perspectives, heavy with the sense that a reconsideration of occult concepts might offer solutions to some contemporary dilemmas, *My Years of Magical Thinking* is a sane and sensible meditation upon a subject that is often dismissed as anything but, as well as a pinnacle of current magical theory.

Highly recommended.” **Alan Moore**
(author: *Jerusalem, V for Vendetta, Watchmen*, etc)

“I have just read the latest draft of ‘My Years of Magical Thinking’ by Lionel Snell, aka Ramsey Dukes, aka Dr Wunlita Suzuki (and no end of other aliases) who must surely rank as the finest metamagical theoretician currently, or perhaps ever, incarnate.

In this masterly summary and exposition of a lifetime of magical thought, Lionel muses deeply on the relationships between art, science, magic, and religion. You may not find much of immediate practical use in this tome but it certainly expands and contextualises the magical way of thinking as a distinct and increasingly relevant way of relating to perceived reality. Lionel told me he had tried to write about magic for the general reader in this latest book. He may achieve that, in places he digresses into magical thinking strategies in the dark arts of politics and marketing, yet

I will always regard him as ‘The Thinking Magician’s Magician’, the wizard who looks into the ideas behind the ideas, and as such he may well go down in history as the 20th & 21st century’s version of Paracelsus.”

Peter J Carroll (author: *Liber Null*, *Psychonaut*, *Epoch* etc)

“When academic colleagues ask me to recommend a work of magical theory, I’ve always suggested Ramsey Dukes’s S.S.O.T.B.M.E. But now Lionel Snell steps out from behind his alter ego with *My Years of Magical Thinking*, a masterpiece that builds upon and somehow outdoes the earlier work.

MYOMT synthesizes a lifetime of thinking, writing, and living magic. It is an ideal introduction to Snell's work for those who are new to it and an exciting development for those that aren't. Many books boast that they will transform how you look at the world; this one actually does.

If everyday life in neoliberal modernity is a prison, MYOMT is a chisel smuggled inside a package the guards didn't think looked dangerous enough to check. It's in your hands now: dig to freedom." **Phil Ford**(author: *Dig: Sound and Music in Hip Culture*, OUP)

My Years of Magical Thinking

Lionel Snell



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“Don’t fight it.
Don’t fight it.
Feel it.”

Sam Cook, 1961

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Introduction

This book was originally conceived as a response to the question: “Whatever happened to the Enlightenment?”

The argument, which has run since the 1990s “decade of evangelism”, is as follows: “five centuries have passed since the Enlightenment, five centuries of rationalism, increasing education and the spread of humanism and democracy. So why are we now seeing an apparent increase in superstitious fads such as astrology, tarot, faith healing and New Age mumbo jumbo, not to mention an apparent religious revival?”

As someone brought up in the 1950s, when those Enlightenment qualities were in the ascendant, and as someone that enjoyed a liberal, scientific and mathematical education but, as someone that also went on to write books about magical thinking and its culture, I felt I was unusually qualified to provide an answer to that question.

I did not want to deliver another lament, replete with contemporary examples, about human folly in response to uncertainty. Nor did I want to join those who turn the tables by denouncing the Enlightenment and representing the shift as some great spiritual re-birth. I simply wanted to answer the question by describing the influences on my own thinking, current and how that developed into my recognition of the current role of magical thinking and culture.

My most radical reappraisal has been to suggest that it is a mistake to see magic as pre-scientific, and that it is better understood as post-scientific thinking. Many of today's magical practices – such as astrology, divination, alchemy and alternative medicine – are indeed a revival from the Roman era when they were last considered “mainstream”. But it is equally true to say that the Enlightenment also marked a revival of the preceding Classical era culture and five centuries of rational, humanistic thinking. When people blame the fall of Enlightenment values on post-modernist academics' questioning the nature of truth, do they not see a parallel with Pontius Pilate's similar question from two thousand years ago?

I do not believe that magical thinking is in any fundamental way superior to other types of thought, but I do consider that it is timely. It is currently on the rise, maybe for very good reasons, and it has been a serious error to deny its existence or importance. So embracing the type of experience and understanding suggested in this book could open our eyes and provide a wake up call. It could provide healing simply by reducing the fear of the strange and the unknown.

The book is presented in seven parts as follows:

- Part One: Begins by explaining the influence of existentialism on my worldview and individuality. Not that I was ever a committed

existentialist, but that philosophy touched me lightly as it touched many of my generation.

- Part Two: Lists other factors that stimulated my curiosity about different worldviews and how they can co-exist and shape people's experience, as well as their explanations of experience.
- Part Three: Explains how I sought to extend the "two culture" model of Arts and Sciences to recognise

four cultures: Art, Science,
Religion and Magic.

- Parts Four and Five: Explore the relationship between these cultures – how they interact and how they clash and how they tend to evolve and transform.
- In Part Six: I present a visual metaphor that summarises my position
- Part Seven: Does something that I deliberately tried to avoid earlier

in the book: it explores current affairs in the light of my model.

This is done not to “prove” the model, but rather to present questions for further study.

To what extent has my model provided a compass to help us map and better understand what has indeed happened to the Enlightenment?

Ways to read this book

One of the first things a reader might look for in a book like this is a plethora of examples, quotations from respected authorities and an extensive bibliography to support the argument. The reader will not find it, for two reasons.

Firstly I was educated as a mathematician. Although this book presents nothing like a mathematical theorem, my training makes me want to present an argument that is relatively self-consistent, that builds on itself towards an acceptably logical conclusion. (In a mathematical solution $2x = 6$ would imply, for example, that $x=3$, and nothing would be gained by adding statistical data or a quotation from a respected academic to support that assertion.) So it would be a failure if my basic argument depended on other people's evidence or ideas, rather than simply being a series of thought experiments that could survive in some reader's minds.

Secondly I argue that today's fondness for extensive notes, references and external sources is a throwback to the religious culture that is responsible for so much rejection of magic. Academia is one of the finest remnants of religious domination and is utterly adorable in its own right. But when it popularises the idea that the acceptability of a thesis is proportional the number of references to scripture or other accepted sources, then it is simply educating people to accept rather than to think. Today's "serious" publishing culture is dumbing down society, and the rise in magical thinking is partly a reaction against that.

Although this book was meant to be read in sequence from start to finish as a continuing argument building to a conclusion, I do realise that could be very tiresome for some readers. So I have numbered and headed the sections to make it easier to flip through and read bits that look more interesting. This increases the need for repetition, but I have often provided cross-references instead, so the reader can go back to see how I justify assertions that might otherwise look cranky.

A problem of language

Some people have shown interest in my ideas, have even recognised that I am suggesting a different way of thinking that should be more widely recognised, yet they object to my use of the word “magic”. It has even been suggested that my books might have been more acceptable if I had completely avoided the word.

While I suggest that we are currently experiencing a shift from scientific towards magical thinking, I also admit that after two millennia of religious values we are moving towards a system of science-based values (Section 16.4). So, just as ancient grimoires were couched in pseudo-religious terminology, the future of magic will be better shrouded in pseudo-scientific terminology.

Publishers might have embraced me if I had come up with and trumpeted some (to me) vomit-worthy euphemism such as Post Rationalist Paradigmation (PRP), but I still have a few years left in which I will be forced to live with myself. I prefer the spirit in which Crowley wrote: “I chose therefore the name ‘MAGICK’ as essentially the most sublime, and actually the most discredited, of all the available terms. I swore to rehabilitate MAGICK, to identify it with my own career; and to compel mankind to respect, love, and trust that which they scorned, hated and feared”.

Unlike Crowley, however, I have refused to define my use of “magic”. Indeed I express contempt for those who believe it impossible to discuss things like Art or Consciousness without prior agreement on “the exact meaning of those terms”. By nature an intuitive, I believe we would both have failed if, by the end of this book, you still do not have a workable understanding of what magic means to me.

I have, however, more often used the phrases “magical thinking” and “magical culture”, because they are more accurately what this book is about. It is not so much a treatise on magic, as it is an introduction to the mind-set that is necessary before we can truly understand magic.

Opting for the word magic is, to me, calling a spade a spade. And my use of the word has proved widely acceptable among those who currently understand or practice magic. But it is true that it is a problem word for those who distrust or despise magic and the occult.

For such people, the word is an example of a sort of guard dog usage to identify heresy and defend the boundaries of a shared culture. When people of a certain disposition label one a “communist” in response to an expression of relatively liberal opinions (or a “fascist” in response to a call for structure) the word is being used to hound a heretic out from their circle of faith.

Curiously though, if the heretic then decides to accept the word and that they are indeed a communist, then a common reaction would be to retract the label: “if you were really a communist you would go to live in North Korea. Admit it: you are just another wishy-washy liberal”. The same word that is used to drive out heretics will be also used to deny them any recognition.

The word magic is often deployed in this way. Suggest that astrology, homeopathy, crystal healing or whatever can have beneficial results and should be taken seriously, these practices will then be dismissed as “just magic”. But when I cast my net wide to include all these alternative practices in a broad “magical culture” I am sometimes told that I am not really writing about magic as is commonly understood.

This is a problem for me in South Africa, where there is a strong tradition that magic aligns with evil intent – using, for example, stolen human body parts to gain power. I used to live in Britain, where there is a similar idea among some that magic must be “anti-science”. Describe a successful magical operation and it will be dismissed as “just coincidence” – because it cannot be “real” magic unless it breaks the laws of physics.

At the same time, the prevalence of a belief in the healing powers of rhino horn will be blamed on a belief in magic. I argue that this is an example of bad science more than bad magic, because the horn is believed to act by its own agency, without the need for human intention or behaviour. The idea might have had its roots in some early tradition that one can invoke the power of a rhino by taking its horn, but such traditions usually require a shamanic intermediary who will enter into the spirit of the animal and seek its permission for the act. The poaching behaviour of the rhino horn traders betrays a firm belief that it is the substance that is effective independently of any human intent – and that proves to me that this is an example of erroneous scientific thinking, not magic.

Anyone who addresses this book under the assumption that it is some hundred thousand words in praise of anti-science or evil will gain little from reading it.

PART ONE

My taste of Existentialism

1. The Outsider

I cried at my mother's funeral.

I played the game.

And I won!

I begin with three simple statements, and yet they seem to me to reflect very different styles of thinking, different types of meaning.

The first statement is easiest to understand. Anyone who was actually present at my mother's funeral might confirm its truth. Even if no-one noticed or could remember in retrospect, it is clear that observers could have been posted, or sensors attached to my cheeks, to authenticate those tears if it was important so to do.

I am therefore tempted to describe the first statement as “scientific”; though that would be jumping too far ahead in my argument, for the terms of the first statement have not been precisely defined. To me “cried” suggests tears plus sound. I am sure I wept and did not wail, but cannot recall whether I also whimpered at the time. So, although amenable to being disproved, the statement is not precise enough to be truly scientific.

The second statement is a curious one. What game? What are its rules? Who plays it and where? Without such information the statement must seem quite meaningless, and yet it is recognisably a rhetorician’s statement: one that could invoke cheers or boos of derision from a crowd of those who know me.

”One thing can be said for sure about Lionel Snell... he really Played The Game!”

Hurrah!

The third statement is much more personal. Collect all those who might have cheered that previous statement and put the question to them: “Lionel played the game, but did he win?” and I would expect a mixed response.

It’s a very doubtful statement about an apparently meaningless concept, and yet I myself consider it to be the most important of the three, because it is an affirmation.

As you will shortly see, the first two statements are the relevant ones but, having written them, I felt moved to add the third as a sort of copywriter’s flourish (a job I held for many years). I felt good when writing it, and I feel good seeing it on the page. That is its value, and it needs no further defence.

For that very reason, I will now proceed to defend it further.

I cried at my mother's funeral

That statement is a reference to a book we studied at my school in the late 1950s – Albert Camus' *L'Etranger*. He writes in the Afterword dated 1955: "I summed up *The Outsider* in a sentence which I realise is extremely paradoxical: 'In our society any man who doesn't cry at his mother's funeral is liable to be condemned to death.'"

I played the game

Camus goes on to explain that Meursault, the hero of his book, is condemned because he “doesn’t play the game”. That is: he refuses to lie, and lying means not only saying what is not true but also saying more than is true: “and, in the case of the human heart, saying more than one feels”. He refuses to hide his feelings and so society feels threatened – not by the enormity of those feelings, but rather by their nuanced departure from convention. In court he is asked to admit that he regrets killing a man, and he replies that he feels more a type of annoyance than true regret. The jury does not like that.

Reading L'Etranger in my early teens, I thought that Meursault was “cool”. Nowadays the word cool has become almost meaningless, a synonym for “OK”, but then it still meant the opposite of hot – as in hot jazz versus cool jazz. The epitome of cool was the man in the white suit and wraparound sunglasses playing the vibraphone like Milt Jackson. Hot jazz was an overt noisy display of passionate emotion, whereas cool jazz was cerebral, relaxed, and seemingly devoid of feeling. In a world still resonant with the passions and religious fervours of Nazism, Communism and the Second World War, “cool” was real cool (to mix old and new usages).

So I admired Meursault in an uneasy, teenage sort of way. Growing up in a world where so many people had risked their lives to defend their principles, their beliefs and their freedoms, there was something shocking and exciting about a man for whom the warmth of the sun meant more than love, for whom God was of no interest and who would watch his freedom be taken from him rather than say what others wanted to hear.

Of course I also understood that it was noble and good to fight for one's rights – somewhere in the school buildings I recall a plaque or window with the words “Greater love hath no man than this, that a man lay down his life for his friends.” It must therefore be so, and yet I also reckoned that if, twenty years earlier, the world had rejected such love in favour of sunbathing, then many millions of lives and a lot of property would not have been destroyed. Mine was the rational argument of an intelligent teenager, and the fact that it shocked an older generation made it all the more interesting. At one point in the novel Meursault is puzzled because he is judged as being “intelligent”, and that somehow makes his crime seem worse to the court.

Meursault was an outsider. When one witnesses some of the stupid behaviour people fall into when acting as a mob, then the outsider begins to look attractive. He was intelligent and he was sensual. When I recently re-read the novel nearly 50 years later I was looking out for the one thing I could remember: Meursault's description of his pleasure at drying his hands on a freshly laundered towel.

I too am a sensualist. In my earliest years, my tendency was to float off into dreams. I recall the uncomfortable vividness of sensory data, covering my eyes to shield them from the sheer intensity of seeing. But in my teens I was slowly learning to ground myself by appreciation of my senses, discovering the pleasures of sunbathing, of physical exertion, sex and eventually French cuisine. I too love the feel of a fresh crisp towel.

I could also identify with being an intelligent outsider, for I had been plucked from a small village school in England's Cotswold Hills because I had won a scholarship to a public school and the local government were paying the rest of my fees. So I was an outsider – a poor scholar in a college for the children of wealthy parents. As a scholar I was one of the privileged few whose names were italicised in the school lists, thus was I branded a “swot”, a “brain box” from a range of similarly degrading terms.

Like Meursault, I was then puzzled that such a basic human quality as intelligence should be so frowned upon. A few years ago I was studying the executive job adverts in an English newspaper when I noted that a majority of advertisements asked for applicants who had “passion”, but not a single advert asking for applicants who were “clever”. I grew to despise a business culture that rates the victims of emotion higher than the warriors of intellect.

In such ways I could identify with Meursault, but did I too refuse to play the game?

No, I played the game. My game was being cool – an outsider but one that could be safely labelled. Being cool also made it almost forgivable to be clever, because it differentiated me from the swot who works to be clever. I learnt to wear my cleverness like a silk blazer slung casually across my shoulders, never to be seen to be trying too hard, yet always getting the distinction in exams.

It is a fine distinction, but it seemed that in Meursault's society there was only one game, and not to play it was to be condemned. But this was the turn of the 1960s and our generation were beginning to have quite a choice of games to play.

I chose cool, and I have continued to play games since. Unlike Meursault, I turned my back on truth in favour of game playing, of saying things for the effect they produce more than for their truth.

And I won

Yes – I won because I have lived on into my seventies, enjoying a rich and diverse life, whereas Meursault was condemned to the guillotine at an early age.

I think Camus would disagree with my presumption, pointing out that his hero made a choice and died feeling profoundly happy, whereas I am not. If I were truly happy, I would not need to write this book. In fact I have several major worries, not least that of entering old age.

In the context of 1950s materialism, and the terrible results of religious fanaticism in the past, I admired Meursault at first for his atheism, his total indifference to God. But then I began to realise how easy it would be to dismiss God if you were his son.

In the same 1955 Afterword Camus writes: "I tried to make my character represent the only Christ that we deserve." So, if Meursault's choices lead to an early death in a North African jail, then he has Camus, his father and creator God, to write up every detail and present his innermost thoughts to a world seeking redemption. A generation of would-be existentialists like me would don black polo-neck sweaters and become engaged in the imitation of their Christ.

If, however, my own choices lead me to that same fate and same death, there would be little glory for me. Without a great author to immortalise my story, the same act of defiance would simply result in a damaged family, a few briefly tearful friends, and some column inches in a local paper. What a waste!

In those terms, Meursault began to look like a fraud. The only Christ that we deserve is a fictional one. I'd buy the cool, I'd buy the sensuality, I'd buy the intelligence... but I would choose instead to play the game.

For most of my later years I reckoned that I was losing the game. It took me a long time to realise that the fact of losing was no reason not to insist that I had won. Was that, maybe, the real game?

2. I cried at my mother's funeral

For reasons already described, Meursault seemed to me to depict the death of religion. It took me longer to see that he also depicted the death of science.

Science and technology were triumphant in the 1950s. A World War, which had seemingly grown out of a sort of religious frenzy of hatred between fascists and communists, had been brought to an end by a technological triumph – the atom bomb. After years of newspaper rumours about the weirdest fringes of scientific speculation – time travel at the speed of light and chain reactions that promised either endless cheap power or the end of the world – these “crazy” boffins’ theories suddenly bore fruit at Hiroshima. A war-maddened world had been restored to its senses, then it did indeed seem as if the solution to mob irrationality lay in the logical decision processes of science.

Hail science! I was a bit young to enjoy the Festival of Britain in 1951, but I remember hearing about its displays of the wonders of factory farming (now demonised) and the technological marvels of the future. In the 1950s, our boys' comics featured spacemen who communicated via wristwatch video phones: we were sure that such devices would become commonplace, and that by 1980 people would be living off vitamin pills instead of cooked food. Where turn of the millennium children would say "brilliant", in the 50s the trendy word was "supersonic".

So, for many of my generation in the 1950s, religion was a laughing stock or, at best, somewhere to meet the neighbours on Sunday, while science held all the answers. Maybe that was why it was so easy to see the death of religion in Meursault, but not so easy to see the death of science?

The clue for me lay in his lack of curiosity. His sensuality placed him firmly in the here and now, and it strangled the flow of “what if?” questions. He accurately observed how his refusal to display the right emotions turned the court against him, but he did not go on to explore what might happen if he did display those emotions.

Observation is very important to science, but so also is speculation, and, when appropriate, observation is best combined with experiment. It would have been a valid experiment for the cool, rational outsider to have deliberately broken down in court the next day, wailing that his father had always taught him to keep a stiff upper lip and be a man, that he had tried his best to do so, to be a man before his mother, to maintain his facade and not act in anger... and now he could not bear the pretence any longer in the face of the enormity of what he had done.

Having put on such an act, he could then observe whether that outburst swung the court in his favour. It is all very well serving truth as he did, but why be content with only part of the truth when a simple experiment could determine a much more complete truth?

Whereas “I cried at my mother’s funeral” could, if suitably clarified and witnessed, provide an item of scientific data, it would have little scientific significance unless, for example, I was part of a very large population of funeral criers being compared with a control sample of non-criers in order to test Camus’ assertion that “In our society any man who doesn’t cry at his mother’s funeral is liable to be condemned to death.”

That raises another challenge: Meursault's extreme individualism would not make it easy to work towards the level of consensus required for science. Faced with a multiple choice question such as "Did you, or did you not, cry at your mother's funeral?" I suspect that a population of such individualists would drive the experimenters crazy with a range of "don't know" answers... "well, I suppose you could say that I cried"; "I was expressing sorrow, but not exactly what I would call crying"; "I was crying, but not exactly 'at the funeral' so much as the way other people seemed to be thinking they ought to cry" and so on.

In fact I can recall one time as an undergraduate at Cambridge when I was asked to be a subject in an experiment at the Psychology Department and we had to fill in a multi-choice questionnaire. Sincerely wishing to give accurate answers, I asked one of the test team to explain one of the questions to me in more detail, and he said to the room in a rather angry voice: “we just want you to fill in the answer that comes quickly to you, and not to try to be ‘clever’ about it”. I pointed out that if it was necessary not to be clever for this experiment, then perhaps it was a mistake to have chosen Cambridge undergraduates as a sample.

So, by not bothering with “what if?” questions, and not being prepared to “play the game” of agreeing to consensus definitions, Meursault seemed to me to be showing as much contempt for science as for God.

Many years later I find myself wondering if Camus intended that, or had that in mind? For at the time when I read *The Outsider* I was aware also of some intellectual backlash against the triumphalism of science, in particular a reaction to its ascendancy in education.

In the spirit of post-war socialism, there was a continuing drive to extend the availability of higher education, and that led to the question of funding. Many people considered that the future need was for more scientists and engineers, and so that was where expansion was needed – not in the humanities.

The next step in that argument was to suggest that maybe too much was already being spent on non-technical education and there should be cut-backs in those departments to help fund more scientific learning. Indeed, should any non-scientific subjects remain in the curriculum? The downgrading of Latin and Greek as essential elements of education was already under way – might not the same happen to art and literature? The extreme version of this argument suggested that, once a proper scientific analysis of the canons of art and literature had been conducted, then why go on teaching them in the old way when they could be taught properly and rigorously as a branch of science?

What could have turned into a very bitter fight for funding and academic territory was largely resolved by CP Snow's concept of Art and Science as "two cultures". Rather than see science and art as two rivals battling for space in the curriculum, we should recognise them as two distinct and vital human needs – like, say, air and water. Neither could replace the other: society needed both because society included both "convergers" – ie those whose thinking processes favoured science – and "divergers" who favoured the arts.

Snow's two cultures idea was originally about two very small minority groups – the humanities and the science faculties in traditional British universities – but the idea caught on in a broader educational context and these “two cultures” became quite a hot topic in my later school days. In fact the idea made such an impression on me that I will write more about it in Chapter 5.

My point here is simply that, in the scientific and technological euphoria of the 1950s, people like Meursault – and that would include some like myself that had been influenced by Camus' book – might already have begun to step back and see the world of scientific consensus as just another game.

Science, if a game, is something that one can choose to play, or not to play. Maybe the Arts culture, if such existed, was made up of people who chose not to play the science game?

3. I played the game

Whereas Meursault refused to play the game, I chose to do so.

There was something very final about Meursault's refusal, it seemed to me a sort of cul de sac that ended in prison and death. Having reached his level of immediacy and clarity, there seemed to be nowhere else to go. I, on the other hand, was a schoolboy setting out on the path of life. It was the late 1950s, rock 'n' roll had arrived in England and there was a sense of change. I wanted to move forward, and I chose to play the game.

The important word here is “chose”. Unless one chooses to play the game it is not really a game. The culture that Meursault was rebelling against was not in itself a culture of game players. They did not think they were playing a game, instead they probably considered that they were living truth or “reality”. It took Meursault’s outsider viewpoint to recognise that this reality was in fact just a game.

Only when he had recognised that it was a game could Meursault choose not to play it. Having myself taken on Meursault’s viewpoint – our generation’s take on the imitation of Christ, perhaps – I could see the extent to which the life I was leading was equally a game. But, instead of refusing it, I chose to play the game.

I think that many of my generation made the same choice, some more and some less consciously. A popular read

at that time was Stephen Potter's books on Lifmanship. The series began with Gamesmanship – a humorous guide to winning at sport, not by being the better player but rather by gaining the upper hand psychologically. So, for example, if your tennis opponent is acting highly professional – wearing the right clothing, having a top notch racquet and playing very strictly to the rules – then you should adopt the laid-back amateur role – arriving a little late in old and slightly inappropriate clothing with a battered old racquet and an attitude of “well, it's only a game after all”. After winning a couple of games, your opponent begins to feel a bit caddish, a little too serious, and so begins to relax his play. At that point you start playing in deadly earnest, and you thrash him.

With examples such as these, my generation learnt about games within games. Whereas some sportsmen were not, in this sense, “playing a game” – like the people in the culture Meursault rebelled against, they were in deadly earnest – Potter’s “gamesman” saw that playing any game was itself part of a meta-game called gamesmanship. From there Potter went on to extend the idea to his books on “Lifemanship”, using similar principles to win the whole game of life.

So, for example, how does a non-fiction book reviewer get one up on the author? Let's say the book in question is actually a definitive study, like Gibbon's *Rise and Fall of the Roman Empire*: what the reviewer should do is begin by briefly outlining that rise and fall in his own words. This gives the reader the impression that the reviewer is already an expert on the subject, whereas all he has done is to crib the gist from the book he is about to review. Then the reviewer continues along the lines "Gibbon appears to have a reasonably sound grasp of his subject, apart from a few unfortunate lapses, such as..." then you insert some nit-picking recent historical revisions. The overall effect is thus one of a real expert giving a promising newcomer to the subject a little pat on the back. The author is belittled and the reviewer has won the game.

Without having the actual texts of the Potter books before me, I cannot do better justice to their humour. The main point is that they were very popular with my generation, and from them we learnt to look on the serious business of life with a wry sense that it was all just a game, and that the skill lay in recognising this fact and using the knowledge to outplay the others.

Although I speak only for my generation, such game play left a lasting legacy. Nearly 20 years later I remember hearing the word “yuppie” for the first time: it was during a radio discussion. The word was used and the speaker was asked to explain what this new word meant. He said: “a yuppie is someone who chooses to play the finance game but does not buy it”. In other words the first yuppies were seen as entering the finance game in a spirit of playful non-attachment. Following the hippie era, when finance was looked down upon as an inferior materialistic obsession, the yuppie arrived as someone who still saw it in those terms, but was prepared to play that game.

Of course, the irony is that less than 10 years later the word yuppie came to describe someone who, far from being a detached player, was utterly absorbed in the finance markets. Like the culture that Meursault rebelled against, yuppies were now seeing finance as their only reality, and could no longer be described as “playing a game”. This seduction, by which the game takes over the players and ceases to be play, is an important problem that we will need to return to later.

Going back to my generation, however, many of us felt we were approaching life with the new spirit of playfulness. After the enforced intensity of World War II followed by the earnest materialism of the 1950s, our generation heralded the playfulness of the late 1960s hippie era. Returning to CP Snow's idea of the two cultures, this raised for me an interesting question: is "playing the game" itself an art? Or is it a science?

Before answering that question, I should say more about what "playing the game" meant to me those many years ago.

4. And I won!

Whereas Meursault refused to play the game, I chose to do so. But what was the game that I chose to play?

This was my situation: I was a “Bevan boy” who had been plucked from a country village school and given a fees-paid scholarship to a Victorian public school. That made me initially something of an outsider; although in my case I was never seriously “picked on” as an outsider. People mostly treated me well so that I was never made painfully aware of the fact – partly because I learned a few survival tricks, as we shall see. But it did make it easy for me to identify to some extent with Meursault.

After reading *The Outsider*, I too achieved a state of living very much in the moment, in touch with the physical sensations of my immediate environment and aware of my immediate feelings. At the same time, the normal chatter of my mind had reduced to a sort of silent watchfulness, in which state I was less inclined than most people to ascribe the accepted labels to those feelings and sensations.

For example, the public school tradition instilled in me a strong sense of honour; but I was more inclined to question the basis of that honour. Fifty years earlier a similar sense of honour might have been exploited as a lever to send me to fight for my country. What was different was that I had to a greater extent internalised my idea of honour; it had rather less to do with my peer group and socially accepted ideas, and rather more to do with a personal sense of what made me feel honourable. In these terms, conscientious objection felt to me more honourable than fighting for my country, even although I still understood the honour of battling for a shared cause. It was a difference in weighting, rather than an absolute distinction.

In a similar way I observed the many conventions and traditions of the British public school ethos and I often appreciated their value, but saw them more as a game with accepted rules than as anything absolute or universal. So I was neither a diehard “public school type” nor the sort of rebel who rejected everything the public school ethos stood for. At the turn of the 1960s the choice lay very much with one or other of those two camps – so my own intermediate position simply confirmed me as something of an outsider.

For example: a few years later as an undergraduate at Emmanuel College Cambridge, I was invited by my friends to join in a protest against the absurd and out-dated rules and regulations of college life. As part of our matriculation we had been asked to sign a document saying that we were willing to accept these terms and conditions (including being “a gentleman”, and not lighting bonfires in public), and my friends were now objecting that they had been made to sign something that denied their ordinary rights as members of the British public.

I then had the embarrassing task of explaining to my friends that, whereas I really loved the idea of rebellion, and would treasure the social cohesion of joining the revolution with them, I could not honestly partake in it because, before signing that document, I had read it through and decided that – as a scholar provided with the very best rooms in college, a free gown, free books and several other privileges – I was getting one hell of a good deal relative to the petty inconveniences of the contract I was being asked to sign. Whereas my friends felt they had been tricked into signing, I had signed with full conscious acceptance, so couldn't really take part in their revolution.

My situation was utterly different from that of Meursault, but my outlook was similar, and yet in many other ways I did choose to play the game. One example of the games I chose to play came from studying the difference between two archetypal school cultures that nowadays would bear the labels “Nerds” versus “Jocks” – terms that were not extant at the time, but I’ll use them for convenience.

As a scholar and mathematician, and useless at sport, I identified totally with the Nerds, but there was much also that I admired about the Jocks: their extraversion, their popularity, their easy relationship with girls, and their good looks. Above all they seem so comfortable in their bodies, society and environment – while I felt like a round peg in a square hole. So I wanted some of their qualities, but was quite hopeless at sport, so instead I studied those gestures and mannerisms that made them seem so comfortable and secure with other people. I learnt to adopt a certain nonchalance, some measure of greater confidence, as well as particular gestures, ways of walking and standing, and the use of certain phrases.

I never made it as a Jock, but I did achieve a level of social acceptance for being “cool”. In those days the word cool hadn’t quite risen to the heights of meaninglessness that it has achieved today, because it still had associations with cool jazz and a sense of being admirably relaxed and unemotional.

So I played the game, but did I win? The answer is far from obvious, because my intentions were none too clear. If I had set out to become a Jock then I had completely failed. But instead I did have a sense of success, because I had found a place for myself in the school society: rather than being a total outsider I was now considered to be a member of the “cool set”. I had also learned some valuable lessons about living, in particular living with other people.

My experiment had begun with a desire to change my state from being an outsider to belonging. So I had observed those people who seem to belong the most, studied their behaviour, mannerisms, ways of speaking and acting, in order to reproduce some of that in myself. I then adopted similar patterns of behaviour, observed the effect on others, and made adjustments according to the observed results, until I had approached a personality style that seemed to invoke the results I was looking for.

This apparently trivial example held an important lesson for me: that success can be judged in two distinct ways. One is by objective, absolute measures: I tried to be a Jock, I did not succeed in becoming a Jock; therefore I failed. The other is by a subjective, retrospective measure: I tried to be a Jock because deep down I wanted to fit in and not be such an outsider; I failed to become a Jock but, in the process of trying, I achieved a satisfactory level of acceptance; therefore I succeeded.

It relates to what was written earlier about game playing. In a scientific culture success requires one to achieve objective standards that have been agreed in advance – this is like saying that there is only one winner of the men's singles at Wimbledon, and that is the person who scores highest in the finals. However, should a relatively inexperienced player put up such a remarkable performance before finally being defeated that the spectators award them a standing ovation, then the loser will have scored a victory that might leave the actual winner feeling like a cad.

To me this suggested that gamesmanship is “more of an art than a science”, because its victories are judged subjectively after the event – just as an artistic “masterpiece” is not so much one that measures up to certain previously agreed criteria, as one that is later recognised by appropriate judges to be great art.

Thus I could claim that “I played the game, and I won”. And the importance of this will be expanded in Section 13.4

PART TWO

Other influences

5. C.P. Snow on cultures

I have mentioned how, during the late 1950s, there emerged an intellectual backlash against the triumphalism of science. In particular it was a reaction to the extreme view that there would soon be little reason for non-scientific subjects to remain in the educational curriculum. Latin and Greek were already on the way out – might not the same happen to art and literature?

The disagreement began with a practical problem about how best to extend the availability of higher education in Britain's economically lean post war years. Technology was seen to be the cure, the means to drive growth – so maybe too much attention was being given to non-technical education? Indeed, some went so far as to suggest that the arts and humanities were dinosaur subjects that should begin to be phased out.

It was less than a hundred years earlier that academia was similarly rent by a debate: then it was a question of whether science could be allowed any place at all in university teaching. Curiously enough, the business community was among the nay-sayers, for it considered science a rather flaky abstract study that would not have its place in the hard-headed realities of business! It is worth remembering that

the word “art” is related to “artificial” and was used to describe manufacturing processes and other “useful arts”. Thus today’s Royal Society of Arts (RSA) is a shortened name for what was called The Royal Society for the Encouragement of Arts, Manufactures and Commerce – founded in the eighteenth century with the aim to “embolden enterprise, enlarge science, refine art, improve our manufacturers and extend our commerce”. Even what we would call “fine art” is a manufacturing process that delivers a material product so, in these terms, it is easier to understand how nineteenth century mill owners would have considered art to be a more practical, down to earth subject than speculative scientific research.

The debate invoked strong feelings. What I recall in the 1950s was a response from the Arts faculties that was not so much a reasoned counter-argument in favour of art education as an emotional cry of “Philistines! Uncultured oafs! How could they say such a thing!”

Into this debate came CP Snow with his concept of “two cultures” – Science and Art – as two distinct and vital human needs. Neither could replace the other, for society, and its members, needed a bit of both. What had started as an analysis of two cultures within the narrow world of academia, soon expanded to embrace two classes of people across the whole of society.

What struck me at that time was not so much the details of Snow's theory as the effect it had on this debate. What had started to develop into a territorial war, soon settled down in mutual recognition and a determination to go for some sort of a balance between the sciences and the arts.

This was a very important lesson to me because it illustrated the enormous consequences that can result simply from a change in perception. If the arts become identified with the past – representing an earlier human need and therefore the upholder of tradition and culture – while science is identified with progress and the future, then there is a battle. But if the time element becomes irrelevant and the two are seen simply as complementary human needs based on different sets of human faculties, then the battle fades away and the two can coexist. They can still poke fun and be rude to each other, but now there are “no hard feelings” – simply because CP Snow had given us a new way to look at the problem, and had shifted our perceptions.

There was another important lesson for me. Snow's distinction suggested a general recognition that something existed outside of science. That might seem terribly obvious now, but I was at the time in my teens when science seemed to have all the answers, to be all-inclusive. Clearly art was distinct from science, and yet it was "contained in" science in the sense that one might measure the release of pleasure hormones in a subject enjoying a work of art, and one might, for example, relate their aesthetic appreciation of certain shapes to the prevalence of similar forms in nature as demonstrated by the Fibonacci series, and so on. Thus Art and its perceived value would all soon be "explained away" – and yet the two cultures concept suggested that such explanations might turn out to be inappropriate or irrelevant.

This was not a return to a sort of religious dogmatism saying “science is forbidden to cross this boundary” but rather an indication of science’s own inherent limitations. Science could still go anywhere, do anything, but its thinking and methods might in some cases turn out to be just as irrelevant as a “what if?” question would be to Meursault when he was alive in the totality of his now-ness.

In these terms, comparing science with art is as misleading as comparing chalk with cheese – an analogy used by Nicholas Spicer who quoted a writer Stephen Jay Gould who used the term non-overlapping magisteria to describe fields examined by different cultures. Spicer wrote:

Each magistrery, each area of mastership, has authority in its own field. But it can claim no authority in another magistrery – or does so at the risk of sounding ridiculous and ignorant.

If the cheesemaker pronounces chalk dry, tasteless and unripe; if the farmer says the Cheshire cheese will never sweeten the loam or fertilize fine turf, they are both right. And we recognise they are both ignorant.

Again I emphasise that the real lesson for me was not whether science was right or wrong, or simply limited, but rather that there could exist different mind-sets or cultures. For someone learning to be deeply into his senses, a detached observer, and who was also being trained as a pure mathematics scholar to respect the absoluteness of logical argument, it was quite staggering to witness the extent to which there could exist such different interpretations of the same apparent reality.

5.1 Snow's two cultures

This idea became so important to me that, perhaps, I should outline more clearly my understanding of Snow's two cultures. Although his idea soon became recognised in terms of two broad divisions of human culture, it actually started with his observation of two very specific elite groups within academia: "men of letters" and physical scientists.

As someone who was both a scientist and a writer, Snow realised that he was caught between these two worlds. As a writer he rubbed shoulders with a group who identified themselves as “intellectuals”. He quoted the mathematician GH Hardy saying: “have you noticed how the word intellectual is used nowadays? This seems to be new definition that certainly doesn’t include Rutherford or Eddington or Dirac or Adrian or me. It seems rather odd”. Being an intellectual in these terms seemed to have little to do with pure intelligence or creativity, it was more a pointer to one’s choice of profession – with philosophers at the top and followed by literary and arts figures, as long as their role was more to comment than to create.

On the other hand, Snow was also acquainted with those eminent scientists mentioned by Hardy, and it certainly did seem odd to exclude such brilliant people from the category of “intellectual”. Between these two groups Snow became aware of a gulf of mutual incomprehension, even hostility, but most of all a complete lack of understanding.

Snow quoted Rutherford saying: “this is the heroic age of science! This is the Elizabethan age!” and Snow added: “what is hard for the literary intellectuals to understand, imaginatively or intellectually, is that he was absolutely right”. The intellectuals’ reaction to statements like this was to feel threatened: they felt insecure in the face of a new wave of thinkers who seem to be taking over academia. There seemed to be an underlying fear that the teaching of humanities and literature could be side-lined in this new heroic age.

In these original terms you could say that the two cultures debate was a storm in a teacup, with little importance in the outside world. But it did go further than that, for the idea was taken up by educationalists. In Britain, where educational specialisation begins early, the idea that we were separating pupils into two streams – the sciences and the humanities – became deeply influential.

This is what I remember being debated while I was at school. One teacher gave us personality tests that attempted to distinguish what sort of boy should choose the science curriculum rather than the humanities. I was curious to explore my own inclination: was I an artist or a scientist? As a mathematics specialist, I felt my subject had more in common with science, but it did not fit neatly into either culture.

5.2 Two cultures across society

This broader understanding of the two cultures was taken up later by Liam Hudson who wrote a book called *Contrary Imaginations*, in which he said that schoolchildren could be divided into two intellectual types: convergers and divergers. The convergers were those who thought literally, prosaically and predictably – these were the ones who tend to specialise in mathematics and science. The divergers tended to specialise in the arts, and showed greater imagination and were capable of surprising cognitive leaps.

Thus CP Snow's original observations about the minority world of academia became extended to a popular view of two broad cultures spanning our society: the arts and the sciences. These two cultures were clearly much larger and less well defined than Snow's original two groups.

The word "art" can have a very specific meaning: you don't go to "art classes" to learn dancing, playing music, public speaking or conjuring, you go to art classes to learn painting and drawing. And yet all those other subjects, and many more, are included in the broad category of "arts". Indeed, whenever anyone makes a statement such as "golf is more of an art than a science" they are hinting that the subject lies more on the arts than the sciences side of this cloudy polarity that spans all humanity.

So we can see the arts culture is a very broad and nebulous term embracing a whole range of subjects including music painting, drama, film, sculpture, dance, craftwork and even some technical skills, such as tuning racing motorcycles, that demand a large measure of subjective judgement. It goes even further: the arts culture would also include people who do none of these things, but simply approach life in an appropriately imaginative, “divergent” sort of way.

Similarly, but not quite so obviously, while the science culture clearly includes Snow's physical scientists in the laboratory, it also embraces a much more widespread and diffuse attitude in our society. Even an uneducated and illiterate person saying "That's bullshit! I'll believe it when I see it!" is speaking from the science culture insofar as he is insisting that he requires first-hand or reliable evidence before he will accept that something is true. (An obvious counter-example could quote Popper and his generation to argue that science culture is increasingly open to shifting paradigms. In Chapter 26 I suggest that this might rather be seen as part of a general drift towards magical thinking.)

The fact is that in our education and secular traditions this broad scientific culture is so innate that we tend to take it for granted. We say the above speaker is being “down to earth” or “grounded”, and are more likely to see the artistic thinker as being the oddball.

What had expanded into a very broad and ill-defined division of society into two great classes of people did, however, serve a useful purpose: by presenting the two cultures as complementary, rather than antagonistic, it helped people to clarify their own thinking.

To give a naive example: when writing up scientific work it is necessary to be objective and unemotional, but does that mean that any involvement in emotional activities like playing music or drama would somehow undermine one's scientific credentials?

In terms of Snow's theory, those two activities were complementary rather than mutually exclusive – one needed a bit of both to achieve balance. Indeed, one might even be a better scientist for having given one's emotions healthy expression in music – rather than denying them and running the risk that they might intrude into one's scientific work.

5.3 The impact on my education

In educational terms, the need to balance the two cultures made it necessary to ensure that science specialists received a bit of “culture” and that arts students in turn should receive a touch of technology rather than risk becoming totally “innumerate”. The English educational system encouraged early specialisation – a choice that exacerbated the cultural gulf – so this was taken very seriously. So, in addition to my mathematics A-level exams, I also had to sit a “general” paper to prove that I also possessed a smattering of culture.

That smattering of culture required that I also had to read Camus.

And the two cultures notion gave me a new way to understand Meursault's predicament: he was condemned because he had stepped out of the prevailing culture. Now, if there are only two cultures, as suggested, then which way had he stepped? From science into art? Or from art into science? This was clearly a daft question – neither fitted what happened in the story. He had clearly stepped right out of a culture that was neither art nor science. There must, therefore, be more than two cultures – I was already thinking like a mathematician!

Putting the question of further cultures aside for the present, I was intrigued by the fact that Meursault's defection caused such antagonism when, in general, people seem content to float to and fro between the two cultures without noticing the transition – despite their very different attitudes and expectations.

To illustrate what I mean, consider the statement that golf was “more of an art than a science”. Then imagine that I, who know almost nothing about golf, am handed a ball, a tee and a club. I place the tee in the ground, put the ball on it, take the club and swing and... get a hole in one! Applause!

Then let us imagine that someone who thought they would be “in for a laugh” filmed me taking my first swing, and so has a visual record of this achievement. Here is the very same club, tee, and ball, plus two depressions on the grass showing my exact foot placing, and a visual record of my exact stance, grip on the club and swing. This means that the other people present can now copy my swing exactly... but not one of them manages to get a hole in one. Indeed, Tiger Woods happens to be watching all this and he has a go, and even he does not quite manage to repeat my achievement. I am now a hero! I can dine out for weeks on the story of how I outplayed Tiger Woods!

Now compare this sporting story with what happens in experimental science. In 1989 two physicists managed to get cold fusion to work sufficiently well to justify detailing their results in an academic journal. Then other laboratories tried to repeat their experiment and most failed to get the same result. Did the reputation of the two physicists soar with every failure to repeat their achievement? No, it plummeted! They ended up in disgrace, so much so that it became almost impossible to get any work on cold fusion to be accepted or even looked at by any reputable scientific journal.

Example like this nourished my awareness of how big a transformation can result from a small shift in perception. If fusion physics had been classified as a sport rather than a science, the two physicists would now have a silver trophy on their shelves – instead they had to hide their heads in shame. This also shows that the sort of broad culture we are talking about is not identical to the discipline that lies at its core: whether or not the laws of physics might be evolving and different in different places on earth might be an interesting question for pure science, rather than a forbidden topic. And yet the broader “science culture” is largely dependent for its survival on its faith in the existence of an objective reality that allows repeatability. Whereas in an arts culture repeatability, as “reproduction”, tends to reduce value, in a science culture it affirms it.

My experience of the arts culture also gave me surprises. However pure and unworldly might Art's quest for beauty seem to me, the arts culture is surprisingly venal. When invited to London's annual Freize Art Fair I was as much aware of the talk about prices as about artistic excellence. I lightly remarked that it would be fun to win the lottery and then come to buy something here, but was told that they would not sell to me, however much I paid, because I was not a known collector of art. It seems that the value of an artwork, and so of the artist, often depends more upon who buys the work, and for how much, than upon its aesthetic qualities.

That, it seems, is a feature of the broader arts culture – but is it a feature of art? Not at all. An artist or art critic who had no opinion on the quality of a work of art because no-one had yet bought it, would not be considered worthy. The criteria for success in an arts culture are closer to the “gamesmanship” described at the end of Chapter 4: success is something that is recognised afterwards by subjective evaluation.

As with science, there are differences between the core discipline and the culture that surrounds it, and I learnt that it is more realistic to focus on a culture and its observable effects rather than speculate about the untouchable abstraction that is presumed to dwell at its core.

In such terms, I was faced with a mystery. We slip unconsciously between cultures without a moment's thought, and yet Meursault was condemned to death for stepping out of his culture. So where did he step to?

6. Platonism

So the first great lesson I learned from the popular understanding of Snow's two cultures was the extraordinary extent to which a different way of thinking could alter one's perception of the world, and how some people seemed able to move so easily between these different states without being shaken by their contradictions.

Another example that impressed me was the contrast between two ways of thinking that had been labelled Platonism and Aristotelianism. According to Samuel Taylor Coleridge, everyone is born either an Aristotelian or a Platonist and the distinction being made was about the nature of this everyday world of the senses. Is it real? Or is it but a pale shadow of some more ideal, objective and timeless reality?

I was taught that Plato's pupil Aristotle did not deny this greater "Platonic" reality, but he suggested that human knowledge should be grounded upon this world of the senses – for that is the data we are given. In a sense, this divide was about faith and experience: faith in a world beyond the senses, versus the immediate experience provided by our senses.

The image handed down from Plato was that we are like people in a dark cave watching shadows on the far wall and thinking that this is reality. If we could only turn and look over our shoulder, we would see the entrance to the cave, the light shining in, and the real objects – the puppets that cast those shadows. Instead of being in the thrall of shadows, of illusion, we would then know the truth.

This was for me an amazing image, as my generation was brought up in the age of the cinema, Plato's shadow play seemed to be describing the illusion cast by the projector on the screen, and how it did indeed hold the audience in its thrall so that the story on screen seemed almost more real than the whirring of the projector, and it was the former experience that would remain in memory long after.

But was it right to say that I must be either a Platonist or an Aristotelian? I was not sure. That existentialist experience put me very much in the latter camp, and yet there was something attractively authoritative about the Platonic claim to “higher truth” and the aura that surrounded its claimants.

Like many teenagers I had dabbled in experiments with an ouija or planchette board. Miraculous messages sometimes seemed to arise spontaneously as we sat with our fingers on a glass that moved from letter to letter, spelling out answers to our questions. Most of the answers were not very interesting, even stupid, but there were some examples of remarkable perception, when the “spirits” seemed to have intimate knowledge of the players’ secret lives. Yet what interested me was not so much these messages, as the diverse reactions that other people had to them.

For example there were those that warned us of the danger and claimed that these messages were delusions. The fact that they seemed to make sense and seemed to provide evidence of an afterlife was itself an illusion and proof that the devil was leading us astray. The Bible warned about attempting to communicate with spirits and it was therefore not God's way. They knew this with absolute certainty.

Others who claimed that the messages were delusions said they were caused by the fallibility of human perception – our brains were making sense out of nonsense. Also the fact that the glass seemed to move of its own accord was proof that our senses were deceiving us, for we must be unconsciously pushing it. They too knew this with absolute certainty.

This was intriguing to me: here were two groups of people coming from totally different mind-sets, and yet both were claiming with full certainty that our sensory observations and deductions at the ouija table were an illusion, and that they had knowledge of another reality that was more real than our sensory experience because it was objective, universal and unchanging over time. The actual world of our experience was just a distorted shadow of that higher world, an illusion rather than the truth. But the one group called the real world “spirit” and said it was the devil that was deceiving us, while the other group called the real world “material reality” and said it was our brains that were deceiving us.

In both cases, however, the Platonic viewpoint felt like the voice of authority, the voice of an expert player from an elite group who knew the rules and had greater access to the real world beyond the senses – whether through the study of the scriptures or through study of scientific publications. Those of us who wanted to “find out for ourselves” had been penalised. We might struggle to stay in the game, trying to prove that the messages were so “good” that they must be the work of God, or that they amounted to a body of evidence so formidable as to overturn the scientific world view but, more realistically, the choice was between defeat or stepping out of the game like Meursault. We could simply become outsiders who refused to play either game but chose to accept and give primacy to our own subjective experience.

Even in the latter case, we might still gravitate towards a Platonic model, because it often happens that such spirit messages prove their value by being very helpful. It becomes possible to step out of society's scientific and religious games and then find oneself being drawn into a new game based on the idea that there really is a higher spiritual reality that is generating these messages. This suggests a third explanation: that our ouija experience was the revelation of a higher spirit world that is guiding us.

To summarise what I had experienced: when a person is caught up in the illusion or shadow at the back of the cave and then a Platonist arrives and makes that person turn round and see the reality that is casting that shadow, then that person, their previous experiences of illusion and everything they have deduced from those experiences will be downgraded by the realisation that they were never “the truth”. In terms of “playing the game” the Platonist is now “one up” on the person who had been swept up by the illusion.

Something interesting is happening here: it is as if the Platonist has added an extra “layer” to human experience, analogous to the communications layer model. If the movement of my larynx causes perturbations in the air that cause your eardrums to vibrate, we might label that as “transport layer”. If your brain recognises that this is me trying to speak (as opposed to simply groaning to myself), you may call this a “communication layer”. If your brain can actually understand my words, we might call this the “language layer”. If you can also understand what I am trying to say you could call this the “meaning layer”... and so on.

So a Platonist is someone who adds a “Platonic layer” to everyday experience, a layer that contains a “true” model of what is really happening when we experience the shadows cast by that model. So, should I have fallen in love with my neighbour’s wife, a Christian Platonist might interpret this to mean that the Devil has lured me into sin, while a biology Platonist might interpret this to mean that my hormonal system has been inappropriately triggered, and an evolutionary Platonist might say that my genes are seeking to propagate, and so on. In each case the Platonic layer contains a full explanation of what I am experiencing.

But let us go back to the movie analogy and ask a famous critic to tell us about a certain great movie. The chances are that the critic will tell us about what happens on the screen, the beauty and pacing of the scenes the credibility of the characters and so on. If I then try to be the clever Platonist and explain that the critic has been fooled: not only was it really just film passing between bright light and a lens system, but also the characters were simply paid actors playing roles – am I then “one up” on the critic? Have I won the game?

No, it is now the Platonist that looks stupid, even though I have laid bare the reality behind the illusion. This suggested to me that maybe the arts culture was grounded in the immediate, subjective world of the senses, while the science culture relied on its faith that, behind that subjective world, there was an objective reality whose secrets could only be unravelled by careful and repeated experimentation by trained experts under closely controlled conditions.

And yet it did not seem to me that this amounted to a simple equation that aligned Aristotle with the arts and Plato with the sciences. Not only was the Platonic view shared by some non-scientists, such as my religious example, but also – as one went deeper into artistic discussions – there was often a sense that the greatest value of the artistic experience, however subjective and sensual, lay in its revelation of some higher, abstract concept of beauty or perfection. That seemed to be a thoroughly Platonic notion.

7. Mathematics

I have mentioned the fact that the English educational system lead to early specialisation, and my subject was to be mathematics. At the time maths was loosely bundled with the sciences – for all I know it may still be so in schools. So it was mostly studied as part of a “science” trinity consisting of Maths, Physics and Chemistry. But those few pupils who were destined to become mathematicians studied Maths, Higher Maths and Physics. There was no other choice: mathematicians were not free to avoid Physics at my school, just as they also had to have a smattering of arts for the “general” paper to become decent citizens.

This was not so agreeable to our main mathematics teacher, who used to talk scornfully about us going off to the “Folklore Department” for our Physics lessons. It was only much later that I understood the problem: it was that faith, though perfectly able to co-exist with logic, tended to constrain logic within its bounds. Our one-third-science education was subjecting us to a Platonic faith-based culture and, if we were to become pure mathematicians, we would need to be free of those limitations. Our teachers need not have worried: the 1950s was itself so imbued with scientific culture that we were already thoroughly corrupted.

This showed up most clearly on the day that a second maths teacher began the lesson by writing on the board “let i be such that $i^2 = -1$ ”. What should have been a perfectly acceptable mathematical statement was met with howls of protest. For half an hour of a forty-five minute lesson the teacher had to hold down a student rebellion. “That’s rubbish! It doesn’t exist!” “There is no such thing!” “You cannot have a square root of a minus number!” “If it’s meant to lie in another dimension, then where is that dimension? Show us!”

We had even been taught to use the non-existence of such a number as the trump card in *reductio ad absurdum* arguments: where an initial assumption was shown to imply that a certain quantity squared must be a negative number, and therefore the assumption must have been false.

The teacher had a struggle to overcome our resistance, which was based on an underlying faith that you cannot work with something that does not exist. As a sop to such disbelieving minds, these new quantities were labelled “imaginary numbers” and then we reluctantly began to study their properties. As so often happens in pure mathematics, something that begins as an apparently pointless exercise ends up by casting a lot of light onto the workings of the physical world – it becomes “applied mathematics”. Imaginary numbers were to prove fundamental to humanity’s understanding of electricity and a whole raft of other physical subjects.

This has, presumably, been a challenge throughout the history of mathematics. Whoever first suggested the possibility of a number must have met with scorn: “you can have three cows, or three wives, but you cannot just have three!” Then, once numbers had been found to have practical uses, there would be a new battle to recognise the concept of a number zero, then of fractional numbers. Negative numbers would have met considerable resistance: “How can you have ‘minus three’ cows? What do they look like? Cow-shaped holes?”

The Greeks, who did so much to shape our views of the world and to encourage rational discourse, themselves gagged on the idea that there could exist numbers that could not be written as fractions. Any real object would have a certain length and, if you accept that matter is made up of indivisible atoms, then it must be a certain number of atoms long. But, if you chose a square object of length and breadth one billion atoms then, according to Pythagoras' theorem, the diagonal would be one billion times the square root of two – a number that was not “rational” because it could not be made up of whole atoms. Just as we had to use the prophylactic term “imaginary numbers”, they talked about “irrational numbers”, even though these supposedly “irrational” numbers vastly out-number their rational brethren.

But I digress: the point here was that our faith in the “real world” described by physics had become so ingrained that it took the greater part of a maths lesson before we were prepared to even take the first steps into a less exclusive reality. And this is the problem with faith: it is a form of belief so instilled as to be almost invisible to the faithful, with the result that they do not recognise it as an article of faith but assume it is a given or “truth”. In such a context, that which lies outside or contradicts the article of faith is seen as “falsehood”.

7.1 Numbers as fairies

This problem came back to haunt me many years later when I wrote a book on experimental clairvoyance, published under the title “How to See Fairies”. How many people would dismiss the exercise of trying to see fairies as ridiculous, simply because “fairies do not exist”?

The technique for seeing fairies that I described amounted to asking yourself what you would expect fairies to look like if they did exist, and how might one communicate with them? Once one had answered those questions sincerely, then you are more than half way to seeing them, and you just have to work at that until you get the knack. As with “imaginary numbers”, the exercise of conversing with “fairies” then turns out to have useful implications that can add richness to everyday existence.

Another occasion when I witnessed the power of an underlying faith to constrain reason was at a lecture given to the Cambridge University Society for Psychical Research. The woman giving the lecture – thinking back, it could have been the witch Lois Bourne – had mentioned her acceptance of reincarnation. When it came to questions from the floor one science undergraduate asked: “How can you possibly believe in reincarnation, when it is mathematically impossible?” When asked to explain “mathematically impossible” he said that there are more people alive on the planet today than there had been in the past, so they could not all have reincarnated from past lives!

At the time this seemed to me an absurd argument, based on assumptions never mentioned. If the speaker had begun with an outline of the

assumptions – an equivalent to saying “let i_1 be such that $i_2 = -1$ ” – it would have been different. To be even approaching a mathematical argument he should have begun more along these lines: “Let us first assume that a soul is an eternal and indivisible monad that does not generate spontaneously, but enters a human body at birth and only departs from it at death, to then enter another human body. Then the number of souls existing today, being larger than the number of souls existing in the past, is incompatible with that assumption. Therefore, something about that assumption must be wrong”. If this had been said I might have accepted the broad implications of the argument. However, only one of those implications is that a soul does not depart at death and enter another body (ie reincarnation does not happen); other implications could be that souls

are not indivisible, or that they can themselves be born anew.

What was different about this undergraduate's thinking and that of the mathematician exploring imaginary numbers? Both take the form of a "what if?" enquiry, beginning with an assumption and then applying what we might nowadays call "soft reason" (as opposed to hard logic) to reach a reasonable conclusion. The mathematician, however begins with a clear statement of the premise "let i be such that $i^2 = -1$ " and then goes on to make deductions and reach conclusions.

What was missing was the clear statement about the assumed nature of the soul. So his argument, while undeniably reasonable, was constrained within a set of assumptions: a universe where souls can never appear from nowhere, or multiply. This is an example of what I call an “underlying faith” – a set of beliefs that are simply assumed to be true and therefore need not be spelled out before proceeding with the argument.

This diversion into faith and reason is important for my later exploration, because it points to the difference between Science Proper and a Science Culture. Science Proper has no law of “The Conservation of Soul Matter”: it would not even see any meaning in this vague term unless it was accompanied by a lot more explanation. And yet in the broader Science Culture one finds

very clear assumptions being made about the nature of the human soul, assumptions that appear to have their origins in previous religious beliefs but are preserved by the scientific culture as a means to discredit religion. This is analogous to the way that one might choose to discredit a Marxist during the Cold War by asking: “if you think communism is so great why haven’t you gone to live in Moscow?” – an apparently powerful question that relies on a mass of dubious assumptions.

8. Artificial intelligence

I have written in another book about the influence on my thinking of Professor Frank George of Bristol University, when he gave an evening talk and discussion to a group of sixth formers at Clifton College around 1960. It was the first time I had heard someone argue with conviction that a computer might become self aware, and that the human brain could itself be considered as a form of complex computer.

In terms that I have already used in this essay, many of the other pupils present at that discussion were “arts” types, studying English, history, languages etc. Their arguments with George were largely along the lines that “surely a computer could not write a poem, or fall in love...” and so on. George’s response was along these lines: “Please be more precise: tell me what you mean by ‘falling in love’ with sufficient exactness that we can then test to see if the computer can do it”.

He then explained that such an exact description would amount to a definition of exactly what must be programmed into the computer to prove that it could 'fall in love'. If, on the other hand, the expression 'falling in love' turns out not to be well-defined – ie something that could never be described in such exact terms – then he would dismiss the question as 'meaningless'.

In retrospect, this casts light on another distinction between the arts and the sciences cultures: the sciences limit themselves to concerns that can be expressed precisely in words and symbols, whereas the arts address those things that cannot be expressed, or even encompassed, precisely in words and symbols. Even when, say, a poem seems to provide words that nail down a transcendent experience with uncanny precision, then the truth is that we are surprised at how nearly this has been achieved, rather than that it has finally been achieved. Wherever there arises a 'final statement', there art ends.

As a mathematician, I was no longer much interested in these arguments about where the limits of computing might be. This was because I recognised that Professor George had in a sense illustrated his own theory by creating a machine algorithm to win this argument:

1. Is there something you can conceive that a computer could not?
2. If so, define it exactly (if you cannot do this, then it is meaningless).
3. That definition then becomes the process that must now be programmed into the computer.
4. As a result the computer can now do it.
5. Therefore the computer can do anything.

8.1 Virtual worlds

What intrigued me much more back then was the idea that my own consciousness could be mapped into some form of “computer” – the inverted commas reflecting my understanding at the time that such a computer might be vastly different from any of the computers around in 1960, it might even be some sort of biological culture and yet still by its function be recognisable as a computer. This would seem to imply that any number of other conscious beings could also be mapped into such a machine and that they could interact inside it just as in real life – in other words they could experience each other inside the machine’s “dream” just as if they were living beings. To argue that this was not possible would go against the assumption that the individuals’ total nature and awareness could be modelled inside the machine.

The natural extension of this argument to me was to accept that there could be a machine inside which an entire universe was modelled, containing sentient and self-conscious beings that were living out a dream that felt to them indistinguishable from physical reality – in other words they were in what we would now call a “virtual reality”. The conclusion of this argument for me was to deduce a possibility that the apparent physical reality that we inhabit could itself be a model being played out within some information processing system. In modern terms: I was exploring the possibility that we could all be living within a virtual reality.

This idea returned to me about ten years later, around 1968, when there was a lot of concern in the media about the limits to human population. They saw a future where we were so constrained by over-population that even a totally recycling world could not sustain any more life. I proposed an alternative to the common assumption that over-population would compel humanity to colonise space: instead we might be able model many parallel Earths within computers and download our individual consciousnesses into them so that humanity would survive and live on in many parallel “virtual” realities. I suggested that the best way to do this might be to recreate worlds based on our Earth as it was in neolithic times, when the first signs of civilisation were beginning to form.

This also suggested an alternative to another idea, proposed by writers such as Erich von Daniken, that was on the media circuit around that time: that Earth had been visited by superior intelligences from space and this could explain surprisingly sophisticated achievements (such as Stonehenge) being built by supposed savages. In my version it was not beings from outer space that inspired these monuments, but rather scientists from the original physical Earth that found themselves downloading into a virtual neolithic environment and wanting to leave some sort of mark or message for later civilisations to discover.

Returning, however, to the question of reincarnation referred to in the last chapter: the notion that my consciousness could be reproduced as a “programme” or pattern of information seemed to make the question of reincarnation very much simpler. I could dream at night about any number of other people and have convincing conversations with them, this provided a “Turing Test” indication that the brain could model any number of conscious, self aware entities within itself. There was, therefore, nothing impossible about my brain modelling the consciousness of people from the past, so that they could “reincarnate” in me.

Not only could such “souls” multiply and reincarnate many times over, I myself might contain the reincarnated souls of many people from the past – without breaking any supposed “laws of mathematics”!

9. Magic

I have often been advised that, if I want my work to find a reputable publisher, I must not to write about magic as if it is a serious subject for discussion. It can be treated as a historical, pathological or anthropological phenomenon, as an aberration of the primitive or disturbed mind, but not as something of any significance today.

In an attempt to get round this problem I will be writing more about “magical thinking” and “magical culture” – that is to say the subjective experience – rather than admit there is any underlying reality. But when it comes to outlining early influences on my thinking, I really have to use that dreaded “M-word”. Eerily, my MSWord software still refuses to include this chapter heading in my table of contents, despite a dozen attempts to reformat it.

People sometimes ask me, as a known writer on magic, when I first became interested in the subject. I tend to assume that everyone is interested in magic as a young child, because it suffuses so many of our nursery tales. For me as a child the most delicious setting for any story was when a character goes walking in a dense wood then comes across a mysterious, silent clearing. In the centre is a sort of altar or sacred place, around the edges unusual and atmospheric plants, and there is a suggestion (when I was very young) that this could be a fairies' meeting place. As I grew old enough to have discovered Tove Jansson's work, this feeling suggested that it could be a place for moomintrolls; then, as I approached my teens, it was more fun to imagine that it could be a ritual space for a secret sect of powerful magicians.

As I grew old enough to know that magic “is not real”, I still entertained phantasies of creating such a space in our nearby beech woods in order to give others that magical experience – even though I knew it no longer existed for me. This was when my love of magic was morphing into a love of conjuring – or rather prestidigitation, to avoid the original meaning of the word “conjuring”. So I would draw up plans for finding a suitable clearing, planting it with circles of Cuckoo Pint (the wild British arum), wormwood and other witchy plants, installing incense smoke generating devices and projectors to create smells and visible phantasms, and hiding aeolian harps in the trees to sweeten the air with haunting sounds. It was all dream: I was never practical enough to complete any of these projects.

Then my true “Harry Potter” moment

came when I was plucked from my village school on receipt of a scholarship to Clifton College in Bristol. One day, seeking a peaceful escape from the pressures of boarding school life I ventured into the science school and found a science library on the top floor – deserted, silent and with creaky floorboards. There I found a whole wall of glass-fronted bookshelves stuffed with ancient books on alchemy and magic – texts going back to Arabic manuscripts with pictures of furnaces, through Latin and Greek tomes and the works of people like Agrippa, Paracelsus, Thomas Vaughan and all the great names of alchemy. (I later discovered this was a private collection donated by EJ Holmyard who had been an historian of alchemy and head of the science department at Clifton). I still, six decades later, have occasional dreams

of discovering such a treasury of ancient wisdom, then waking with a sense of loss that it was all just a dream.

By that time I knew that magic was nonsense. I had gone through the stage of being interested in psychical research in an attempt to find some loophole in scientific understanding that could still allow me to believe in magic, then I had read about the many exposes of fraudulent mediumship by scientific researchers as well as conjurers like Houdini. I knew about the need for primitive minds to find explanations for things they could not comprehend, the need for people in mourning to cling onto ideas that the spirit might survive, and the hunger of the oppressed to find a loophole that could provide escape from the hard facts of existence. And yet it seemed strange to find, in that library, that so much had been written about subjects that had absolutely no basis in reality.

9.1 Magic and the quest for truth

This discovery took place in the late 1950s, at a time of scientific triumphalism as I described it in Chapter 2. This was a time when magic was not to be discussed: because it did not exist. In that case, I wondered, why had so much been written and said about it in the past?

The answer I was given at that time could be, a little unfairly, summarised in these terms: our primitive ancestors, because they were ignorant, did silly things like beating drums, painting images and dancing to make it rain. Doing silly things like that is what we call “Magic”. Now if you keep doing silly things for thousands of years you begin to do them rather well. Doing silly things well is what we call “Art”. If you go on doing silly things well for many more thousands of years, you begin to do them with real authority. Doing silly things with authority is what we call “Religion”. Then, happily, humanity woke up, realised it was being silly and, sometime in the 19th-century started doing what we call “Science”.

The above summary I have described as being unfair, because it is a rather glib summary of the full argument. It is a version of history that has persisted, and I came across a more thoroughly explained version of this same sequence many years later. It was at the 1997 Cheltenham Literary Festival in a talk by Felipe Fernandez Armesto about his new book *Truth – a history and a guide for the perplexed*.

The way he explained this evolution in human thinking was to suggest that our understanding of “truth” had evolved with time. This evolution has left us a cultural legacy consisting of four basic types of truth that can still be usefully used or combined. The first type of truth he described as “the truth you feel”, a sense of truth that is felt emotionally rather than by the senses, or being understood rationally. He suggests that pre-literate societies tend to see truth in this way and the author relates this to a basic human need for a sense of coherence. The suggestion is that this version of truth gives rise to magical thinking. Something must be true because it “feels right”. This might be compared with my gamesmanship example at the end of Chapter 4, where the person who loses at Wimbledon but gains a standing ovation could also be described as a winner.

The next stage he described was when the “truth you feel” becomes overlaid by “the truth you are told”. This is truth that comes with the backing of authority. Typically an external authority, a priest or shaman, but it could also be something like a divine revelation or strong intuition. It can also be truth by consensus: a truth that gains authority by being shared. In terms of Snow’s two cultures, we can see how these first two types of truth inform the artistic culture: the artist feels moved to express an inner truth, one that “feels right”, which then becomes recognised as a “true” work of art by consensus, or by the judgement of some artistic authority. In Section 5.3 I described my reaction to London’s Frieze Art Fair – where the value of a work of art lay primarily in the reputation of the person who had bought it, and only secondarily in the

price paid for it.

The third type of truth he described is one informed by reason or rationality. Beginning with a truth of the previous sort, one that comes from an authority such as divine revelation, the truth seeker now chooses to see if it stands up to reason. Taking a revelation such as “God made the world good, but man’s sin corrupted it” one can think about this idea at great length and see the logic in this, the extent that it explains things and makes sense and, for that reason, it might indeed be “true”.

This development of rationality is reflected in the tortuous reasoning of theologians in the middle ages. Ultimately however, the impact of reason in religious discussion can become corrosive, when the processes of reason come up with explanations that are simpler or more reasonable than the original authority or divine inspiration. This introduces scepticism: the stirrings of doubt in the authority of the priesthood or leader.

The fourth type of truth is the truth you test through your senses. The idea that “seeing is believing”, is fundamental to empiricism and scientific culture. The author suggests that although this notion of truth has always been with us, it is only fairly recently that it has come to dominate other types of truth. When Galileo invited his Catholic critics to look through his telescope and see for themselves, some refused on the basis that the telescope was “the work of the devil”. Nowadays however, most of us would accept the view through the telescope as proof of truth.

Armesto's version of the story appealed to me more than the version I had been given in the 1950s, because it recognised that the earlier versions of truth – by feeling, authority and reason – were still active and still had some validity. The problem with the earlier version that relegated magic, art and religion to an ancient past was that it failed to explain why CP Snow had found two cultures still extant today. According to the version that ended with the scientific trump card, one would have to be a bit simple minded to still be doing art or religion – let alone magic. It was OK as an explanation of why there was no magic nowadays, but why then did art and religion both survive in a world that had enjoyed this scientific revolution?

But even in this more thoughtful version there was still a measure of scientific triumphalism, in which the earlier versions of truth hold lower status now that we have reached the pinnacle of scientific rationalism. I compared this with another talk that I attended that same week in Cheltenham: Francis Fukiyama describing his new book *The End of History* that also suggested that humanity had reached a pinnacle of development from which we could cast off old, outworn delusions from the past. In Fukiyama's case it was the Western economic and political model that was the final trump card. History has ended because we now, for the first time, all know the truth.

9.2 Testing the truth about truth

Back in the 1950s I accepted that story about the evolution of human thought, and its explanation of why so much had been said about magic even though we now knew that it was completely non-existent. What is significant to me now, in my present discussion, is not so much that I did accept it but why I accepted it.

Was this truth confirmed by my senses? No, because I was in no position to go back in time to see if people really did in the past test truth by feeling; nor was I able to examine primitive societies to see if they did so and might thereby provide indirect confirmation of what our ancestors once did.

Was it truth that stood up to reason? No, because, though not blatantly unreasonable, it was to me “sufficient” but not “necessary” as an explanation. For why should people not, when authority had been revealed to have feet of clay, have reverted to feeling as a higher form of truth? Once one had learned about human folly and delusion, why should we trust our senses as being more reliable than reason? There was no clear reason why that sequence should have taken place.

So was it truth by authority? To some extent, yes: it was what my teachers and other experts were telling me in the 1950s. But remember that I had been a teenager who was beginning to question authority – even if, at times, it was rebellion for rebellion’s sake. At the age when I heard Armesto give his version, I was far too cynical about human knowledge to totally accept even his authority as a renowned Oxford philosopher.

No. The reason I accepted that version of history was not that I could test it with my senses, nor that it was the only reasonable explanation, not even that it was delivered with absolute authority, but rather that it felt right.

Why did it feel right? It can be dangerous to give reasons for feelings, or to put too much weight on such explanations. So I will simply provide an explanation that passes the same truth test – this explanation also feels right to me.

Although I cannot remember much of my infancy, I have since observed babies and find it easy to accept that they explore the world using all their senses but with feeling as the measure of truth – for example the feeling that certain things belong together: “smile, and the world smiles back at you”, “cry loudly and things start to happen”. I can see in this the basic elements of magical thinking. In a year or two, however, my baby feelings had developed to the point where they could overwhelm observation, and I began to live in a fairy-tale world of imagination. I would see Moomintrolls lurking in the roots of trees and I would dramatize their existence and tell my mother stories about them. I would now consider myself to be thinking artistically at this stage in my growing up.

But then, as I approached 10 years old, I did not like older children dismissing my fantasies. I began to look for something more permanent and fundamental, as well as socially acceptable, and I became more religious – thinking about God, and praying by my bed after lights out. Then, with educational training, my powers of reasoning became stronger. I reached that young teenage state of demanding reasons for everything: “give me one good reason why I have to be back home by 11 o’clock!”

Science seemed to embody that power of reason, it could explain everything and I began to observe that it could also make and fulfil predictions. Demonstrations in the school laboratories provided proof that science was indeed the path leading to truth.

So here at last was a theory that put magic in its rightful place. Rather than just deny its existence in the face of all those books on the subject, I could now see that magic was an outmoded and erroneous way of thinking that had its place in the infancy of human culture, and in the infancy of each one of us. It was something we had outgrown. I accepted this theory not because it could be demonstrated, nor that it was logically conclusive, nor that I was subject to absolute authority, but because it felt right.

So this theory that places magic in our primitive past was in itself an example of magical thinking – based on feeling as a criterion for truth. It is itself a magical theory and therefore, in its own terms, suspect.

Nor did this suspect theory align with the two-culture theory that suggested that art in the 20th century was an active and relevant complement to science, and so not simply its outmoded forebear, based on outmoded criteria of value.

If art lived on as a distinct culture after the rise of science, might not also magic and religion live on in the same way? I did not have to look far for evidence that there was a thriving religious culture even in the sceptical 1950's – a culture as distinctive as the factors differentiating the art and science cultures. It took longer for me to locate a magical culture, because it was the one that was not supposed to exist.

As a school prize for essay writing, or something, I received a copy of Eliphas Levi's Transcendental Magic in the translation by AE Waite – evidence that there had been a magical culture as recently as the late 19th century and as close as France. From the Gloucester public library I borrowed the Watkins re-issue of The Book of the Sacred Magic of Abramelin the Mage – evidence that even close to home in England there were still people around with an interest in magic.

So, where were these people?

PART THREE

My quest
for four cultures

10. Cultures

What most impressed me about the popular notion of “the two cultures” that came out of CP Snow’s lecture, was that it seemed to resolve a conflict. What had its roots in a territorial war dividing academia and a battle for educational funding, settled down to an understanding that the two cultures live more in symbiosis than in conflict. Science could generate new media for artistic expression, while the enjoyment of the arts could equally stimulate creative, lateral thinking and so support, rather than hinder, scientific progress.

But I could see other areas where similar differences in thinking or perception did lead to unnecessary conflict. I am not talking about differences polarised along a single axis, but rather differences in orientation.

As an example of differences polarised along a single axis: if one person believes that everyone is their own master, so that the poor only have themselves to blame, then they will be in conflict with someone who believes that society has an obligation to help those in poverty. That is a polarised conflict that could only be resolved by compromise. But if the person who believes that the poor only have themselves to blame comes up against someone who believes that everyone has a right to better themselves through education, they might also begin by getting into arguments – until it was realised that making education available for all would actually add weight to the argument that those who still remain poor only have themselves to blame. Here are two viewpoints that at first seem opposed but actually could work in harmony.

Many years later I married someone who made a living helping company boards improve their decision-making. It was a similar process: conflicts arise on the board because people think differently, and this leads to stasis. But if these different modes of thinking are recognised as complementary, then board performance can be improved. For example: some people see the visionary “big picture” while others see the detail – put them together and they can become polarised into “wafflers versus sticklers”. But a skilful chairman might allow the wafflers just enough discussion of the big picture to stimulate general interest, then turn to the sticklers (before they start complaining) and ask them to address the challenges and suggest realistic steps towards achieving that big vision.

I could see other areas – for example in the debate between science and religion – where the notion of different but complementary cultures could be helpful. Before explaining why I wanted to extend Snow’s scheme to include four cultures, it should be pointed out that I was not the only one who suggested extending it. CP Snow himself admitted that the number two was a “very dangerous number”, and that attempts to divide anything into two should be regarded with the utmost suspicion. He recognised that you could not easily lump together cultures as diverse as biology and physics, and yet in the end he decided to go for a simple division into two.

There is another reason why I found the idea of cultures helpful. If you debate art versus science, religion versus science and so on, then you are pitting one abstraction against another; whereas a debate between cultures is a debate based more closely on observable physical realities.

When defending an abstraction like Art or Science, the tendency is to retreat towards an essence or core of that abstraction that is so pure as to be practically unattainable and so unassailable. I remember arguments at school between Christians and atheists along such lines. The Christians would talk about all the good done by Christianity, and the atheists would counter that by pointing out that Northern Ireland was being torn apart by battles between Protestants and Catholics. The response was: "That is not really about Christianity, it's just a

political battle”. So the atheists would then bring up the crusades or the Spanish Inquisition and other cruelties committed by Christians in the name of a supposedly loving God, and get the inevitable response: “You cannot blame that on Jesus’ teaching – it’s human nature that’s at fault”. In the end the atheists found themselves attacking a version of Christianity so immaculate, so far removed from historical reality, that it had retreated into an untouchable citadel.

In the same way, those who criticised science, or suggested it was responsible for world problems, would be told about the detachment and scrupulousness of scientific method, that must not be confused with actual scientists' human fallibility. Or we would criticise some "great work of art" and be told that it is not, of course, the artist's finest work and, of course, "Chopin is hardly in the same league as Beethoven" or whatever.

Christ's teaching may have been immaculate and radical, but there is no doubt that Christian "culture" contains many elements of dogmatism and reactionary values. Science may be the detached pursuit of knowledge, but scientific culture has also played a significant role in developing weapons of mass destruction and despoiling the natural order.

That is why I later chose to focus on human cultures, rather more than the abstract principles that lie at their heart, and this is the line I am following in this book.

People sometimes asked me to define what I meant by science, art etc, and I have increasingly chosen not to do so, but rather to look at the behaviour of the groups of people who gather round those banners. In Chapter Seven I described how the scientific culture is deeply anchored in the idea of repeatability and peer approval, and that indicates a strong underlying faith in the existence of one objective material reality where the laws of physics remain universal, eternal and unchanging. That suggests a scientific culture strongly based on faith, even though “science proper” might at any time question such articles of faith.

10.1 Science compared with magic

Early on, however, when I was at school and university, I did indeed attempt to analyse the difference between science and magic. I quickly decided that the real difference lay in attitude and thought, more than any actual practice. When Aleister Crowley, the most famous British magician, describes writing a letter as an “act of magick”, he is describing a simple physical act no different from any non-magical letter writing – it is the thinking behind the act that makes it different.

In Chapter 9 I described how, in the context of 50s materialism, I was being taught that magic was a totally bogus phantasy concept, utterly out of touch with reality; but when I discovered Holmyard's collection of books on alchemy and magic, I was impressed by the quality and detail of observation in some of those books. Far from being flaky delusions, these ideas were founded on solid empirical data.

In fact, it became clear that science – though also founded on empirical data – was much more selective. In this respect it was, therefore, less complete. Aleister Crowley's instruction on meditating, for example, require the meditator to not only make a written record of the subjective experience of the meditation, but also a precise record of as many factors as possible such as time, duration, weather conditions, planetary positions, mood, physical condition etc. If it were conducted as a scientific laboratory experiment instead of a magical exercise, many of these factors – such as planetary and outdoor meteorological data – would very likely be dismissed as not being relevant to the meditation exercise.

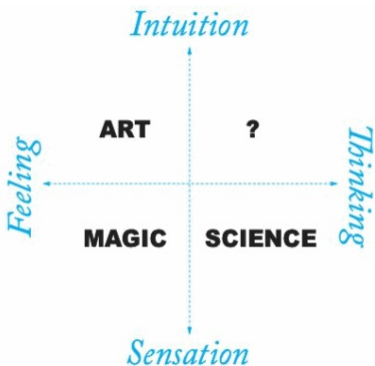
So I decided that, although both magic and science required observation to provide input, the way that data was subsequently processed was different. Taking astrology as an example – and I later explain why I consider astrology to be part of the magical culture – how does an astrologer gain an understanding of astrological factors, such as the twelve signs? Of course much of it is simply gained by reading instructional books (truth by authority), but practicing astrologers also build up their own guidelines by observation.

So, to take as a simple example the sign Aries and its role as initiator or first sign of the zodiac: the astrologer might note among the many people with Sun in Aries that some like pioneering activities, some are good at planning or starting projects but give up later if the process becomes protracted, some like to overtake vehicles in order to have a clear road ahead of them, some have a childlike quality, some tend to say “no” to any suggestion as if they wanted to clear a space for some new suggestion... Among all these observations that seem far too diverse and immeasurable to a scientific mind, the astrologer gains an almost aesthetic sense that they are all linked by some subtle thread of “first beginnings”.

If a scientist chose to investigate this connection, it would require a very different approach: instead of opening the field of observation so wide, it would need to be tightly focused, preferably on a single factor such as whether Aries subjects are more likely than other signs to initiate conversations. So several thousand conversations between Aries and other signs would be recorded and monitored to test the hypothesis. The result of this analysis, whether positive or negative, might have scientific value but would have very little application for practical astrology.

How do I then describe this difference in the way data is processed? I used the words “aesthetic sense” above, and that is the clue, for I decided back then that science gives greater weight to thinking about the data, and magic gives greater weight to feeling – while both have observation in common.

Those three words “thinking”, “feeling” and “observation” resonated with what I had at the time been reading about Jung’s psychological types, and it led me to create the following diagram:



My argument was that any system of thought requires two things: data input and data processing and evaluation. For science and for magic the primary input was observation; for art the primary input was intuition. For art and magic the primary evaluation was by feeling – does the idea “feel right” or “make sense” in terms of sensibility; for science the primary evaluation was thinking – does the idea make logical sense in the context of what is already known.

I added the word “primary” because, of course, all these activities incorporate all four of Jung’s functions, but certain ones do take priority. Thus it would be ridiculous to suggest that an artist does not use physical senses in order to observe, but on the other hand an artist who only recorded exactly what was seen would be no more than a camera – it is the artist’s intuition and feeling that makes a “mere drawing” become recognised as art.

When I first created this scheme in the late 1960’s, I was not sure what lay in the fourth quadrant and asked myself what sort of activity is primarily shaped by intuition and thought. I decided it might be philosophy, but quickly abandoned that idea when I started to think of the diagram in terms of four broad cultures.

11. Religion as a third culture

CP Snow's original two cultures described two tiny minorities – literary intellectuals versus physicists. But the idea was taken up in a popular sense to divide all human activity into two broad categories – art or science. And yet, even in that broadest sense, I could see that there remained many human activities that did not fit easily into either group. For a start I wanted to consider religion as a distinct culture.

Religious practice, when viewed as drama, can appear quite “artistic”, and yet the people involved would be insulted if you only saw what they were doing as a form of artistic expression. It is even easier to draw a distinction between religion and scientific culture. So was that reason enough to classify religion as a distinct, third culture?

The answer is both yes and no, because, as in the case of art and science, I recognised both a broad and narrow use of the word “religion”. In the narrowest sense religion was what went on in churches and temples but, by extension, I could include family prayers, the saying of grace before the meal, and an individual’s private prayers, devotions and thoughts about God. Even with all these added, this was still what I would call “religion in its narrowest sense” or simply “religion proper”.

To understand what I understood as religion in its broader cultural sense, I go back to the origins of the word. The word “religion” comes from a Latin word meaning to bind back together. So for me the religious culture is about ideas that bind people into social groups (and typically by binding the group to some central entity or belief), and so I included politics and spectator sport in the religious culture.

This approach to religious culture is not altogether unlike that of an anthropologist, for I suspect that if an anthropologist came across a whole tribe dressing up in deer skins and dancing like deer, the first assumption would be that this was a religious festival: to some extent serving the purpose of confirming the tribe's identity by binding its members to a deer totem. But if they found one single individual dressing in a deerskin and dancing like a deer, and doing this in secret, then a more likely first assumption might be that this was not religion so much as a magical practice, maybe intended to assist the dancer to hunt and catch deer.

Here, however, I was on sensitive ground, because in the 1950's religious people often found themselves under attack from non-believers. So when I suggested that communism was perhaps best understood as an alternative religion, they tended to interpret my enquiry as just another attack on religion. Although it was not uncommon to hear people say that "football is his religion", there was no offence as long as this was taken simply as a joke. I never thought that football was a "religion proper", because I could see significant points of distinction between football and conventional religious practice; but rather I considered that football had qualities of binding people into groups, providing meaning and establishing loyalties while excluding outsiders, all of which I associated with the wider religious culture.

Again, a recent book about Hitler and the Nazi phenomenon was lauded for its insight that Nazism was “perhaps better understood as a religious phenomenon”. To me, and to many others, it is always been very obvious that Nazism was a religious phenomenon. I remember being amused when I heard a fundamentalist Christian preacher ranting against “Eastern religions”, because, when it came to naming his list of pernicious Eastern religions, he included communism among them (I could imagine Marx turning in his grave). Although not quite so well defined in terms of symbolism and observance as Nazism, communism also qualifies pretty well as religion in this broadest sense. Republican or Democrat, Tory or Labour – whatever the nation, politics usually boils down to dividing people into groups with strong

loyalties, and that is fundamental to my notion of a religious culture.

11.1 Is religious culture irrational?

If religion was to fit into the missing top left quadrant of my diagram, then there must be a sense in which it relies more on Jung's ideas of intuition and thinking, or reason than on feeling and observation. Critics of religion would have no problem in downplaying the role of observation and claiming that one must be positively blind to fall for such nonsense.

Feeling is harder to separate because there is a tendency to confuse intuition and feeling in common parlance – and I am not sure that I can always be clear about the difference myself. But here is an attempt: if a religious person suffers a “gut feeling” that something is good or bad there will be a tendency to

distrust that feeling as maybe the work of the devil. For example the communist who feels tempted to have a flutter on the stock market. But if there is a stronger sense that the message came not from within but from some higher source – an intuition – then it would be more immediately acceptable to the religious thinker. So that communist might get the idea that the flutter on the stock market would not be for personal gain but a way to better penetrate the capitalist mind (as Marx himself managed) in order to overthrow it – and if any profit results it could always go to party funds.

In that manner I could see religious culture in terms of the reception of ideas from some “higher” source (a scripture, a rule book, a legal precedent, a manifesto) and then thinking about how best to put those ideas into practice in everyday life. Later, when I heard Armesto speak at the Cheltenham Literary Festival about the evolution of human ideas about truth – described in section 9.1 – I preferred his use of the word “authority” to describe “the truth that one is told”. So that I now see religious culture as more about accepting ideas from some perceived higher authority and then thinking about how these can be put into practice.

In either case, I wish to address one misunderstanding between the scientific and religious cultures. I often heard speakers from the scientific culture criticising religious people for being “irrational” or “illogical”, and this was a dangerous criticism to make within earshot of a mathematician, for whom the words reason and logic have a more precise significance.

Once one had accepted the idea that this world was created by an omnipotent, omniscient God that wishes to be worshipped, then I could see nothing irrational or illogical about choosing to worship him in the traditional manner. As suggested above, I saw reason or logic playing a significant role across the wider religious culture, because that is how one works with the data provided by the religious authority. Once the Football Association's rules have been accepted as scripture, the actual game is a logical working out of those rules, just as the workers' co-operative is a logical extension of communist beliefs. To me the true difference between the religious and scientific cultures lay not in rationality, which was common to both, but rather in those underlying beliefs or assumptions.

It is commonly understood that an idea or statement has no scientific validity unless it is open to being disproved. Sacrificing precision in the name of elegant symmetry, I would suggest that no idea or statement has religious significance (in this broad sense) unless it is open to being disbelieved.

This seems like a very radical statement, but consider trying to form a religion on the basis of some unarguable reality – such as the fact that the sun rises every morning. You might manage to build some sort of brand around that idea, but I do not believe it could ever attain the dynamism of a religious belief because it is unarguable. It would be better to found a religion on the basis of a belief that the sun only rises every morning because certain priests perform daily rituals to make it happen.

Going back to the idea that religious culture is based on ideas that bind people into groups, you need the binding ideas to be open to disbelief in order to define the boundaries of the group that does believe it. (Note that the criterion for religious belief is that it must be ‘disbelievable’ rather than ‘unbelievable’, because the latter would mean a religion that no-one could belong to.) So, from a scientific viewpoint, you could say that a belief only has significance to the religious culture if it might be seen as somewhat ‘silly’.

For example, the football fans' belief that the most important thing in the world is to get a certain ball into a certain net is, to many people, pretty silly. Just as the communists' idea that a working class could rule the world and still remain a working class, seems pretty silly. Or that Mary could become pregnant and give birth to The Son of God without losing her virginity, seems pretty silly in scientific terms. In terms of the broad religious culture, the power of all such beliefs seemed to lie in their ability to separate believers from nonbelievers, and thus create a strong, coherent community – one that binds people together and so distinguishes the believer from the non-believer.

If that is understood, then it will become clear why I also included things like brand loyalty in the religious culture. The whole process by which a trade or occupation turns into a profession seemed to be another manifestation of the religious culture.

This was the thinking that led me to place religion in that top right corner of my diagram, as another broad human culture on a par with Snow's science and arts cultures.

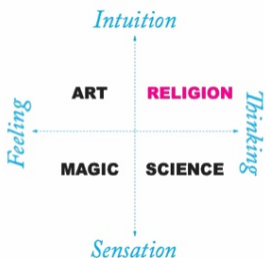
12. A fourth culture

Several paths of exploration came together and led me to the idea of magic being at the core of a fourth culture based on magical thinking.

The first path I have described was the idea that “magic” belonged to a distant past where our ignorant ancestors tried to make sense of and control the world, and that from those practices there emerged the human activity we call “art”, and with increasing socialisation came “religion” and now we have “science”. That sequence by itself would seem to suggest that we should all now be scientists – because magic, art and religion all belong to earlier stages in our social evolution. But CP Snow’s followers had suggested that present day society was in fact divided into scientists and artists – that art, far from being an obsolete relic, was still alive and well in modern times.

So what about religion and magic? Why shouldn't they have survived too? Religion clearly was still around, even in the 1950s. That line of thought led me, as described in the last chapter, to see religion as a third culture. But this, in turn, left a puzzle: if there was indeed a surviving fourth culture of magic, then where was it? What did it look like? Who was representing that culture?

A second line of exploration I mentioned at the end of chapter 9: in trying to understand the difference between modern science and magic as described by the ancient experts in Holmyard's collection, I had drawn up a table with four quadrants. Three of those quadrants contained art, science and magic respectively, so what if I put religion in the missing quadrant to produce the following diagram?



Did it make sense to see religion as based on input from intuition being processed by thinking? I was able to convince myself that it did: because religious leaders intuited “the word of God” and then created formal religions by thinking through the implications of that message.

So this diagram was arguably not so much about four cultures as four ways of thinking, or looking at the world. And when I extended my idea to a broader religious culture, I could see that politicians went through a similar exercise: inheriting a set of authoritative political beliefs such as equality, racial superiority, free markets or whatever, the exercise then was to think through the implications and find ways to put them in practice. Similarly, given the official rules of football, one then devised winning strategies in accord with those rules. The limitation of this diagram lay in my shaky use of the word “Intuition” at the top – I was later to improve on that, as I will explain in Chapter 15.

A third line of enquiry began with my earlier question: is “playing the game” art or science? It is certainly one of the activities that people might describe as “more of an art than a science”, but does that make it art? A confidence trickster, for example, is also known as a “con artist”, and yet the con-artist I was once told about – who bent up a wire coat hanger and placed it in an gallery of modern art and nearly got away with it – did not earn membership of the Royal Academy for his efforts.

This is an interesting example because of its complexity: whilst he was playing his game he was accepted as an artist by those visiting the gallery but, when it was revealed that he was in fact playing a game, his coat hanger was promptly removed from the gallery. His artistry was rejected. Nor was he himself, as “con-artist”, accepted into the art fraternity as a member of the artistic culture. So it would seem that although, to the outside observer, the arts culture may sometimes look like game-playing, to those in the culture it most certainly is not. Forgery and pranks are greatly frowned upon and, even when sailing very close to that wind, artists such as “dadaists” need a very strong philosophical back-story to justify their apparent prank as being a serious artistic statement.

Game playing does have elements in common with art – notably the dramatic arts – but, in trickster mode, it is most successful when nobody knows you are playing. Recognition plays an important role in art, so that any activity that is annulled by recognition would not, therefore, be easily accepted in an arts culture.

Nor would “playing the game” be welcome in the religious culture, because it involves too much individual choice, plus elements of deceit, untruth and accepting rules other than God’s law. The nearest equivalent in the broader religious culture would be sport, but gamesmanship sits uneasily here. Even though extensively practiced on the court or field, it has no place in sport’s official rules and tends to be denied or considered to be “unsporting” – though the fans might love it. Again, this is a fine distinction: “playing a game” might seem to be what sport is all about to the outsider, but to the insider the sport is not a game in that sense of arbitrary choice but a matter of utter seriousness. Football is, in that sense, not a game, but a religion.

The elements of illusion and deceit would also exclude game playing from easy acceptance in a science culture.

Again there is a paradox here because, to the outsider, it can seem quite absurd how far psychologists will play games and lie to test subjects about the purpose of their tests in pursuit of the truth: if they are so comfortable telling lies, what reason have we to believe anything they report as a result of their tests? Again there is a fine distinction: to the psychologist this was not a lie but a “necessary test condition”.

12.1 A game-playing culture

So I looked for signs of a fourth culture to encompass those who treat life more as a game with arbitrary rules that one can choose to accept or ignore. I have already mentioned the widespread popularity of Stephen Potter's *Lifemanship*, as an example of people treating life as a game, and I could see plenty of signs of this sort of behaviour around me. But it felt more like a social construct: a religious grouping based on the idea that it was fun to pretend that life was a game as a relief from the knowledge that actually life was terribly serious. It was ok to boast about one's clever lifemanship skills, but if someone else drew attention to them, they would usually be vigorously denied.

The nearest thing I discovered to game playing as a serious life choice in the 1950s was in the pages of Prediction magazine – a popular astrological journal that also included articles on tarot, casting runes, graphology and other forms of divination. The idea that one might map one's life by a shuffling of playing cards was remarkable enough, but that one could also accept that game at one moment and then shift reality to a world where life was instead mapped by the movements of heavenly bodies, or the casting of a set of stones – this seemed to me to be in the true spirit of game playing.

There were divisions among Prediction readers – some people would classify themselves as astrologers, or as tarot readers, or rune-masters, and suggest that theirs was the only game, and therefore the truth. But at the heart there were signs of a minority that was equally at ease playing any of these games or more, and some of these people apparently did not mind calling themselves “magicians”.

At the centre of the arts culture stands art in its narrowest sense, meaning painting and drawing – and every town and village had people practicing such art with varying levels of success.

Also, at the centre of the science culture there were scientists known to be actually working in laboratories and publishing erudite papers. At the centre of what I now recognised as the religious culture, there was religion itself – practices that everyone had some inkling of, even if not deep understanding.

But when it came to my fourth culture, what was the equivalent inner core? Who were the people that were practising the sort of conscious game-playing that I described earlier? People who not only “put on an act”, in the sense of adopting suitable mannerisms, words and gestures, but also improved their act by projecting their consciousness into the required role?

I had found the answer in a very small group of people who did actually call themselves “magicians”. It looked as if Prediction readers were part of a broad culture that could not be neatly fitted into the arts, religious and science cultures. And at the core of that culture was “magic proper” practiced by people who actually called themselves magicians.

In Chapter Six I drew an analogy with the Layer Model used in communications and suggested that the Platonic view effectively adds a higher layer to our experience: a layer that contains “truth” in the form of an accepted model that supposedly casts the shadows we experience. In such terms you could say that magical thinking superimposes an even higher “Games Layer” to existence. This layer embraces all the possible “true” Platonic models, but presents them not as absolute unique truths but as a collection of games.

Should I have fallen in love with my neighbour's wife, a Christian Platonist might interpret this to mean that the Devil has lured me into sin, while a biology Platonist might interpret this to mean that my hormonal system has been inappropriately triggered, and an evolutionary Platonist might say that my genes are seeking to propagate, and so on. Each person interprets my experience totally in terms of the higher truth in their accepted Platonic layer.

In the magical culture that I was exploring those Platonic models are no longer the whole picture, for they are just elements in a higher “Games Layer” that allows the free application of any number of different Platonic models. A magician might appear to agree with the Christian interpretation, then horrify the Christian by deciding to draw a tarot card, or study the horoscope, or both, in order to find ways to optimise or avoid the sin experience. You can choose to play on any board or several games at once. The only limitation is the power of your imagination to hold so many truths in parallel. You can play chess on one board and draughts (checkers) on another, but do not mix the rules. When the boys at Rugby school decided to pick up the ball and run during a soccer match, they were birthing a whole new game.

The idea of a games layer could be an abomination to scientific and religious cultures, where it is important to identify an explanation that is objectively true. In religious culture the model is more likely to be a given (data), whereas the scientific culture works more by discovering the model (capta), but both rely on the layer containing one single agreed truth, even if it is still waiting to be discovered.

Imagine a chess tournament where White's pawn at a2 takes Black's rook at h3 – because White thought they were playing “cylindrical chess”. It is possible to travel far with someone, trusting that you are both “singing from the same hymn sheet”, only to discover an underlying difference that creates a schism. People once united in Christ can turn into bitter foes because of some doctrinal detail that is given the label “heresy”. It can be very disturbing to discover that an agreed truth is falling apart, and becoming a set of alternatives.

12.2 Don't mention the m-word

Ever since that point, I have been told over and over that no-one who takes the word magic and treats it seriously will ever themselves be ever taken seriously. As a writer I am told that I have only two options: either to use the word magic in a totally frivolous manner and become a writer of fantasy novels, or else to avoid the word altogether and then have a chance of becoming recognised as someone with something worthwhile to say.

That was one reason why, in my first attempt to put these ideas into writing, during the 1970s, I chose not to talk about four cultures but rather about four ways of thinking, or four ways of looking at the world: magic, art, religion and science. Even in this present book, I wanted the title “My Years of Magical Thinking” rather than put the naked M-word into the title. This is because magical thinking, as with a belief in magic, is something that one is allowed to discuss as a form of human pathology. So let us say for the time being that, when I talk about the culture of magic, I actually mean a culture that is based on magical thinking. In such terms, I can now proceed to outline my theory of four cultures.

Just as I had difficulty with the narrower meaning of the word “religion” and its broader sense as a culture that binds people into groups, I face a similar problem with the magical culture, but even more so. Because magical culture in its broadest sense embraces a whole range of activities that the majority of people either considered to be non-existent or, from a religious perspective, “evil” or, from a scientific perspective, “ridiculous”.

Most difficult of all was the fact that “magic proper”, in its narrowest sense, was something that was not supposed to exist in the 1950s when I started exploring this topic.

12.3 In search of magic

During the 1950s public interest in magic was at its lowest ebb and there was very little equivalent to today's "mind body and spirit" bookshelves. In Britain the main sources were the mail order Aquarian Book Service near Heathrow airport, and later the Helios Book Service in Toddington, Gloucestershire, plus one or two specialist bookshops such as Atlantis and Stuart & Watkins in London.

The few English books being published on magic at that time were mostly based on the ideas of Dion Fortune, a British occultist who had died in 1946. She defined magic in psychological terms as “the art of causing changes in consciousness at will”. This was her version of the definition given by Aleister Crowley, another British occultist who had died in 1947, who defined it as “the Science and Art of causing Change to occur in conformity with Will”. (You see in these definitions my problem with the something being both art and science.)

Apart from reprints of Dion Fortune's books, the main English language magical author at the time was WE Butler, to be followed by Gareth Knight and others who had a magical temple near Tewkesbury in Gloucestershire. I got to know of this group through the nearby Helios Book Service not far from where I was brought up and living at the time. In keeping with the ideas of Dion Fortune, these writers described magic in terms of choosing a traditional system of symbols, reinforcing the meaning of those symbols through meditation and study, so that they became deeply rooted in the unconscious (or that their pre-existing unconscious roots became firmly established, depending on one's beliefs) and then using them as "doorways" through which one could explore these "inner pathways".

I have shamefully and inadequately used words in inverted commas as shortcuts rather than attempt a fuller description of the magic outlined by these authors. The reason being that it is not my intention at this point to describe magic in any detail, but rather I just want to indicate how around 1960 current ideas about magic aligned with my idea of a “game playing” culture. (In the next chapter I will describe some of the elements of magical thinking that help to identify it.)

Remember what I wrote in Chapter 4 about my “game playing” role when I foolishly aspired to becoming a “jock”: how I began by studying and copying the outward forms. These magicians were doing something very similar when, for example, choosing to explore the symbolic meaning of, say, the Roman god Mercury. They would

begin by studying and copying the god's outward symbols: the appropriate choice of words, the God's clothing, gestures etc. But to really get into the symbol Mercury, these magicians would take a further step along the lines of my empathetic identification. Like the little baby that begins better to understand mother's behaviour by imagining that something like its own consciousness might exist inside the mother, so the magician would "project" his conscious awareness into the symbol being built up and so, in a sense, "become" the god Mercury.

On one level the magician is perfectly aware that they are not the God Mercury, who may not in any provable sense “actually exist”; at the same time they are in a mind-set where the God not only exists but is part of them and capable of becoming one with them. They are “playing a game” as much as any chess champion who is utterly absorbed in a match.

Another example would be the use of symbols for divination. A traditional set of symbols such as the tarot pack, I Ching or even tea leaf patterns, would first be chosen, then fortified by meditation and study, then dealt at random as one might for a simple gambling game, and then “read” for the meaning suggested by their symbols.

To an outsider this process might seem to be taken too seriously to be described as “a game”, but to someone who has practised divination, the first important consideration is that the particular set of symbols was a personal choice, and that the diviner, having made that choice, then agrees to accept the rules of that particular set of symbols and to act according to those rules – just as the chess player accepts and abides by a set of rules that might seem arbitrary to a non-player.

Here I would like to address one common misunderstanding. Critics of magic might welcome the hint of triviality in my drawing a comparison between magic and game-playing, but might not accept it. This is because one of the things that people who despise magic find so irritating is the air of pompous seriousness that hangs around traditional magic. The way to parody a guru or master magus is to put words like this in his mouth, without a suggestion of a smile: “the mighty powers of Atlantean science, the secret wisdom that can sway the ignorant masses and shape their destiny, can only be perceived and understood by us, the great initiated ones...” and so on.

The biggest misunderstanding of game-playing, however, comes from a belief that it must not be serious. Nietzsche said something along these lines: “the maturity of man is to have reacquired the seriousness of a child at play”. So, compare the learning of a magical system to a first learning to play chess: both are playfully “just a game” and both prove their value (but not any absolute truth) by working. But when the player finds the opposing Queen standing next to his Knight – why can’t he take Her? In a real battle any Knight in that situation could kill the enemy Queen by impaling her with his lance. If the rules say a Knight cannot make that move, so what? It’s only a game, after all?

The very fact that chess is “just a game” is the reason it has to be taken so seriously. You cannot just mess around the rules as you might in real life. Like good magic, the rules of chess, however arbitrary, have proved their value (though not any absolute truth) by working. Over centuries, chess has become a great international pastime and one can even earn a living playing it. Within that narrow reality, it would be a crime on a par with murder to deviate from the rules.

In the same way, the magical neophyte who sniggers at the pompous pronouncements of the great master, or who decides to pronounce the “words of power” in a different way, will be condemned. You chose a game, and you play it properly. Treat it as “just a game” in the trivial sense and you may get nowhere. Master the game, and you may become able to write your own rules, but it will then become a different game. We will return to this example in Section 14.2 when we discuss the nature of belief.

Again, I do not wish to delve too deeply into describing “magic proper” at this point. I simply wish to explain the extent to which this type of magical practice fitted my own ideas of playing life as a game. Although I have described only one particular school of magic, that of WE Butler and Dion Fortune, it is basically the same as any other school of ritual magic, although the language of Fortune and Butler is rather more psychological. Even the modern chaos magician works along similar lines: the main difference being that the choice of symbols is far less bound by tradition – so today one might use a symbol system based on the works of HP Lovecraft, or one invented by the magician himself, or even archetypal characters from some children’s television show like Teletubbies.

To sum up: I approached the fourth culture and magic from three different routes. One was a quest to locate people who consciously “played the game”; another was to see whether a supposed primitive human activity survived in modern times as an “alternative culture”; and the third was a discovery that those who wrote about magic seemed to be describing a way of thinking that relied primarily on observation being processed by feeling.

Were these three different things the same? I decided that they were, and will explain more about the elements of magical thinking in the next chapter to justify my claim.

For now I will just reiterate my point that each of the first three cultures consists of an inner core – an abstraction called Art, Science or Religion – around which there is constellated a whole range of very diverse activities and mind-sets that make up a “culture”. Here I suggest that there is such a thing as magic, that is practiced by a very small minority as a way of thinking, and it is central to a much broader culture embracing a whole host of human practices including: divination, lucky charms, most alternative healing practices, practical “pop” psychology, as well as things like marketing and advertising. All these I would class as “magic” – although many of their practitioners would be horrified by my label.

There are astrologers, advertising executives, homeopaths, New Age healers, psychologists and others who insist that their work is “science” or at least “new science” and they would argue that it is a mistake to label them as magicians. But I will attempt in later chapters to justify my position, and I will also explain that they have sound, yet mistaken, reasons to want to be seen as scientists and not as magicians.

13. What makes thinking into “magical thinking”?

For reasons that will be explained below, I have no intention to define magic or magical thinking in any formal sense in this book. Instead I will describe some of its qualities and in what ways it differs from the thinking that is fundamental to other cultures. I will also do a bit of that for the other three cultures because, although they are more familiar to most people, I need to clarify my own specific use of those words – for example explaining as I have already done why I consider politics, being a sports fan or brand loyalty to be forms of religious culture.

But in this chapter I focus mostly on some of the less obvious factors that distinguish magical thinking. Some of these are relatively subtle, but still cause misunderstanding. In the following chapter I will focus on some of the glaring differences: those that have contributed to magic's being feared, hated or despised by other cultures.

In particular I will need to justify the inclusion of such a broad range of activities in my magical culture – explaining the common threads that help identify the pattern. I have already suggested that “playing the game” is a common thread, but it will require a fuller understanding to explain why the same thread runs through so many and diverse facets of my magical culture.

13.1 Feeling and pattern recognition

In Chapter Nine I contrasted the way an astrologer and a psychologist might research the significance of Sun in Aries: whereas the scientific researcher would seek to isolate one possible characteristic – like a tendency to initiate dialogue – and then collect statistical data to confirm or refute it; an astrologer would simply observe many people with Sun in Aries with a relatively open mind and seek some common quality, however intangible. I described this process as “feeling” rather than thinking, because it fitted my understanding of Jung’s four functions at the time and, at a later date it seemed to align with Felipe Fernandez Armesto’s concept of “the truth you feel”.

Meanwhile I had found a term that better described the process: it was “pattern recognition”. For all the widely differing characteristics the astrologer might note in the Sun Aries population, they might identify a common pattern that could be described as “being number one” – even though not one of the subjects might actually be “number one” in any significant sense. Meanwhile, other astrologers might come up with a very different phrase.

So what happens if a second astrologer sees the Aries pattern differently, perhaps coming up with a contrasting phrase such as “child-like”? It could lead to a dispute, or else the first astrologer might just hold the phrase “child-like” in mind while reviewing what was observed and then agree that it too had the right feeling. What is being noted is a common pattern that is non-verbal and so any phrase attached to it has to be one that gives the right feeling rather than one that has a specific meaning.

My understanding of pattern recognition helped me to understand one of the most basic types of magical thinking, namely sympathetic magic. Basically this means that you can attract something by constellating those things that “go with it” (ie are part of the same pattern) or you can avoid something by avoiding those same things. So if, for example, an athlete felt confident and did well in races every time she wore a particular bracelet, then wearing that bracelet becomes a way to attract future success. Or, if one hears of many people who had disasters when they started a journey on Friday the thirteenth, then not starting a journey on that day becomes a means to help avoid such disasters. This is simple, sympathetic magic.

13.2 Magical versus scientific language

I once was asked by a magazine to comment on the New Agers' use of the word "energy" or, even better, "energies". For a mathematician who sees energy as a scalar quantity, terms such as "negative energy" or "balancing one's energies" have a distinctly quaint ring to them.

I wrote that the New Age usage was magical, as opposed to scientific, language. The distinction I drew is that scientific language uses a word for the meaning it has, while magic uses language for the meaning it conveys. My example was the way the word “turbo” was used in the early 90s: “this car has a turbocharged engine” is a sentence that has a specific meaning, whereas the word “turbo” written in dashing italics across the back of a sports car has, we hope, some meaning but also a dash of magic. But when we see a bottle of aftershave labelled “turbo”, the word has ceased to have any meaning, and yet it was chosen specifically by the marketing people for the image that it conveys to the consumer.

In the arts culture this might be described as “metaphor” – a word derived from a Greek word that can be used to describe a bus company or other physical conveyance. So in my previous example, the two astrologers were both looking for a simple metaphor to convey the sense of a non-verbal feeling they each had about Sun in Aries.

Metaphorical use of language means that magical culture can happily plunder language from any other culture. Renaissance magical texts are steeped in religious terminology to an extent that could be considered diabolical to religious purists. More modern magical culture does the same with scientific terminology, going back to the nineteenth century adoption of terms like “animal magnetism” and “etheric forces”. Since then we have had “higher dimensions”, “quantum consciousness”, “neuro-linguistic programming” and “new paradigms” etc.

As useful magical concepts, these phrases all work very well and I respect them for that, but I tend to avoid them myself because my mathematical training has “somewhat weakened my metaphorical muscles”, if I may attempt a metaphor. So I either like things properly defined or, more usually, avoid any attempt to define but rather invite the reader to journey and discover with me – a matter of recognition more than definition.

I do, however, get great amusement from witnessing how this magical use of scientific terminology drives the scientific culture towards apoplexy. At least they don't burn us at the stake as some religious zealots used to.

13.3 Magical versus scientific theory

An extension of this expropriation of scientific terminology is the way a scientific theory can elide into a magical theory. This is a very important element in this book, because it has already happened without me telling you.

I described the theory that human thinking had evolved through four stages – from magic to art to religion to science – and how I had aligned that to the evolution described by Felipe Fernandez Armesto. This theory was a version of history that might also be described as a sociological, anthropological or some otherological theory and it has got its feet planted firmly in the science culture. “Real Science”, however, it most certainly is not – at least not without an enormous amount of detailed experimental verification – and yet it is based upon the assumption that there is a real

objective truth out there, that humanity really did evolve along certain lines along a single time dimension, and that this description is an attempt to approximate to that perfect truth. It also, with disarming modesty, places science at the very pinnacle of human achievement.

But I myself accepted that theory, and I did so without years of studying the evidence for it. I accepted it so readily because it “felt right” – a strong sign that I was judging its truth by feeling, and so accepting it in magical terms. In such terms there is little value in asking “why” it felt right, however this is a natural thing to do, especially when brought up in a largely scientific culture, and the suggestion I gave is that it felt right because it paralleled the evolution of my own thinking as I grew up from baby to child to young teenager to student.

This is interesting because something that was presented as an objective fact within one specific context – human social evolution – was accepted because it equally fitted two very different contexts – human evolution over hundreds of millennia and the growing up of one human being over twenty years. What I saw as common between the two was a pattern of development, and as suggested in Section 13.1, pattern recognition is fundamental to magical culture.

A magical theory is a pattern that has universal application. The example just given fitted just two scenarios, but I will later show (Chapter 16) that the same pattern can fit a number of other timescales. So let me give a different example.

I remember having nuclear fission described to me as a youngster. How radioactive materials gave off

particles and, if too much was constrained in too small a small space, these particles would start a chain reaction leading to violent explosion. At a later age, when a physicist was explaining fission, I added that it was interesting how the same thing applied to people: one mistake made in the 1960s was to demolish low density slum housing and replace it with high-rise blocks that concentrated people into a small area with the benign intention of thereby providing green spaces between the blocks for recreation and aesthetic benefit. But in fact the result had lead to a break down of the nuclear family with teenage “particles” leaving, joining gangs and creating a social chain reaction resulting in a collapse of community – and those open spaces becoming litter and graffiti-scarred war zones.

This staggering insight proved unpopular with the physicist, who pointed out that it was a very grave mistake to apply scientific theory “out of context”, that nuclear fission was about very specific substances emitting very specific particles under tightly defined conditions leading to predictable results, and it had nothing whatever to do with the “breakdown of the nuclear family”, which was an expression that did not even have a strict scientific meaning.

The physicist was right, in terms of scientific culture, and right to be so defensive: because even within the broader scientific culture there is a tendency for enthusiastic devotees to jump ahead of theory and apply scientific ideas to a wider context before it has been properly tested. In a magical sense, however, I had detected a fundamental and useful pattern: if you pack things together more closely than is natural, then they tend to break down.

This is a magical theory and, as such, has universal application. It is a pity it was not understood in the 1960s when, not only were people rehoused too densely, but also roof insulation became fashionable and was often wrongly applied as a means to reduce heat loss. Where old roofs had suspended tiles on wooden joists and let the wind whistle between those

tiles and the ceiling below, builders were now packing glass fibre into those spaces to stop the wind and create a warm blanket – saving a great deal of money on heating bills as well as keeping the house cooler in hot weather. Two or three decades later it was discovered that tightly packed insulation, while obliterating heat loss through airflow, encouraged wood rot. So a very large number of houses had to be expensively re-roofed, and a new philosophy developed to insulate more loosely, to allow a necessary minimum amount of airflow.

In both these examples I am pretty sure there would have been a few old and experienced folks listening to the rational justification for tight packing and thinking “this somehow does not feel right”. They would probably have been over-ruled because the objection sounds so woolly. So I wish our society could call a spade a spade and admit that “this may be OK science, but it is bad magic”, so that the final decision could be based on a better understanding of the relative roles of magical and scientific thinking.

A prime example of a scientific theory eliding into a magical theory is provided by natural selection or “Darwinism”. I accept the original idea as a scientific theory in my broad sense that it belongs in the scientific culture (though whether it meets the stricter criteria of repeatability under test conditions, disprove-ability and so on that is required of a truly scientific theory, I leave to those sufficiently interested). But what I am sure about is that it has become a magical theory: I myself have in the past used natural selection to explain a whole host of phenomena: from the way an inferior operating system like MS-DOS came to dominate the PC environment, to the way that sensationalism flourishes in the media and that market forces lead to boring choices for the shopper.

This is such an important example that I will return to it at greater depth in Section 23.5 – in particular to explain the most important role of religious culture. Whatever might be said specifically about Darwinism by today's religious zealots, magical theories in general present a more fundamental challenge. Magical theories, being universally applicable, begin to look “god-like”, and this is threatening to religious culture. I'm sure the Football Association wants to be free to decide for itself what the size of a football pitch must be, and not be told that it must issue edicts that children may not play football in confined spaces lest it lead them to violence and breakdown.

So magical theories typically provide universally applicable models, such as: all phenomena can be described in terms of four elements, Earth, Air, Fire, Water: all human activity can be described in terms of four cultures, Magic, Art, Religion and Science; all possible outcomes can be expressed in terms of combinations of the I Ching hexagrams, the elements of astrology or the symbols of the tarot pack and so on.

Or else magical theories indicate universal patterns underlying all processes, such as: “things happen in threes”; things evolve because those best fitted to their environment are most likely to survive; thesis, antithesis, synthesis; Aleister Crowley’s many examples of “magical formulae” such as the tetragrammaton; every action invokes an equal and opposite reaction and so on. Note that some of these patterns sound almost like scientific theories but, as magical theories, they have been generalised out of scientific respectability. “Every action invokes an equal and opposite reaction”, for example, can equally apply to an act of love or violence.

As suggested, this universality of application becomes quite threatening to religious culture. It is one thing if such a theory has its origin in the words of an accepted authority – as if the Bible, or Wittgenstein, or Karl Marx had declared that “things happen in threes” – because it then would become part of the respective Christian, academic or political religious culture. But if it emerges as a folk tradition, or catches on as an import from some foreign culture, then its universality becomes threatening. I understand that the Catholic authorities’ argument with Galileo had less to do with whether the sun did or did not go round the earth and more to do with their concern that he was positing this as an absolute truth – a quality that only God could claim.

In this one respect the scientific culture can come to the rescue of the religious culture by pointing out that all these magical theories are only universal in the sense that their components are so ill-defined as to be scientifically meaningless.

13.4 Subjective versus objective “evidence”

Consider the magical theory just mentioned: that “things happen in threes”. It is indeed totally meaningless in a scientific sense, because any number of things are constantly happening. So what can it possibly mean in a magical sense?

What it means is that, in the course of everyday life, one's pattern-recognition faculties quite often identify three otherwise independent things that seem to "go together". When I write "seem to" I do indeed mean that it is a feeling that first puts them together, even if one can later find some words to "explain" or justify that feeling.

It was well expressed in an Ian Fleming novel when Goldfinger says to James Bond something along the lines: “in my country they have a saying: the first time is happenstance; the second coincidence; but the third time, Mr Bond, it is enemy action”. A similar formula provides a useful human management principle: the first time a mistake is made one accepts that we all make mistakes and that the real test is to learn from our mistake; the second time it happens it could mark the emergence of a pattern, so a very stern penalty warning is given; if it happens a third time, then the penalty must be applied firmly and without hesitation.

The key thing to note is that the three things are identified AFTER they have happened, and they are “recognised” by subjective assessment. This is a key differentiator between magical and scientific cultures, and one that causes a lot of misunderstanding, because magic and science are the two cultures most concerned with making things happen. (Of course it would be ridiculous to suggest that arts and religious cultures never make things happen, it is just that an artist who says, for example, “I will now paint a picture that is intended to sell for one million pounds at the next art fair”, or the religious culture that says “we will aim for one million converts by next June” could both be said to have strayed a little from the essential core of their culture.)

I experienced a good example of this misunderstanding in the first decade of this century when a book called The Bible Code was published and caused a bit of a sensation. Basically it took the text of the Bible and used very basic algorithms to get a computer to generate pages containing large matrices of letters. The miracle was that significant word clusters could then be detected amongst these superficially random-seeming pages of letters when read horizontally, vertically or diagonally. So one might find a constellation of recognisable words such as flying, two towers, burning, terror all appearing within one quarter of one page.

What is the probability of those exact words appearing so close together? It is actually so unlikely as to be negligible. Does this not prove, therefore, that the Bible Code has predicted the terrorist attack on the World Trade Centre?

Magically this is fine: like recognising three events out of a day filled with thousands of events and saying they “go together”, the eye that scanned those pages of letters and recognised that constellation of words was making a subjective choice after the event, and the actual presence of those words on the page cannot now be denied.

In a scientific culture, however, this approach raises a number of problems, such as:

What if the words happen, not,

will could also be found
somewhere on that same page,
would that amount to a prophecy
that the same terror attack did not
happen?

What if the person looking for
significant phrases happened to
be a non-English speaker who
would not have noticed the
significance of these words and
so passed them by? Do we, at
last, have definitive proof of the

truism that “God is an
Englishman”?

Might not a truly caring Jehovah
have been a little more explicit
in his writings, in the hope of
maybe saving thousands of lives?

Although the probability of those exact words flying, two towers, burning, terror all appearing in close proximity is miniscule, it is not very different from the probability of the alternative words metal birds, world trade, menace, ouch also being discovered. There are many thousands, if not millions, of other combinations of words that could equally be seen as a prophesy of the same event. The chances of any one of those millions of combinations turning up begins to be a lot less unlikely, and the odds of some sort of prophesy of the event being discovered become quite significant just as long as the actual words are to be recognised after the event, rather than predicted in advance.

To make the Bible Code into a significant scientific phenomenon one would need to work very differently. First one might scan media reports and

prepare a weighted list of words most commonly associated with the event – the sort of words I’ve suggested above. Then decide on a the smallest number of such words that would need to concur to be acceptable as a prophecy. Then decide how close the words should appear to be accepted as a concurrence – for example, should they appear within a radius of twenty letters on the page to be considered concurrent? Then decide how many pages should be searched from the beginning before giving up the search as being too deeply buried – this might amount to searching all the pages. (I can already think of several enhancements of this search, but scientific method has a way of getting boring.) Then one needs to make a prediction along these lines: “if a sufficiently weighty cluster of words is found to meet these requirements, then

it will be accepted as evidence of a prophecy with statistical likelihood...” followed by numeric quantification of the statistical significance.

The key difference is that the scientific prediction is tentative and is made in advance and is precisely defined. Whereas magical thinking would allow me to scan the pages with an open mind until I chance upon a group of words such as thinking, magical, my years, seller, best on one page, whereupon I might fall on my knees and become an instant Bible convert.

What happened in practice is that, because the process involved computers, algorithms and numbers, it was widely hailed as being a scientific, rather than a magical, exercise. As I will be explaining, magical culture is as comfortable using numbers, algorithms and computers as it is using Jewish names of God and stolen communion wafers. The stupidity, for me, lies not in magical culture but in our society's denial that such a culture could exist, and so insisting that an exercise like the Bible Code must be labelled "bad science" – thereby casting a shadow of dishonour over the scientific method.

Recognised as a piece of magical thinking, however, the Bible Code was first class. Were the perpetrators conscious that they were doing good magic? That would depend upon their intention: if it was to win converts to bible studies, or to make money by selling books, I'm sure it was pretty effective. If it was to help some elderly people delay the onset of Alzheimer's disease by encouraging them to tackle complex word searches across pages of matrices, then I'm sure that it helped. Scientific culture would find these suggestions of mine ridiculous, and that in itself is stupid – for sensible people should tolerate any number of books like the Bible Code if only to keep the elderly from premature senility.

The Bible Code example was chosen because it was a relatively clear and simple example of the difference between subjective recognition and conditions defined in advance. Real life examples are far more complex, but the same misunderstanding applies.

Consider a group of friends, one of which falls ill with cancer and is diagnosed to have but six months to live. I have suggested that alternative and New Age healing is part of the magical culture, so let us say they try something along those lines to help heal their friend. It could be prayer, a ritual, crystals, Reiki or whatever. Now, what is their intention? It is to “heal” their friend. Would an overnight total remission of the condition count as “healing”? You bet it would! But so would a lot of other things...

Let us say that the next time they visit their friend they find he is still dying, but he announces something along these lines: “You know, I’ve lived my life in terror of something like this happening, it’s been like living a prison sentence. But now I know it is actually happening I feel curiously free! I’ve got just six months to live and, for the first time in my life I am really determined to live those six months, and do all the things I never got round to trying...” Hearing that, a typical New Age or magical group would recognise this as evidence that the “healing” is working – even though no actual physical remission has been noted.

In scientific terms, however, it is no such evidence, because it could be dismissed as “wishful thinking” – a gullible group comforting their selves with the belief that they are helping their friend.

The scientific culture is absolutely right to reject this example as scientific proof of the healing’s validity, but it is utterly stupid to take this as evidence that magical healing is nonsense, or delusional. Because the example of “healing” I have described is very far from being trivial: it is the sort of healing that can have a significant positive effect – not just on the cancer victim but also on his family and friends – a lasting benefit that can prove even greater than if the cancer had simply vanished and the man had gone back to his old life.

In magical culture, results are assessed subjectively. That gives them little value in scientific terms, but that does not mean they might have very great value in other, real life terms. A cancer victim who has had such a change of heart might even continue life with such renewed vigour that the cancer does in fact go into remission. Popular opinion would claim that this remission was the real magic, but I suggest that the change of heart was the real magic, and the remission just an understandable consequence.

At the end of Chapter 4 I pointed out that, in “scientific” terms there could only be one winner of a tennis tournament, and yet in terms of “sportsmanship” an apparent loser could also claim victory – and this made more sense in terms of an arts culture. In Chapter 12 I suggested that magical cultures add a sort of “games layer” to our experience – analogous to the layer model used in communications – where a single truth becomes just one of a whole population of models of reality. You can choose the rules you wish to play by.

13.5 Changing perception

If the results of magic are to be recognised subjectively and in retrospect, then it would obviously be helpful to alter one's perception first, in such a manner as to make the intended results easier to recognise.

Let us take a very naïve example: someone who wants a magical power to become rich. Let us say they have a very concrete idea of what it means to be rich: owning at least four dwellings across the most prestigious locations worldwide; owning a Lear jet plus a helicopter and a certain minimum number of supercars; an annual income of at least.... And so on.

Then what is meant by “the magical power to become rich”? Is it really necessary that each of these factors must be realised in a purely miraculous fashion – such as two hundred foot motor yacht appearing out of thin air under test conditions, fully crewed and registered in the new owner’s name and in such a way that there can be no possible scientific or legal explanation as to how that could possibly have occurred by any natural means.

This is clearly a tall order. Any offers, readers?

I have exaggerated – most people would be satisfied by a colossal lottery jackpot or surprise inheritance, to claim that the magic has “worked”. But there is a popular idea that magic has not “really worked” unless it delivers its results against at least extraordinary statistical odds if not outright defiance of the laws of nature. What happens in practice is mostly very different.

Let us return to wanting “a magical power to become rich”, how would a “real magician” go about this?

Going back to the classical image of the renaissance-type magician, the idea would be to align oneself with the principle of wealth and decide how to invoke it in order to command it. What the “principle of wealth” looks like depends on the accepted mythology, so let us assume classical mythology: in which case the figure might be built

around Jupiter the generous, Pluto the hoarder of treasure, Midas whose touch turns all to gold, or other such archetypal characters. Whatever the “spirit of wealth” is taken to be, it is necessary to gain some understanding or rapport with it in order to decorate the temple appropriately and create a suitable ceremony to invoke that spirit. The invocation formula could consist of first a third person description of the spirit (“he who harvests the riches of the earth and builds great...”) eliding into a second person call (“thee, thee I invoke thou mighty hoarder whose bounty exceeds all...”) and then into an ecstatic first person identification (“I am the source of all riches and splendour, in my grasp I hold the ever-flowing...”)

The point I wish to make is that the process of preparing such a magical invocation involves a large measure of

initial exploration of the result one wishes to attain. Today such Renaissance-style high magic is very rare, much more common in today's magical culture is the New Ager approach, in which one first meditates on richness in order to tune into it. Typically this might be framed as a realisation that one could not desire wealth unless one had some inner picture of what it was you desired, so what is this desired state? Think back to times in the past when you had a feeling of relative wealth (maybe when receiving your first pocket money as a child) – what did that feel like? And so on. While superficially nothing like the classical technique, actually it is doing something fundamentally the same: in this case as preparation for writing a wealth-bringing affirmation or whatever modern magic spell is going to be used.

So typically the preparation for wealth magic involves a very deep personal and subjective exploration of what it is that is really, truly desired. And what can happen is that, during this process, the aspirant finds themselves sitting calmly in a nice place contemplating what wealth “really means”: whereupon there comes the realisation that they are already wealthy, that their life is full of richness and they have never realised it because they were so busy dreaming about what they did not have.

As in the healing example given above, this is scientifically ridiculous: nothing real has happened. But this type of magic can be utterly life changing – it can be the release that creates a new persona that in fact can begin to attract “real world” riches in the way the old, dissatisfied soul failed to do.

My point here is not to try to prove that magic “works” but rather that the actual magic in this operation is the very thing that would be considered most delusional in a scientific culture, namely the change of perception. If the person described now steps out into the world a happy man, and finds themselves being offered a wonderful well-paid job, then the popular belief is that this is the real magic, but I do not agree. The real magic is the change in perception, and most of the benefits that subsequently flow from that, however wonderful, will be readily explicable in terms of the natural order.

Does this explanation make magical culture seem even more ridiculous? If so, consider the role of marketing and branding: a manufacturer wants to sell more of its product and there are two main things it can do. One is to

improve the product: quite a costly exercise in rejigging the production process. The other is to change the market perception, or “branding”. To do this it is necessary to explore in depth what sort of public image one wishes to invoke, and the process is closely parallel to that of the ceremonial magician: what images, associations, smells, colours, music and types of people best align with that desired brand, and how best to invoke it into being and command it to increase sales. The magical culture is broadly aware that marketing, advertising and branding belong in magical culture, but its practitioners don’t dare to admit this – they would rather believe that what they are practising is actually some new form of science.

One last point: I have described what a real magician conscious of their role in magical culture would do to invoke wealth. But isn't the popular image of wealth magic more about finding some old book of spells and simply following its instructions along the lines: "To find a hoard of gold first obtain the blood of a miser and mix it with frankincense at full moon in a golden chalice... etc etc"?

There is nothing subjective in that process, so it does not fit my idea of magic at all. As a set of instructions it is more like a dubious chemical experiment in that it assumes an objective world of cause and mechanical effect. I would say that this is really "bad science" masquerading as magic, just as truly as a failed branding exercise would amount to bad magic pretending to be science.

13.6 Fractal categorisation

After early attempts to define magical thinking in terms of observation and feeling, I decided against definition and preferred to describe examples. This was considered disreputable by some people. I recall being highly amused at some New Age conference discussion about the nature and seat of consciousness when, about an hour into the debate, an old man contributed by saying: “I would like to point out that this discussion cannot get anywhere until we first decide exactly what we mean by the term consciousness”. Some people really do think like that – there is no point in designing any plan of action until we have first mentally solved all the world’s problems.

The religious and scientific cultures require clear boundaries. If someone from the religious culture asks if you are Muslim or Christian, Catholic or Protestant, middle or working class, or whether you supported the Springboks or the All Blacks in the rugby final – the answer “both” would be unacceptable in every case. And in the science culture it is not acceptable to explore things like the nature of consciousness unless they have been “well defined”, that is to say: defined with clear boundaries to exclude extraneous elements.

It is not that I don't like definitions. As a mathematician I was taught to be very happy with the sentence “let i be such that $i^2 = -1$ ”. Very few definitions in physical science are half as good as that sentence, even though it is defining something that is supposed not to “exist”.

The problem has more to do with the fact that the four cultures themselves have different approaches to categorisation, and so to definition. In religious culture categories really need to be exclusive, in science they must be “well defined”. But the arts culture is quite different. Although it is full of categories – expressionist, impressionist, abstract, modernist, post-modern, punk, blues, jazz, house, realist, symbolist, surreal etc – the whole purpose of such distinctions in an arts culture seems to me to provide gulfs to be bridged, or barriers to be broken.

I remember the debates in the 1950s about classical music versus jazz. They resulted in the Modern Jazz Quartet releasing a record called “Third Stream Music” that blended classical themes and jazz improvisation. Draw any distinction, such as Steam Punk versus Acid Techno, and you will soon have an artist saying something like “I don’t accept either of those labels, I would rather see myself as someone who is exploring the relationship beyond the two”. It is as if in the arts culture distinctions and differences are merely seen as challenges to be transcended.

In magical culture it is different again, for magical distinctions and categories are generally fractal in nature. To illustrate this, consider the ancient and fairly well known magical categorisation of phenomena into four elements: Earth, Air, Fire, and Water. Here are four apparently distinct elements, and yet they totally overlap: Earth, for example, can be subdivided into Water of Earth, i.e. marshland and mud; Fire of Earth, i.e. magma and volcanoes; Air of Earth, i.e. dust and windblown sand; and Earth of Earth, i.e. solid rock or the soil beneath your feet. Similarly with the other elements, creating a sixteen-fold division. Then each of those 16 subdivisions can themselves be subdivided into four, and so on ad infinitum.

Another example is provided by the Cabbalists' "tree of life" which consists of ten distinct spheres but of which it is said: "each sphere contains the entire tree", and so once again each sphere sub-divides into ten and so on ad infinitum. Divide any astrological sign into its twelfth harmonic, and you initiate a similar infinite progression.

I have already suggested that my four cultures is a magical theory, and here is evidence confirming the fact: each of my four cultures completely contains the other three. Consider the laboratory scientist performing physical experiments to test whether a particular hypothesis can be disproved: as such this is pure science. But in so far as he might also be driven by an urge to discover the truth, to dispel false theories, or to raise humanity's understanding of the subject to a higher level, I would say that his approach shows characteristics of religious culture. He might also be driven by a desire to clear up a clutter of conflicting theories and construct in their stead one single beautiful theory or explanation – in that case the motivation has an artistic element.

Fourthly he might also express his intention in such terms as “I am aiming to reduce the problem of global hunger” or “I’m wanting to find practical, alternative sources of energy”. Then, even in the context of a science laboratory, he is moving into magical thinking. This is closer to magical thinking because aims expressed in such terms are more complex and less well defined than proper scientific outcomes, and his level of satisfaction with the results would be more likely to rely on a later subjective evaluation.

To give an example: the scientists that developed special varieties of wheat to suit African growing conditions did so largely with the intention to help alleviate world hunger. Their wheat was grown extensively and did indeed provide a new source of food. But later critics claimed that it was too successful and it ousted indigenous crops to the point that there was a glut, the price of wheat fell and the local farmers were ruined and had lost their original source of income.

Whether this was true or not, my point is that the success of the intended outcome “alleviating global hunger” turns out not to be a clear scientific measure so much as a subjective and debatable quantity. One cannot conclude that “as a direct consequence of the use of this type of wheat, global hunger was reduced by X per cent”; instead we are left with a situation where the original science team might, with some justification, say that they succeeded in their resolve, but that commercial factors undermined the success, while others could claim that their work was a disaster that merely exacerbated world hunger.

However, the point here is simply to show how one culture can contain elements of all the others. An artist, as another example, can reveal an almost religious devotion to an ideal, or can focus on the technical means to produce a particular artistic effect, or to produce work with some relatively humble intended result – such as the desire to make money in commercial art – that amounts to performing a magical operation to achieve a specific aim.

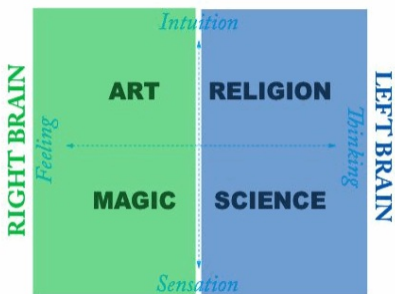
Categories that are so completely permeable as to totally overlap are alien to religious and scientific cultures with their clear sense of boundaries. When I tried to explain my four cultures some people rejected the idea because the cultures were too permeable – they were seen as meaningless or of no use.

And yet most of us use categories like this every day. No-one would disagree with me if I described Stockholm as “a northern city” and Cape Town as “a southern city”, nor would they be surprised if I then went on to talk about Cape Town’s “northern suburbs”. For it is well understood that there is just as much northness in the southern city of Cape Town as there is southness in the northern city of Stockholm. North, South, East and West are widely recognised as four clearly distinct categories, and they lead to fractal divisions of space: that Northern suburb of a Southern city has its Southern half within which we can still identify a Northern sector, and so on. What allows us to accept this fractal division is the way we apply it using our spatial sense of direction rather than our analytical ability to divide things into exclusive categories.

The fact that I had to explain magical categories by comparing them with directional categories – ie that my four cultures can better be seen as four different mental orientations rather than four exclusive groups of people – is interesting because it suggests another way to explain magical reasoning. The sense of direction in multi-dimensional space is apparently managed by different parts of the human brain than the parts that govern linear sequential thinking.

I have been told that the former lies more in the right side of the brain, the latter more in the left side. Such theories have a way of being disproved and denied as soon as they become common parlance, so I will not rely upon that location as a truth, but simply accept the observable reality that there are different aspects to our thinking and that they have been conveniently labelled “right brain” and “left brain”.

So we might say that magical thinking and its “pattern recognition” relies more on the right-brain spatial sense, while science and religion rely more on the left-brain sequential sense that we use to analyse linear sequences such as “cause and effect”. This seemed to be a useful distinction, and so I was encouraged to add it to my matrix of the four cultures as shown below.



Understanding the four cultures as four orientations also helped resolve other misunderstandings. In the 1970s when I first proposed this model, I remember someone rejecting it saying: “I don’t go along with these attempts to put things like magic into neat little boxes”. A slightly more sophisticated version of this misunderstanding is to say something like “which side of the line between magic and science would you place homoeopathy? Or astrology?”

Although I myself am confident that both homoeopathy and astrology belong in the magical culture and not the scientific culture, my point is that this question shows misunderstanding of the model: it does not show four boxes but something like a compass rose.

Show someone a compass and ask “where is Cape Town on this compass?” then the answer would depend on where you are standing.

Asking a question like “where does philosophy lie on this diagram?” is therefore a mistake. Instead one should ask: “where does this diagram lie in philosophy?” – ie which parts or pursuits of philosophy are more scientific, magical, religious or artistic? As an attempt to resolve and clarify confused thinking by exposing false arguments, philosophy could belong to a scientific culture; as an aspiration towards higher truth, it could be considered religious; as a search for intellectual beauty, it could be considered artistic; and as a means to sooth the uncertainties of existence and bring peace of mind, philosophy could be considered a form of magic.

13.7 Cultures as orientations

Later in this book it will be useful to consider my four cultures in terms of four directions, so it is natural to ask the obvious question: “what does each direction point towards?”

In the simplest terms, and in keeping with popular understanding, we might claim that the artistic culture aspires to Beauty, the religious culture aspires to Goodness, and the scientific culture aspires to Truth. In such terms I suggest that the magical culture aspires to Wholeness.

The word wholeness sounds rather lovely – and the immediate reaction from other cultures might be “of course, but we too aspire to wholeness!” But think again: wholeness would also embrace the opposite of their aspiration, and in Chapter 22 this will cast some light on why magic is rejected by other cultures.

We shall see that magic does not deny truth, it positively embraces truth as a crutch to assist belief, but it equally embraces falsehood – and that makes it unacceptable in scientific culture. Magic embraces goodness, but it also embraces evil – and that makes it disreputable in religious eyes. Magic embraces beauty and it also embraces ugliness – and that can make it seem kitsch or “cheesy” in artistic eyes.

In broad terms I have tried to avoid championing magical culture over others, because I truly do not believe that it can be in any absolute sense better than science, art or religious cultures. An “end of history” that left us only with magical thinking would likely prove just as much of an evolutionary dead end for humanity as one that ended in the triumph of science. At times I have in some detail or other pitted one culture against another, but more in order to clarify the difference than to prove the superiority of either.

There is, however, an exception to my claim that I wish to present these four cultures as equals. For there is one small sense in which religion and magic do stand apart from art and science.

I described in the previous section how a magical theory categorises in fractals and that this is not so alien to our thinking because the same is true of compass directions. Go anywhere on the globe and North, South, East and West will all be present in equal quantities. There are, however, just two exceptions to that last statement. At the South Pole there is only one direction, and that is north. And at the North Pole, all becomes south.

In such terms, on my diagram you could equate Science/Art with the E/W axis and Magic/Religion with the N/S axis of the compass. Thus it is that someone who tries to eliminate religion, by going further and further away from that pole, would end up in a place where nothing remains except religion. That is to say that person would have created a new religion, a new faith to bind its adherents together. Similarly someone who goes to an extreme of denying all magic would end up in a place where there is no magic. Making magic itself vanish would become the ultimate act of magic. In this book, however, I am not concerned with those extreme and vanishingly small possibilities, but rather on the more obvious relationships between magical and other cultures.

13.8 Right brain and magical thinking

The distinction between right and left brain thinking has entered popular culture to the extent that it gets aligned with other ideas, such as masculine versus feminine thinking, and this can cause confusion. I have referred to the idea that the right brain plays a greater part in spatial orientation: now I also understand that this faculty tends to be better developed in the average male brain – hence the observation that men often prefer a map where a woman would prefer a set of verbal instructions on how to reach a destination – so it seems a bit confusing to align right brain thinking with “the feminine” when it is the woman’s left brain verbal skills that tend to be better developed in this sense.

For that reason I had better explain what the distinction means to me when I align right brain thinking with magic in contrast with the left brain thinking of scientific culture.

My starting point, having in recent years taken walks in the Southern African savannah, was to imagine myself as one of our earliest “bushman” ancestors. Brushing through long grass under a blazing sun, I am alert to all sorts of dangers: from internal dehydration to sunstroke, from attack by a lion, a snake or a scorpion, down to a tiny tingle that could be a tic or a mosquito bite. So my body and senses are on high alert.

Suddenly I detect a movement in the grass from the corner of my vision and that “pattern” triggers an even higher alert – my body becomes pumped with something that I believe to be adrenaline and I’m suddenly even more alert and ready to run or charged to face an attack. That seems to happen in a fraction of a second once the pattern has spelled “danger”. That very fast recognition of a pattern, and its immediate association with danger, and the consequent orders given to my body to prepare for action – all that I ascribe predominantly to “right brain” processes. As a result, I am now on high defensive alert

Then something else starts: I begin to assess the danger. Grass has moved – is it still moving? Could it be just wind, or is it too localised for that? What was the shape of the movement? Can I smell or hear anything? And so on.

I present these as verbal questions but initially they are so rapid fire between thinking and sensory answers as to be pre-verbal, but they do begin to verbalise if the dialogue continues for more than a couple of seconds. This verbal activity I associate with the phrase “left brain”, and I can compare it to the right brain “pilot” anticipating the need for a change of course and so ordering the “co-pilot” to check things out with the local air traffic control, and advise accordingly so the pilot can then make an informed decision.

Why should the two roles be separated in this way? My suggestion is that even the very small time interval needed to make some initial rational analysis of the situation is still too dangerously long: if the brain asked those questions before preparing for flight or fight, survival chances would be decreased. So evolution has favoured this right/left brain division of labour.

Of course this can lead to some silly mistakes. You find yourself suddenly up a tree trembling with fear, and then a mouse – not a lion – runs out of the grass. You then feel very silly and your left brain will be ordered to do an extensive reputation repair job explaining how one cannot be too careful in the African savannah, and so on. But to dismiss right brain thinking as inferior on this account is a very bad mistake, because it has probably played the key role in human survival. When you are driving your car at night in a semi-conscious state and the sudden appearance of a light “where it shouldn’t be” causes the instant reaction of an experienced driver, then your right brain may have saved your life.

I became aware of this while walking in dangerous places, but realised that it also works in less extreme conditions. I gave the example previously of sympathetic magic arising from simple pattern recognition – eg not wearing green on your wedding day in order to attract a better marriage. Examples like this, when I used them to illustrate magical thinking, sometimes lead to further ridicule because they sound so trivial.

So I chose a different thought experiment to illustrate the continuing relevance of magical solutions: imagine that tomorrow a universally respected scientific body announces a dramatically high correlation between cancer and decaffeinated coffee. There would be a sudden public demand for a ban on the sale of such coffee and, what seems silly to me, the scientific community itself would become divided between those calling for swift action and those insisting that we must first determine the cause of this correlation and its direction – ie how do we know it is not the onset of cancer that generates a craving for decaff, rather than the other way round?

What would seem to me a more sensible approach would be to respond with a very quick – and yet not unconsidered – sympathetic magic solution along the lines of a banning order, but to make it clear that this is a temporary magical response and it has been taken in order to allow time for a fuller scientific enquiry. Some scientific purists might still say it was silly to make any response without a proper scientific evaluation, but they would be reminded of the life-saving potential of a quick response: sales of de-caff might suffer in error, but what is that when one might instead be saving lives?

So my intention in writing this is not to deny that there is a rise in magical thinking nor, at the other extreme, to praise this as some sort of great spiritual awakening. What I do deny is that this is a “bad thing”. What is bad is the denial that there is any such thing as a meaningful magical culture, and to insist that we are sliding towards a sort of pit, at the same time as denying that this pit actually exists.

In Chapter 23 I address some of the reasons magic – while not even considered to exist – is still seen to be a force for evil and delusion.

14. Problem areas in magical thinking

In Chapter 13 I outlined some of the characteristics of magical thinking that seemed to distinguish it from other cultures. What emerged was a mind-set that is different – maybe seeming a bit dotty – but hardly reason to justify burning magicians at the stake, committing them to lunatic asylums, or refusing to publish material that takes the subject seriously. But I also saw other features of magical thinking that could bring it into direct conflict with other cultures.

In the previous chapter I outlined my understanding of the relative difference between what has become known as right and left-brain thinking. What appeared clear to me was that the so-called “right brain” needs to address complexity at very high speed, and does so by a process of pattern recognition. By comparison, the “left brain” tackles something far simpler, but needs more time because it does it in greater depth.

Once, as I walked in the savannah, my mind had to scan the entire environment as far as the eye could see (for there might be a thundercloud on the horizon) right down to that tiny touch of a mosquito on my shin, but not to forget also all my internal processes that might be signs of dehydration, exhaustion or loss of perception. I understood that the right brain shoulders this responsibility. But when the grass trembles it triggers alarm and the left brain is now given a far more specific instruction: not to notice the far horizon, to forget my hunger and the air temperature or the type of grass, and focus purely on the list of things that can make grass move, their relative likelihood and their potential risk, in order to make a reasoned assessment of the situation.

I also gave the example of how a scientist might look for significance of an astrological factor such as Sun in Aries – by isolating one measurable quality ascribed to Sun in Aries, and running a statistical analysis to see if it did indeed predominate in a “Sun in Aries” group when compared against a suitable control group. In contrast I suggested that an astrologer be less likely to narrow the focus to a single quality but rather to “open up” to a holistic assessment – one might say “gazing across the whole group with half open eyes” in a mental process that is analogous to casting out a net to catch patterns of similarity.

This is not such an obvious high-speed process as my savannah example, but it is a means to address a complexity so great as to be beyond verbalisation. It is by no means instantaneous but, if you were to consider all the separate Arian qualities needing to be isolated and individually tested in the psychological process, then the astrologers' process begins to look blazingly fast.

So, if I was asked to provide a one sentence justification for magical thinking still having a role, rather than being abandoned as a relic of an ancient evolutionary past, it would be this: magical thinking is the brain's way of handling complexity and, judging by the survival of humankind, it has done a pretty good job.

14.1 Demonolatry

Demonolatry is a supreme example of the way magical thinking addresses complexity. I was not sure whether I should use the word demonology, meaning the study of demons, or demonolatry, meaning the worship of demons, but I chose the latter as it is responsible for the greater confusion with religious culture.

The idea that magicians worship demons seems to strike terror into the heart of religious culture. The popular notion of “worship” is taken to mean “slavish devotion to”, and certainly being slavishly devoted to Satan or a demon does seem a bit silly, if not downright perverse. But in magical culture, worship is about forming a correct relationship with the other. Once, when I was at school, I even heard a Christian theologian express the same idea: that worship meant “forming a right relationship with deity”.

But for the broader Christian community, demonolatry has only one possible meaning, and that is bowing down, selling one's soul and subjugating oneself to the devil. Similarly, in political circles, there can be no "right relationship" with dissidents or terrorists, except perhaps to lock them up or kill them. I am less sure about what constitutes a right relationship between rival sports fans.

“Selling one’s soul” causes particular trouble with religion in the narrow sense, because the soul is considered a gift from God that one has no right to trade – I chose the word “trade” because the actual magical practice is more like lending than selling (but I suppose that lending with intent to gain in return is not that different from selling). In the broader religious culture, politicians and other groups do use the term “selling one’s soul”, but the better analogy is whether or not it is admissible to negotiate with dissidents and terrorists.

In terms of the scientific culture, the idea of demons and worshipping them has no meaning; they do not exist nor is there any soul to be traded. The relationship between the magical and scientific ways of thinking is a bit more complicated in this case, and I sometimes explained it in terms of a baby's early experience and choices.

My model was based on the observation that babies love to push an object to the edge of a table and see it drop. This can happen over and over and never ceases to amuse and educate, because falling objects are so reliable. What makes it possible for it to happen over and over is the presence of a mother who picks up the fallen object and puts it back, over and over.

Now, according to my understanding of Armesto, this truth that is tested by observation is the most modern and sophisticated form of truth, but I think it is also the most primitive. Even Pavlov's dogs were doing it when they learnt to salivate when the bell rang. So I see scientific thinking as basically very primitive – as well as being potentially very sophisticated, once it has further evolved.

The problem for the baby is the mother, because she does not operate quite so well. She does not pick up the fallen spoon with the same predictable regularity as the way the spoons falls: something is wrong. What I suggest is that the baby is at a crucial parting of the ways:

One way is that the mother is

fundamentally no different from a

spoon, just more complicated. So she too will ultimately turn out to be predictable with further research into how to “press her buttons”. Such thinking lays a foundation for what will evolve into scientific method.

The other is to postulate that there might be another “me” inside mother, something that makes her behave in a more complex fashion. So if one can project a

bit of my “me” into her (ie “lend her a bit of my soul” in grown-up talk) and ask myself how might I behave if I was in her shoes, then I might be able to understand, and even predict her. This is one basis of what will evolve into magical practice.

That question – “how might I behave if I was in its shoes” – is only acceptable to religious culture if it is applied to fellow humans, because humans are allowed to have souls, although even this concession can begin to break down in the case of terrorists, dissidents, and heretics from other religions or football clubs. The scientific culture is even more generous, and might even be prepared to explore and anticipate enemy behaviour by putting oneself in the enemy’s shoes. But both religion and science draw the line at extending such identification to animals, machines, and systems.

In magical culture the process can be used anywhere as a means to address complexity. I could never understand the mysterious un-crossable gulf that is supposed by the scientific community to separate the mechanisms of human

consciousness from all other forms of complexity. Why can we not ascribe human emotions to our pets when we are told that their brains are based on the same mammalian components as ours? Why was it so hard for the broader science culture to embrace artificial life or intelligence, or so necessary to relegate them to science fiction? What is wrong with talking to trees and waterfalls and wondering how they feel about us? My limited study of fluid dynamics would suggest that the complexity of information exchange between the air and water molecules in a fluid system could be of similar order of magnitude as the complexity of a human brain – though the fluid does move more slowly inside a tree.

In particular, if we are troubled by an extended sequence of highly complex patterns – for example a repeated failure to hold onto any job for more than a month, or a tendency always to fall in love with someone who will end up hating you – then why not address the problem as a “demon” and ask it what is its purpose and what is it trying to say?

The mechanics of such dialogue varies across the magical culture – from the ritual magician summoning the demon in his temple, through the gestalt therapist visualising the problem as an entity and speaking to it, through the tarot reader asking the problem to communicate via the cards, or the experienced sailor gazing at the clouds and sensing the threat of approaching weather, to the financial trader gazing at screens full of flickering data and trying to sense “the mood of the market” – but they are all fundamentally doing the same thing, which is to trade a bit of their own soul by projecting it into a complex system and seeing if that helps them to form an empathetic relationship with it.

Demonolatry is still condemned widely in Western culture with its strong religious and scientific bias, but the condemnation is growing a little hysterical – as when media pundits almost wet their pants with excitement at the idea that Prince Charles might actually be speaking to his meadow plants (while overlooking the fact that they earn their own livelihood by talking to cameras). One promising development is the growing acceptance in the scientific culture of the possibility of artificial intelligence, though it is still broadly subject to the inherited religious restriction that only humans are really allowed to own proper souls – so, yes, a machine might mimic self-awareness, but never actually possess it.

To conclude: to the scientific and religious cultures, demonolatry is one of the most offensive aspects of magical culture. It is offensive because it “tricks us” into believing that all sorts of phenomena can have souls, and it allows us to trade soul-stuff with them. This is forbidden to religious culture because souls are exclusively a non-transferable gift from God (or are only allowed to those in our peer group).

It is also forbidden to scientific culture where souls do not exist and have no meaning. That makes demonolatry more a cause for ridicule than condemnation, so scientific culture is more merciful in this respect. On the other hand, science culture does have the greater problem when it comes to the magical attitude towards belief.

14.2 The nature of belief in magical thinking

As suggested in Chapter 9, I have been playing safe by focusing on magical thinking, rather than magic per se. My hope was that the unsympathetic reader might agree to some extent that there could be people with different thought processes, seeing the world in a different way; but people still saw a huge gulf between that acceptance and the idea that magic might actually work. They would ask of me: “OK I get that, but don’t tell me that you really believe in magic?”

This is a loaded question, because it takes us back to my discussion of the spell to make oneself rich described in section 13.5. What such questions are “really” asking is whether I believe that these magical ways of thinking could possibly make something happen in a manner that could never ever be explained purely in terms of the natural laws of science.

To the questioner it seems the most obvious and simple of questions: does the paranormal exist or does it not? But in terms of my model of magical thinking it is a very problematical question.

My understanding of science is that its purest focus is on seeking to disprove what can be disproved: it is a sculptural process of paring away wrong theories so that what remains is an ever closer approximation to absolute, objective and universal truth – a “theory of everything”. So a notion has no scientific meaning unless it is capable of being disproved – and that is why it has been suggested that questions such as “does God exist?” lie outside the remit of science. In Section 11.1 I suggested that a parallel statement about religious culture is that a notion has no religious meaning unless it is capable of being disbelieved (for otherwise there would be no non-believers from which the believers could differentiate themselves).

In such terms, with my addiction to symmetry, I might say that a notion has no magical meaning unless it is possible to believe it (and I suppose I must therefore claim that a statement can have no artistic meaning unless it is impossible to disprove it).

That last assertion about magical thinking seems to amaze people from the scientific culture, because in that culture it is not possible to believe that a tarot pack or the positions of the planets could reliably predict the future, or that carrying a certain talisman could attract wealth, or that a medicine so diluted that not one molecule of the original substance remains in the water could have any healing effect. To such thinkers, the obvious characteristic of a magical culture could appear to be a level of gullibility so debased as to allow one to believe the patently unbelievable. Or, as the religious culture puts it: “if you don’t stand for something, you’ll fall for anything”.

Over the years, however, I slowly learned that the word “belief” has a very different meaning within religious and scientific cultures than it has within magical (and maybe artistic) cultures. To understand how the word could be used in two different ways, consider the following. Nearly everyone I have met says that they believe in equal rights for women – so I suppose I move in more liberal circles. On the other hand relatively few admitted a belief in fairies. I therefore applied the demonolatry test described in Section 14.1: I put myself in other people’s shoes and could understand that, if one had never seen a fairy, knew no-one who had seen a fairy, and if one accepted the general myths of scientific and religious culture, then there really was very little reason to believe in fairies.

Then why did the same not apply to equal rights for women? As a concept it has a lot in common with fairy tales, with especially strong traditions and regional variations in Northern Europe and the Nordic countries, yet the idea crops up here and there across the globe. It is something widely discussed – even more so than fairies – and yet I do not consider that truly equal rights for women have ever been rigorously demonstrated to exist anywhere.

Again the demonolatry test provided the solution. When asked if one believed in equal rights for women you are surely not expected to believe that they really, really exist, but simply that... That what? That you would like them to exist? That it would be good if they did exist? That you are prepared to dedicate your life to promoting them?

No, such “belief” is less a recognition of existence as it is a sort of expression of acceptance, with a supportive touch. When people say they believe in equal rights for women, they are giving a gift of part of themselves towards those equal rights. I would say they are giving a “gift of belief”.

On the other hand, if we live in a scientific or religious culture then a belief in fairies would require fairies to earn our belief by passing a number of tests. These tests include being in accord with scripture – eg do fairies fit a scientific world-view? or are they mentioned in the bible? – as well as providing evidence of their existence by being seen under test conditions, and so on.

What is happening here is that “believing in” can be used in two ways: in one sense it means believing that something is really true or that it exists; in another sense believing implies something more like “offering acceptance or support to a myth”.

In both religion and science, belief is a property that must be earned. One believes in a religious idea when it has proven its value by, for example, giving one's life meaning, by being in accord with scripture, or by evoking a strong inner sense of certainty. A scientific thinker – while less inclined to say “I believe” and more likely to say something “has been proven to be true” – is again telling us that something has earned the right to be believed: in this case by experimental verification, by being consistent with scientific orthodoxy, or at the very least by satisfying some such informal test as “seeing is believing”.

In magical culture however, belief is not a property that is earned: it is a gift, and so must be given. I am here tempted to describe this kind of belief as “Latin”, because the word credere is derived from an idea of “giving one’s heart to” a belief – and that differentiates it from the Greek equivalent pistis that has more to do with having been persuaded. As in the case of believing in equal rights for women, where the belief is more akin to an offering of support for equal rights for women, when someone in the magical culture says that they believe in fairies, they really mean that they choose to accept, and maybe even live by, the myth of fairies.

That last statement is pretty radical, and I suspect that some readers will object, immediately thinking of people they know, or have heard of, whose belief in fairies, or some particular magical tradition, seems to be as absolute and “proven” as in the religious or scientific meaning of the word. You do find magicians apparently so serious about a particular set of symbols that they appear to have accepted it as “absolutely true”. Does that mean they are no longer playing a game? Like any important magical question, the real answer is totally subjective: unless you can get right into the mind of that person you can never tell if they are deluded, or simply playing a higher game. The question is only answerable in broad terms: such as the degree of respect the believer can evoke in questioner.

For all such apparently gullible believers, when it comes to real, practicing magicians today, you more often hear statements like “I have started working with the Celtic myths, and I’m getting much better results than I did with the Kabbalah” or vice versa. In saying this, such magical thinkers are not suggesting that in any way the Kabbalah was “wrong” and that the Celtic tradition is now “right”, but simply that, as their current choice, the Kabbalah is working better for them. Today’s magicians can jump from auras to energy fields to chakras to chi meridians without any concern that the different systems should align with each other or be mutually compatible. An astrologer is happy to work with a system that bases the universe on a duodecimal system and can at the same time accept that other diviners might trust the I Ching, a binary model that

needs sixty-four symbols to describe the universe; while others rely on the tarot that needs seventy-eight symbols, or runes that use only twenty-four (in the Elder Futhark). In magical culture, a belief in any one system does not compel disbelief in another system that contradicts it, and this sets magical thinking apart from religious or scientific use of the word “belief”.

In the terms suggested in Chapter 6: the magical thinker is operating at the Games Layer where you can choose the game and the rules to follow, whereas the religious or scientific thinker has committed to a specific model at the Platonic Layer.

What does this sort of belief mean in practice, and how can it lead to such misunderstanding? I cannot remember whether it was a TV documentary or something on the radio, but it featured an interview with a tarot reader, holding up a tarot pack and saying the usual sort of spiel along the lines “here are seventy-eight mystic symbols that encapsulate the ancient wisdom of the Egyptian priesthood going back to time immemorial...” Next we were introduced to a “respected authority” who pointed out that there was no reference to tarot cards before the Middle Ages. Clearly, it was suggested, this was proof that the tarot reader had been talking nonsense.

The assumption was that the second speaker, by pointing to historical inconsistencies in the tarot reader's statement, had cast doubt on the validity of her entire tarot reading philosophy and skills. The comment was presented as a means to trump the tarot reader's statement, and make it look ridiculous, because the historical revelation supposedly unveiled "the truth". In the media, this truth was accepted without it being considered necessary to recruit any further experts to discuss to what extent the lack of recorded references to tarot cards prior to the middle ages really did "prove" that there could be no Egyptian wisdom encapsulated in its symbols (after all, the search for the "missing link" carried on for ages without its missingness being generally accepted as proof against the theory of evolution).

What would happen, I had wondered, if the same respected authority were asked to comment on a performance of a Shakespeare play? What if he had responded in a similar manner, insisting that the whole thing was a fraud: because the man who claimed to be Prince of Denmark was simply an actor from the East End of London, that his apparent death on the stage was a hoax? Would that too be accepted as proof that Shakespeare's work was nonsense? I suspected that, in this case, the audience would be far more likely to laugh at the respected authority than at the actors.

The majority of the public understand the scientific culture much better than the magical culture, so they would be impressed by the historical criticism providing counter-evidence against the tarot reader's claims. However, most people have at least some understanding of the artistic culture – enough to see that similar criticisms should not apply to something like a Shakespeare play. Without comprehension of a magical culture and the requirements of magical belief, they fail to understand what the tarot reader is doing, and they fail to appreciate the extent to which the “sceptic’s” criticism has entirely missed the point.

So if a tarot reader is asked if she “believes in the tarot” and the answer is “yes”, what is really being said is that the reader has accepted the symbols as being “able to be believed” and has then used them and found that they work well enough.

But does that mean that they are now accepted as absolute truth? That the runes and I Ching must be wrong or mistaken because they try to describe all phenomena with the wrong set of symbols? Or that a history that refuses to trace the tarot back to ancient Egypt must be false? Not at all: all that is being claimed is that the tarot, as a myth, works for that reader.

The word “myth” in scientific culture is synonymous with falsehood: myths are mistaken ideas needing to be exposed by “myth busters”. In magical culture an idea cannot be a myth unless it conveys an element of truth, which actually means “unless it works”. So, for example, I clearly accept the theory of evolution as a myth. I accept the myth that consciousness is generated within my brain, because that too works well for me – but it does not stop me also accepting the myth that I have an immortal soul that has incarnated in this body because that also works well in other contexts. I can at the same time accept the myth that light is a wave as well as the myth that light is made of particles, as both those myths work for me in their own way.

In fact, I am quite happy to “believe” (in this magical sense) that all the phenomena I observe with my senses are all impressions from an external world comprised of material particles obeying the laws of physics and that external world enjoys a special quality called “objective existence” – because that myth too works pretty well a lot of the time.

14.3 True and “really true”

I suggested that a belief in equal rights for women does not necessarily imply a belief that equal rights really exist. In Michael Frayn’s novel *Spies* the young boy draws a distinction between what is true and what is really true, and it has parallels with the two types of belief I describe.

If the silly girl next door says something to the boy in the novel about having seen one neighbour kissing another neighbour's wife, then this is obviously dismissed as un-true "girly nonsense" – not like when his authoritative pal claims that his mother is a German spy, which must be true because He said so. So in the novel they start a secret operation, collecting data and spying on the mother in order to outwit this evil foreign spy, and they discover lots of exciting clues. Scarily, these clues begin to add up to suggest that she really is covering something up. Up till now he's accepted it as "true" that she's a spy, but now there is a terrifying possibility: what if it's "really true"?

So, back to the question that seems so simple and obvious to the scientific-minded enquirer: “do I believe in magic?” All they were asking me was whether I believe magic is “really true” – as opposed to being a workable myth.

What is so difficult about this question in magical terms is that is loaded with a weighty assumption that magic is required to break scientific laws, or else it is not magic but merely some form of applied psychology. Do a spell and win the lottery is nice, but you cannot really claim it was magic unless you can do it again and again to show it was not just a lucky coincidence. Do a healing and it leads to a remarkable remission, then it becomes necessary to prove that there is no possibility that the remission might not have occurred without the magic spell, and it is also necessary to prove the spell did not work via some natural means such as the placebo effect or the patient getting special care as a result of the added attention from having been subject to a magic spell.

In these scientific terms, a belief that magic is “really true” would mean nothing less than a statement that science is wrong, and that the laws of physics are not absolutely true, because we can demonstrably break them. This process of progressing by negation, however, has little significance in magical and artistic culture, where most progress is obtained by affirmation.

Progress by negation, as suggested, is fundamental to science culture – also to religious culture where sacrifice is so important. So any conclusive demonstration that magic is real would amount to a scientific refutation of science (not just as it now stands, but for ever more: because “real magic” must go beyond being simply tomorrow’s science). That really is asking too much of a culture based on affirmation. Asking a magician to provide scientific proof that science is wrong is as inconsiderate as asking a scientist to prove that religion is non-existent by invoking God under laboratory conditions and getting him to confess that only science is true and that He is totally subject to the laws of physics.

So to ask if I really believe in magic is on the surface the very lightest and most natural of questions when it comes out of a scientific culture, but under the surface it is has dire implications because it amounts to a test whether I am a heretic that totally rejects science. From the magical point of view, however, it is on the surface the most tricky question and one to be avoided at all costs, because it is like being asked by a Spanish Inquisitor whether I just happen to be a heretic.

Beneath the surface, however, the question is utterly trivial: because it is simply a matter of what myths I'm choosing to live by today in a world whose very existence is just another useful myth.

14.4 Can magical belief survive in a rational universe?

I have drawn the distinction between a myth being accepted as true or “really true”, and described how magical thinkers can happily shift between myths, while scientific thinkers are struggling to identify whether they are really true or not. I have also admitted that you do find people in magical cultures that fail to live up to this principle and seem to think that their own magical myth is really and objectively true.

My statement – that magical thinkers are free to give a gift of belief to any workable idea – is an ideal statement, the equivalent of saying that a scientific thinker is a totally detached and reasonable observer of objective fact. I stand by both statements, even though in the broader scientific culture you find plenty of near-blind faith, and in the broader magical culture too – although it is less consistent and shakier in the latter case.

What we are recognising here are human limitations: how far can one maintain rational objectivity in real life, and how far can one maintain total flexibility of belief? There are practical limits.

Most magical thinkers in Western culture have been educated to accept the scientific world view of a material universe made up of elementary particles obeying a finite set of physical laws, and that our perception and understanding of that physical reality is mediated by processing within our brains. As presented to us, that myth is a powerful one that has no room for psychic phenomena, divination, auras, spirits, chakras and a lot of the stuff of magical culture.

According to my version, the magician should accept that worldview as just another myth, and put it aside when choosing to work with auras, spirits or whatever. But in practice it is not always easy to overcome a nagging sense that maybe the scientific worldview might be really, really true, and that puts a brake on what magic can achieve. So at some point members of a magical culture need to break away from their conditioning.

One approach is to insist that their magical culture is scientific: if an advertiser, psychologist, economist or astrologer can persuade themselves that their profession is a science, then the problem is resolved. Other magical ideas may be delusions, but persuading people to buy things by altering human perception with a veil of glamour is then seen as hard, measurable scientific method and can be freely practiced without any conscious gift of belief.

Another approach is to work on the obstinate myth in such a manner as to allow more freedom within it. Take the problem of magical linkage: if one totally falls for the scientific worldview, then it becomes hard to accept that the positions of planets, or the randomly chosen tarot cards can have any useful relevance to your everyday life. How could the chance pattern of tea leaves in your cup predict your future, or even offer meaningful advice about your present situation?

Most magically useful myths suggest far greater connectivity between phenomena than can be easily supported by scientific myths, so anyone brought up in a culture that accepts a scientific myth as being “really, really true” can find it difficult to give a useful measure of belief to such magical theories.

It is harder, but it is not impossible, according to the magical thinker's strength of mind and dedication to the cause of freedom. In Section 22.7 I will give two examples of magical operations, or thought experiments, to expand consciousness to embrace a more magically connected universe while still respecting the scientific understanding we have inherited.

To end this section I will present an analogy to illustrate the difference between a scientific hypothesis and a magical myth. It quotes the traditional attribution of Air (the sword) to science and Water (the cup) to magic. We imagine a scientist and a magician both wanting to achieve some objective and we symbolise this as a desire to reach a point on the far side of a river. So science would travel by air to that point, where magic would travel by water.

To do this, the scientist needs an aeroplane – ie some sort of scientific theory. An aeroplane has to be pretty well constructed to fly safely: one engine might sometimes misfire, but you would not trust a plane with a wobbly wing. By this I am not saying that the scientific theory has to be perfect and complete – because science is always advancing – but in the terms used above the theory should be “true” even if it is not really, really true.

What the magician needs is very different: it is a raft – ie some workable magical myth. Here the standards are very different, because you can knock up a raft from any old bits that float, and all it has to do is keep you afloat till you reach the far side. So it can be made up from all sorts of bits and pieces – even including discarded bits from science’s “aeroplanes”.

Let us say the aim is to heal a sick condition and the doctor has diagnosed it as a glandular problem, while the priest has said it is God's punishment for sins, the acupuncturist has blamed it on an unbalance of yang energies and the astrologer blames it on Mars in the sixth house. For the scientist the only reliable material for an "aeroplane" would probably be built on the doctor's diagnosis, while the magician could knock up a "raft" from any or all of those elements just as long as it could hold together enough to reach the other side without sinking. So the magician might assemble a regimen that includes, prescription medicine, prayer, tai chi sessions and waiting for a better aspect to Mars – and it would be very effective for as long as the constructed myth holds together.

In this sense, magic can take a scientific “proven truth”, call it a “workable myth” and use it as such.

PART FOUR

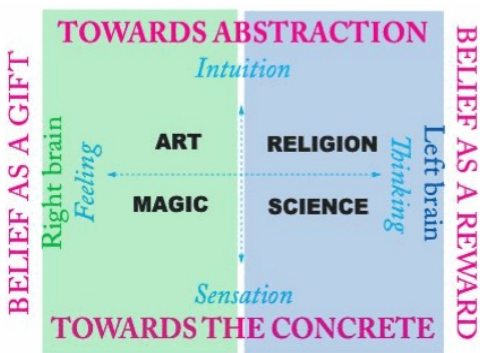
Relationships between four cultures

15. Linear and spatial relationships

In Section 9.1 I described how in my school days I was presented with a linear relationship between magic, art, religion and science. This scheme placed them along a single time dimension from pre-history to modern times, as follows:

Magic->Art->Religion-
>Science

In Chapter 11 I explained how – informed firstly by the CP Snow’s suggestion that Art and Science could be two contemporary and complementary cultures, and secondly by greater experience – I approached the topic from a different angle, and come up with four cultures arranged spatially as follows:



The two arrangements at first might seem incompatible, but they need not be in conflict. You could argue that, in the second case, I have simply bent the time line in half so that the progression from magic up towards art might be called something like “progression from the physical towards spiritual abstraction” and the progression from religion to science be described as “progression from spiritual abstraction back towards the physical”.

However, the difference is rather more radical than that. For a start it suggests an uncomfortable challenge to the linear “end of history” view that puts science in the present and all the other cultures in the increasingly distant past: because in the second arrangement science, far from being widely separated from magic at the far extremes of human evolution, is now placed alongside magic. This suggests that science and magic might have qualities in common, rather than being polar opposites.

The second arrangement also suggests a pattern or structure that hints at more complex relationships between the four cultures than a simple linear progression through time. For example, we have already seen how CP Snow saw a polar relationship between Art and Science: looking at this diagram it would suggest that Religion and Magic must have a similar, complementary relationship. Indeed, it is quite helpful to see them in that way.

For a start, this complementarity helps us to distinguish between magic and religion. This distinction is helpful because many people, well grounded in the scientific culture, are inclined to dismiss religion and magic as being the same “stupid nonsense” – except, maybe, that magic is even worse because it does not even have the social cachet of religious culture. At best they might recognise that the better religious leaders do possess a measure of authority and intellectual rigour, but that the bulk of their congregation are simply gullible people taken in by the mumbo-jumbo, superstition and magic.

One reason that people lump together religion and magic is because these are the two cultures that pay tribute to, and even rely on, the idea of “spirit” – as in “the holy spirit”, “team spirit” or the magical game player’s “getting into the spirit” of some desired mental state.

The idea of a spirit world also furnishes some useful magical theories, providing a model for the sort of demonolatry described in Section 14.1.

So ideas about the relationship between matter and spirit are common to religious and magical cultures, but the difference in approach is also what distinguishes the two cultures. While religion usually works from the material world towards the spiritual world, magic tends to work in the opposite direction: from the spiritual world towards the material world.

My example of the latter was noting how a new-age crystal healer obtained a piece of quartz crystal, and then went through the process of cleansing it, “energising it” and generally dedicating it to some healing process. As a result of this magical operation, that which began as a lump of matter became imbued with meaning – a process not unlike that of a gardener planting and nurturing seeds of meaning to encourage them to grow to fruition. What was once just a lump of quartz, has grown into a “power object”.

In these terms I used to ask myself: “is building a church a magical or a religious act?”. My answer was that, in so far as building the church involves taking a place, bricks and mortar, and creating in them something that is sacred, then it was actually an act of magic, because spirit, “meaning” or spiritual significance, had been invoked into matter. But – insofar as the true purpose of this act was to create a place where people could come from their everyday lives in order to reach up to, or be lifted up to, contact with spirit – to that extent it was a truly religious act.

What this example shows is that perhaps the sceptical scientist is partly right in confusing the two, because there is plenty of magic in religion, and vice versa. But the difference in direction that I have suggested is actually highly significant because, although most religious people are happy to accept the magical process of turning bricks and mortar into something holy, it is only allowed because it helps facilitate the religious intention of lifting people up to God. If too much attention is given to the holiness of the church itself, then it begins to be seen as idolatry.

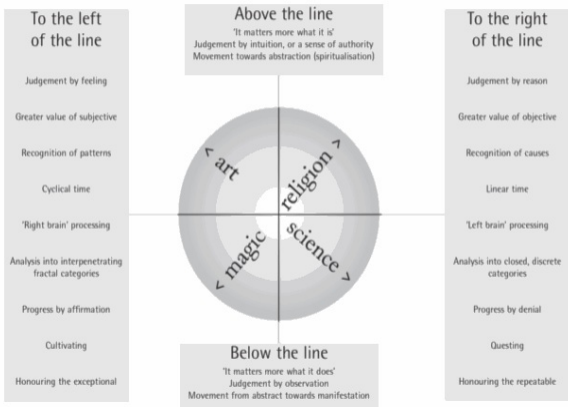
The same applies to religious icons and artefacts: there are plenty of examples of saint's bones, or statues, that have become what I would consider to be magical objects imbued with spirit, and these are generally accepted by religious people so long as their prime purpose is to inspire people or bring them closer to God; but if there is any suggestion that people are beginning to worship the object itself, then there will be sooner or later a reaction. At its most extreme we have the example of puritanism, when no images or statues or ornamentation is permitted at all, lest it should lead to idolatry instead of true religion.

This apparent overlapping of the two cultures, magic in religion and religion in magic (as in new-age spirituality and pagan worship) is of course an example of what I described in Section 13.6 as the fractal nature of magical categories, and how this lead to my four cultures totally overlapping while remaining distinct. I also explained that many people struggle with categories that are not discrete, and it helps to see these categories as spatial directions rather than ill-defined “boxes”.

This means that it is perhaps easier to get a feel for the four cultures by considering their place on the diagram as in the following grand version that I presented for the second issue of the Journal for the Academic Study of Magic.

THE FOUR CULTURES AS A COMPASS ROSE

The predominating qualities suggested here are those referred to in this essay plus others illustrated in *SSOTBME - an essay on magic*



In this diagram I summarise many of the factors I have already suggested – judgement by feeling, right brain processing, pattern recognition, honouring the exceptional, fractal categories and progress by affirmation – and suggested that they are shared by both art and magic cultures, whereas their faith based antitheses are shared by religion and science. I have not yet mentioned cyclical versus linear time – that will follow in Chapter 16 – nor the distinction between cultivating and questing, which will follow in Section 17.2.

There is another set of distinctions between those “above the line” and those below. These I expanded on in my essay for the journal, but basically the first distinction is that both magic and science require a form of action, things must “do something”, whereas in art and religion it matters more what they are, than what they do.

My examples centred around a glass of water: let us say a magician begins a magic spell by saying “I take this glass of ordinary water...”, this could arouse the suspicion of a scientific sceptic who might insist on testing the water to make sure there was no cheating. In effect, the scientist would subject the so-called water to a series of physical and chemical tests before agreeing that it was indeed water, on the grounds that it had done the right things when tested.

If the magician then claims that the water is “healing water”, then it must prove that claim by doing a healing (with the obvious caveat, as explained in Section 13.4, that a magical healing, though subjectively significant, is not necessarily a healing that a scientific culture would accept).

Compare that with a religious claim that the glass contains “holy water”: even though healing is something one might expect from holy water, it is not relevant here, because holy water is water that has been blessed by a priest – it just “is” holy water – and if holy water does not heal it does not mean it is not holy, but simply that it was not God’s will that the healing should take place.

The artistic example is rather more complex, and will be explained later. (Section 18.1). But let us just say that if I produced a facsimile of the Mona Lisa that was molecule by molecule an exact replica of the original, then nothing it could do under scientific testing could distinguish it from the original. Despite this, in the artistic culture it would not be given the same value, because it is not actually the original. Its being is more important than its doing.

One point of interest about this diagram is that it places Magic diametrically opposite Religion – a surprising polarisation for those who would rather lump the two together. The sense in which the two cultures are opposites will become clearer with later examples, but I will point out here that Aleister Crowley himself wrote: “It is particularly to be noted that Magick, so often mixed up in the popular idea of a religion, has nothing to do with it. It is, in fact, the exact opposite of religion; it is, even more than Physical Science, its irreconcilable enemy.”

16. The sequence of cultures

The last chapter pointed out that my first understanding, according to my teachers, was that magic, art, religion and science formed a linear sequence; and that I later came to view them as a 2x2 pattern without any obvious sequence. So was the sequential view wrong? I suggest not, because I did experience a sequence along those lines while growing up. This suggests that I could see my 2x2 diagram as a sort of clock face, illustrating the evolution of thought from magic in the bottom left and round via art and religion to science in the bottom right.



I have already explained that my fourfold analysis of human cultures makes no claim to being a scientific theory, nor one that is in accord with religious scriptures, but is simply a demonstration of a magical theory, one that passes the truth test of “feeling right”. I have also suggested that a sure sign of a magical theory is that it can be applied anywhere. Indeed, the cycle shown above has already applied to two widely different cases: the process of human evolution over many thousands of years (I was told) and to my own twenty-odd years of growing up (as I experienced).

16.1 Applying this cycle

So let me attempt to apply this cyclic pattern to a situation I have never been in, and let the reader judge if it still “feels right”. I imagine a company board meeting and the chair has just announced “any other business?”. Director David frowns and says “I can’t say that I’m altogether happy about our performance”.

So what does the chair say? “Well, I AM happy with the performance. Next item please” is a bit too autocratic. Much more likely is that someone will ask David “why” he is not happy. This seems a logical response, but I do not recommend it because it tends to crystallize into a “thinking versus feeling” tennis match where each expression of feeling will be countered by reasons why that feeling is not justified. And I suspect that this is a wrong question anyway, because it amounts to asking Feeling to give reasons, and that is not Feeling’s proper function.

Instead of such dialogue I suggest moving the conversation forward into the Art culture and ask for some creative story telling. The Chair could say: “So, tell us about the sort of performance that you would like to see, David.” This prompts a bit of creative imagination from David, and maybe others too.

Before this spirals into dreamland, the chair then moves to the religious culture and asks for a vote to get the group mind involved: “do we stop here, or shall we take this further?” If the vote is simply to stop the discussion, then David has been temporarily excommunicated. But, if it gets the go-ahead, we then move into the religious debate: including whether the suggested change is in the spirit of the company culture, whether it is ethical, whether it obeys the “Word of the Lord” by being legal, and so on.

Having got the discussion past these various peer pressures, then the chair can move to the science culture and ask for practical suggestions on how best to implement the change, or to better define the next steps to be taken. The topic ends when the chair looks round the table, at David in particular, and asks if we can move on to the next item.

Now, that last question actually takes us back to the start point, it is really asking if David, and everyone else, now “feels better” about the issue: ie that enough has been agreed to allow it to be released. This is the subjective arena in which a magical wish, which was hinted at earlier by David, has now been resolved.

16.2 A continuing cycle

I have already spent too long on an arbitrary example, in order to give an idea of its universality, but I do want to draw attention to a remarkable fact that the sequence did not end with science but returned to the magical sector – suggesting a cycle instead of a sequence – and that cyclic thinking is very much part of a magical culture that rates pattern recognition higher than causal sequences.

Returning to my experience of growing up. I have explained how in my mid teens I was thoroughly taken with rational, scientific ideas and how invincible they seemed compared with woolly religious platitudes. According to the “end of history” model I, having learnt to think scientifically, would now be a fully initiated member of the human species, and could not possibly revert to primitive thinking.

But what actually happened was that, by the time I got to Cambridge, I became far more interested in magic than science, and I spent a lot of my time exploring Aleister Crowley's and related works in the University Library. (I might even suggest that, after a few more years, I went out into the world and had to invent a style, put on an act to earn myself a role until, around the age of thirty I began to seriously considered whether I was making the right choices and so moved on through the art and religion phases and so on.)

What is more interesting to me, however, is the universality of my experience.

Now my niece has ticked me off for giving these stereotyped, sexist examples, but they really do seem to encapsulate the essence of this transition from science to magic – a transition that I had been taught should be impossible, if not unthinkable.

So please picture the stereotypical sit-com scenario of a group of male nerds sharing digs. They know absolutely everything, because they are sceptics with a scientific education: they fully understand every aspect of womanhood, because they've read the sex manuals; they know all about hormones and periods; they fully embrace women's rights and have even dipped into Woman are from Venus books. So there remains only one, huge mystery in their world, namely: why can't they get laid? Or rather: why can't they get laid when the brain-dead oafs from the rugby club – with their sexist attitudes and inability to spot a feeling if it bit them in the ankle – seem able to graze effortlessly across the lushest female pastures.

I suggest two likely solutions to this unanswerable question. One is that a small, yet not insignificant, minority of such people will find their way into a pagan group, learn about the Goddess and how to form a relationship with the feminine within and without, and how to create charms and talismans to focus their will and invoke change. This group will discover that Christian moralists are not altogether wrong when they suggest it is easier to get laid in a pagan culture.

Meanwhile the rest of those unhappy geeks will be persuaded by advertisers that what they must do to get laid is become “cool”, and that this will be achieved by wearing a T-shirt almost exactly like the ones they already have, except that it has a designer label on the outside to attract girls with its talismanic power. This costs a lot, but what do you expect if you demand magic?

My grudge here is that the former group – who have consciously stepped into magical thinking and are learning how to master it – will be denounced by society and the media for being ridiculous and gullible; while the second group – who have fallen prey and become unwitting victims of magical culture – will be celebrated and wooed by business, society and the media with glossy magazines and a thousand further temptations.

Enough: the point is that I am not the only person in the world that has moved from a scientific into a magical culture. My suggested cycle is proving to have wider application, so how does it relate to the linear “end of history” theory that puts magical thinking into a distant past when feeling provided the key criterion for judging truth, while placing scientific thinking in the more sophisticated present where we have learned to judge truth by testing it against observation?

For a start I found it hard to accept that judging truth by observation was less primitive than judging it by feeling. Surely we first see such proto-scientific thinking in laboratory animals? Pavlov's dogs observed that the ringing bell heralded the arrival of food, and they salivated because they took that to be true. Crows that build tools in order to hook food out of test tubes seem to proceed by experiment, trial and error, and learning from observing. In my example of the baby pushing the spoon off the edge of the table, the baby's education began with that simple observational test, and it seemed to me a major leap in sophistication to move to the magical, feeling-supported understanding that the mother might also contain a conscious mind.

Similarly, I would assume that proto-humans first shaped their understanding of the world by simple observation – testing by practice – and that the development of magical thinking only began as we moved towards the more sophisticated social awareness that is popularly associated with homo sapiens. As I explained in an earlier book about magical personification, the process of projecting consciousness into phenomena in order to explain them employs more skills and many more brain cells than simply seeking mechanistic explanations. I suspect that the major growth of the human brain came not with making tools, but rather with the very demanding challenge of social intercourse.

This makes an important connection. A key part of developing social intercourse is the development of language. So I suggest that this age of magical thinking was the time when language first evolved, and this tallies with my own experience of infancy. Though I remember little of it, observing babies does suggest to me that their time of magical thinking does span the period when they are learning to speak. I'll come back in Section 22.3 to this link between magic and language: a link that is suggested in the old word for a magical text "grimoire" which means a "grammar".

So the simple picture that begins with magic and ends with science could be flawed. Instead magical thinking could be seen not as a distant predecessor to science but rather as post-scientific thinking – an evolution beyond simple science.

16.3 A generational cycle

In fact between the 50s and the late 60s I witnessed the evolution I had myself experienced – from science towards magic – happening to a whole generation.

Here we change gear to a different timescale: whereas my cycle from proto-science through magic, art, religion, science and back to magic, happened in the first 20 years of my life, we are now talking about a sequence of generations.

In the opening chapters I described the 1950s as an age of scientific culture that had triumphed over the “religious” battles between communism and fascism of the late 30s and 40s – the world had shifted from a politico-religious polarisation into a scientific culture where we thought technology had all the answers and we had reached that “end of history”. And yet the next generation, my generation that came to age in the 60s and 70s, is notorious for its revival of the magical culture, experiments with transcendental experience, magical symbolism, witchcraft and tarot reading.

The following generation – roughly spanning the late 70s and 80s – was obsessed with style, designer labels, dance crazes and the birth of new digital art forms. So I ascribe that age to the arts culture. Other characteristics of that generation were body sculpting, health and therapy crazes and financial speculation – leading to a stock market crash in the late 80s that heralded a time of penance and the “decade of evangelism” revival of religious culture. Following the damp squib of the millennium, there has been another revival of scientific culture, a new period of looking to technology to provide all the answers and a return of the scientific triumphalism I remembered in the 50s.

What this pattern seems to describe is a relatively trivial cycle of fashion, or mass enthusiasm. The early 19th century saw a revival of mesmerism

and the birth of the spiritualist movement, and it was followed – taking my own home town of Cheltenham as an example – by the age of Regency dandies, of the importance of style, the rise of health spas and a new rich wanting to show off their wealth. Then came a property crash, a sense of shame and guilt that was fertile ground for religious revival as preachers arrived in the town and condemned the sins of the flesh. This religious culture took a knocking with the arrival of Darwinism and new scientific discoveries. We then enter the age of Victorian science, when people would go to the theatre to see demonstrations of the latest scientific discoveries. But again, that love of science gave way to a love of mystery and, around the turn of the 20th century there was a magical revival that included the formation or formal

magical groups such as the Golden Dawn, and a new theatre craze for “Mysteries of the Orient”. After the First World War the magic faded and again we had the 20s era of style, dance crazes, speculation and new artistic media: notably cinema and radio, which matured into serious art-forms.

As already described we then had another big financial crash and the religious polarisation leading to World War II.

On this scale I would anticipate another popular revival of magic within the next five or so years. But I would not attach great importance to it, for we are talking about a fleeting cycle of fashion awareness. The only obvious common factor I can see heralding the last two magical revivals was that both the Edwardian and the Teddy Boy movements encouraged tighter trousers and a more fashionable displaying of men's legs – whereas the opposite religious revivals have both been heralded by baggy men's clothing, mid length, ill-fitting trousers and a general grungy, penitent look. Perhaps this cycle reflects some sort of testosterone cycle?

16.4 Whatever happened to the Enlightenment?

A popular craze or magical revival of the type I have described tends to trigger off a spate of articles in the more serious media along the lines “whatever happened to the Enlightenment?”. The argument being that the Enlightenment, as the name suggests, marked the end of a dark age of religious domination and ushered in the bright lights of rationality, humanism, progress and scientific method. This was supposed to mark the high point of intellectual achievement, so how could today’s properly educated masses, knowing what we now know, revert to superstition and magical mumbo jumbo?

There might seem little excuse for such concern at present, as the 60s magical revival is long gone, and no serious journal or broadcaster would waste prime space on “Mind Body Spirit” topics – it is science and technology that fill the headlines. At a deeper level, however, rationalists do sense a threat from an encroaching magical culture.

What is it that they think is under threat? They quote the Enlightenment as the turning point, so I understand that they are referring to the five centuries since the Enlightenment, when scientific culture has played a special role. Despite all I have suggested about cycles of fashion favouring religious, artistic and magical revivals over the years, for the last five centuries scientific culture has indeed held a prime intellectual position. Even though higher decisions

may have been made on a religious or political basis, the general impression is that rationalism, humanism, democracy and scientific method have been seen as correct, or the proper measure of truth. Even when the world has fallen far short of these ideals, the idea remains that those ideals do represent progress, they mark where humanity is heading, they are the future. So any turning to other, presumed earlier, cultures would seem like a threat in these terms.

According to my magical theory of cultural cycles, however, we would expect any phase of science culture to be preceded by a religious culture and followed by a magical culture. I have already illustrated this in my growing up and in a cycle of fashion crazes. So, if we have seen scientific culture occupying a certain position for several centuries, then I would expect it to have been preceded by a similar period of religious culture and followed by a similar period of magical culture.

The Enlightenment was not only a forward leap. It equally marked a “turning back the clock” two thousand years and a revival of a culture that began in the fifth century BC and was typified by Greek philosophy, ideas of democracy, a rejection of religion, superstition and magic in favour of rationalism. This was the age when medicine became “the silent art” because discussion with the patient was considered too open to suggestion, too subjective and magical. So that the doctor should merely observe symptoms and treat them – just as today’s specialists will study the patient’s scans rather than ask them how they feel. In China too there was a similar “age of reason” at that time, and I suspect that similar signs might be found in other regional cultures.

And this classical era was indeed preceded by five centuries that were remarkable for their religious ferment – the so-called “axial age” that saw the foundation of Judaism, Zoroastrianism, Hinduism and Buddhism across the world. And yet the classical “age of reason” was followed by five centuries of the Roman Empire, and a huge revival of magical thinking, divination and spell casting. Again, we see a magical culture that replaced a scientific one.

Jack Lindsay in his history of alchemy described how the sophisticated metallurgy of the classical era became too politically important: because the ability to counterfeit gold coins undermined the power of the rulers. So the free movement of ideas and knowledge that typified the classical era began to be restricted, as with the sack of the library at Alexandria. Metallurgists were locked up by the rulers and their science had to be hidden in coded messages and became more esoteric and mystical as metallurgy evolved into alchemy. This was typical of the move from a scientific culture into a magical culture that began around zero AD.

These centuries also saw the rise of Christianity: but in this initial period the religious conversions often owed more to magical than to religious thinking. Constantine's most famous conversion was reputed to be based on a vision of the Chi-Rho cross and the words "by this sign ye shall conquer": so he got his soldiers to paint the sign on their shields and this was followed by a magnificent military victory. In other words, Christianity had proved itself by being magically effective – and this was typical of a number of conversion myths from that period.

According to my model, the next five centuries should have reflected a dominance of arts culture. Here I am on less certain ground for we are well into the dark ages. It was, however, the period in which most of our fairy tales, Arthurian legends and other tales of knightly gallantry seemed to be set. I am on firmer ground when I ascribe the following five centuries – from the tenth to the fifteenth centuries – to dominant religious thinking. As with the axial age, this was a time of important religious ideas: the rise of the Catholic Church and Islam, and then the protestant revolution. And then came the Enlightenment, and five centuries when scientific thinking became dominant.

This intellectual cycle, I suggest, is a far more significant cycle, in the sense that it would suggest that the scientific culture is now giving way to a magical culture on a scale that has not happened since the end of the classical era. I believe that this is what is really being sensed by those writers who lament the end of Enlightenment values, and that this transition is far more significant than the fleeting popularity of “mind body spirit” titles in the bookshops, or yoga classes in the suburbs. Here I do think that something important is happening, and I will come back to explore its significance in Part Seven.

16.5 A cycle of values

I will give one more example of this magical model's universal application. Despite everything I have said about the intellectual cycle over the last two thousand years, you could say that, on another level the past two millennia have really been dominated by religion. Despite the fact that scientific culture has been the dominant intellectual force for the last five centuries, the values that guided serious national decisions have been more religious and political than scientific. And this dominance of religious values goes right back to the end of the classical era.

So, whatever the phase of the intellectual cycle, society's values have been coloured by religious culture for the last two thousand years. Magical grimoires were written and published during this time, but they were all cloaked in religious terminology where spirits are summoned "in the name of God", and the work must be carried out by devout people of high moral authority. Over the two millennia the greatest works of art have been religious, or have at least reflected religious themes. Even the scientists themselves have tended to describe their work in terms of unveiling "the wonders of God's creation". Even nowadays, if a little tongue in cheek, we still have expressions such as "God does not play dice" and "finding out the mind of God".

The most dramatic example of the role of religious values, is the fact that all the major wars for the last two thousand years have been religious wars. Compare that with the artistic culture of the previous two thousand years, when people went to war in a quest for cultural artefacts, gold and jewels. The most famous war of that time was fought over a beautiful woman. I do not know much about warfare in the third and fourth millennia BC, but it was the great age of the Pharaohs. So I can imagine that magical values might have been dominant at that time, but my mind boggles at the thought of magical warfare!

On this timescale, we should be near the end of two thousand years of religious values, and entering into an age when scientific culture takes the reins. As an example of this shift in values, consider the history of colonisation in Africa. Early settlers considered the natives to be “savages” largely on religious grounds: for not only did they not worship Christ (or Allah), but clearly their dress and behaviour was far from devout. On religious grounds, therefore, they were inferior beings and civilised people had both a right to exploit them and a duty to civilise them.

But by the end of the nineteenth century there was a move towards evolutionary values: the natives were inferior because they lacked military discipline, technology and firepower. The dominance of white races proved that those were fitter to survive, and this even lead some colonisers to argue that natural selection would be furthered by eliminating the inferior races – thus Kaiser Wilhelm in his treatment of Namibian natives prepared the ground for Adolph Hitler and “ethnic cleansing”.

Just as magic, art and science used to pay lip service to religion, I already see signs of religious valuation giving way to scientific valuation – as in the tendency for modern magical culture to be cloaked in scientific terminology: we now have “quantum healing”, “higher dimensions”, “neurolinguistic programming” and other such grand phrases to describe what I would describe as magical practices. “The knowledge and conversation of one’s holy guardian angel” would more likely be described as a “process of individuation”.

I do not know quite how this will be reflected in art and religion, though I can see the growing tendency for technology to shape art – as in the great achievements of a film like Avatar, or the pickling of dissected sharks and so on. Perhaps religion will need to justify itself increasingly in terms of its humanistic value? I have read news items announcing that measures of happiness are higher in more religious communities.

What I can see happening more clearly is a move away from major wars being fought to defend religious values towards justification in scientific terms. For example, the arms industry or the military needing to test their latest technology to see if it works in battle – as in Hitler's involvement in the Spanish Civil War as a means to test the new blitzkrieg strategy.

At another level the justification for war is increasingly based on concepts expressed in scientific rather than religious terminology – as in Hitler’s concept of “racial purity”, or the growing interest in “ethnic cleansing”. Even at the start of the twentieth century social Darwinism was widely used to justify genocide of “inferior races” in the colonies. I suggest that future national conflicts might have more to do with economic forecasts, scarcity of resources and DNA profiles than religious conviction.

Today's battles are increasingly justified in terms of economic necessity, capitalism, or Enlightenment values such as democracy, rather than in terms of traditional religion. Behind the scenes, a major cause of local wars can be traced to pressure from the arms industry: the need to de-stabilise a region in order to stimulate the market for weapons – and to test whether the newest models work under realistic battle conditions. It is increasingly the value judgements of scientific, rather than religious, culture that are invoked to justify modern warfare.

17. A magical theory of dynamic relationships

In Section 13.3 I explained how a specific scientific theory can sometimes evolve into a generalised magical theory, and in Chapter 16 I gave another example of a “scientific” theory developing into a “magical” theory. My starting point – the traditional view of a linear progression from primitive magical to modern scientific thinking – was not strictly a scientific theory, but it was one that would be broadly acceptable in a scientific culture because, for example:

- It assumes the existence of a real, objective world in which humans have evolved from an animal past
- Those who propose this theory would probably support it with archeological, anthropological, psychological, historic and other evidence that would be acceptable in a scientific culture
- It assumes a progressive evolution
- Above all, it places science at the summit of that evolutionary progress

I also explained how I myself accepted this scientific theory not in such scientific terms as an exhaustive study of the evidence for it, but rather in magical terms: because “it felt right”.

As an aside, I would suggest that even in the scientific culture a great deal of science is accepted in similar, magical terms without that fact being acknowledged. Every day we hear announcements of scientific studies that support unsurprising facts about people and nature and most people just accept their truth with no more than a cursory glance at the evidence, because it simply “feels right”.

To illustrate, I will pause right now and do a Google search for “science news”. It leads me to a study that proposes a link between climate change and crime, suggesting that between 2010 and 2099 there could be twenty two thousand more murders and one hundred and eighty thousand more rapes in the US based on rising temperatures alone. That’s the sort of story that would circulate freely in today’s broader scientific culture without significant resistance from individuals demanding to know more about the precise decision criteria and the researchers’ reputations. But in that same culture a theory stating that governments worldwide are in crisis because Pluto has entered Capricorn would be stillborn – even though the latter theory does feel right in a magical culture.

Returning to my theme: having accepted the linear version of history because it felt right, I then found that it fitted my own experience of growing up. I suggested that could be the reason why it felt right, even though cause and effect have little significance in magical thinking – where my changing way of looking at the world might equally have followed that pattern for the very reason that it felt right.

Then I attempted to demonstrate the linear pattern as a fully fledged magical theory, in the sense that it can be applied to a whole diversity of different situations where any one culture seems to hold sway at a particular time, and that it has predictive potential. At the same time I showed how the original linear pattern had turned into an ever-repeating cyclic pattern, like the very best magical theories.

As a magical theory, the cyclic view stands or falls on the recognition of a pattern, and there is no magical need to explain that pattern. Why should human cultures follow each other in a cyclic fashion as I suggest?

I have no idea, except that I can see that a species that did follow the linear model and arrive at a single culture as the “end of history” would be a species that risked entering an evolutionary , whereas a species that cycles between its cultures on many levels is one that is constantly exercising all its functions – thinking, feeling, observation and intuition together with right and left brain processing and respect for authority – and so will preserve the adaptability that has allowed it to survive so far.

Note that even this “explanation” is just an example of a broader magical theory that suggests that stasis – even in the form of perfection – leads to death, whereas “perpetual revolution” fosters adaptation, growth and life.

17.1 Exploring the theory subjectively

Having accepted that the justification for this cyclical theory of cultures is that it feels right – and that all the quasi-historical examples I have given are just examples of it feeling right, rather than any solid evidence of the theory's objective truth – my next step is to explore further the cycle in terms of how it feels, or might feel.

Why does scientific culture evolve towards magic rather than some other culture? Why does art evolve towards religion and religion towards science? In exploring these transitions a whole lot of reasons will emerge, but none of them will provide a single mechanism that would be taken as an explanation in the scientific culture. The process is more like a tracing of many parallel threads making up the pattern on a tapestry or carpet, or following a piece of music or a novel's plot by looking in detail at the many instrumental or human lines that make up the complete picture: each thread may display a certain logic in sequence, but no single one offers enough to support the whole picture.

So, in the following exploration I will not ask "why" the transitions happen, but rather suggest "how" they happen.

17.2 How did my thinking evolve from science into magic?

I have already suggested how a baby might move from proto-science – in the form of simple “cause and effect” analysis of a spoon falling to the floor when pushed over the edge – to an ability to empathetically project consciousness into a complex phenomenon such as Mother’s behaviour, and so gain the measure of understanding, predict-ability and control that I associate with proto-magic. So what was it that encouraged a similar move from a scientific to a magical worldview in my late teenage years?

There are many parallel threads in this picture, and I have in Parts One and Two described some of the influences on my thinking that accompanied the shift – notably Albert Camus’ novel *l’Etranger* and the awareness that so many things that society takes very seriously can be considered by the individual as “just a game”. One of the games played as a teenager is rebellion against authority, and our generation very much enjoyed using our scientific education to get up the noses of scripture teachers by presenting scientific reasons for dismissing their whole religious assumption.

My basic scientific education gave me tools to cut through dogma and raise awkward questions. But my scientific education remained basic because pupils like myself, who were destined to take “Maths and Higher Maths” at A-level, were at that time only taught physics, and no chemistry, biology or other science subjects. So science began to take second place in our estimation and our senior mathematics teacher used to speak a little scathingly of the time we spent in “the folklore department”.

Compared with the rigid logic of pure mathematics – where no statement can be made unless it follows directly from what went before, and without exceptions unless these are acknowledged – scientific wisdom did indeed begin to look somewhat flaky and folkloric.

By that time my general interest in arcane subjects had lead me to books on psychical research, and I'd had a good laugh at the excuses made by spiritualists when subject to scientific examination. When nothing happened they would say things like: "the presence of sceptics is producing negative vibrations that are driving the spirits away" and, once I had heard that a few times, I became a bit cynical about spiritualists' claims.

So, on a number of occasions when a practical scientific demonstration itself ended unsatisfactorily, and we were given a similar hasty excuse as the bell rang for the next lesson, I was not impressed. One experiment to determine the conversion factor between heat and mechanical energy produced a value around ten when it should have been closer to four point two. The physics master said “at least the result was the right order of magnitude”, and that the discrepancy was probably due to atmospheric damp – and we were left expecting to believe that we had witnessed a scientific demonstration.

So science, in the form of psychical research, had raised my standards of proof to a level that science teachers could seldom satisfy in practice. As students we were expected rather to have faith in science – and that did not go down well with a fan of Meursault.

I asked my rationalist teachers why so many people over the ages believed in magic if it had no reality? The answer was that a culture that believes in magic would, by suggestion, persuade people into thinking that they were witnessing magic, even though it did not exist. My response was to suggest therefore that a culture that did not believe in magic would, by suggestion, persuade people into not seeing magic, even if it had happened. (At a later date I saw this in action, when a hypnotist gave a post hypnotic suggestion that a certain person would become invisible on one cue, and

visible again on a second cue. The person was made to vanish and reappear repeatedly in front of the subject's very eyes, but the subject showed no surprise: his brain registered the absence and re-appearance but refused to register the miraculous transition between those states.)

Basically, I was applying to science itself the level of scepticism that science encouraged me to apply to unscientific phenomena. As a rebellion this was just as delicious as teasing the scripture teachers, and this provides a clue to the attractive power of the magical culture. As befits its position in my matrix opposite the religious culture, magic is strongly anti-authoritarian. As the Welsh alchemist Thomas Vaughan wrote in 1650: "A witch is a rebel in physics and a rebel is a witch in politics".

So one attraction to magical thinking lies in its sense of rebellion and rejection of authority. At a rebellious stage of growing up, the very rejection of magic by my society gave magic an appeal. This, I suggest, is a common factor and it is emphasised by the attraction at that age not just to magic but especially to the most forbidden and “blackest” magical ideas – typified by the heavy metal “Satanist”.

Another attraction lies in the universality of magical ideas. Science focuses on particulars such as the genetic mechanisms by which traits can be passed down to generations, or the behaviour of particles when plutonium reaches critical mass, whereas sweeping generalisations about natural selection outside of nature, and the risks of compressive overpopulation, become indicators of magical thinking. A theory that works nearly perfectly in a laboratory is rather satisfying, but one that provides even a small amount of predictive or explanatory power right across the chaos of normal life becomes much more fascinating.

This was what I was discovering. Rationalism had provided some interesting tools to dismantle religious faith, and I could apply the same criteria to dismantle my faith in science: look closely enough and it does not always work; what's more, a thing perceived is not necessarily a thing that has really happened, so maybe science relies on social conditioning just as much as religion.

Another appeal that drew me away from a scientific education and into magical culture was that magic is highly individualistic – just as religious thinking binds people into groups, so conversely does magical thinking separate them into individuals.

The success of a magical operation is decided by subjective observation – you personally know it has succeeded, and you do not rely on any other person’s agreement. If I attend a New Age “healing” workshop, it is I myself and the way I feel afterwards that decides whether I have been healed by it, rather than any consensus measure of success. Like the individualism of l’Etranger, to cast off all prior authority and prejudice and simply to observe is a highly individual and subjective act that has especial appeal at an age when one is traditionally supposed to be breaking out of the family/school shell and finding one’s own independent way in the world.

So the journey from science and religion into a magical culture is a journey away from the consensus and into individual experience. The value of a magical culture lies not in public or peer group acceptance, or recognition by some authority, but in the individual's sense of increasing meaningfulness.

This growth in meaning is another important factor, and outside observers sometimes seek to “explain away” a magical revival by saying that it is a “search for meaning”. This is not quite true. A “search for meaning” better fits a religious culture, because the search lifts us from matter towards spirit: the world of our senses seems barren and shapeless and the quest leads us to some “higher principle” that makes sense of it all and we typically find ourselves joining others who have been inspired by that higher principle, whether it is Christianity, Communism or football.

What happens instead in a magical culture is that we plant seeds of meaning and cultivate them – like the New Ager who buys a lump of quartz, cleanses it, places it in the light of the Sun or the Moon and meditates until it becomes a “power object” as spirit is invoked into that piece of matter.

This is an important distinction. At that breaking out stage of adolescence the ordinary world of home and school can begin to look very constricting, boring, predictable and meaningless. This can prompt a “search for meaning” typified by the hippy trail of my generation: one sets off with a backpack to explore exotic parts of the world and one may indeed, in some cases, find meaning as described in the religious sense.

But something else can also happen: in place of meaning, one discovers facts. What had been dreamed about as the “wisdom of the East” may be registered as a society full of exploitation and extreme poverty, because the search for meaning can become as voracious as a hunting frenzy. Instead of dwelling in meaning once it is found, meaning is trapped and killed as a trophy. This is one downside of the progress from a religious to a scientific culture, and it parallels what happens when a hunter society gains in technical skill: a sky once flocked with birds of meaning grows emptier, while glass cabinets swell with stuffed birds labelled as “facts”.

This is what makes the adolescent's immediate, familiar environment so meaningless: all is known about it, it has been hunted to extinction. The search for meaning is forced abroad in an endless tourist quest that simply extends the desert of meaninglessness: I can remember 1960, when a holiday in Spain was still an exotic growth experience, rather than the cliché it would become during the 1980s.

Again the move to magical thinking offers an alternative. Sitting alone on the little mound overlooking the demolition site near home, a teenager contemplates the boringness of everything, then experiences a moment of surprising tranquility. There is something nice about this place. This is casually mentioned to a friend who remarks that the mound used to be called "Puck's Tump" – and an Internet search suggests that the word is

associated with nature spirits. Intrigued, they look it up on the Ordnance Survey map and note that it happens to be at the mid point between two Saxon churches – and at the crossing point of another line linking some ancient sites. It now begins to feel really special, and when, after making enquiries in the pagan community, new friends are taken to the site, they comment on its “amazing power”.

This is the opposite of a hunt for meaning that leads to capture and desiccation. It also it reflects the pattern of humanity's transition from hunter/gatherer to agriculturist. The world that has been stripped of all meaning can still provide rich soil for cultivating new meaning. Instead of destroying the magic of the Far East, one can invoke new magic into one's own back yard. That little piece of land can become a sacred site, a place for lonely meditation, or group workings. It can even become a new religious site or a focus for a campaign to stop development of the area.

I have described a number of subjective reasons from my own experience why an individual might, despite having a scientific education, become interested in and part of a magical culture. None of these reasons are enough to explain why society as a whole might move on after five centuries of enlightenment rationality, I will attempt to illustrate that bigger picture in Chapter 26.

The point here is to invite a reader, who might not comprehend this revolt against scientific culture, to gain an understanding of it at an individual level. For me the dominant feeling was of expansion, as on release from claustrophobia. A magical universe is vastly bigger than a scientific one – it has more room for growth and surprise – because the latter is constrained within the limits of objective truth. Magic offers the greater challenge.

All the same, only a tiny minority of adolescents make this choice to embrace magical culture – although they are numerous enough to provoke anxious media responses about the loss of Enlightenment values. A far greater number of teenagers instead learn to overcome life's problems by following marketing advice on how to become cool by spending a lot of money on talismanic brand labels. Described in those terms this sounds like a form of magic, but it is no more magic than buying a picture is art, or buying a smartphone makes one into a scientist. The brand promoters are practicing magic, but the public is simply buying it without any understanding.

Another thing that I often observed was how some people can advance far into magical thinking while unconsciously keeping one foot back in scientific culture. These are the ones who wish to “prove science wrong” – a thoroughly scientific endeavour. Although I have insisted that the real test of magical effectiveness should be subjective, some of the results can be quite astonishing. Once as a child I took a pack of cards, shuffled it and thought of a card and a number. I counted down to that number and there was the very card I had thought of! I repeated this successfully three more times with increasing excitement and then I rushed to demonstrate what I could do to my older brother – and it never worked again. The desire to share the magic resulted in its negation.

You do find some people in magical culture who are on a quest to prove things like astrology or homeopathy to a wider public, rather than simply accept them within themselves. Not surprisingly, those who set out to prove science wrong tend to prove science right.

So what, in summary, is it that draws the individual out of a scientific culture into a magical one? As an individual path, the true answer will depend upon the individual, but my experience is not untypical. Turning my back on authority, tradition, education and peer pressures, and looking at the world and my subjective experiences with the naked innocence of an outsider, I began to see all human activity as a choice between games.

One of those games was called “reality”, or “scientific reality”, and I could see it wasn’t always played very well. I began to experience things that broke the rules of those games and each time that presented me with a threefold choice: either to play the consensus game and reject the experience because it was not part of the game, or to reinterpret the experience so that it fitted the rules of the consensus game, or to reject the game and choose a new game that better incorporated the experience.

So, for example, walking alone in the woods, I catch a sidelong glimpse of something looking like a fairy: my choice is either to dismiss the experience because “fairies do not exist”, or to explain the experience in terms of imagination combined with the play of light and shade, or else to accept that I have indeed seen a fairy.

Behind the young seeker lies the familiar world, where the individual's value depends utterly upon other people's acceptance; ahead lies an individual adventure, a path into the unknown. The whole richness of a "Games Layer" superimposed on everyday experience.

18. The path from magic towards art

I find it harder to envision the transition from a magical to an artistic culture. This may be because I'm attempting to describe the move from one extremely individualistic position into another, so it is harder to identify general themes in such a personal journey.

A common evolution through magic is to begin, as suggested above, with a sense of disillusionment, or rebellion against, scientific culture. Often there is a desire to impose one's will, to make things happen that are actually considered to be impossible (like knowing the future or turning lead into gold) or at least to have little meaning in scientific terms – such as making a beautiful girl fall in love with you, or becoming happy, or being able to see fairies.

Then what happens is that the serious study of any magical culture typically leads to the discovery that the desired objective can only be attained by a lot of work upon oneself. I have in the past expressed this cynically as follows:

1. I want to be rich, happy, famous.

2. Hooray! I have discovered something called Magic that promises to make me rich, happy, famous.
3. According to Magic, all I have to do to achieve this is first to perfect myself.
4. But how will I know when I am perfect?
5. I will be perfect when I no longer wish to be rich, happy, or famous.

This evolution then leads to a process of growth where the individual feels less and less driven to change, or to make an impact, on the world. Instead there grows an increasing appreciation of what is – “as it is, so be it” as The Processians used to say.

One thing that haunted me when I first became interested in magic was fearfulness – the youngest child’s fear of a world that lies beyond their control. Magical training eased a lot of those fears, but eventually working with fear in this way became interesting in its own right. Instead of wishing to eliminate fear, I learned to value its protective role and find the changes it brings about in me quite interesting and sometimes useful. A touch of fear can be a wake-up call to alertness that is akin to meditation. I now value fear, rather than seek altogether to eliminate it.

This move – towards a greater celebration of life than a wish to change it – I can see in terms of a doorway into the artistic culture. I have once or twice spoken to a gathering of pagans or other people whom I would consider to be members of the magical culture, and I have then suggested that the longer people practice magic the less magic they actually do – rituals become less and less spells to bring about change, and more and more a form of celebration, as in rituals to celebrate the seasons, or nature. Every time I said that, I saw heads nodding – typically the older heads.

I am not suggesting that the artistic culture is simply about celebrating life, but rather that the impulse to celebrate something by expression may be one doorway from magic into artistic culture.

There is another important thread that is followed between magic and art that is not so easy to describe to those who have not experienced it. I have already described religion's role as a "search for meaning", which intensifies as one moves to a scientific culture where meaning is hunted down and killed. This is not a totally destructive process, but more like the way an entomologist pins and labels butterflies for classification – so that glimpses of meaning become crystallised into "truth". Into this world of diminishing meaning comes magic, not so much as a new quest for meaning as a process through which new seeds of meaning can be planted and encouraged to grow.

In a lot of magical practice this is done in a very deliberate way that is by no means alien to artistic culture, but which would be frowned upon by that culture if taken to excess. Someone designing a magical talisman or a tarot card, for example, would use symbols as one might use telephone numbers to dial-up specific emotions or affects: a dove as a symbol of peace, a laurel wreath to symbolise triumph, the skull as a symbol of death and so on. Symbols are deliberately inserted into a magical artefact to produce specific results.

If this is done too blatantly in an artistic culture, it will be dismissed as “bad art”. My school art teacher used to rant against the Surrealists for this very reason: he saw their work as a glib exploitation of psychological theory, at least when compared with the raw revelation of his beloved Expressionists. More typically, the film producer who insists on including popular scenes such as a car chase, a shootout, and love interest in every movie in order to “get bums on seats”, will be dismissed by artistic critics, unless this is done extremely well. But such a producer, like any commercial artist, is simply doing what a magician would do in order to create a talisman to attract success – embodying as many symbols of success into a material object in order to attract that success.

If I were to choose one word to describe this distinction between magic and art, that word would be “craft”. I feel cautious about trying to clarify my understanding of the mysterious world of artistic culture, but take comfort from other people’s use of this word: “The Craft” is an expression commonly used for witchcraft.

The craftsman, like the magician, sets out to achieve a specific effect. The effect has its objective elements, but the final measure of the craftsmanship is subjective: the sense of a job well done, of a beautiful solution to the need. Just as a magician may set out to “heal”, where healing may be reflected in objective improvement of the condition, but the final acceptance of the healing lies in the subjective sense that it is happening.

So, if I loosely equate magical culture with a form of living craftsmanship, at what point would craft evolve into art? I suggest that it begins with the changing balance between observation and feeling: the move away from the will to change, or have some impact on one's reality, towards greater attention to the subjective feeling. A very experienced magician can choose to practice magic without any object, to play a game where the rules are unknown, to explore and discover, rather than to change. This could be the start of a move from a magical to an artistic culture.

The magician, or “craft worker” who responds to some inner dissatisfaction or need to make a change by privately creating a ritual, incantation, talismanic object or image is, at that stage, doing something very similar to the artist who is moved to create a drama, poem, sculpture or painting. I suggest that the point of transition from magic into art is marked when the creator’s privacy is interrupted by a voice from behind saying: “Wow! That is awesome!”

This means that a third party, outside the creative act, has been moved by it; thus it is shown to have more than just a personal meaning. With that third party acknowledgement, it has become an “art object” – and may be on its way to become widely recognised as “great art”.

The movement of art goes from the extreme individualism of magic towards acceptance by a wider public – a public that will evolve into an authority with the ultimate power to sanctify the work as “art” of universal meaning, and so pave the way to religious culture.

Going back to the traditional linear view that places the origins of magical thinking at the stage where hominids first began to form language, I would then associate art with the stage where language is enabling shared feelings: so that a group of people can now recognise the value of what may have begun as a purely individual statement. In terms of individual development, it is the point where an infant’s scribbling is first placed on a fridge door and proudly secured with a magnet.

18.1 How art transcends magic

I mentioned in Section 12.3 that Dion Fortune chose to upgrade Crowley's definition of magick as "the Science and Art of causing Change to occur in conformity with Will", with her version that "magic is the art of causing changes in consciousness at will". Myself I think that changing perception is fundamental to magical success, but I would not limit myself to a definition that "magic is the ability to change perception at will", because that would overlook the extent to which a changed perception can ultimately lead to physical changes – as when a feeling of wealth may actually invoke wealth.

So, although I would not from my experience choose to limit magic to purely subjective change, I recognise that art, as an instrument of change, can extend far beyond any but the most fanciful of magical transformations. When scientific solutions become bogged down in political conflicts, practical limitations and the vagaries of human nature, some people are tempted to move on to the magical culture in search of solutions. In a similar way magic's ability to reshape physical reality may in turn reach its limits, and that encourages the migration into art.

To show the extent to which art can transcend magic, I refer to a talk I gave in Brighton in 2003. At the time I poured four glasses of water and then proposed an act of magic. Before their very eyes I would transform the four glasses of water into four distinct objects: a glass of water, a glass of holy water, a glass of healing water and an oak tree. The idea was to show how differently we test for truth in the four cultures.

In the scientific culture, if I say that I have produced a glass of water then the ultimate test is not simply whether I have poured from a bottle labelled “water”, but rather that it must behave as water under laboratory conditions. It must, for example have the right density and viscosity, it must break down into hydrogen and oxygen in the right proportions and so on. For in the scientific culture the emphasis is on what a thing does when tested.

The same applies in magic. Taking the “healing water” as my example, I argued that the test should be “does it heal?” – bearing in mind that a magical healing must be subjectively recognised, unlike the objective criteria of a scientific healing (See Section 13.4.)

But when we come to religion and art the criterion is not so much what a thing does, as what it is. Compare the holy water with the magical healing water: it is indeed holy water provided it has been blessed by a priest, even if it behaves exactly like ordinary water when tested in the laboratory. True, some people have expectations that holy water can be healing but, if such water should fail to heal, then it only shows that it was not God's will to heal, it does not prove it was not holy water. Whereas magical healing water that often failed to heal would be disgraced.

So we come to my fourth example, the glass that has become an oak tree – the most astonishing transformation of all. At this point I read out an extract I had discovered on the Internet, it read as follows:

In a room at Tate Modern there is a three-quarter full glass of water on a high shelf. It is a work by Michael Craig-Martin called “An oak tree, 1973”. Beside it there is the following text:

Q. To begin with, could you describe this work?

A. Yes, of course. What I've done is change a glass of water into a full-grown oak tree without altering the accidents of the glass of water.

Q. The accidents?

A. Yes. The colour, feel, weight, size ...

Q. Do you mean that the glass of water is a symbol of an oak tree?

A. No. It's not a symbol. I've changed the physical substance of the glass of water into that of an oak tree.

Q. It looks like a glass of water.

A. Of course it does. I didn't change its appearance. But it's not a glass of water, it's an oak tree.

Q. Can you prove what you've claimed to have done?

A. Well, yes and no. I claim to have maintained the physical form of the glass of water and, as you can see, I have. However, as one normally looks for evidence of physical change in terms of altered form, no such proof exists.

Q. Haven't you simply called this glass of water an oak tree?

A. Absolutely not. It is not a glass of water anymore. I have changed its actual substance. It would no longer be accurate to call it a glass of water. One could call it anything one wished but that would not alter the fact that it is an oak tree.

Q. Isn't this just a case of the emperor's new clothes?

A. No. With the emperor's new clothes people claimed to see something that wasn't there because they felt they should. I would be very surprised if anyone told me they saw an oak tree.

Q. Was it difficult to effect the change?

A. No effort at all. But it took me years of work before I realised I could do it.

Q. When precisely did the glass of water become an oak tree?

A. When I put the water in the glass.

Q. Does this happen every time you fill a glass with water?

A. No, of course not. Only when I intend to change it into an oak tree.

Q. Then intention causes the change?

A. I would say it precipitates the change.

...and so on, ending with:

Q. How long will it continue to be an oak tree?

A. Until I change it.

To help explain how I myself understood this astonishing transformation, imagine now that on this page I have printed a black and white thumbnail image of The Mona Lisa and beneath it the question “What is this?” The answer, of course, would be: “it’s the Mona Lisa”.

If I then said: “the Mona Lisa is a priceless artefact worth many millions of pounds, so you will be thrilled that I am going to sell you this book, which includes the Mona Lisa, for a mere one million pounds” you would hardly be impressed. To put it simply: although it would be true to say that my thumbnail really was the Mona Lisa, it would not be THE Mona Lisa.

But then again I could take you the Louvre in Paris and stand before the original painting and say “what is this?” and you could this time say it is THE Mona Lisa, and I might reply “no it isn’t because THE Mona Lisa was a woman, and this is just a piece of canvas covered with paint”. Again, I doubt if you would be impressed.

Even if I could include with this book a reproduction of the Mona Lisa so perfect that it satisfied every laboratory test to prove that it was identical with the original, my book would still not be worth millions of pounds because, in art as in religion, it is not so much what a thing does as what it is that matters.

Da Vinci took paint and canvas and created something that became recognised evermore as “the Mona Lisa” and the transformation was so absolute that, in a very true sense, even my little thumbnail image of it becomes “the Mona Lisa”. So also, if an artist of sufficient repute (and I exclude myself from that category) creates an artwork that looks like a glass of water but is actually “An Oak Tree”, then any scientific attempt to prove that it still behaves like a glass of water and not an oak tree would be meaningless in the artistic culture.

In magical culture too, such a transformation would be utterly mind-boggling. When I performed it in front of my audience I was, as I had to explain, briefly playing the role of an artist, I would never attempt to transform a glass of water into an oak tree by magic. Such transformations can only ever happens in artistic depictions of magic – as in Harry Potter films.

So, just as magical culture can create willed changes to everyday existence that members of a scientific culture would love to make, but often fail to, so does art create transformations way beyond anything a magician could do.

In each case the miracle is only achieved because the rules of the game have been changed.

18.2 Conclusion

What we are seeing in these chapters is the way that each successive culture takes us beyond the previous one, and yet no one culture is “better” than any other because each is consistent to its own standards. The movement comes from the evolution of human needs, in this case a cyclic process.

Is there any reason for this cyclic pattern superimposed on human evolution? I am trying to focus on the way things happen, rather than any assumed reason behind the happenings, but will divert here to give a tentative explanation. It may sound to some like a scientific explanation, but the following is actually more of a magical exploration.

If, as the linear model of evolution towards scientific culture would suggest, there were one single human culture that ousted all the others, then it would drive humanity towards an evolutionary dead end. If reason and observation proved ultimately superior to feeling and intuition, then the latter would tend to atrophy in human society and we would become perfectly adapted to our ecological niche.

The wisdom of experience, however, suggests that the strength of humanity lies in not over-specialising in this way. In Gerald Heard's story *The Wishing Well*, nature's greatest triumphs – birds that can fly, lions that are king of the jungle, mighty elephants etc – are adaptations into specialised functions whereas humanity's great strength is lack of any such specialisation. Thus we have retained our flexibility to become whatever we wish. This means we will be better able than many other life forms to adapt to extraordinary circumstances, such as global warming or contact with alien cultures.

Curiously, this idea seems to be well grounded in the popular imagination. I described the time around the 1950s as an age of scientific triumphalism. Around that time there was also a popular genre of science fiction in which planet Earth is attacked by a vastly superior race of extreme intelligence. The tables are turned, however, when their very advancement becomes their downfall: they are so super-rational that they cannot cope with humanity's blind doggedness in face of un-surmountable odds; or that they fail to understand the power of love; or, as in War of the Worlds, they are so hygienic that they fall prey to our cold virus. Thus popular imagination does seem to sense that irrational emotions hold the trump card in a battle against superior intellect.

Therefore, I suggest that humanity's evolutionary success has been constantly reinforced by cultural churn: a constant quest that keeps us restlessly moving between different ways of looking at, judging and operating on our environment. This happens at different rates on different levels to create the richest diversity of culture and greatest adaptability to change – and it offers a further answer to that question “whatever happened to the Enlightenment?”

19. The path from art through religion to science

Just as I have described the path from magic into art in terms of a highly individualistic move from close observation of subjective experience towards an increasingly subjective appreciation of the feelings it generates, so I would describe the path from art to religion as something that begins with a very individual feeling experience but moves towards greater group participation, leading towards recognition by authority: whether the authority of the critics, of an academic “school”, or the authority of recognition by a wider public.

The evolution to greater group participation is less significant, in the sense that it tends to greater magnificence but not necessarily greater art. The lonely individual creating a tune may gravitate towards an ensemble and maybe an orchestra, and individual artists might find their fullest expression in a mighty shared venture such as an opera or a movie, but it is arguable whether the awe-inspiring group art project need be considered as greater art than a brilliant individual work. The evolution towards authority, however, is rather more fundamental.

Although I showed some early potential as an artist – I won prizes for my painting at school and was commissioned to design posters in my undergraduate days – I never had any further artistic education. As a result, my ideas about art remain relatively naïve – I mostly understand the artistic process in terms of individual expression, and have less grasp of the role of the group, or of authority. This latter, however, was brought home to me a few years ago when I attended the Frieze art show in London.

The annual Frieze art show is a major selling spree of modern art, occupying an enormous tented enclosure in Regent's Park. It is a sort of art market village under canvas. There were works on sale for hundreds of thousands of pounds, even millions. I speculated with my hosts whether, if I had a sudden lottery win, it might not

be amusing to splash out a few million at the show. But they explained that, even if I had the money, I would not be able to buy anything significant. For it seems that a vital part of an artist's reputation rests upon whom it is that buys their work. So that, if a major gallery or an esteemed art collector wants to buy, they will be welcomed with open arms; but if someone like myself, with zero reputation in artistic circles, wishes to buy, then my offer will be turned down – even if I have more than enough money. An artist friend explained further that the real objective is not to be purchased by an investor – someone who might later be reduced to reselling the work at a knock down price – but to a great collector or art museum. These are the modern day Medicis.

This suggests something about the crucial role of authority in art, and it

reinforces my understanding that the path through artistic culture may begin with pure expression of feeling but that authoritative acceptance plays an ever-increasing role. Recognition in an artistic culture is not a one-off process, but rather a lengthy climb up a slippery slope to the heights of Olympus. All along the way there are critics (and criticism is itself a form of art) who may opt to boost their own reputation by standing out from the crowd with scathing criticism of the rising star. That is their gamble, and it might either result in a boost to their reputation, or egg on their face. But it all serves to extend the climb so that, although the art world may be a very small minority of the population, the climb to ultimate artistic acceptance is practically infinite. By the time one has become a Beethoven, Shakespeare, or Leonardo da Vinci, one has achieved something

on a par with pagan godhead.

So that is my understanding of the path from art to religion. It begins where magic ends – with a need for self-expression that goes beyond practical or even subjective utility – it achieves wider recognition, and then works towards a level of authority that is godlike. At which point criticism of the – now divine – artist acquires the taint, and the deliciousness, of sin.

Finally I repeat my warning of Section 13.6: that the nature of the artistic culture is to cross any boundaries that are imposed on it. If my concept should gain any acceptance it will be justification enough for some famous artist to go off into seclusion, create something in private and then destroy it simply to prove that I am wrong. My answer would be that they have thereby practiced magic – rather than art. It would be a magical act performed with the willed intention to deny my version. It only becomes recognised as art when the knowledge of that act reaches the art critics – and the rebellious gesture earns its place on the art world's Great Fridge Door.

19.1 Developing religious culture

Just as art transcends magic – in the sense that I have demonstrated a simple artistic transformation that would be a magician’s wildest dream of turning a glass of water into an oak tree – so does religion go way beyond art.

I suggested that the artist’s success is to produce something that not only feels like the fullest expression of themselves, but also produces a gasp of recognition in others – recognition that this work goes far beyond individual expression and represents something timeless, universal and absolute.

(I also repeat that it is difficult to make such statements about art because the nature of artistic culture is to cross all boundaries and resist all limitations. So the previous paragraph is artistically OK if I put it forward as a humble opinion but, if it were to be presented as an authoritative statement, then some great artist would feel a moral obligation to respond with a masterpiece that was utterly ephemeral, specific and personal.)

Where art ends, religion begins, in the sense that it begins with a divine revelation – an experience or declaration that appears to be timeless, universal and absolute. This is most obvious when applied to religion in its narrowest sense, when the experience is most numinous, a direct message from God as the ultimate authority. But it applies also when that message is promulgated and becomes recognised by others as “the word of God”. These are the “believers”, and process of religion is to bind them together.

A similar thing happens in politics: a recognition that here is a theory or message that makes sense of the world and offers real answers. I do not really understand the passion for sport, but assume it must be a great experience watching a game, especially in a crowd of supporters and maybe a feeling that this is the greatest possible experience.

In each case one starts with a glorious gift – a revelation, a theory, a style, a body of knowledge or the rules of a game – and then begins the process of sharing that gift and engaging “like minds” to mould a community.

An important consideration here is that those “like minds” will form an elite. Although to the believers that initial revelation may appear to be so universal that it should be acceptable to everyone, in practice a religious revelation must be one that appears ridiculous to nonbelievers. This is what binds the believers together as a group, as I explained in Section 11.1.

What about the lonely mystic, the hermit who hears the word of God? Is this not a form of religion? I do have a problem here: in my model there is no religious culture unless other people come together to accept the revelation as believers, and thus form a “religion” or “binding together”. In the case of the solitary mystic there is a binding together – in the sense that the mystic is being bound to divinity – so this does not altogether argue against the derivation of the word “religion”. And yet what is happening in this case fits more comfortably into my idea of the magical culture. Indeed, certain important magical ceremonies (such as the Abramelin Operation) are intended to bring the practitioner into a divine presence.

For the time being, I suggest that, if the intention is to bring spirit down to earth, then the solitary mystic belongs in the magical culture. For example, if one seeks divine communion in order to become wise, or a better person, or to bring divinity to others, this is a form of magic. If, on the other hand, the mystical path is intended to take one away from the world into the spirit, then it has a place in the religious culture. In those terms, the act is a religious anomaly, but what happens in actual practice is that anyone who performs this act tends to attract a following. Even after their death, their reputation becomes the revelation that forms the core of a new religion in my understanding of the word.

So, even in the case of the hermit, the true basis of religion is not just a revelation but also a group of believers. Religion's harshest critics sometimes suggest that that is all there is to it: the believers become like machines, never changing, never moving forward, but simply acting out the revelation for the rest of their lives. To outsiders it can sometimes look like that, but I suggest that human nature resists such stasis. True, there is a definite tendency in religious culture to wish to return to the original revelation and stay there, and I will address this tendency later in Section 21.2. In the long term, however, any religious culture tends to generate considerable debate, discussion and even dissent around the original revelation.

This may take the form of discussion of the precise meaning of the terms, on how best to apply the principles of the revelation to everyday life, or how best to convert nonbelievers. Over the years the world changes, but the original revelation stays the same: so how should one now interpret that revelation?

If the revelation takes the form of a game – such as the game that emerged when pupils at Rugby School went wild while playing football – what will happen in later years to the newly formed rules of Rugby? When, for example, society requires stricter measures to protect health and safety, or when a new generation of sportsmen are so strong or skilled that the rules need to be adapted to preserve the sport? Questions like this can divide believers and create schisms, and can even lead to war in the case of politics or religion. At best, however, religious culture progresses by debate, new revelations, and alliances between different groups of believers.

My emphasis here is on the growing importance of thinking about the basic revelation, its true meaning, and its evolving interpretation in an evolving world. What may have begun in a flash of inspiration or “message from God” becomes material for endless discourse, examination and exploration. As I explained in Chapter 11, reason and debate is a vital part of religious culture, although this may not always be apparent to its critics. Section 21.2 outlines the dynamics of a counter tendency – an anti-intellectual component of religious culture – but for the time being I want to describe the path from religion towards science in its more healthy manifestation.

As time passes and the original revelation comes more distant in a changing world, the role of reason and debate becomes stronger in the religious culture. So much so, that it tends to dilute or displace the original revelation through generations of analysis. Religious culture tends to precipitate educational institutions: schools, colleges, universities and study groups. The majority of the world's great academic institutions were founded by religious bodies, or have strong political or sporting associations.

So the ideal evolution in religious culture is towards the search for a single, unified theory that can re-unite the culture into a coherent whole. Thus the broad tendency in religion is to evolve towards monotheism. Even the obvious exceptions, the polytheistic religions, tend in their highest form to postulate a single divinity as the parent of all the other gods – a sort of white light which becomes split into the many colours and shades of divinity.

This could be described as the healing process of the religious culture: a culture which begins by uniting people through isolating them into tightly discrete groups, and then seeks to undo the division it has created by an urge to draw everyone together into the one true religion or unified political theory.

But it is very difficult to build such unity without creating an unintended duality in the process. It has been widely accepted that democracy is the one viable political system that everyone should enjoy – but what does that imply for those who reject democracy? It is then necessary to believe that they are simply “behind the times” or “backward” and need to be taught democracy. But if they continue to reject it? Then they must be devils...

Monotheism in its strictest religious sense tends towards the ultimate duality of matter and spirit. There is God, the one God, and there is this world we live in. Is this world we live in just part of God? Is matter the mind of God? Or is God the mind of matter? Or do we try to arrest this process by demonising matter and positing a demi-urge that is responsible for creating the material world?

If sensory experience does not allow us to deny the material side of the duality, then the question is whether we can abandon the spiritual side to achieve unity? The ultimate stage of this tendency towards monotheism takes us towards one single, unassailable truth: and that truth is the material world, and the laws of physics that govern it.

This is the path through religious culture that leads us into the scientific culture. If there is but one ultimate truth, then it must include – or even equal – physical reality.

God the creator, the one reality, the ultimate truth, has not been banished: it still exists but is now called “the laws of physics” or “the theory of everything”. The language of religion falls away, but the yearnings of faith have been consolidated into certainty.

PART FIVE

Resistance and conflict between cultures

20. Emerging complexity and inherited vices

No theory can claim maturity until it has been accused of being “a gross over-simplification”. That is where we now stand with my magical theory of evolving cultures: it is an over-simplification that suggests a necessary cyclic evolution. This in turn could lend itself all too readily to facile prediction.

Following the 1990s “decade of evangelism” we have had a wave of popular interest in science and rationalism. Now I am told that hi-tech movie thrillers have had their day and, as in the 1960s, there will be growing demand for movies that show science in more negative light (like Dr

Strangelove, 1964) and introduce more paranormal or occult themes (like The Twilight Zone did in 1959 – 1964). I have already noted a return to magical reality in “serious drama” as in The Leftovers, recent more “realistic” presentation of Marvel Comic heroes, and novels such as Two Moons where it is acceptable to include a paranormal element in an otherwise realistic situation without the publisher or producer insisting that it is done with a giggle to appease modern sensibilities. So, yes, popular taste is again evolving from religion through science and towards magic.

Such predictions can be very neat – but they are not in keeping with the chaos of reality. Change is seldom so smooth and regular: instead we have “reaction”, providing friction to resist change, and “overlay”, where things apparently change on the surface while leaving a sedimentary layer of earlier patterns underneath.

Reaction is a strong component in human nature. Tell the world that a certain process is inevitable and there will always be a more or less conscious tendency to deny or resist it. If we are in State X and are progressing towards State Y, there will be some who dig their heels in and try to remain in State X, and there will also be some who are consciously willing to move forward but manifest resistance at an unconscious level. There will equally be a more or less unconscious tendency for those happily progressing towards state Y to carry with them ingrained elements of X, the previous state – so the effect is that beneath the new veneer the old ways still hold sway. And all this happens at the same time as the overall progress continues.

What's more, a cycle does not imply a return to exactly the same place, especially in a human context, for every cycle is a learning experience. "No man ever steps in the same river twice" as Plato quoted Heraclitus.

Even if one is perfectly at balance, and fully prepared to move with the times, reflexivity can rock the boat: so any prediction that attracts conscious attention, can deflect or shape the final outcome. If I were to lay my hands on your forehead and say "tomorrow you will notice your aches and pains melting away" then some people might respond positively to my suggestion and call me a "healer"; some might be alarmed into a negative reaction and condemn me as an evil witch; while more sceptical people might simply look for and find evidence of my inability to heal.

So, even if we should experience another popular magical revival before 2020, we cannot expect a simple repeat of the 1960s. For we now have the Internet and the iPhone (as part of the legacy from those old hippies), and there is no more Iron Curtain or Apartheid Regime to polarise political opinion as it did back then.

In this chapter, however, I want to focus on those two factors, resistance and overlay, which complicate the simple cycle. Reaction is the natural resistance to change that endeavours to hold back development into the next culture. While overlay means that each time we shift to a new culture we retain some shadow of the previous culture.

Some “shadow” of the previous culture means that some key element of the previous culture remains but is buried by the overlay of the new culture – like sediment over an old river bed. This means that some tendency of the earlier culture is carried forward as an unconscious, unacknowledged factor. This means that it is likely to show in a negative manner, like an unacknowledged psychological factor emerging as a complex or psychosis.

As a result of overlay, each culture inherits a problem or problems from the previous culture, starting with the problem of “meaning” inherited from magic by the Arts culture.

20.1 The problem of meaning

In the case of art, the problem that it inherits from magic is that of “meaning”. It is not that art has no meaning, but rather that in an artwork meaning will have grown into full and complex fruition, compared with the relatively simple and literal seeds of meaning sown by magic.

So an artist whose work depends too much on the deliberate planting of symbols for effect – as in the creation of a talisman or tarot symbol – is slipping back into magic, and is likely to be criticised for producing “bad art”. But the temptation is always there, because less artistically literate members of the public often demand to be shown such simple meanings.

For example: the public may look at an abstract painting – let us say the geometric abstractions of Mondrian – and ask “but what does it mean?” The sort of answer that would satisfy such an enquirer might be: “those areas of bright colour symbolise strong human emotions that are constrained and forced into rectangular conformity by the strong black lines of today’s modernistic conventions”. Although some such explanation might play a minor role in defining the artistic value of that painting, if that was all there was to it, then it would not be considered significant art.

Nevertheless, I suggest that what the artistic culture inherits from magic is an uneasy sense that art's consumers often will demand a measure of literal meaning, simple enough to be described in words. You can make a better living from your art once some critic has helped to "explain" it.

Another problem is that the borderline between craft and art is not the sort of well-defined distinction that is demanded in religious and scientific cultures. I have known one or two craftsmen who explored their medium in an artistic manner, finding new outlets for their expression: a potter who hit upon a particular type of ceramic model that sold extremely well, a glass engraver who developed a theme that was widely admired. When that happens, there is a choice: whether to keep on exploring the medium and to move on to something new, or whether to capitalise on this success by repeating it.

In the latter case one limits innovation and keeps on making what the public wants, with only minor, acceptable variations, and maybe taking on apprentices in order to accelerate production towards commercial success. The former choice takes one's craft closer towards art, the latter choice is to remain very much within the craft itself.

Reproduction dilutes the sense of artistic awe, and the process becomes more an artistically “meaningless” moneymaking exercise – in other words, it remains an act of practical magic.

20.2 The problem of style

Meaning and symbolism play a vital role in magical culture, a role that can become a problem in the shift towards artistic culture – so too much dependence on literal symbolism becoming a recipe for “bad art”.

Religious culture, in turn, inherits a problem in the shift from artistic culture. It is the problem of “style”. Style plays a vital and recognised role in any art: it remains as the signature of the individual artist, even when their art has risen to the heights of universality and timelessness.

Religious purists like to think that “all that sort of thing” has been left behind in their culture, that it is the content of the revelation that is now all important and that style is reduced to a mere remnant of worldly trappings, something to be scorned and cast off. How very wrong they are: for the religious culture is utterly permeated by considerations of style!

Examine any religious war, and I find what is basically a style war in which the doctrinal differences are minute compared to the differences in their interpretation. Indeed, the bitterest religious conflicts arise between the nearest neighbours in doctrine. The more familiar is the content of any religion, the greater the dependence on style to define its boundary.

Presumably there have at times been conflicts between Christians and Buddhists, or between Christianity and Shintoism, but I have not heard about them, and I presume that this was because they did not amount to very much. On the other hand the conflicts that arose between Christianity, Judaism and Islam have rocked the Western world in their intensity – even though these three religions share a common ancestry and much common content. In my own time the bitterest struggle I have witnessed has been between two avowedly Christian groups: the Catholics and Protestants of Northern Ireland, having very different styles of worship yet based on the very same God and same book of revelation.

The more pure the religion, the greater its rejection of style, and yet style is all that ultimately survives. The puritans smashed the stylistic kitsch of Catholicism and saw the greatest virtue in simplicity. The most extreme example of this can be seen in the Shakers of North America, and yet all that I know about the Shakers today is that there is a furniture shop in London dedicated to Shaker style furniture. In the Far East, Buddhism's purest manifestation would seem to be in Zen, but here in South Africa the word "Zen" now refers mainly to a certain style of bathroom furniture. At a more mainstream level, the Vicenza biennial religious fair provides a very glossy shop window to Italy's multi billion pound export business – providing stylish designer vestments and religious artifacts for the world's churches.

What is true of “religion proper” is also true right across the religious culture. I am sure that those devoted Nazis who swallowed the entirety of Nazi philosophy would be horrified if they realised the extent to which the masses were drawn to Nazism by its sense of style – the uniforms, the symbolism, and the many stylistic touches in a movement that was, after all, headed by a would-be artist. Compared to Nazism, the Communist style can seem a little insipid, and yet I have seen instructions to the South African Communist Party of the 1950s on the correct “shabby chic” clothing that should be worn to suggest identification with the workers. And I also suggest that many young people are still attracted to revolutionary causes by one famous and very stylish poster of Che Guevara.

I am hardly qualified to comment on the role of style in sport, but I do get the impression that old-school sports commentators can be upset when their beloved game, maybe via the medium of television, becomes increasingly dominated by style over sportsmanship.

Academia is a particularly interesting example, especially as it tends to distance itself from religious culture – increasingly presenting itself as a bastion of common sense against the nonsense of religion. This is despite the fact that the majority of academic establishments began as religious foundations – and even today’s secular colleges were most likely founded by people brought up in the traditional academic environment. Academia is also a supreme example of a society dividing itself into elite groups bound by a common culture or “discipline”: groups that defend their boundaries against all neighbours with the utmost diligence and scorn for “interdisciplinary” processes.

Sure enough, style has become the dominant criterion of academic success. Take any well-established content – maybe a work of a great philosopher, or recognised theory of physics – and rewrite it in any non-academic style, such as a personal reminiscence, thriller script or New-Age channelling. Regardless of the quality of content, the result will never be accepted by any academic publisher or examining board, because of “not being presented in academic style”.

I experienced this myself when, following my three years of mathematics Tripos, I studied education at Cambridge and was asked to present a dissertation on a subject of my choice. As a typical mathematician, I had zero sense of style, coming from a discipline in which the whole value of a thesis lay in its content, and its logical structure. My examiner told me that my dissertation – on initiation and education – was the most interesting one presented to her that year, however it could not be accepted because it was not presented in the academic style. At that time I had no idea what she meant, but now can I now understand her problem. (She also said that she hoped that I would continue this study in my later life, and it occurs to me that this present book is to some extent evidence that I have done so.)

It could be argued that excessive dedication to style need not diminish content. But in fact content is often regarded with suspicion in a religious culture where it is easier to retain sanctity in silence rather than deliver content that might contain seeds of heresy. Whether political debate or inquisition, a “vow of silence” is usually safer than a rant. This rejection of content may be related to the obvious enmity that survives between religious and magical cultures. If Donald Trump is considered to be the devil, it is because he said too much – whereas Bush became President by appearing to be dumb. Content is, however, all-important in magical culture. Indeed without the boundless content of subjective experience, magical culture would hardly exist.

In the case of academia, it is broadly recognised that one should not only focus on academic style of presentation but also reduce content as far as possible. So a thesis that raises questions for future study will be preferred to one that presents solutions. Academic publishers will shy away from books with titles like “Seven Secrets Of Business Success” while feeling nothing short of awe at “Notes Towards a Preliminary Study on the Meaning of Meaning”.

20.3 The problem of faith

Faith is a key part of any religious culture, but it is an aspiration and not a given.

In the case of “religion proper”, faith is a high virtue, it is said to move mountains. When faced with problems the devout are urged to “keep faith”. And yet loss of faith in moments of despair is a vital contributor of religious maturity: it is when one has lost faith and experienced the resulting desolation that one can return to the faith with a growing sense of its true value.

In politics loss of faith is so dire that exile or death can be the punishment those who lose faith or desert the cause. I am not so sure about sport, but suspect that there is often a temptation to “bend the rules”, and a corresponding revulsion against those who lapse in this way. And academia can be extremely harsh on those who stray outside their prescribed discipline.

Not surprisingly, the science culture is very keen to distance itself from something so utterly fundamental to religion. In fact “science proper” goes out of its way not to rely at all on faith, and it refuses even to allow the word into its vocabulary.

I say “science proper” because I want again to emphasise that my main interest is not in the perfection that is at the heart of each culture, but rather the broader and all-too-human culture that surrounds it. And that broader scientific culture is built upon a rock of faith so solid as to make the faltering Christian positively weep with shame.

Faith is the problem that the science culture inherits from religion. But here it is absolutely not an aspiration, it is a given. As such it is neither admitted nor recognised.

In the early 1990s I came across a discussion group in a West Country pub that looked interesting. It was a mixed bunch in age, gender and attire and they described themselves as a “sceptics group”. I had had enough scientific education to wish to put them to a test, so I posed a series of questions.

“Does anyone here think there might just be something in Reiki?” No hands. “Does anyone here think there might just be something in crystal healing?” No hands, and so on. I seem to recall astrology and homeopathy getting a vote or two, but overall I had hardly any response for a whole list of what I would consider to be magical practices.

So I concluded that here was a pretty diverse group of people united by a set of shared and absolute beliefs, ie that there was “nothing in” any of these popular topics. And yet the origin of the “sceptic” label they had adopted is a Greek word for “doubt”. A sceptic should properly be one who expresses doubts, not certainties.

In Section 5.3 I commented on the different attitudes to repeatability between a science and an arts culture. I gave the example of a cold fusion experiment that was triumphantly published in serious scientific periodicals, but which failed to be replicated later in other laboratories, and how in a scientific culture this failure lead to disgrace for the original team. I then pointed out that, if cold fusion was classified as a game (ie a bit of exercise and fun for the individuals concerned, as opposed to “sport”: a serious group activity that would put it in the religious category), then the team that achieved what others failed to repeat would have been awarded a trophy.

It provides a good example of a science culture that is reliant on faith to the extent of being a “faith-based” culture. For why should the failure to repeat the result – by a different team in a different part of the world at a different moment in time – negate the result? We are dealing with minute quantities being measured with great sensitivity, whereas those later experiments are conducted in a different part of the world where the climate is different, gravity is not the same, maybe by people of different race and education, under a different phase of the moon and planetary alignment. So why should we expect the same result?

Why is it that, in a universe where everything that exists is seen to be subject to processes of change and evolution – an observation that is supported rather than denied by science itself – should the science culture then believe in laws of physics that are themselves universal and immutable?

It appears on the face of it that an arts culture – one that celebrates rather than denigrates what cannot be repeated – is being far more logical and realistic than a science culture that comes out with the “sour grapes” conclusion that if it cannot be repeated then it could not possibly have happened.

That conclusion indicates an enormous faith not only in the immutability and universality of the laws of physics, but also in the existence of an objective reality open to subjective misperception – and yet there are people who can step out of the science laboratory and go and play a game of golf without thinking twice about the huge leap in culture, reasoning and judgement that they have just made.

It also draws attention back to the difference between the culture and the name it is given. Science proper is indeed dedicated to open enquiry, it is not dependent on faith. Whether or not the laws of physics might be evolving and different in different places on earth is an interesting question for pure science, it is not a forbidden topic. And yet, without the science culture's faith in repeatability and objective reality, the scientific culture could not survive. It is the cultural environment that is faith based, rather than Science itself.

20.4 The problem of doubt

In this chapter I have risked making enemies by taking a dig at the way each culture boldly turns its back on the past culture, and yet retains a hotly-denied heritage from it. So I doubt that I will be very popular when I assert that the biggest problem in a magical culture is that no-one in it really believes in magic.

OK, that is a bit extreme, and it ignores what I have already explained in Chapter 13 about the different meaning of the word “belief”. But I would like to illustrate with two examples.

Firstly, going back to the so-called “sceptics” group: if I had put the same set of questions to a group from the broader magical culture – even a relatively consistent group like hardcore ritual magicians – I would have received a much wider range of answers, revealing far greater levels of

doubt. I know of chaos magicians who think astrology is rubbish, while some think it is a workable psychological model but has nothing to do with the physical planets, and yet others who largely accept it. The worth of Reiki, crystal healing, divination, invocation and every other magical topic is an open question to be debated in most magical cultures. Many groups on the fringe of magical culture – such as the advertising community, homeopaths, analytical psychologists or whatever – will even go out of their way to distance themselves from magical culture by claiming disbelief in any form of magic, because they want their own practice to be respected as a science, and not sullied by association with cranks.

Secondly one should listen to the way people converse in a magical culture. Again I will give my example greater penetration by narrowing it to a specific subgroup: one would expect astrologers, at least, to believe in astrology. But in any group of astrologers you are likely to hear statements along the following lines:

“Last Tuesday I nearly forgot I had an appointment at 10, so dashed to get my car and it would not start! I seem to have mislaid the driver’s handbook so decided to call the RAC, only to find that my mobile phone was out of battery...” and so on. The statement ends with: “You’ll never guess what: Tuesday was the very day that Mercury went retrograde! It’s incredible!”

This sort of remark is very common in astrological circles, and yet astonishing when you know that, according to astrological theory, that is exactly the sort of thing one should expect when Mercury goes retrograde.

I exaggerate a little, but the fact is that members of a magical culture never cease to be astonished that their magic actually works. We often hear that word “incredible” being used, without recognition that it really means “unbelievable”. Can you imagine an advertising executive not being utterly thrilled when a client’s sales soar during their campaign? “Hey, look at these incredible sales stats!” Or can you imagine an “energy healer” not wanting to shout from the rooftops when their patient’s cancer goes into remission?

Compare that with the scientist who explodes a mixture of two parts hydrogen to one of oxygen and finds it turns into water – would that scientist rush to tell everyone about this “incredible” result?

Just as faith, in religious culture, is an aspiration that is seldom fully realised, whereas it has secretly become a given in the science culture, so also is doubt an aspiration in the science culture (witness those self-styled “sceptics”) that becomes an unadmitted given in the magical culture.

Before that exaggerated statement makes me too many enemies in my home culture, I need now to refer back to the different use of the word “belief” described in Section 14.2. Whereas a religious or scientific person will only “believe in” something when it has earned the right to belief by being in accord with scripture or scientific orthodoxy as well as, in some measure, providing observational proof that it is true; the magical practitioner should in theory be able to believe in anything that is capable of accepting their gift of belief – even something as fanciful as world peace or equal rights for women, let alone Reiki or fairies.

What is it that makes it possible for a “magician proper” to work one day with the runic elder futhark – which postulates a universe built on 24 basic principles – and the next day with the I Ching which bases existence on powers of the number two, or the decimal system of a tree of life consisting of ten spheres? The answer is that the magician does not “really believe” in any of these systems in the religious or scientific sense – ie that they have proven themselves to be accepted truths. Instead, in a magical culture, they are accepted as myths that work.

This ability to shift between myths is key to magical cultures: the therapist who, on getting nowhere with analysis of a patient's complexes, "has a go" at gestalt therapy and hits jackpot; the advertising executive who surprises his client by suggesting the use of sex to sell bibles or the copywriter who uses a politically incorrect headline to attract attention in a liberal market; the psychological astrologer who has a breakthrough when chancing on an article about traditional planetary dignities – these are all examples of the ability to shift beliefs in the search for a magical solution, even if it might seem to a non-magician to be incompatible with the practitioner's other core beliefs. This whole facility to change belief would not be possible in a culture that was not built on doubt.

So scepticism is actually a core strength in magical culture, but it is equally a problem. Just as style is the strongest binding factor in a religious culture while it is also a worldly abomination to “religion proper”; just as faith is the bedrock of scientific culture though something utterly denied in “science proper”; so is doubt the lubricant that gives freedom to explore in a magical culture, even though it is a huge handicap to “magic proper”.

In Chapter 14 I gave an example of wealth magic to illustrate the way magic relies on shifting perception. I suggested that it would be unrealistic to expect that a magical ritual to become rich would result in “a two hundred foot motor yacht appearing out of thin air under test conditions, fully crewed and registered in the new owner’s name and in such a way that there can be no possible scientific or legal explanation as to how that could possibly have occurred by any natural means.”

In fact “magic proper” would in theory allow this to happen, as long as the practitioner could give their belief to a world model that was sufficiently adaptable to that extraordinary result. Just as “science proper” would in theory allow me to stop writing this book and instead put pen to paper and devise a theory of everything that would mark the end of all scientific endeavour. Both of these examples are unlikely to happen – they remain mere wishful thinking – and yet the scientific culture allows itself to believe in the second one.

In admitting that the instant materialisation of a luxury yacht was out of the question, I was on the one hand using a trick to convince the reader not to dismiss me as a hopeless crank, but on the other hand I was confessing my limitations as a magician.

Deeply held scepticism about any absolute truths is a strength in magical culture, one that allows access to wonderful working myths. However, we are only human and it is hard to attain total scepticism. Although I accept the existence of external reality as a myth, and similarly the idea that my consciousness is the result of chemical reactions within a brain structure in my head – in view of my background and education, I find it very hard at times to resist the idea that these myths might actually be true. And that does limit what I can achieve as a magician.

I have beheld miraculous, even impossible events in my magical career, but have also learned the secret of not examining them too closely or sharing them with others – as those foolish cold fusion researchers at Southampton University did when they published their results. I rejoice that the Wright brothers' first demonstration flight was not attended by the scientific community (because it had been agreed that of heavier than air flight was a scientific impossibility) and so the experiment was free to succeed. I have worked on devising models of reality that allow far greater freedom, and I have met those who have accepted those models and enjoyed greater freedom, while having to admit that I myself am only human, and still bearing the burden of a childhood in the 1950s.

This is a fundamental challenge on the magical path, and one raised by Crowley in his Book of Wisdom and Folly: how to ride the clouds of doubt right up to the edge of the abyss, and then be able to forge the certainty needed to leap the abyss and deliver one to achievement.

For now, however, it is enough to say that no-one can know what scepticism really means until they have fully embraced magic.

21. The demons of resistance

Reaction is demonised by the revolutionary, and yet it is a very natural human response and it often plays a useful role.

When some organisation grows big and rich it may seek to demonstrate, or build on, its power with some great public project – a new housing or industrial estate, a new road or oil refinery, a new institution for the criminally insane or whatever. Then come the objectors – who will be scorned as “bunny huggers”, NIMBYs (“not in my back yard”) or reactionaries.

Yes, they are reactionaries: they resent the change being imposed and will gather round any suggested reason for opposing it. But in the long run they often benefit the original scheme, because their reaction forces it to be thoroughly reconsidered, revised, adapted and taken much more seriously than if it had simply been steamrollered into existence. Thus reaction plays a training role in the revolutionary process: turning what might have been a “spoilt child” scheme into an adult project. A truly bad scheme might even be halted.

So I am not here arguing against reaction, simply suggesting that knee-jerk reactions against cultural change, when not consciously addressed, can degrade the culture they are meant to defend.

In describing a cyclic movement between cultures I am also suggesting that each culture can at a certain level be seen as a development between two functions as in my diagram in Chapter 16 (although in practice both functions are active together in a healthy culture).

21.1 Art under attack

On my diagram, for example, one could view the arts culture as a progression from Feeling towards Authority – in the sense that artistic creation begins with feeling a need to create, and reaches fruition when authority hails it as “art”.

(I believe this is even true when an artist works to commission, because I can recall my school days when we had a regular “House Art Competition”. I never really felt an autonomous urge to paint, but would look at the subjects proposed for the competition. Sooner or later one of them would grab me – I once got excited about painting “A Forest Fire”. At that point my top priority was not to win a competition but, as best I could, to realise in paint the forest fire that I had pictured. I did not give much attention to trying to paint it in a way that would most likely win the competition – for that would steer the project towards being a magical talisman rather than art. I painted what I wanted to paint and, happily, it was highly rated by the judge.)

Insofar as the arts culture does move from feeling towards authority, it has the consequence that the culture will resist authority when it feels insecure. Attack a work of art, and the artist will often start denying the very authority that has given it value, and insist that the work was what they “needed to create”. For example they might say something like: “I don’t care if the critics claim that my latest project fails to be a valid ‘post-modernist statement’, I actually hate that label. My work is not ‘post’ anything – it’s ME!”

The culture is rife with artistic movements that rose to recognition on the blessings of some authority – whether public or critical acclaim, intuitive evaluation as a masterpiece, attracting the right sponsor, or being accepted by a respected academy – and then spawned angry dissident movements that spat in the face of their very champions.

This also shows as a reaction against any artist that assumes the mantle of authority in their own lifetime. The film stars becoming too famous for their own good, or the book that “everybody who is anyone” is talking about, will become a target for the most bitter critical sniping. I remember when I was at Cambridge someone wrote in the university magazine that “Tom Jones is the worst film ever made”, and this absurd statement I saw as evidence that the writer was aspiring to become a film critic – for in that same year the film Tom Jones had been widely heralded as a masterpiece.

In practice, recognition by authority is as vital a part of any art form as the feeling that goes into it. Yet, when the art culture is feeling insecure or is defending itself from attack, it is most often the stamp of authority that is denied or attacked in return.

It is as if the art culture itself senses that the movement towards authority is the process that will evolve it towards a religious culture – authority becomes the doorway into a religious culture. The work of art becomes so universal that it no longer “belongs to” its creator – it has become an icon, a holy object. It is no longer art but divine “revelation”. I recall reading about Salvador Dali’s distress when he found that the surrealist movement, which had once welcomed his art, was turning into a political movement.

So the impulse to reject authority is driven by a form of reaction – the need to preserve the arts culture itself.

21.2 Religion under attack

In the case of religion, the corresponding movement was described as being from authority towards reason, or thinking. The hopes which inspire communism are, in the main, as admirable as those instilled by the Sermon on the Mount, but they are held as fanatically and are as likely to do as much harm. First the revelation is accepted, and then the practice of religion becomes an exercise in thinking how best to realise that revelation and follow its teachings in the reality of everyday circumstance. So the corresponding reaction, when a religious culture feels threatened, is to deny reason or thinking – the over-cultivation of which will lead from religious into scientific culture.

I recall hearing about Cambodia under the Khmer Rouge, where at one point anyone who wore glasses in public was at risk of being taken for an “intellectual” and attacked – an extreme example of the common political defence mechanism of demonising intellectuals when under threat. I have seen a similar rejection of intellect in those football fans that take delight in acts of boorishness. The brain is as important to sport as the rule book – I even heard that, in the highly physical sport of bodybuilding, the brain has been claimed as “the ultimate anabolic” – and yet it also poses a perceived threat that sport will “degenerate” into a science, and that athletic prowess will reduce to genetics or taking the right drugs.

In the case of “religion proper” – the very foundation of most educational and academic institutions – there is a corresponding defensive reaction that can arise against intellect and reason. This reaction has been expressed by burning books and heretics, as well as mass purges against witches every bit as crazy as the intellectual purges in Cambodia.

In Chapter 19 I suggested that the logical evolution of religion is towards monotheism and the consequent duality of God versus Matter, and that this problem can be resolved when Matter becomes the one principle – so that the Creator or Absolute Principle is revealed as The Laws of Physics. Thus religion gives way to science and, in any religious culture under threat, there will always be some reactionary tendency to turn against, resist or deny reason and intellect lest they might erode the power of authority. When I was an undergraduate at Cambridge, it was curious how often I heard people opine that someone was “too bright to remain in academia”. In my day the dazzling ones were expected to go into “the city”, leaving the more pedestrian but persistent souls to plod the cloisters of academia.

Did you, the reader, notice that the first paragraph of this section contained an inappropriate non sequitur after the opening sentence? In a proper magical text there could be no such thing as a non sequitur: the reader should have paused to seek deeper meaning in any apparent non sequitur because magical culture questions not just the content of any act but equally its purpose – truth alone is not enough to justify a statement, it must be judged above all for its effectiveness.

Had I added an explanation that the sentence was a quote from Bertrand Russell, then there might be less incentive to ponder its role in my thesis – because Russell is recognised as an authority from whom a quotation could be accepted without further justification – whereas my own words have to work harder for their living.

Nevertheless, a more studious reader might still be curious as to the context in which Russell wrote those words. If I had presented the quotation in proper academic style – complete with detailed reference and provenance – then the reader would not only have been spared the effort of judging the statement's value, but also the effort of exploring its provenance.

Whereas the noble intentions of academia include the desire to stimulate thought and enquiry, the wider influence of academic style is to foster a culture of acceptance. In a world where Google is at most readers' fingertips, it is surely an insult to throttle down human curiosity and the adventure of exploration with redundant references in order to satisfy an ancient, very worthy, but increasingly irrelevant academic tradition?

The best magical texts, by contrast, present a constant challenge to the reader: the literary style can be irritating, appallingly opaque and inconsistent, requiring reading, meditation and re-reading to penetrate the surface and mine potential scraps of meaning. (See, for example the alchemical works of Thomas Vaughan, the Nag Hammadi manuscripts, the I Ching, mediums' channelled writings and so on.) It reminds me of the biblical story of the family that inherited a vineyard with the promise of buried treasure. They dug and dug in search of that treasure and finally gave up in disgust. But such was the effect of all that digging that the vineyard yielded a massive harvest and they earned a fortune – that turned out to be the “treasure” that was supposedly buried there. I understand that Gurdjieff added deliberate obscurity to

his writings for just such a purpose.

In magical writing, style is a mere veneer; what matters is the purpose, the content and the reader's own struggle to digest it. Whereas in religious culture, style dominates content: according to Iamblichus the highest shrines are empty; the Tao that can be described is not the true Tao; the purest prayer is silence – in each case perfection requires a reduction in content. And the perfectly styled academic thesis that raises nothing more substantial than questions for future research achieves highest praise.

Let me make it clear that I am simply describing a tendency in religious culture, and academia in particular: my happiest years were spent at Cambridge, and I found academia to a very kindly and respectful environment. The real problem I am suggesting is that what is good for

academia is not so good for society as a whole. Although the media like to position themselves in the “real world”, as opposed to the ivory towers of academia, they are profoundly influenced by those religious tendencies to elevate style over content and reverence for authority. A “serious” publisher would be unhappy about that non-sequitur sentence – a direct quote without acknowledgment or reference, because plagiarism is a great concern to academia. This is ironical in a culture where something can only be accepted as true if another person has said it already.

The question “whatever happened to the Enlightenment” hints at the “dumbing down” of our society in apparent contradiction to the spread of education and the wide availability of news and information. But this dumbing down owes a great deal to a culture that discourages original thinking in favour of accepting the word of authority. And I experience the current rise of magical thinking as a reaction against that dumbness, rather than a symptom of it.

21.3 Science under attack

In the case of science, the equivalent motion is from thinking to observation – from an abstract theory towards physical testing. As in the other cultures, the healthy state is a more or less equal balance between these two fundamental elements and yet, when this culture feels threatened, it will reject or deny observation. It will refuse to look.

To many readers, this could be the most surprising example of my list of reactionary tendencies. But it will be very familiar to paranormal investigators, judging by the number of stories of phenomena that other scientists refused to investigate because they were deemed absurd, or impossible or outside the field of scientific enquiry. I am not here talking about wild-eyed cranks demanding that their powers be taken seriously, but people in laboratories taking careful

measurements under strict conditions and getting results that they found “disturbing”. So they asked for colleagues in other disciplines to help them pin down the nature of these anomalies. Professional parapsychologists would mostly welcome honest investigation, even if it points to errors in their method, rather than be simply dismissed or ignored.

I was recently visited by a champion of the scientific culture who was suffering a persistent pain. I felt concerned and offered her the use of a curious electric device that I had purchased on the Internet. The device made a sort of quacking noise and promised – in pages of enthusiastic user testimonials and slightly dodgy scientific evidence – to help ease and even cure pain. I had used it with not inconsiderable success to ease pains in

my shoulders. The next day I asked her if the device had been any help and she said: “well, I read the booklet and was not convinced.” She had not even tried the device. My reply was: “then you should have tried harder.” A third person present, who happened to be a fellow mathematician, laughed in delight at this collision between scientific and magical method, saying: “Yes you should tried harder to be gullible!”

The point of this story is that as a “sceptic” it was more important to her not to use a device that, according to her own reasoning, had no power to provide healing, than to experiment with something that, according to other people’s experience, did have that power. This amounted to an acceptance of pain rather than to observe or test a possible remedy. To the magical thinker this is awesome: a semi-religious devotion to higher truth, an acceptance of bodily suffering, that makes me feel quite humble.

Of course in scientific culture it is the rule, not the exception, which holds greater sway, so I must now extend my frame of reference beyond one charming anecdote.

The scientific culture has countered magic’s manifest superiority in the fields of health and healing by creating its own snake oil panacea, namely the

“placebo effect”. I once wrote a parody of those mailings – which now arrive to me as e-mails – announcing an amazing new supplement and containing pages of rhetoric and user testimonials before finally revealing what the supplement contains (usually a “scientifically optimized” combination of traditional herbal remedies). So I wrote about “the secret ingredient that doctors and pharmacy giants don’t want you to know about”; about “the one remedy that is so potent that it is used as a yardstick against which all new drugs must be proven”. I gave loads of statistics from actual case studies about the healing power of this mystery ingredient, and raved about the incredible low price of this miracle and how it was being further discounted for privileged purchasers who paid immediately – before announcing that the wonder drug was

called Placebo.

The placebo effect has become the politically correct term for magical healing – one that avoids the forbidden M-word. It is so widely accepted that no serious test of scientific healing will take place without a “double blind test” where a control group receives a placebo remedy instead of the remedy under test, and those administering the remedies do not know which one they are administering. To the magical observer this is hilarious, as it appears as an attempt to disprove the existence of magic by devising rituals to banish magic.

But my point here is that this placebo effect, while totally accepted across the scientific culture, is not in itself investigated any further than I have described above. (Note again that I am here talking about the science culture, as I am sure that what I am about to

describe has been considered in some depth by “science proper”.) What I mean is this: I have heard many, many times such double blind tests being authoritatively quoted in e-mails, in the press, on websites and by sceptics – both to prove the worth of a certain medical solution or else to disprove the validity of something like homeopathy or faith healing – and they are consistently based on the idea that the significant difference between the two groups was whether they received the medicine or the placebo. The placebo effect is fundamental to traditional magical practice, it provides the “magical link” and any magical practitioner understands the need to build expectation and reinforce that link.

It is well understood that the power lies not in whether the patient has actually taken the medicine or the placebo, but whether they think they have taken the medicine or the placebo. Yet those reports never offer further data on what proportion of those receiving the real cure believed they might be receiving the placebo, or vice versa, and to what extent the administrators believed they were or were not administering a placebo. If the placebo effect has any validity whatever, this would be a vital adjunct to the test, and yet the broader scientific culture closes its eyes to this need. So the term “double blind” reduces to “the blind leading the blind”.

In my first published book about magic I suggested a simple mathematical analogy to illustrate the way that magical thinking embraces a

level of complexity that scientific thinking cannot cope with. I considered the infinite series $1 + \frac{1}{2} + \frac{1}{4} + \dots$ and so on ad infinitum, and I compared scientific method to the person who argues that, for example “one two hundred and fifty sixth is too small to have any significance”. Any scientific investigation needs to draw a line somewhere, place a limit on measurement, before it can proceed. In my earlier discussion of cold fusion I pointed out that the experiment was rejected when it failed to repeat in other laboratories, even though in many respects the conditions were not the same: minute quantities being measured with high precision and yet by people with different agendas speaking a different language in a different time-zone under marginally different gravitational effects and at a different moon phase and planetary

alignment. It is not that such differences might not have occurred to the scientific community, but rather that they would have been considered insignificant to the enquiry.

By contrast magical thinking is like the person who takes a ruler and looks at adding one inch, a half inch and a quarter inch and so on, and immediately senses that it will never exceed two inches, but will approach ever closer to that value.

If the scientific culture grows arrogant in its manifest success and forgets this limitation, this becomes a problem. For the “cut-off” value that is considered insignificant will – as it is now the greatest of the omitted parameters – become all-powerful. In my last example, the fact that one of the laboratories that failed to replicate the cold fusion experiment was in a different country run by researchers

reared in a different culture was not considered significant, because both were following strict scientific method. Why then do climate scientists working for the oil companies seem to draw different conclusions in similar experiments to those performed by those working for environmental agencies? As soon as I ask that, a host of explanations will surely be invoked, and yet it is just one example of the point where a certain scientific discipline, after careful thought, chooses to draw the line only to later find that the next, ignored term in the sequence has risen to paramount importance as the work progresses.

As in art and religious cultures, science culture under stress will turn against the second of its two prime functions in order to resist evolving into the next culture. Rather than permit magic, the science culture will refuse to observe it.

21.4 Magic under attack

After my examples of science on the defensive, my examples of magic could seem a bit feeble in comparison. This is largely because our society does not allow so much experience or understanding of magic. But I am confident that my examples will be recognised by anyone who consciously embraces magical culture.

The equivalent movement in magic is from detailed observation towards feeling as a tool for evaluating and organising the subject under observation – and when magicians get defensive they tend to deny or denigrate this feeling. Thus we see, for example, hard-core chaos magicians being very rude about “touchy feely” New Age stuff. One chaos magic friend of mine made a point of rhyming “New Age” with “sewage”.

More generally I draw attention to all those people in my “magical culture” who try to distance themselves from feeling by claiming to be scientists. I have heard astrologers, homeopaths, energy healers... the list is endless, claiming to be practicing a “science” rather than admit to anything as woolly as feeling. Then there are those who, while doing excellent work on the manipulation and application of feeling, will nevertheless adopt pseudo-scientific terminology – quantum healing, dianetics, NLP etc – to avoid being dismissed as “touchy feely”.

I have in front of me a confidential promotional proposal to a client by a well-known British promotional agency that begins with a quotation by one Sergio Zyman: “No matter what anyone else says, the truth is that advertising is not an art. It may involve some artistry, but in the final analysis it’s a science whose results are 100 per cent measurable.” Having quoted that ridiculous claim, the proposal itself then continues by saying: “Words cannot express the outrage I felt when I first read these words in Creative Review”. It goes on to agree that advertising is not quite an art, but says how scientists laughed when shown that quote. To my joy this introduction ends with a definite conclusion about advertising: “It’s Magic.”

More generally you will find corporations happily using the most disreputable magical techniques – such as emotional manipulation and smokescreens of grand rhetoric – and they will re-brand their criminal behaviour as “sound business practice” with the pseudo-scientific respectability of natural selection to defend their bullying. If you accuse such people of bad practice they will banish feelings for being: “wishy washy liberalism”, “bunny hugging” or “NIMBYism”.

Even myself: I was a little unhappy when I first heard Felipe Fernández-Armesto describing a magical culture as one that uses feeling rather than thinking or observation as a test of truth. It felt a bit dismissive – until I realised how well it accorded with my own ideas.

That is my second conclusion for this chapter. Although all four functions are active in every culture, each is founded on two functions of particular importance. And yet, when on the defensive or under attack, there is a reactionary tendency for each culture to deny or resist its second function. Add to that the tendency for one culture to overlay another, and my apparently rather simplistic cycle becomes a whole lot richer. You could even describe it as “more realistic”.

22. Lies, damn lies, and magic – the conflict with science

In this chapter I explore my reactions to the general denial of magical culture. Why was magical thinking so despised and why did society give magic such an unfair deal?

For part of the answer it is useful to reconsider the point made in Section 13.7, where I described my four cultures as four directions and then asked: “what does each direction point towards?” I suggested that in simple terms one might say that the artistic culture aspires to Beauty, the religious culture aspires to Goodness, and the scientific culture aspires to Truth and, in such terms, I suggested that the magical culture aspires to Wholeness. I pointed out that this sounds rather nice, but it actually poses a problem, because wholeness naturally implies embracing polarity, taking the good with the bad, and this casts some light on why magic is rejected by other cultures.

We shall see that magic does not deny truth, it positively embraces truth as a crutch to assist belief, but it equally embraces falsehood – and that makes it unacceptable in scientific culture. Magic embraces goodness, but it also embraces evil – and that makes it disreputable in religious eyes. Magic embraces beauty and it also embraces ugliness – and that can make it seem kitsch or “cheesy” in artistic eyes.

Actual magical practice requires getting a significant amount of “dirt under the fingernails”. Although some New Agers take the pseudo-religious stance of denying all that is not sweetness and light, serious magical work requires facing up to the negatives in one’s personality, in human nature and nature herself: for example alchemical work that begins with base matter, the role of the “malefics” in astrology, the relationship with fallen spirits required in the Abramelin operation and so on. Opponents of magic can then point to all these untruths, evil and ugliness as reason enough to avoid magic like a plague.

22.1 Magical thinking gets a raw deal

To give a flavour of the unfair treatment suffered by magical culture, I will return to the analogy in Section 13.8 where I compared the difference between art and magic on the one hand and religion and science on the other, with the popular notion of “right brain” and “left brain” thinking – a useful myth to live by, regardless of where these functions might actually be dispersed within the skull.

My example was of a human walking in the savannah in a state of high alertness for the many possible dangers – from mosquitos to snakes, from dehydration to lions. I illustrated the proper working relationship by suggesting a sudden tremor in the grass, and how it triggers – via “right brain” processes – an immediate sense of danger, a rush of some stuff like adrenalin preparing the body for flight or fight. It also sends urgent messages

to the left brain processors whose job it is to advise: scanning the horizon for other signs such as a puff of wind, scanning memory banks for lore about the behaviour of lions and snakes, listening for sounds and so on. In a few seconds the “left brain” can transmit back advice on whether in its opinion flight, fight – or just to dismiss the incident – would be the recommended option, and the right brain initiates appropriate action, because it governs the sense of space and movement.

But this happy co-operation cannot always be relied upon. Now imagine the same circumstance, but the movement in the grass is so close that it does not leave time for collaboration. Suddenly the person finds themselves up a tree, teeth chattering and in a state of shock.

This is magic. A minute ago, any suggestion that the person should climb that tree would have been laughed at: “What! At my age! I couldn’t even reach the bottom branch!” – but it has actually happened! What’s more an entire life has been transmuted at one stroke: the person may have been feeling bored, upset by family quarrels and wondering whether there was any meaning left in life, and now, in an instant, the realisation that they are still alive makes sheer existence seem so sweet. Vision is clearer, deep breaths and the air smells sweet, the pulse is racing with excitement.

I suggest that something valuable and deeply wonderful has happened – let alone a life having potentially been saved. But is this how it is perceived by the religious and cultural conventions of the left brain?

The voice of religious culture launches into criticism, saying: “Look at you, sitting up a tree just because of a movement in the grass! You have made a proper fool of yourself, imagining a lion about to pounce. You had better keep quiet about this, or people will consider you to be not only a fool but also a coward”. Then the science culture chips in with: “You did not bother to note that the movement was part of a ripple spreading across the savannah caused by a gust of wind, and now you are up a tree and have to find your way down again. More fool you.” And so on.

The person miraculously up a tree – who is alive and revelling in a joyous sense of the meaning of life and why it is so precious – is told that they should be ashamed. In a similar spirit, the joyful benefits from the right application of magical thinking are routinely criticised, analysed out of existence, denied or presented as laughable and embarrassing. Society today either belittles magic as foolish, childish fantasy, or else inflates it as great evil.

Artistic culture can also laugh at magic – portraying the subject in literature and movies with a twist of the absurd or diabolic – but the criticism is less harsh, even a little playful. I sense that artistic culture has some feeling for its roots in magical culture and can lash out at its embarrassing forebear but without deep hatred. The wizard in the movie may indeed be cast as a charlatan or a fiend – but that wicked, sinister role is the very one that movie stars will beg for, while the role of the wise religious leader or professor will be foisted on lesser actors.

22.2 Sometimes it is just sour grapes

I have seen media pundits – those who spend their lives talking to cameras – jeering at pagans who choose to talk to plants. I have heard discussions where labelling someone a “tree hugger” is considered to be a knockout blow to their credibility. But I have myself chosen to hug trees and speak to plants and found both activities immensely rewarding and enormous fun – especially if you wait to listen for the answers. I have also heard wonderful human abilities being scornfully dismissed as “mere imagination” by people who might nevertheless accept an art critic’s advice to invest vast amounts of money in the fruits of other people’s “mere imagination”.

Austerity, denial and rejection are lauded in religious and scientific cultures where an idea can only be meaningful if it can be disproved, where a religion can only be founded on ideas that permit disbelief, where an inability to repeat a result means that it can never have happened, where flesh is evil and any wonderful exception reduces to a statistical anomaly.

And yet there are those who completely and utterly dismiss all magic as an illusion while still getting immense pleasure out of it. Witness the continuing popularity of “sceptical” conjurors that present themselves as mere tricksters with no pretence to real magic or mystery. Such performers can still fill a theatre with people who enjoy the very experience that the performer is insisting does not, and never did, exist.

How much greater wonderment is evoked by the current wave of “psychic entertainers” who choose, to varying degrees, not to impose their rigid beliefs about whether what they are doing is “real” or a fraud. Instead they invite their audiences to create their own world-view – with as much magic in it as they desire or need. Instead of devoting years to mastering sleight of hand and buying costly props, these people use a few simple techniques and allow the whole audience to provide the magic, and they do so to great effect.

When in the early 1970s Uri Geller demonstrated his ability to bend metal by psychic means, he made the world a bigger and more intriguing place for millions of people. When The Amazing Randi demonstrated that this was a fraud, he made the world smaller again. I know who got my vote.

In conjuring circles it is considered very bad form to give away to the public the secrets of how your tricks are performed – even worse to give away other performers’ secrets. This can partly be ascribed to professional defensiveness: don’t let the public know the tricks of your trade because it might weaken your hold on them. But it also reflects a real problem: that once the secret of a trick has been revealed it is nearly always a disappointment, or anti-climax. It is seldom that the revelation or analysis of how a trick was performed evokes greater wonder than the original experience of the trick. Conjurors often despise those TV programs that expose how a woman can be sawn in half, and yet they often celebrate similar shows that expose how mind reading and psychic magic “really works”.

I originally introduced magical culture in the context of “game playing”. The magical culture does retain that playful and naughty spirit and, as a consequence, it does get heavily censured by “serious” religious and scientific thinkers.

22.3 Magical culture dismissed as infantile

In section 9.2 I explored the “end of history” model of human development where magical thinking is related to the earliest stages of human development – when feeling was the dominant measure of truth according to Felipe Fernandez-Armesto – and I related that stage to my own infancy. I could accept that a new-born baby has a nervous system that registers sense impressions, plus a quality we call “feeling” to assess those sense impressions, but the baby has not yet developed a significant sense of authority or of reasoning ability as required by later stages of that truth development model. So the baby’s sense of reality will initially be based on observation and feeling.

Now one of the characteristics that both infancy and the dawn of humanity have in common is, I suggest, the development of language. A baby begins completely on its own: even the baby's mother is initially just another set of sensations in an ocean of sensory data, until her importance is gradually realised through experimentation. The baby begins with no language with which to share ideas: by the time it has acquired language it will have outgrown its initial reliance on magical thinking and be progressing to artistic creation and self-expression. I suggest that something similar is passed through in the earliest stages of human development.

To say, therefore, that language is inherently magical should not be surprising. After all, the word “grimoire”, used for a book of magic spells, is supposed to be cognate with the word “grammar”. To those without any language, the initial experience of its operation must indeed seem quite magical: for example it includes sounds that can initiate action at a distance. This is very obvious in the case of written language: a clay tablet arrives from a distant land and the scribe can hold it in his hand and describe things that happened far beyond the horizon: how can any piece of clay “talk” in this way?

Indeed, most magical systems can best be understood as alternative languages: the tarot, astrology, kabbalah, I Ching, and runes all provide a set of symbols that can be used to describe, model or articulate any phenomenon. One could object and insist that these magical languages are hopelessly woolly compared with the precise statements of “proper language”, but that would betray ignorance of the inherent wooliness of any human language.

If visitor comes to my house for tea and I say “please fetch me the cup on that table”, I expect them to look around the kitchen, see the cup and bring it to me. Actually, my sentence did not ask them to fetch a cup: it said “please fetch me...” so surely the visitor should have walked over and picked me up before asking me to explain the non-sequitur that followed this request? OK, we can explain away that inconsistency, but then why did the visitor just bring me a cup when I specifically asked for “the cup on that table”, and the table was left behind?

Just as the astrological symbol for Jupiter evokes a whole universe of meanings, only one of which may be relevant to a specific astrological interpretation, so does the word “cup” evoke a whole universe of images from a silver chalice to a teacup to a cupped hand or cupping glass – only one of which images matched the requested cup on my table. The visitor may even have never before seen a cup like that – the one on the table could be one of those handle-less double walled glasses recently used for tea in trendy minimalist cafes – and yet the visitor might still understand and follow my instructions notwithstanding.

The point I wish to make is that magical thinking, as laid down at that babyish stage of development, is expressed in many languages each of which might later be dismissed as babyish – and yet it has left us with a

medium of communication that allows not only great artistic expression but it also provides a glue to hold religious groups together, and the same medium was ultimately used for sharing scientific information. At every stage, language may be treated with suspicion: the artist may insist that all art should aspire to the conditions not of language but of music; the religious fanatic, while insisting that “in the beginning was the word”, may equally insist that deity and other religious truths lie beyond all attempts at verbal description; and the scientist, feeling uneasy about presenting only in words, would rather see the experiment quantified as numbers. Language, and with it magical thinking, will be reviled even when people are totally reliant on it.

So far my argument has been equivalent to saying “don’t despise babies because even Einstein only existed because he was once a baby”. So I would like to extend my argument by now suggesting that babyish thinking is not only a starting point, it is also highly sophisticated, post-scientific thinking. I do not know enough about pure science to do that, but I will take an example of what is widely considered, in the year of writing this, to represent the last word in leading-edge business technology – namely Big Data.

The rough idea of big data is that, for example, a huge retail chain will have accumulated mountains of data from past sales and from things like customer loyalty schemes. Some of that data will have been carefully recorded in structured form – such as a loyalty scheme that classifies people by sex,

age, income, post-code and marital status. Such structured databases have long been mined to find out simple marketing information – such as the impact of income on a woman’s food shopping choices. But a lot more data may not be so neatly structured: sales during different types of weather, during changes of government, when the air conditioning was on, when the staff had just been given a rise, or were feeling tired... the permutations are endless. Mining such a mountain of independently structured information was not practical before the arrival of large virtualized datacentres, but now it is theoretically possible to extract from such raw material vital market gems such as: “following a change of government you can expect sales in this geographical area to correlate closely to income and education, while in these areas they will correlate more

closely with weather conditions, distance from the store, and price”.

This sort of deduction might equally have been achieved over years of experience by an elderly shopkeeper – a magical thinker with a good feeling for patterns and coincidences. It is, however, only recently that we have developed sufficiently flexible computer processing to go beyond simple truth tests and discover correlations that have no immediate logical basis. Computer technology, which has long been good at doing calculations, supporting scientific discovery and playing chess, is only just beginning to approach the subtle pattern recognition abilities of magical thinking. The shopkeeper that uses such instincts to arrange the goods on sale is not thinking scientifically, because there is no question here of causes producing repeatable effects. The

decision is based on a past pattern that just “feels right” for optimising customer response. This is magical thinking.

Now consider a tiny baby making that most babyish of discoveries, which may later be conveyed in the words “when you smile, the world smiles with you”. What could be simpler?

Then let us accept, for the moment, the scientific myth of objective physical reality being mediated by the brain. The one word “smile” encapsulates an immensely complex process whereby something first registered as a feeling in the nervous system triggers a cascade of electrical and chemical events that cause certain muscle fibres to contract and draw some skin cells into folds that cause changes in the baby’s face. The whole process is so convoluted that even today we may not have a datacentre sufficiently powerful to model it in perfect detail.

But that is just the beginning. Some photons travelling at the speed of light in air must now either be absorbed by, or bounce off, those rearranged skin cells and then be registered in special receptors on the faces of those beings in the vicinity that are oriented towards

the baby, and those receptors must similarly launch a cascade of chemical and electrical impulses along nerves into the observer's brain so that the resulting impulses, on arrival get distributed around the brain and will match, to some degree of approximation, feeling patterns that are similar to the feeling initially felt by the baby and which initiated the whole event. Once again, that reflected feeling launches a similar cascade of events that results in a returning smile. Only when this whole sequence has been repeated several times does the baby begin to learn what I have conveyed to the reader in the simple phrase "smile and the world smiles back".

I suggest that what the baby has been doing is to initiate a massive big data experiment: launching a highly complex experience in the form of neural data into a massively complex computer that the scientific culture amusingly describes as “physical reality”, and eventually mining from the resulting torrent of returning data a simple, usable marketing principle: “smile and the world smiles back”.

I apologise for this clumsy and wordy exposition. The point I wish to make is that the English language – even when wielded by an educated Englishman who may not be a literary genius but did get good marks in O-level English – struggles to convey a simple act of magic that a baby can achieve in a few ecstatic gurgles.

Magical thinking is childlike, but that is far from saying it is trivial. In Part 6 I will return to adult thinking in order to demonstrate the greater flexibility of magical virtualisation over the scientific culture's insistence on using “real physical” hardware.

22.4 But is not scientific culture a bit adolescent?

Like many students, I grew out of scientific and into magical culture during my university years – as described in Section 17.2 – and that transition between child and adult reflects aspects of scientific culture. To the magical or religious thinker, scientific culture can appear arrogant, dogmatic and as inconsistent as a rebellious teenager.

That last statement could read like a magician's attempt to trash science, but what I am really saying is that – just as magical culture retains certain infantile qualities – so has scientific culture retained qualities from a later stage of development that can be equally irritating from a “grown up” viewpoint.

Adolescence marks the transition from child to adult: when one is supposed to outgrow reliance on parental authority and stand on one's own two feet. This often happens in a tentative or clumsy manner: so that the adolescent defies authority and expresses individuality by adopting a style that offends the parents but is every bit as tribal as the culture being rebelled against. For example: the refusal to wear a suit because it is "conventional" while eagerly adopting hippy or punk apparel that is simply a different form of convention.

There is a childish arrogance in a brat that has discovered the amazing “fact that Santa Claus does not exist” and takes great delight in announcing this fact both as proof of becoming “grown up” and a certain cruel delight in shattering other kids’ dreams. But the wise adult is not threatened, because this little act of rebellion is recognised as just a phase in growing up, and that the power of Santa Claus lies in the very fact that he “does not exist” (for if Santa did exist, sheer logistics would make his position untenable in a global culture).

In such a manner, scientific culture makes a huge display of defying earlier forms of belief in the name of open-minded exploration, while simply adopting other conventions. When sceptics announce that clairvoyance or devas do not exist, they pride themselves for being “rational”, when actually they are in fact imprisoning reason by restraining logic onto well-trodden paths.

In Chapter 7 I explained how we reacted when our mathematics teacher began a lesson with the words “Let i be such that i^2 equals minus one”. We howled with protest, saying there was no such thing, that it did not exist, and we refused to work with “imaginary numbers”. That is equally the reaction I would expect from members of a scientific culture if I told them that a very practical way to learn how to grow vegetables is to begin by asking devas or fairies for advice on where and when to do the planting.

Imaginary numbers, Santa Claus and devas “prove” their value by producing valuable results, but the value is not in measured terms of existence or truth, but effectiveness – a magical measure. If the square root of minus one was a real physical object that had to be hired and collected from a depot every time one wanted to do a

complex number calculation, technology would grind to a halt, just as Christmas would take months to complete if Santa Claus was a real human being (though I guess such an extended Xmas would make the retailers very happy). Folklore accepts the existence of imaginary entities on the basis of cultural convention rather than evidence, so my pure mathematics master used to describe the Physics Department as the “Folklore Department”. He recognised that scientific culture is folkloric (but I doubt that he would have agreed with me that pure maths is magical).

Consider also how such adolescence reacts to individuality, and how scientific culture reacts to surprise. What happens when a truly surprising discovery is announced in a scientific culture? Let us say that some respected scientific institution announces an extraordinary new property of water. Does the scientific community have immediate faith in this announcement? Not exactly, but they do recognise authority and cautiously await confirmation of the results from other respected institutions. This caution is claimed as evidence of open-mindedness.

But what if it was suggested that the announcement might be completely bogus, on the grounds that it is conceivable that the scientific institution in question might have been infected by telepathic alien space invaders in order to exploit the institution's authority as part of a strategy to undermine human culture in preparation for an alien invasion? In terms of magical culture this would be a perfectly acceptable theory that might, with a little fiddling, welcome the gift of belief. In terms of artistic culture it might even be considered a superior theory – insofar as one might make a more interesting movie based on this version than on conventional ideas.

But in scientific culture the alien-invasion theory would be dismissed as unacceptably preposterous. For all the lip service paid to scientific open-mindedness, the scientific culture can be every bit as conservative about consensus reality as any religion. That matter exists, and that it continues to exist even without my awareness of it, is an article of faith so fundamental to scientific culture as to require no acknowledgement. It might even be questioned as a gesture in debate, but never really taken seriously.

The analogy with adolescence is as follows: a class of teenagers can go out of their way to dress outrageously in defiance of tradition and to shock their parents and teachers. They will claim that “anything goes” and yet, if any one of them arrives in an outfit that is not considered “cool” (maybe Bavarian lederhosen?), the supposed rebels will become even more embarrassed than their teachers. Telepathic space invaders may be outrageous and fun, but in a scientific culture they are very far from “cool” – so any explanation involving them will be immediately reviled.

This tension between open and closed mindedness gives scientific culture great dynamism, but it can also mean that scientific understanding evolves as a series of crises or revolutions rather than a smooth development. It is as if the bedrock upon which science is built is so solid that, rather than being able to flow, it requires earthquakes and a new rebellious generation before a major shift in scientific understanding can be accepted.

22.5 Truth or fraud

I re-iterated at the start of this chapter my idea that the direction of scientific culture lies towards truth, while that of magical culture lies towards wholeness – and wholeness must necessarily include falsehood as well as truth. The role of fantasy in magical culture is often interpreted in very negative terms as deception, lies and fraud – a deliberate rejection of truth – whereas I suggest that absolute truth is simply less significant in a magical culture. Truth, especially in a scientific culture, is regarded as a key measure of value; but as we move into magical culture truth takes second place to the value of effectiveness – “if it works, do it”.

In magical culture feeling may appear to be the measure of truth, as suggested by Felipe Fernandez Armesto (Section 9.1), but I suggest that the role of feeling is better understood as a means to judge whether to give the gift of belief in the magical/artistic sense that I described in Section 14.2.

For example: I am suffering from aches that my doctor has failed to cure; I hear good reports from those who have experienced acupuncture; I note with interest Chinese diagrams of energy lines in the body that I can relate to my points of discomfort; and so I feel good enough about acupuncture to “give it a go”. My feeling function has evaluated acupuncture as worthy of my gift of belief in it, and my senses will be alerted to observations of its effectiveness, in the hope that my gift of belief will be repaid.

If the remedy works, then the magic has worked. If I then slide back towards scientific culture by believing (in the absolute, non-magical sense) that its effectiveness means that it must be “really true”, then this degrades into superstition – especially if I go on to preach to others that it must be true. The best magical healing requires silence – at least until the healing and convalescence is complete – because too hasty announcement of its success so often invokes a torrent of questioning, doubts and counter evidence from other cultures that add up to a “nocebo” inversion of the healing process. In a typical mixed culture, therefore, silence about one’s personal healing is the safest option.

In a purely magical culture there is little harm in sharing the experience, and it may even make it easier for others to give the gift of belief. There is, however, another type of magical working: where the object is to make money and healing other people becomes the means to do so. In such cases it is correct to broadcast the remedy's effectiveness, describe it as a "miracle cure" backed by many true or false testimonials and some talismanic scientific data to encourage others to try the cure and encourage them to be cured. This type of magic is better known as "marketing".

Notice that in the latter case only those who consciously embrace the hype and give it a gift of belief in order to be better healed can be said properly to belong within a magical culture. Those who simply buy the remedy and accept the pseudo-scientific packaging as absolute truth are not magical thinkers: they are victims rather than members of magical culture.

This is an important point, because critics of magical culture find this sort of marketing magic very distasteful – an example of magic’s equal acceptance of falsehood and truth – and will speak of “unscrupulous manipulation of public gullibility”. Such critics will often describe the public as being superstitious, or gullible and will attempt to equate magical thinking with such gullibility. A similar criticism is levelled at people who attend public spiritualist gatherings for messages from departed loved ones: such people are presented as exemplars of a gullible magical culture, when they may simply be victims of a clever magical culture. It is also possible that they are indeed magical thinkers, who have no illusions about the reason they are attending nor about the positive value of the experience.

When a randomly chosen group has been recruited to provide subjects for a scientific double blind or psychological experiment, it does not mean that those subjects are now part of a scientific culture. One could equally argue that they are victims of science – exploited by fraudulent claims in order to further the experimenters’ agenda. Only those victims who also take an interest in the experiment and its methodology could be said to have become part of the scientific culture.

My point is that being a victim of magic does not make one a magician any more than being a laboratory rat makes one into a scientist. The example does, however, provide another illustration of the defensive denial of feeling when magic is under attack, as described in the last chapter.

On the one hand the originators of

such a snake-oil marketing strategy may be clever magicians who will almost certainly have used feeling judgements in building their campaign: they might, for example, ask “does the addition of some statistical evidence at this point support the authoritative feel of the promotion?” or “would a testimonial from a converted sceptic sound better than one from a believer?” On the other hand, if we now attack the marketers for being unscrupulous manipulators, they will typically turn away from feeling and defend themselves in a very “unfeeling” manner. They will very likely argue: “we’re simply giving people what they want”, or “this is business, and it is my duty to increase my client’s profit” or “maximising the placebo effect furthers healing, so I have absolutely no moral scruples about what I am doing”.

22.6 Truth versus myth

The different use of the word “belief” that I described in Section 14.2 presents a serious problem when explaining magical thinking to religious or scientific cultures. So instead I will now use the word “myth” and, bearing in mind that I am addressing science culture rather than science proper, make this claim: where scientific culture accepts truths, the magical culture can accept the same ideas as myths.

In a scientific culture the word myth implies non-truth, but in a magical culture something only gets the label “myth” if it works according to the subjective standards of magical thinking. So, for example, the Greek myths can “ring true” because they seem to reflect common patterns underlying human behaviour, and this sets them apart from what might otherwise simply be “a good story”. (Something that works can also be said to have passed the observation test for truth – but I will only call it a myth at this point and not a truth, because I am explaining magical rather than scientific thinking). Myths can also be seen as patterns that have some universal significance.

In section 13.3 I gave the example of natural selection: in a scientific culture it is accepted as a scientific theory based on demonstrable genetic principles. In a magical culture it is accepted as a myth because it is recognised as a universal pattern whose working can be observed not just in living matter but equally in ideas, markets and any other form of virtual ecosystem. Similarly, the idea that human thinking had progressed from magic through art and religion to science was first accepted by me as a myth, and then re-presented in this book as a magical theory of cycles that recurs on many levels.

In a scientific culture observation and reason are both tied to the important role of testing for truth – in Fernandez-Armesto's sense. The fact that reason is part of the truth test (along with observation of evidence) in a science culture means that reason tends to be constrained by that important role – whereas a scientist's feelings are left free to run wild.

Richard Dawkins has tried to popularise science by describing his and others' feelings of awe and wonderment in the pursuit of science – indeed any experimenter is allowed to be passionate about their work, or furious at those who doubt it, or greedy for results, or eager to please the paymasters. Scientists are at liberty to indulge whatever modes of feeling may fuel the scientific endeavour – because all these feelings will be put aside and never be mentioned when the experiment is finally written up. They play no significant part in science's final test for truth.

Contrast that with the magician who is required to control feelings and take careful note of every motive, mood and hope during a magical operation – because these will be vital evidence in determining the final effectiveness of the operation (magic's equivalent of the truth test).

Conversely, the scientific thinker has to be very careful to restrain reason within the bounds that can be accepted as a valid truth test when the experiment is written and presented. While feelings run wild, reason is hamstrung in a scientific culture, and the opposite applies in magical culture.

For example, any experiment as experienced subjectively by a scientist must be assumed to have a one-to-one relationship with an experiment taking place in the higher Platonic reality of a physical universe that is assumed to “really exist” and whose shadow or image makes up the experimenter’s subjective experience. Whereas a pure mathematician might begin with something apparently absurd – such as a square root of a negative quantity, or parallel lines meeting at a place called infinity – and is free to experiment with the idea under the simple constraint of logical consistency, in a scientific culture reason is constrained by a framework in which any experiment is only valid if assumed to have happened not in fantasy, or purely subjective experience, but in a “real world” that is accepted by the scientific culture’s consensus.

A scientific paper that ended with the words “having completed the experiment, I woke up and realised that I had dreamed the whole laboratory experience” would be ascribed negligible value; whereas a magical experiment that ended with such words could still prove highly significant.

22.7 Magical freedom to explore scientific myths

In Chapter 8 I mentioned the great impression made on me when Professor Frank Honywili George from Bristol University came to my school for an evening discussion about the brain as a computer. The suggestion that the human mind and consciousness, in all its subtlety and complexity, might one day be fully reproducible in an information system – ie that the brain is a superior computer and consciousness is its by-product – was a radical one at that time. Many people in the scientific culture of the late 1950s accepted this notion as confirmation that the soul – and so things like reincarnation or astral travel – need not exist.

What these people did not seem to understand was that it also provided one of the most acceptable models for the existence of a soul, and of its reproducibility in subsequent and earlier incarnations. All that is needed for reincarnation, once the myth of artificial intelligence is accepted, is that the core information structure that forms my personal identity – and which has retained that identity despite many years of experience, growth, disillusionment and learning – should be sufficiently closely modelled in some future brain for my sense of identity to be experienced by that brain.

“Sufficiently closely modelled” is a key phrase here: for it would be vanishingly unlikely that the precise structure of my present consciousness should ever be exactly remodelled neuron by neuron by chance alone. But how precise a quantity is “my present consciousness”? I can broadly identify with my consciousness of five minutes ago, of yesterday, even of my schoolboy self, so a reincarnated self need not be an exact reproduction. Meanwhile, the fact that my current brain seems able to model any number of sub-personalities and companions – it does so in imagination and most vividly in my dreams – greatly increases the likelihood that some such reincarnation could take place at some past or future time.

What haunted me at the time of this realization was not only that such an extreme reductionist viewpoint could support rather than deny reincarnation, but that such thinking could pave the way to a magical revival as it did in the 1960s – leading to a pagan community richly populated with computer technologists. While most “metaphysical” explorers at that time – the fore-runners of the later New Age movement – were battling against the advance of reductionism, I was among the “chaoist” pioneers, seeking to extrapolate reductionist ideas towards a re-enchantment of everyday existence.

In the following sections I will illustrate two examples of such magical operations, or thought experiments, designed to expand consciousness in order to embrace a more connected worldview. In other words, I will present a modern magician's versions of acceptable scientific myths, reshaped to allow more scope for magic.

22.7.1 A virtual reality myth

I began with a myth that is broadly acceptable in our inherited scientific culture: namely that a “chemical soup” could, given sufficient time, support the chance creation of repeatable structures to form crystals and the basic chemical structures that will eventually evolve towards living matter; and that the resulting living cells could eventually combine synergistically to create higher beings, which could in time evolve towards intelligence and consciousness.

Once I had accepted that myth, along with the cybernetic ideas of Professor George, it was not difficult to accept the myth’s extrapolation to an “information soup”. To understand what that might mean, consider the original chemical soup in terms of a set of chemicals with known properties reacting according to known laws, and you can remodel the chemical soup as

pure information: a description of its constituent atoms, the physical laws they obey, and the resulting interactions that eventually evolve life. That provided one example of an information soup, but I could generalise the concept to any highly complex physical system – the turbulent flow of liquid in a river, the wind in a tree, the swirlings of interstellar dust, or the flow of data in a computer. (I later speculated about the possibility of an information soup that had no physical basis but simply existed as pure information in its own right.)

By such extrapolation, I could accept that an information soup might, with sufficient time, support the chance creation of repeatable algorithms and basic information structures that would evolve and combine to form more complex “meta-layered” structures. Taking the simplest living cell, for example, it could be described at a low level as the basic set of chemical and physical interactions, but it could now, with hindsight, be described at a “higher” level as a living organism operating according to a new set of physical laws. This adds to the chemical description a new sort of “meaning”, similar to that which distinguishes living entities.

What we now call a virtual universe is one example of the sort of information structure that has this meta-layer of meaning. So what I envisaged was countless virtual universes of the sort suggested by Professor George eventually emerging spontaneously within an information soup. Such virtual universes would be involved in a competition for data processing capacity (the analogue of ‘food’), so that the greater complexity of a universe that not only evolved stable internal laws but also evolved virtual life-form within its structure would gain a evolutionary advantage on the data-processing food chain – an advantage analogous to the evolution of intelligence in competition for food.

In particular, such a universe would benefit from evolving the equivalent of an immune system to debug its software. This appeared to me to provide some justification for consciousness: observing my own consciousness I realised that I was never so vitally aware as when faced with an anomaly. Consider your own awareness when reading this book: you are probably in a state close to daydream but, if the book suddenly transformed in your hands into a tablet of stone, you would be instantly highly conscious, senses alert, looking for an “explanation” of how this could happen. You would remain in high alert until some explanation – eg that it was a conjuring trick, a hypnotic illusion, or a new top-secret technology developed by the CIA to neutralise subversive ideas by turning them into stone – had been sufficiently accepted.

Whatever rubbish you come up with, once any explanation has been accepted there is seldom any motivation for further investigation or testing, as long as the explanation has provided a rational patch over the anomaly and the rational mind can go back to sleep once the glitch has been “explained away”. So this might be the role of consciousness in an information universe competing for resources: it could serve as an immune system to keep its “physical laws” healthy by debugging, or cleansing them of imperfections.

One additional point struck me, though not strictly relevant to this thought experiment: how likely is it that we should now be living in a virtual rather than a physical universe? Just as countless life forms are supposed to have evolved in the chemical soup, so would I expect an information soup to evolve endless universes and within those universes further information soups would evolve yet more universes. So that, even in the unlikely event that the whole thing began from a single “real” physical universe as postulated by a scientific culture, it would be vanishingly unlikely that we just happen to be living in that original physical universe rather than in one of the billions of virtual universes that it could spawn.

As a demonstration of magical thinking this exercise began with a myth to which it was easy for me to grant the gift of belief: yes, I was OK with the chemical soup theory. Then, exploring this theory further I found it lead me to a state where I could also give the gift of belief to a myth stating that the universe we inhabit could be a virtual reality in which our own consciousness is evolving in order to stop magic from happening. It would not, therefore, be so unreasonable to seek to manipulate my consciousness in order to allow magic to happen.

The other advantage of this derived myth to the magical thinker is that a virtual universe would be a highly connected reality, with every single phenomenon being part of a single information structure. In this model the sort of independence of action and randomness that is so fundamental to the scientific model becomes an absurdity in cybernetic terms. Indeed a virtual universe would be a magical universe where fundamentally everything is connected and nothing is random, even if the universe gains evolutionary advantage by encouraging its conscious denizens to believe otherwise.

So, let us return to our supposedly physical universe and consider the stereotypical young man experiencing problems relating to women. He might, in a magical culture, draw the eighteenth tarot trump, go to a New Age workshop on “discovering your inner feminine”, build an altar to the Mother Goddess and/or start meditating upon the Moon. In the sort of physical universe postulated as reality by a scientific culture, these actions would seem absurd because: a) the Moon is a rocky structure millions of miles distant, b) the tarot is just a set of gaming cards dreamed up sometime in the middle ages, c) the Mother Goddess is a fantasy from past civilisations, and d) none of these can have any bearing on or connection to the young man’s current situation, for they are all independent and unrelated.

In a virtual reality, however, such independence, orthogonality or randomness would be so costly as to be almost unthinkable. An information structure where every phenomenon was independently processed, rather than emerging from a common set of operations, would be absurd. So a virtual universe would be a “magical” universe insofar as everything within it would be connected (regardless of spatial separation), and nothing would be random; yet it would be a universe of immense complexity when examined from the bottom upwards by scientists within that virtual universe.

Rational analysis would struggle to make accurate predictions based on such observations, whereas the agile pattern-recognition processes of magical thinking might draw some useful conclusions. So, should the eighteenth trump, the Mother Goddess and the Moon all feel like they are pointing in a useful direction, then it is a lead well worth following – provided, of course, that we live in such a virtual universe.

Take the famous Mandlebrot set as another example of a universe of infinite complexity generated by a simple information system. One could take any tiny area of that set, magnify it and examine it in depth in order to study its patterns in order to extrapolate beyond its borders and make predictions about the way the pattern should continue beyond those borders. This is possible, but would

require enormous processing power to extrapolate the prediction to any useful extent – just as in our reality any attempt to predict weather more than a day or two into the future becomes highly problematic. However, if we return to the original “high level” calculations that generate the Mandelbrot set, the same pattern could be precisely extrapolated in a very short time by the humblest personal computer. In this model, magical thinking might transcend rational deduction based on precise observation, by being able to access the software at levels other than physical manifestation.

22.7.2 A subjective reality myth

In another voyage of inner discovery I decided to put aside the previous virtual reality myth, and start with the myth that we really are living in a physical universe made up of subatomic particles subject to the laws of physics – in other words that reality is just as described by current scientific theory. And yet this experiment too led me to a similar virtual space.

First imagine that we have witnessed something that seems to contradict scientific theory: it could be something dramatic like the appearance of money in an empty purse, something vanishing right under our gaze, a conversation with a deceased person or something more subtle, like being healed by an alternative therapy that has no scientific basis.

People new to magical culture can get excited by such occurrences and kid themselves that they must prove that “science is wrong”; but that is a confusion of cultures on a par with the young rationalist who, after the first term of science lessons, now believes that science has proven that “God does not exist”.

So let us imagine that we do try to convince a scientist about the miracle: yes it definitely was the voice of my dead uncle, though it was inside my head; yes, it was a proper dialogue, ie one where I asked questions and got relevant answers, just the sort of answers I would expect from him; no, that does not mean they were all made up of things I already knew, he told me secrets about my father that I was able to verify later; in fact he told me where I had lost the 21st birthday pen he gave me a couple of years ago and, when I went to check, there it was! Exactly where he described it!

Now of course all this detail and more would be unlikely to convince a typical rationalist, who would require the whole thing to be repeated under test conditions before witnesses. “But why do you insist that it must be made to happen again, when I can promise you that it really did happen?”

The answer is that, however subjectively convincing was the miracle, however much apparent evidence was thrown up to justify its reality, it simply could not happen in physical reality. So there will always be an explanation, based on the fact that this was the sensory experience of one single individual. For example: the voice was exactly like your uncle’s precisely because you remember how your uncle used to speak; the responses were the sort of answers you would expect from him precisely because that was what you would expect. OK, he

did surprise you with a revelation, but can you be absolutely sure that this was not something that you had known, or expected, and simply forgotten? And you could equally well have forgotten where you left that pen and the memory had simply come back to you in this dramatic manner... and so on. In other words, your brain has created a convincing illusion because it is both the creator and the judge of that illusion, so the criteria used to test its truth were the same criteria as were used to create it.

This is, of course, an example of the distinction between the sort of Aristotelian and Platonic viewpoints that were described in Chapter 6. The Platonist is saying that the apparently miraculous experience is just a subjective shadow cast by real occurrences taking place in an objective reality; as such it is an

illusion or false perception, because it contradicts the higher truth of that objective reality. The modern Platonist can go further in explaining the shadow mechanism in terms of parts of the brain that convert nerve signals into auditory experience, and how other brain functions shape such experience to “make sense” of them in terms of some inner model of reality that might not completely square with the physical reality. So that, for example, the imagined voice needed to be given some character, and so it was modelled on the memory of an uncle; and that in turn became reinforced by memories of his mannerisms and related facts, and so on.

Similar arguments would apply to all the other suggested examples. Firstly certain physical explanations would be suggested: could the appearing coin have been a conjuring trick? Had you been taking a prescribed medicine at the time the quack remedy apparently cured the problem? If none of those fitted the facts, then there would be the same sort of argument as above: unless you can now repeat the miracle under test conditions, it must surely be a subjective trick of the memory or misinterpretation of the actual physical occurrence. The same argument can even be extended when there are other historical witnesses: because there could be group misjudgements, misunderstandings or even mass hallucinations to explain away the apparent miracle.

So, in this experiment, I chose to accept the Platonic myth that everything we experience through our human senses is just a subjective shadow of events happening in a higher world called physical reality, and that we can only really be sure of that higher world by consulting teams of scientifically trained experts who have through logic and experimentation formed a consensus understanding of that higher reality. Then I decided to rebel, and take Coleridge's "Aristotelian" viewpoint, which suggests that, regardless of any higher truth that lies beyond our senses, humanity has been given these senses and so human knowledge should first be grounded on the evidence of these senses.

This is the point where we properly return to magical thinking: we had experienced a conversation with a dead uncle; the experience added value to our life and we will not, therefore, reject it as untrue. We therefore accept this experience as having happened, even though we realise that it would be better not to share the experience with people from a different culture for whom accepting the experience would, far from adding value, actually degrade their understanding of a higher reality.

Where has this thought experiment taken us, relative to the previous “virtual reality” thought experiment? Instead of seeing our subjective experience as part of a vast information system within which the Platonists’ so-called physical reality is just another information process, we are now assuming that the physical reality is the “truth”, but that each of us only experiences it as modelled by an information system within our heads and made up of brain tissue, neurons, chemical and electrical impulses and all that stuff. So, although there is a physical reality, we all actually live our lives in our separate virtual realities, that are but shadows of that one physical reality.

What if a magician has accepted this myth and now decides to solve a social problem in a ritual that integrates the phase of the moon, the eighteenth tarot trump, rose incense and seven candles? These elements are chosen because links are sensed between all these elements and the targeted problem as experienced in the magician's life – these attributions may be traditional but will only work if they “feel right”. Then it is surely ridiculous to insist that “there can be no connection” between these experiences when, however diverse the experiences might seem, their apparent realities have all been modelled in their entirety within the same three pounds of brain tissue?

Would this lump of grey tissue create distinct, isolated silos of data to process each of these phenomena, rather than dispersing their imagery across shared structures? I would argue for considerable overlap between womanhood, the Mother Goddess, the Moon and the tarot symbol as modelled within the brain structure, and see no obvious reason why it should be considered ridiculous to work on one in order to re-shape one's experience of another.

At this point we reach more or less the same conclusion as expressed in the previous experiment. To suggest that my experience of the fall of tarot cards, my life and the movements of the planets are all running as totally independent and orthogonal information systems within my limited mass of brain tissue would be absurd.

The subjective universe modelled within my brain is necessarily a magical universe, where fundamentally everything is connected and nothing could be totally random. And it is this very subjective universe that the scientific culture insists that we really live in, whenever it seeks to trash magical experience.

This experiment reflects the trip to the South Pole mentioned in Section 13.7: while banishing magic the sceptic has abandoned us to a world of absolute magic.

22.8 The challenge of illusion

In Chapter 16 it was suggested that whenever or at whatever level a scientific culture becomes dominant, it would sooner or later be superseded by a magical culture. I suggest that scientific cultures resist this threat of obsolescence, and will therefore refuse to address magical culture. They will continue to deny magic, even as society embraces it. Observation is an important test of truth in a scientific culture, so I suggested in Section 21.3 there would be an increasing tendency to reject or refuse observation, in case it might uncover an unacceptable truth.

The Amazing Randi, for example, created a foundation to promote his name, and it reputedly put forward a prize for anyone who could demonstrate psychic abilities under its chosen test conditions. The prize was never awarded, or even contested, because anyone who applied for a test would be informed that they had no abilities worth testing. This explanation came not before, but instead of, any observation – in other words “we know that magic does not exist, so the phenomena you claim are an illusion that we are able to explain away, so it would be a waste of our time to test them”. This is a defensive retreat from observation back to thinking, from the magical sector back towards the religious sector.

This is not as stupid as it sounds, because there are other reasons for scientific cultures to resist magic. Insofar as science is a quest for Truth, so is magic a quest for Wholeness, and that presents a problem: because wholeness must include both truth and falsehood.

Long ago I addressed this issue in an essay called *The Charlatan and the Magus*, by presenting the following thought experiment. Imagine yourself suddenly dropped penniless and without identity in some enormous third world shanty. You are given two offers of help and must choose just one: either advice from an academic who has won a Nobel Prize on account of a brilliant thesis on urban violence worldwide; or a helping hand from a local streetwise gangster who says “stick with me, Mate, and you’ll be OK”. I suggested that, while it was not an easy choice, many would opt for the gangster’s protection, even though it meant supplementing trust with a lot of extra vigilance.

The analogy went as follows. Most of the world's beliefs, both religious and scientific, support the Platonic notion that the everyday world is an illusion or shadow of some greater reality. The "everyday" is a subjective impression of a higher world that is more real, more timeless and objective – for example the world of fundamental particles and the laws of physics. So, for guidance in this world of illusion, might we not choose the help of people who are accustomed to working with illusion? And would we not do so in a state of heightened awareness of subjective observations and feelings – the state I call magical thinking?

When a tarot reader gives the gift of belief to the notion that the tarot cards are an embodiment on ancient Egyptian wisdom, everything that is said from that standpoint must seem like an outright lie to the person who has refused to give that gift of belief.

As a schoolboy I was thrilled by ancient grimoires purportedly written by great masters such as Hermes Trismegistos, Paracelsus, Agrippa, Jesus or Pope Gregory. Scholarly texts would decry such provenance, saying that the unknown author chose an iconic name simply in order to make the book seem more authoritative. But let us say that I, as a fan of Aleister Crowley, spent years absorbing every book, memo, letter, poem or ritual he had written, and every surviving anecdote about him. I then felt inspired to write a book, synthesising my thoughts. Would it really be so much more honest to put my own name to that book, rather than Crowley's?

The magical culture is well aware of the promotional value of a talismanic name on the cover of a book, and publishers' marketing departments (magical culture) will go to great lengths to achieve this – by getting a testimonial from the great person, or even by saying in desperation: “if you like Harry Potter you'll love this book”. But the publisher's legal department (scientific culture) will refuse to allow any claim that the book is actually a work by JK Rowling, or Crowley, or Paracelsus – even if the author had spent a lifetime locked up in a cellar with no other reading matter available than the collected works of that one author.

This present book you are reading is a work by Aleister Crowley – a statement that is false. But it is also true. That paradox makes it not only unacceptable in a scientific culture, but actually somewhat criminal.

Healers that I would categorise as part of a magical culture – for example hypnotists, faith healers, reiki, acupuncturists etc – are advised to paper their waiting rooms with impressive looking certificates announcing awards and degrees. This is sound magic, and an important contribution to the healing process, and yet the scientific culture sees this as evidence of fraud.

I observed how the conjuring fraternity contains “mentalists” – those who practice mental or psychic magic effects – and how these are divided into broad types. Those like The Amazing Randi who reveal others’ magic secrets, to prove that magic does not exist; and those like Uri Geller who claim to demonstrate magic, or those like Paul Voodini who allow the audience to come to their own conclusion about the nature of what they are witnessing. The former are known within the trade as “Open Eye” performers and the latter as “Shut Eye” – an ironical usage because the former’s role is to close minds, and the latter’s role is to open them.

The Open Eye performers are darlings of the scientific culture because they justify their revelations by saying that they are exposing fraud and charlatantry. They see the Shut Eye group as people who “deceive vulnerable people by claiming messages from the deceased in order to take their money”. Meanwhile the Shut Eye performers insist that they are bringing wonder and healing to their audiences and enriching lives, not just enriching themselves. The latter are clearly darlings of the magical culture. But the important thing to remember is that both groups are magicians, and both are equally practicing “deceit”.

If it seems paradoxical that the scientific culture should embrace those who tell lies, consider the following. I earlier suggested that most forms of practical psychology lie within my magical culture. It is, however, generally accepted that impractical psychology is part of the scientific culture. Any number of psychological experiments, delivering accepted results, begin with a fraud along such lines as: “the subjects were divided into two, one group being told that the lever would deliver an electric shock to a victim, the other believing that the same lever would deliver a reward...”

Just as in the case of Open Eye mentalists: the person who admits to being a liar is the one who is believed. That is actually good magic. The one who keeps silent and challenges the audience to form their own beliefs about what they are experiencing is viewed with deep suspicion. That must, therefore, be even better magic. And the one who senses what the audience really needs and pretends to be breaking the laws of physics and doing the “impossible” goes even further – for that is real art.

The other accusation against Shut Eye mentalists is that they are making more money. This is not altogether fair, because the most extreme “Shut” Eye” psychics often refuse to take any money for their “gifts”, or else only accept donations. But there is an equal element of truth.

Where the typical Open Eye

mentalist might charge twenty pounds for a slim booklet of magical secrets, the Shut Eye equivalent will sometimes charge over a hundred pounds for a similar booklet containing “secrets” that could be picked up for nothing at a meeting of chaos magicians or pagans. This sounds outrageous, but it is simply a demonstration of a magical principle familiar to any marketing professional, namely that sacrifice adds value and the more you pay for something the more precious it will be – and so the more work you are likely to do with it. There are many magical cults or services that do charge high prices for secrets that cost nothing to divulge – the sort of accusation levelled against scientologists and Eastern gurus – and this is seen as outrageous by people who might think nothing of paying extra for a “premium” model or service, purely on

the strength of its status value.

However, it cannot be denied that the magical culture does indeed have its share of criminals prepared to use magical principles, or magical jargon, to justify fleecing the public. For this very reason, Richard Dawkins and others have campaigned extensively against this culture – denouncing it as a fraudulent operation to deceive a gullible public and fleece them of their money.

Against this I argue that they should really be campaigning against confidence tricksters of any description. In my Junk Mail folder I have over two hundred unread e-mails, the majority of which are spam invitations to invest in spread betting algorithms, “scientifically proven” wonder remedies, Internet get rich schemes and the like. I suspect that most are just attempting to fleece me by making spurious scientific claims. On the other hand, I have only a few times in my life received spam mail that relied on magical claims to fleece its victims. On that evidence, should we not be condemning science rather than magic?

Fraud no more defines magical culture than could a crook using phishing software be held up as an exemplar of scientific culture, or a scam based on Bible quotations be considered a typical example of religious culture. My argument is that the answer to these abuses is to provide more education about science, religion and magic – rather than try to suppress any of them.

22.9 Teetering on the brink of the primordial abyss

Whereas religious people may see magic as a vast and evil threat, I suspect that most rationalists assume that a magical universe is no more than a slightly goofy version of physical reality with a few enhancements – such as an imagined fourth “spiritual dimension” – that might allow a bit of extra room for impossible things to happen.

Actually a magical universe is vastly bigger than any “physical reality” – it embraces immensity on a positively Lovecraftian scale. Subjective reality is not just bigger than physical reality, but infinitely bigger. Magical space could swallow a trillion physical universes for breakfast and not even burp. A sense of panic on gazing into this abyss might further justify the scientific culture’s rejection of magic.

Remember that the Enlightenment was, in a sense, a turning back the clock to a culture that last began two thousand years ago when the classical period began in the Mediterranean region. At that time thinking moved on from a dominant religious phase, described as the “Axial Age” when so many of the world’s now dominant religious movements were seeded, to an age of rational philosophy, humanism and proto-science. The Enlightenment marked a re-discovery of those ideas and that approach.

So a lot of the thinking that we now consider to be modern, rational and humanistic can be traced back to ideas that were proposed in the classical era. One example is a quantum perception of reality, in the sense that the world that appears continuous to our senses is actually comprised of permutations of a finite range of distinct elements. In an earlier model it was a universe made up of atoms: these atoms have more recently been subdivided into fewer types of elementary particles, and it has even been suggested that time itself might come in discrete steps, rather than as a continuous flow.

To Greek thinkers the idea of continuity presented a serious problem. They wanted to believe in a digital universe where every object was made up of atoms that could not be subdivided. This means that any length and every distance along a line could be expressed as a fraction n/m , where n and m were whole numbers.

This, for the Greek philosophers, was reality – there could be nothing other than “real numbers”. A number that could not be written as a fraction would, therefore, be nonsense, it would be “irrational”. So the universe could not possibly be continuous, and a magical universe must therefore be dismissed as irrational nonsense. What’s more, an irrational magical universe would be scary – because it would be inconceivably big.

You see the number of possible fractions is countable. A mathematician can show that the number of real numbers is the same as the number of integers $1, 2, 3, 4, \dots$. If, however, you try to count irrational numbers in the same way, a mathematician can immediately show you that you have missed some out – there are so many of them that they could not ever be counted, even if you had infinite time to do it.

A similar situation has recurred in our post-Enlightenment age of reason. Our scientific worldview is based on a similar notion that all existence is made up of permutations of a finite set of entities (particles or strings or membranes or something) subject to a finite set of physical laws that may one day be uncovered as a “theory of everything”. In other words all reality can be digitised, so we cannot ask questions such as “what happens between two quanta, or in the space between two electron orbits” because such questions are “meaningless”. Some would even argue that it might be “meaningless” to ask what happened before the big bang, because even time itself might not have existed before that point.

I am not saying that all scientists today agree that space and time are discontinuous, but in practical working the effect is the same because deductions cannot be made on infinitesimals. Writing up a scientific experiment requires one to announce the scope for error: “all measurements of length were done to an accuracy of ten micrometers” or whatever. So, for practical purposes, space, time and all measures are effectively quantised rather than continuous – and that amounts to a colossal shrinkage of potential.

For science proper, based on a digital reality, these limitations to reason represent reasonable beliefs. But, as I have explained throughout this book, a scientific culture (like all the cultures) strays far from its core discipline. So members of a science culture will defensively attack the magical culture's continuous reality as being "nonsense" which it most certainly is not.

To say that the space between two discrete particles is meaningless may be fine in a scientists' worldview, but to describe it as "nonsense" shows lack of understanding because: give me any two spatial locations and I can picture a location between them. Give me any temporal event, like the big bang, and I can picture the time before it happened. It may be "meaningless" in scientific terms, but "nonsense" it is not, because such notions are utterly grounded in my sensory exploration and understanding of the world I live in, which is a subjective reality.

Subjective reality is continuous, and so infinitely bigger than anything conceived by today's science culture. The proof of its continuity is the same as used by mathematicians to prove things like the uncountability of irrational numbers: give me any two supposedly discrete points marking the finest possible subdivision of time or space, and I can immediately visualize and define a point between them. This is "irrational", in the sense that it implies that our supposedly countable universe contains uncountability within itself. What's more, this uncountability can do more than simply extend our four-dimensional world model into continuity: subjective reality can "imagine" a Hilbert space of uncountably infinite number of continuous dimensions, and that space can be just one of an uncountably infinite population of possible spaces.

I described in Section 22.7 one magical version of reality where our entire universe becomes a virtual reality that could be generated within some digital information system. But that does not limit the resulting virtual reality to being itself digital or bounded, because it could contain the sort of processes I have just described to model continuity to any level that is required by consciousness. What's more, that magical reality suggests that even our vast "physical" universe could be just one of an infinity of other universes.

What is the simplest thing one can imagine in our subjective world? A silly question, for it is really hard to imagine something as simple as a single point in space without giving it some imagined dimension. Perhaps it is actually easier to imagine a straight line joining two points just one inch apart? So picture that now in your imagination: a straight line one inch in length.

Now consider something hugely complex such as an orchestral symphony, or a movie like Avatar that depicted an entire three-dimensional world containing its own implied evolutionary history. Sampling these vast experiences digitally, as a scientist is forced to do, means that the entire experience reduces to a single very large number: a binary sequence of several billion digits that can be encoded on a DVD. Take that number and insert a decimal point at the beginning, and you will have mapped that entire movie or symphony onto just one single point along the one inch line I invited you to imagine.

Realise then that every phenomenon that is capable of digitisation will also map onto just one unique point along that single tiny line. Then consider that the entire universe as conceived by scientific endeavour, in its vastness and billions of years development from the big bang to final heat death, could also be digitised and mapped to a single dimensionless point on that tiny line – and you may have a feel for how miniscule a world is offered to us by scientific culture in comparison to the multi-dimensional continuities of subjective experience.

The Greek philosophers were logically forced to face the fact that if you constructed a right angled triangle with two equal sides – that is made up of an equal number of atoms – then the hypotenuse could not be measured, because its length was impossible, it was “irrational” because it would

require a splitting of an atom that was defined as the smallest possible entity. Just as the Greeks came up against the challenge of numbers that are irrational, our scientific culture has had to face numbers that are not only irrational but even “imaginary” (ie including square roots of negative numbers) – and I described in Chapter 7 how myself and other students of a scientific education protested when these numbers were introduced to our maths curriculum. From our scientific culture, we schoolboys had to be taught how mathematicians (and magicians) can work with imagination and the irrational, and can get real results.

So when thinkers of the classical era fought against the irrational, just as our scientific culture is doing today, they were not simply swatting away some little irregularities or parasitic notions that were trying to attach themselves to their rational worldview. Instead they were defending their reality from falling into a bottomless abyss of such vastness as to transcend even H P Lovecraft's wildest imaginations.

I often described my move from the scientific culture of my youth towards embracing the magical culture in terms of “claustrophobia”. Those who currently defend science against art, religion or magic tend to emphasise how vast and intriguing the scientific reality is. Yes, scientific reality is fascinating, complex and infinite – just as rational numbers are infinite in number and variety – but it is still utterly cramped and puny when compared with the world of the irrational and imaginary.

Though myself prone to claustrophobia, I do recognise that there is also such a thing as agoraphobia, so I would never condemn those who insist on the comfort offered by scientific reality. Magical thinking is not for everyone. It is certainly not for wimps.

22.10 Modelling versus sculpting

In Chapter 11 I introduced Religion and Science as paths of denial, in the sense that a scientific statement should be one that is capable of being disproved, while a religious statement should be capable of being disbelieved. (In similar terms, magic and art are paths of affirmation, addressing what might be believed and what cannot be disproved).

Truth in a scientific culture is uncovered by eliminating what is not true – like a sculptor cutting away the block to reveal the form within. The magical version of belief, however, is something that is built up with effort – more like the modeller slapping on clay to build up a model.

As a child, I once thought of a number and a card, counted down to that number and found that very card. Three times I repeated this result, then I rushed to my brother to show him what I could do – and it did not work.

In a magical culture, my successful experiments could confirm my psychic powers, and the following failure would simply confirm that I needed to work on those powers to improve them. In a scientific culture, however, the failure of the last attempt would confirm that I did not possess psychic powers – while the previous successes would be seen as anomalies. (Again this is not an illustration of strict magical and scientific method, but rather how the broad cultures respond to evidence.)

If your fundamental approach to truth is that it is something reached at by stripping away falsehood, then someone who slaps on unverified evidence to build up a desired model must seem utterly mindless and gullible. Such a critic would see little value in the hard work that can go into building up such a gift of belief, or the restraint required to stay positive and not slip down the path of denial towards the safety of consensus reality.

The modeller and the sculptor can both end up with either a work of art or a piece of rubbish. I suggest that it is more useful to celebrate what can be achieved than to criticise the others' techniques.

23. Magical culture as ultimate evil

While scientific culture tends to throw scorn or ridicule on magical culture, religious culture can go much further, insisting that any form of, or attempt at, magic is not simply deluded but utterly evil.

This happens in spite of a number of factors that both magical and religious cultures have in common. In Chapter 15 I observed that magic and religion share a concept of “spirit” that is alien to science culture. They have that in common, and yet they work in opposite directions: so that religion seeks to lift us from everyday matter towards spirit, while magic seeks rather to bring spirit down into everyday matter. While religion often reflects a “quest for meaning”, magic is more about “sowing seeds of meaning”. I also explained that these two approaches infuse each other, so that the magical act of making some relic or building into a “sacred object” presents no problem to a religious culture, until some puritan suggests that this is encouraging “idolatry” – then all hell is let loose.

This sort of battle is, however, simply a demonstration of the religious culture's need to mark boundaries – to the point where, the closer you are to a different culture, the more important it is to mark a sharp distinction between yourself and the other. And that is often achieved by demonising the near neighbour.

So the very fact that magic can be the polar opposite of religion can bring the two into close relationship – and this results in magic being perceived as religion's evil shadow.

Such projection does, however, require a suitable screen. So in this chapter I will address some of the features of a magical culture that make it seem so very evil to religious cultures – and that can mean most of society, insofar as society itself is a religious “binding together” of people.

23.1 Individualism and the “me generation”

In Chapter 11 I introduced my concept of a religious culture by drawing attention to the root word “religio” meaning a binding back together. I suggested that, if one witnessed one or two members of some bush tribe dressing up and mimicking a deer in private, then the first assumption might be that this was an act of magic, maybe to prepare the practitioner to stalk and kill a deer. But if the whole tribe were taking part in such a ceremony, the natural assumption might be that this was more of a religious act: maybe designed to bind the tribe to its totem animal, or to unite its members against some outside threat.

In all my examples of religious culture – including religion proper, politics, professional groupings, academia and support for sports teams – the emphasis was on belonging to the right group and not straying across boundaries. Religious culture is strongly social, and it generally encourages individuality to be sacrificed for a common good.

At the opposite end of the scale comes magical culture, which is strongly individualistic. Although small groups of magicians do get together to perform group rituals, the value of such rituals does tend to be measured in terms of individual feelings or successes. More typically, those on a magical path are turning their back on “normal” society and accepted ideas, and setting out on an inward journey or initiatory path.

In Chapter 27 I will address the role of secrecy in magical culture, how it is advisable not to announce that one is practicing magic and in particular not to boast about magical results.

Anything paranormal is threatening to religious or scientific cultures, so if you boast about something like a miraculous cure or surge in income, there will be immense outside pressure to banish the magic by “explaining it away”. “How do you know you would not have got better anyway?” or “You have abandoned the paths of righteousness so must expect the devil to lure you away with such false miracles”. None of that helps to reinforce the magical process of giving a gift of belief: on the contrary, it is like putting money in the collection box and then seeing the local mafia pocketing the proceeds – then the giving seems pointless.

Imagine a billboard advertisement that contained in its copy some wording along these lines: “The public may notice that the woman in the picture is gazing at the man while throwing her head back in a gesture implying orgasm, while the male model was chosen for his pronounced biceps in order to encourage the male viewer to associate the bottle in his hand with an image of virility and a power to satisfy women.” Or else imagine a psychological counsellor or alternative healer beginning a consultation by saying: “Please be so kind as to study these framed certificates on my wall, because I had them printed and mounted in order to raise my patients’ expectation for a miracle cure.” In each case: “pop goes the magic”. Secrecy, or at least not revealing the whole story, is used in magical culture to conserve and

concentrate power, but its main role is defensive.

This turning away from the herd and taking a solitary path is understandably threatening to a culture built on social bonds, so religious culture is inclined to hit back with a vengeance, accusing magical cultures of being individualistic (as a negative word), selfish, self-seeking, self-centred, self-absorbed... The last time there was a popular magical revival in the sixties and seventies, the media spoke sneeringly about the “me generation” and blamed it for the apparent breakdown of society.

23.2 Gimme! Gimme!

There is a core of truth in such accusations. Magical culture is full of high-minded and socially aware individuals but, if you look back to the first stirrings of interest in the subject, it very often reflects some selfish or childish wish. For example: a wish to be suddenly big and strong to get revenge on a bully; a wish to have lots of money to buy a train set; a wish to make the prettiest or most handsome person in the school to fall madly in love with you, and so on. These are the impulses that cause many of the “wrong sort of people” to queue up for magical solutions and this is what is noted by critics – who do not always wait to see what ultimately happens to those wrong sort of people.

This type of fault is not exclusive to magic – after all, I was first attracted to science so I could make explosives, and plenty of little children also pray to God to give them a train set – but popular fantasies about magic do tend to reinforce the idea that magic promises an easy way out. In fact I previously parodied the magical path along these lines:

1. I wish to be rich, popular and successful!
2. I've discovered this thing called "magic" that promises to make my wish come true.
3. Apparently, all I need to do to make the magic work is to perfect myself.
4. How will I know that I am sufficiently perfect?

5 Answer: when I no longer wish to be rich, popular and successful.

6. Oh shit.

The idea that magic promises instant gratification comes from two sources. Firstly it is a simple argumentative trick for making magic look ridiculous, to discourage sensible people from taking an interest in it, and as a ploy to suggest that anyone who takes magic seriously has already lost the argument – a sort of “banishing ritual”. It would be equivalent to starting a debate about religion with the words: “religious people are those who believe that the universe was made in a few days by a man with a beard who sits above the clouds and listens to everything we pray for”; or launching a debate about science with: “a scientist is someone who is not allowed to have human feelings”.

Secondly, and conversely, it is a way to make magic look glamorous to encourage stupid people to fall for it – as in a spam mail campaign that promises a “magical” cure. This takes us back to what was said earlier: being the victim of magic does not admit one into magical culture any more than being a laboratory rat makes one into a scientist. Con artists play on magic, others play on religion, others play on science by producing fake statistical data, while others forge paintings. This is embarrassing, but their existence is not reason enough to utterly condemn religious, scientific, artistic or magical cultures. Each culture has its abusers, but also has something positive to offer society.

So, instant gratification is no more essential to magical culture than bigotry to religious culture or psychopathy to science, and yet times of magical revival do go hand in hand with a rise in individualism – and that can be manifest in many undesirable ways. The same media pundits who launch attacks against a rise in magical thinking will also rage against a culture of narcissism, instant gratification and a “get rich quick” culture. A desire for instant gratification can make magic seem a seductive path but, as my six-point summary suggests, it seldom works that way. Such a shallow fascination with magic will tend to stop at step two in my sequence, but any serious magical culture will proceed to steps three and four, calling for a lot of hard “inner work”.

Even in the case of such a basic desire as getting rich, any magical

solution will require an initial exploration of your own relationship with wealth. This is most obvious in something like a New Age “Wealth Workshop” where the miserable, penniless attendants will be asked first to recall a time in their life when they did actually feel wealthy – say the day when parents gave them pocket money for the first time – and then explore and re-live how that felt. A traditional ritual magician will probably begin work with some archetype of wealth – such as Jupiter or the Sun – and will need to form a relationship with that principle in order to invoke it. Even at the most crass and exploitive end of the magical spectrum – for example an advertising copy writer seducing those who wish to get rich quick – will pause to wonder what the victims “really want”, and seek words and images of yachts, fast cars and sexy

partners to reach that deeper desire.

So, even when one begins with the most materialistic of desires, the actual practice of magic requires one first to explore and work on one's own subjective reality – and this is the beginning of a very interesting process. Broadly speaking, two things happen to people who decide to “give magic a go”.

One is that they dabble in a few spells or magical practices, even commit themselves to a guru or magical order, and soon give it up. Reasons for giving up can be: because magic did not give the desired results; because surprising things happened; because the highly respected guru turns out to be a fraud; or because the aspirant speaks about the subject too openly to non-magicians and is persuaded by them that the whole thing is rubbish.

The other is that they experience a growing recognition that something interesting is happening. In this case the very same problems just described may still be faced but, instead of being seen as a reason to give up magic, they are experienced as initiations peeling away veils of illusion. How this works in practice is a totally personal matter, but here are some suggestions to illustrate what I mean:

- You did not get what you wanted. This can lead to deeper knowledge of what you really need, and of how misplaced was the initial desire.

- The wise person in whom you had placed total trust turns out to be a swindler. This can reveal that you are really looking for one person to make decisions for you, rather than use your own discrimination to select what is good and reject what is not.
- Scary things happen. This can reveal that you are not really ready for change.
- You boast of your success. Others teach you humility by mocking your achievement.

There is a traditional magical motto to the effect that the aspirant must take on the four powers of the Sphinx – “to know, to will, to dare and to keep silent” – and the above four initiations could be seen as tests of those four powers.

23.3 The culture of narcissism

Thus begins a process of stripping away illusions and labels in order to find one's true self. For example: I am seen as an English man, so does that mean I would cease to exist if someone revealed that I had been born a girl in France and given a sex-change operation when a baby? Contemplating this, I realise that there are vast areas of my being lying outside both gender and nationality.

If I had been an orphan and given the name “John Smith”, would it make me a totally different person? If I had not won a scholarship to public school and Oxbridge, would I be recognisable as me? If I were hit by a life-changing affliction such as polio or motor neuron disease, would I cease to be me? More perplexingly: if a severe stroke left me in a vegetative state, who would I then be?

We tend to define ourselves by a whole series of these labels, and each label is a gift from religious culture in the sense that they are the marks that admit us to particular social groupings. These are the qualifications that we will enter on a job application, curriculum vitae, or dating website in order to be recognised as suitable material for a job, club membership or romantic partnership. So these labels can become very precious, and some people will sacrifice much of their individuality in order, for example, to be seen as a revolutionary, or a tough business executive.

So to gaze at oneself and remove these labels one by one can be a challenging process, made more scary by the fear that, after some point, one might remove a final label and find there is nothing left – that one is just a “hollow man”.

Meanwhile journalists may catch you thus gazing at your own reflection and label you a narcissist. The point about the mythical Narcissus was that he was a hunter who was supposedly trapped by his own beauty reflected in a pond, trapped to the point where he so fell in love with his image that he could not leave it and drowned in the waters.

My problem is this: how could the narrators of this tale know what really went on in Narcissus' head if he did not live to tell the tale? He was a hunter, so maybe he continued to be a hunter: if so what was he really hunting? Beauty, or was it the truth about himself? As he entered the water was he truly in despair? Or was he choosing to leave the social world behind him and dissolve into something greater? Those inclined to love themselves can only interpret such gazing into a mirror as a sign of vanity, but it can equally be a sign of self-criticism. It can also be a sign of curiosity, of self-diagnosis, or an attempt to step outside of oneself as an observer. It can even mean someone cannot quite remember where they left the toothbrush.

What I have found is that this process, so fundamental to magical culture, does not lead one further and further away from humanity into navel-gazing isolation. Instead it takes one closer to a state of pure undifferentiated being that lies at the heart of every human. When no more labels are left you do not find nothing, you are left with something that is still far bigger than the sum total of all of the labels that you have discarded. After all, over half of our body weight is made up of water, and that is where Narcissus ended up.

When I first wrote up these ideas forty years ago it was a time when people were feeling paranoia about the amount of personal information governments were collecting, and I pointed out that my own experience of government was that of infinite greed for information and desire to control, but balanced by negligible ability to make use of such information. The fear is still around – bolstered by new ways of collecting data on the Internet and better was of mining that data – but the moment that anyone thinks they know enough to reliably predict my next move, they simply challenge me to surprise them. Huge IT resources are deployed to target advertisements at me as an individual but – even though I have been an avid Internet searcher and shopper for more than ten years – I cannot think of a single promotion that has successfully hit my target.

A magician remains a hunter, not prey. And those that too readily shy away from magic because of its individualism, never discover that it can be a path to universalism.

23.4 The problem of power

I listed a few “base desires” – money, success, sex – that lure people into seeking easy magical solutions. One such is a desire for power. To some extent power is on a level with the desires already mentioned, and the pursuit of power will similarly lead either to disillusionment or a voyage of discovery. But I think there is a deeper relationship between magic and power than between those other primal desires.

Sacrifice or submission is quite fundamental to religious cultures – whether it is to “toe the party line”, to accept the referee’s decision, to trim your thesis to meet the accepted standards of your academic discipline, or to stand by the word of the Bible. Compared to that, scientific culture offers the rather exciting alternative of actually making things happen: from explosions in the chemistry lab to getting a computer program to work. It is when the limits of such effectiveness are felt in an increasingly complex world that the idea of magical power becomes so alluring.

So the supreme vision of magical power is that it allows a direct manifestation of will – without all the labour of technology and seeking permission to act from society or authority. Crowley defined his magick as: “the science and art of causing change to occur in conformity with will”, and Dion Fortune’s definition took the more psychological view that magic is the art of causing “changes in consciousness” at will.

I wrote “the supreme vision” because actual magical practice tends to call on rather more resources than pure will. If will was everything, then why all the traditional paraphernalia, robes, candles, chanting and temple furnishings associated with the ritual magician? Why the “inner work” of a New Ager, or the massive expense of a big advertising campaign, if it was possible simply to will the result?

For many people, however (and this group does include many serious magicians and magical theorists), power is absolutely fundamental to magic. Whereas, in section 13.7, I chose to describe the ultimate aim or direction of magical culture as being towards wholeness, others might insist that the more fundamental direction is towards power, and that all lesser objectives can be re-framed in the light of that. So doing magic to heal, to gain knowledge, wisdom, love or wealth can all be reinterpreted in terms of different paths to power.

I do not agree, partly because my observation is that people who have studied and practiced magic for a long time often become less and less inclined to wield power and cause changes, and more inclined to celebrate things being what they are. I guess that might simply reflect the sort of magicians that a nice person like myself associates with!

But I also have logical difficulties with making power the supreme aim of magic because, again from experience, I associate power with weakness. People who have absolute power tend to grow very fragile, because they have so little experience of not getting their own way and surviving that setback.

My image of this is the boy king and his companion slave: they play together as kids, then one day the boy king is so tired that he asks the slave to carry him home, and the slave knows he cannot refuse to do so. Thus the slave surrenders his power to the king, who then finds it easier in future to insist on being carried. So what happens is that the king grows more powerful in concert with the slave growing stronger, until such time as the king no longer has the strength to stand on his own two feet, and the slave is powerless to refuse to carry the king.

So for me it would seem a little feeble to make power the ultimate aim of magic, because I would say that the greater challenge is to achieve the right balance between power to make things happen and strength to endure should they refuse to happen – in other words the sort of wholeness that I suggested to be the true aim of magical endeavour.

Nevertheless, I recognise that there is a strong correlation between magic and the will to power, at least in the initial stages, and this can seem highly dubious to non-magicians and quite threatening when magical thinking is on the rise in a society with strong religious traditions. One could argue that the desire for power is not necessarily a desire to do evil, but the problem does run deeper than that.

There is much more to be explored in the relationship between magical culture and the desire for power, but for now I will simply repeat that most experienced magicians I have met have not been power trippers.

23.5 When belief appears absolute

Section 13.3 outlined the differences I saw between scientific theories and magical “formulae”, and how the latter could evolve out of a well-defined scientific theory. Whereas scientific theories must be specific and be based on clear causal connections, magical formulae are observable universal patterns that require no causal justification. A typical magical formula is the one that categorises all phenomena into Earth, Water, Air, and Fire. In scientific terms it is only meaningful as a statement about the four states of matter: solid, liquid, gas and plasma. But as a magical formula it applies equally to human psychology, natural phenomena, political theories, planetary qualities and just about everything.

I also gave an example of nuclear fission as a scientific theory that I could extend into a magical theory that anything – from radioactive materials to human families – when packed too tightly together, is liable to break down. But a more significant example seemed to be the extension of natural selection from a genetic to a generic theory. As a magical theory I can apply “survival of the fittest” ideas to explain almost any occurrence or outcome, in particular the flow of ideas or information structures in the sort of “information soup” suggested in Section 22.7 (see, for example, Andy Smith’s book *Satanic Viruses*). This style of thinking has become commonplace when people speak of a story “going viral” on the Internet, and it has been widely recognised under the label “neo-Darwinism”.

But the acceptance has not been universal, because the theory of natural selection is also bitterly opposed by the creationists who rather insist on the literal truth of the biblical account of creation. I myself considered the latter idea too ridiculously dotty to be worth thinking about, but it has been taken quite seriously by fringe scientists who are still writing books both for and against creationism or its variations such as “intelligent design”.

It became clear to me that the debate was not as superficial as I had supposed, it was actually touching some deep nerve. And I concluded that a big part of the problem was that religious culture was recognising something that it could not admit, namely that neo-Darwinism had evolved into a magical formula, with all the religious distaste that goes with magical ideas.

I was told that the Catholic Church's objection to Galileo was not so much that he believed that the Earth went round the Sun, but that he gave this belief the status of absolute truth – a status that only God could claim. In retrospect this suggests that the Catholic authorities held something like my notion of magical, as opposed to absolute, belief: they did not mind Galileo giving his gift of belief to heliocentrism, but they did object if he then claimed it was an absolute truth that could be used to discount alternative beliefs.

I think that something similar is happening here, but it is exaggerated by the magical nature of the theory. With the rise of science, religious culture has learned to live with, and work around, scientific theories that are considered to be absolutely true. One might even debate whether God is master of, or subject to, the laws of thermodynamics. But at least the specific nature of physical laws does serve to keep those laws in their place.

But when a scientific law becomes generalised into a magical formula it becomes threateningly God-like. It is one thing to show how specific genetic mechanisms can lead to inherited characteristics, but quite something else to allow natural selection to explain everything – even the growth and demise of religions themselves!

So I suspect that the deep revulsion felt by some religious groups against Darwinism has its roots in a recognition that magical thinking is on the rise in a world where magic is no longer allowed to exist. Curiously enough, that revelation has lead me to feel greater respect for religious culture, because I see it as the only culture that offers positive resistance to natural selection.

Do not get me wrong: I love natural selection, but also have a natural rebel's dislike of anything becoming universal. Although I still think creationism is pretty daft, I do now recognise that religious culture has provided the one serious antidote to natural selection, and that is the idea that survival might not be the ultimate criterion.

Religious culture has suggested and championed the alternative notion of sacrifice – whether in a religious sense, or a political move for the greater good, the sportsman’s placing team glory above his own or whatever.

There have, of course, been neo-Darwinian attempts to discredit this rebellion by suggesting that the sacrifice of the individual is simply serving to support the survival of some other entity: for example the mother might sacrifice a child to help the family to survive, or a soldier will be moved to give his life in order to preserve his racial genes. But this explanation breaks down when you consider major religious movements, such as Catharism, that require its alpha males to forego sexual reproduction and become celibate. Nor can one argue that this has helped the religion itself to survive when so many such celibate faiths have become extinct in the face of the roaring success of Catholicism, football and other sex-fuelled faiths.

No, the foundation of self-sacrifice is the idea that there could be something more important than survival. No matter what that something is – it need not even be known – it adds a Joker to the natural selection pack, and I think this is a very important and valuable idea. Religious cultures would do well to explore the role of sacrifice more thoroughly, rather than waste their energy on reactionary behaviour that simply serves to discredit religion.

Mind you, the sheer daftness of championing creationism against such odds might itself be a glorious act of self-sacrifice.

23.6 Thou shalt not suffer a witch to live

So, from the perspective of any religious culture, magical culture can seem unpleasantly greedy, individualistic, narcissistic and anti-social to the point of being sociopathic. One might, therefore, expect religious missionaries to be rushing to the rescue of those poor souls lured into magical cultures, and indeed there are some “outreach” organisations that do attempt to save lost souls from the perils of occultism and the New Age.

But for centuries the more common reaction has been a desire to burn or hang witches and sorcerers, and there is still a strong impulse in the more hard-core “religions proper” to denounce magic as evil, rather than merely misguided. Even in secular religious cultures, such as the law, academia or the media, magical ideas get pretty short shrift. Indeed, there is today probably greater understanding and sympathy being extended to petty criminals than to occultists. Should there be any risk that some members of the public might see a murderer as a “victim of society”, the tabloid press will rush to banish such sympathy with rumours that the crook might have “an interest in the occult”.

In comparing magical and scientific cultures, I suggested that the magical impulse towards wholeness presented a fundamental problem, because wholeness necessarily embraces lies and deception as much as truth – and that is intolerable to a scientific culture that keeps its eye on truth and how to approach it as closely as possible. Similarly, wholeness must embrace evil as well as good – and that makes magic deeply suspicious to a religious culture often focused on the elimination of evil.

Consider the idea of demonolatry discussed in Section 14.1: the way that magical cultures can approach a complex problem by treating it as more or less conscious entity that might be open to negotiation. The terrorist provided a modern example: to some political cultures the very notion that a terrorist might have human qualities and be worth negotiating with is absolutely unthinkable, and anyone who even considers such a dangerous approach must be utterly deluded. For the magician, however, any demon good or bad is worth exploring, and a lot of traditional magical lore is built around techniques to negotiate with the very worst demons without being deceived, corrupted or trapped by them.

In fact all four of my cultures have quite distinct approaches to the demonic. In any religious culture there is no place for it: all evil must simply be banished or destroyed by exorcism, political purging, banishment of dissidents, a war on terror or, at the very least, blackballing unpopular club members. Scientific cultures would never approve of the term “demon”, nor would they accept the word “evil”, but they do adopt a very similar attitude: that all such problems, diseases or crises must be solved, cured, eliminated – or even proven not to exist.

Magical cultures, however, recognise such demons as a resource that may have a purpose and may be bargained with for useful effect, as in traditional demonic pacts. For example, susceptibility to colds and flu can really get you down, but it can also

be a handy way to get off work and have time to read books. An inferiority complex can turn a nice person into a tyrant, but it can also spur one to amazing achievements. So New Age workshops will encourage people to “work with their woundedness”, and hip business handbooks insist that: “what others call problems, we see as opportunities”. Whatever religious cultures might believe, the magical negotiation is never about surrendering to the demonic, but rather about forming a new, more useful relationship with it. It is akin to the liberal desire to reform criminals into useful members of society.

In this respect the greatest problem does not lie with magical culture, as commonly perceived, but with artistic cultures that positively celebrate evil and, in the process, earn magic a very bad name. In Section 22.1 I mentioned that arts culture get a lot of fun out of exaggerating magic's evil reputation. Literature, film and stage are full of wicked sorcerers, vampires, witches and ghouls that present absolute evil in a magical guise but, as I pointed out, actors seldom shy away from playing these wicked roles – they actually love them. No film star wants to play the part of a saint or wise man if they have a chance to play an evil genius, cannibal or wicked witch.

Whenever a well-meaning religious/political culture sets out to forbid or censor all negative elements from the arts, insisting on purely wholesome characters and imagery, it invariably precipitates artistic rebellion or cultural decay.

I know many fans of TV detective series, and I have learnt one simple rule of thumb: the artistic reputation of the series in critics' eyes is directly proportional to the problems or suffering of the detective. So Dixon of Dock Green can be dismissed as hopelessly sentimental compared with Z Cars where the police do realistic things like swearing; and the height of dramatic excellence is reached in a series like Prime Suspect where Helen Mirren plays a woman detective in a sexist environment and suffering from depression, alcoholism, chain-smoking and an abortion. All these problems are evils that a religious or scientific culture would be eager to cure or eliminate, and a magical culture would see them as challenges. But in the arts world, all such evils add value to the creation.

I once presented this in an article as a further thought experiment. Imagine that, walking alone one night, you see a painting in an illuminated gallery window. It is a beautifully rendered image of a single orchid flower abandoned on a flight of grey stone steps in a city setting. Moved by this image you try the door, but the gallery is shut, so you determine that you must find out more about this picture and the artist that painted it. At this point, I offered two experimental outcomes:

1. The artist was a teen prodigy that took the fine art world by storm, but rejected its commercialism and hypocrisy and chose instead a life of gutter poverty, painting pictures in return for food and lodging. Having succumbed to drink and drugs, as a dying act every last possession was sold to purchase paint and canvas for one final painting – The Orchid on the Steps – encapsulating the tragedy of a beautiful young soul cast out in a grey, uncaring world.

2. Instead, that young artist embraced the glamour of the art world and is now living in a Hollywood mansion, selling portraits to stars and celebrities at exorbitant prices. Paintings like *The Orchid on the Steps* cost hundreds of thousands of dollars for those lucky and exclusive enough to get their hands on them.

The experiment ended with the question: after imagining each of these two possibilities how do you now feel about the painting? In the first case the artist's misery, rejection and suffering would surely add value, elevating the painting towards being a masterpiece. In the second case, however, the very same painting begins to look terribly kitsch – not the sort of image you would want cultured friends to see on your wall.

While the evils of suffering, rejection, exploitation and poverty can add significant value in an artistic culture, quite the opposite is true outside the artistic context. If word got out that a popular smartphone or T-shirt was manufactured in a far Eastern sweatshop where orphaned children were starved and exploited for cheap labour, it would not add value – indeed most people would feel shame at having purchased the item.

Finally I suggested that any deliberate act of ultimate evil – such as the cannibalism of Hannibal Lector or the priest turned Satanist – could only make sense when considered as artistic rebellion, rather than an act of magic. My experience of pop groups that adopt the most outrageous and evil-seeming persona, is that they often hide the most thoughtful, intelligent, even sweet-natured souls.

And yet it is these outward stereotypes that stick in the memories of a religious culture – and the public, when considered as a unit, becomes what I would describe as a religious culture. The trickster becomes the devil. Playfulness is equated with cynicism. Detachment implies sociopathy. Those who did not stand for anything must have fallen for something.

Meursault is condemned because he did not cry at his mother's funeral.

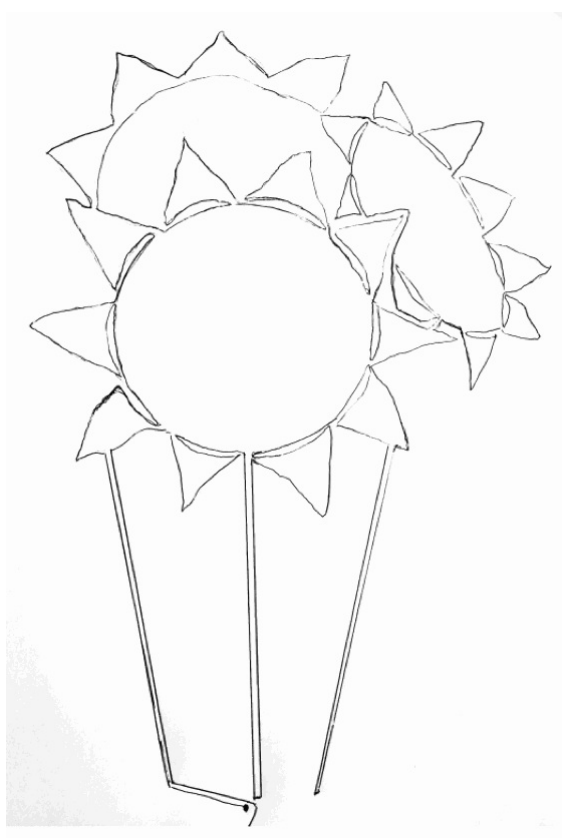
Let us kill the witch.

PART SIX

Picturing it all:
a brief artistic
interlude

24. A brief artistic interlude

I would like you to consider the following picture.



Please answer the following question:
“Have I just asked you to look at a
picture?”

The answer is “no”. I did not ask you to look at a picture, I simply made a statement about my current state of mind: namely that I myself would like you to consider the picture. I did not even specify the conditions under which I “would” like you to do that.

That might seem terribly nit-picking. The reason I picked those particular nits was to demonstrate that magical culture requires one to read in a much more considered way than is expected in today’s religio-scientific culture – as explained in Section 21. This is not simply a question of being more precise – as in the above example – but also of being able to hold a certain level of precision while at the same time adjusting focus to take in other levels of imprecision. That includes: “Why did he write that?”

In this case, therefore: although I did not literally ask you to look at the picture, of course that was what I was intentionally wishing you to do. In magical culture, both statements can be true, according to the choice of focus.

So I will now set out six statements about this picture that are all completely true (subject to the limitations of the reproduction and printing process) but which are mutually contradictory.

1. The picture comprises nothing other than a finite set of discrete white or black pixels
2. The picture comprises nothing more than a single unbroken line between two points
3. The picture shows a circular tour, beginning and ending at the same place and never crossing itself.

4. In the picture there is just one circle.

5. In the picture there are three circles, if you know how to look.

6. The entire picture is made up nothing other than circles.

In magical culture there is no problem about these six statements all being true while contradictory because, as I have explained, truth is not absolute in magical culture – it is a relative idea based on whether something is consistent and works. Scientific culture, however, should reject this possibility, because there can only be one single objective truth.

I said scientific culture should reject it, but actually the culture has learned to accommodate contradictions out of practical necessity. “This bar is exactly one metre in length” is a true statement when it applies to the Prototype Metre bar that was used as a standard unit until 1960; but it is also untrue, because no physical artefact can ever be absolutely exact in length, and the standard metre has since been re-defined in terms of a measurement based on the speed of light.

“Science Proper” recognises that statements can only be judged true in terms of appropriate contexts and levels of accuracy, and this applies not just to physical dimensions. So when a scientific paper quotes “a thousand randomly selected subjects...” we do not insist that the sample should include over a hundred starving people, even though other scientists have estimated that 12.5% of the world’s population is indeed undernourished.

So scientific culture, while attacking magical culture for its contradictions and inaccuracies, is able to a considerable extent to embrace its own contradictions and inaccuracies, as long the context is understood and allowed for.

In recognition of that fact, I will now explain the six contexts that allow each of those six statements to be recognised as true statements.

1. If you are reading this book on a screen, the truth of the first statement should be obvious, even in a strictly scientific context. If you are looking at a printed version, then it would still be true: in the sense that the printer had acted on instructions to represent to you an array of black and white pixels.

2. The quality of the picture is not great – so a critic, looking closely, might “pick holes” in this statement – although I did try to create a unicursal line drawing without taking pen off paper or crossing over a line.

3. If someone in a hotel foyer says: “I’ve enjoyed a circular tour of the hotel garden and am back where I started” this is accepted as true – even though the walk did not necessarily begin and end with both feet returning exactly to one precise spot. The “continuous line” in the picture begins and ends at the lower middle, so a short-sighted topologist might run his fingers along the line, note that it contains no breaks, knots, or branches, and conclude that it was topologically equivalent to a continuous circle.

4. You have just given a toddler a lesson on simple shapes – circle, square, triangle – and you show this picture and ask: “can you see a circle?” The toddler points to the circular motif in the centre and is rewarded – rather than punished for lying. Although the central, broken up shape does not fit the mathematical definition of a circle, in this pedagogical context it can still be described as a “circle”.

5. A few years later you show the youngster this same picture as part of an intelligence test and ask if it contains more than one circle. The answer is that it shows three sunflowers, one of which we can clearly see as a circle, so the picture “really” contains three circles if you understand it rightly and know how to look.

6. Returning to a scientific context but, instead of considering this picture as digital information, we examine it with an electron microscope to show that the paper (or the screen) is actually made up of atoms consisting of electrons moving in circular orbits. So we see that the whole picture is made up of nothing but circles, if you examine it closely enough.

So there we have six statements that on one level contradict and so cannot all be true, but when considered from different angles, or in different contexts, we find that even a relatively strict scientific culture could accept or understand them all.

The point of the exercise is this: those six statements summarise the development of this book's argument, and here is how.

1. People who reject magical thinking normally do so on religious or on scientific grounds. The predominant, popular scientific rejection rests on the assumption that the world we actually live in – a fleeting world of subjective impressions and thoughts – is but an imperfect model, generated within the

brain, of an ideal, objective world called “physical reality” that is comprised of discrete fundamental particles. So this more “real” world is effectively not continuous, but is divided into quanta: so that even light and the passage of time are measured as the smallest observable units rather than a continuous flow. So the first statement models this view in terms of the pixels comprising the picture, and we could call it a fully “scientific” viewpoint.

2. The second statement (while open to criticism because of the quality of the image) would also be generally accepted by a scientific culture in the context I explained. However this acceptance would reveal just how inconsistent scientific culture can be when it agrees with the idea of a continuous line while basing all experimentation on a “margin of error” sampling process that effectively fractures it into a countable quantized universe.

The Enlightenment, which is credited with launching the current scientific culture, turned the clock back two thousand years to a time when the Greeks proposed a universe made up of discrete atoms. At that time Heraclitus was credited with the

idea that one can never step into the same river twice. I can immediately prove him wrong: because as a child we used to take a holiday on the river Thames every year and I would go swimming in that same river each time. Heraclitus would counter my claim by saying that each time the river was a different arrangement of water atoms, and I myself was a different person each time – one who had been augmented with a memory of last time's swim. Thus time moves ever forward in a single dimension of cause and effect.

It was a big challenge for those Classical Era proto-scientists to come to terms with the “irrational” concept of continuity. And once they had embraced the irrational in this way the stage was set for their “rational” culture to give way to the “magical” culture of the Roman era. Even now we are so accustomed to the idea of a continuous line – in defiance of a universe divided into our smallest units of measurement – that we scarcely consider just how irrational continuity once seemed to the Greeks.

Look at the picture again and you see at the very bottom the line begins with a tiny straight section before curving into the picture. As I explained in Section 22.9, if you consider that as a continuous line, then even that one tiny segment must contain within it more points than there are atoms, or even sub atomic particles, in the entire universe! Extend the current vision of the universe by allowing it to become infinite and unbounded, and even allow for several such parallel universes, and still that tiny line contains infinitely more points than can exist in any quantized, and therefore countable, universe.

Let us go one stage further: just as a digital recording of a Beethoven symphony encapsulates the entire musical experience in one binary sequence – ie as a single very large number – so might one digitally “record” the entire lifetime – from big bang to heat death – of a quantized universe and every particle in it as a single huge number. Even if some parameters are assigned probabilities instead of absolute measurements, then the number of probabilities will be made finite by the level of accuracy admitted in the model.

Place a decimal point in front of that huge number and it becomes a single point on a one-inch line. So the entire scientific conception of physical reality is no larger than one single point of zero dimensions within the multi-dimensional richness of our subjective experience.

In section 22.9 I recalled how Greek philosophers had to face the fact that if you constructed a right angled triangle with two equal sides – that is made up of an equal number of atoms – then the hypotenuse could not be measured, because its length was impossible, it was “irrational”. Since the Enlightenment, scientific culture has again got used to working with irrational concepts and has now added the even greater absurdity of

“imaginary” numbers, as mentioned in Chapter 7. The scientific culture rejects magic largely on account of the irrational and imaginary aspects of magical culture – saying that it is absurd to base healing on chakras, angels, positive energies etc, because such things “do not exist”. And yet the same culture relies on numbers that are irrational and imaginary – as well as so-called “real numbers” which, despite the “real” label, also fail to exist – in order to explain and quantify a supposedly rational universe. When the “hard headed” businessman says “Don’t give me opinions, I want facts and figures!” he is actually invoking the aid of discarnate spirits.

3. There is less to explain about the third statement. What at one level of precision is seen as two separate points – a beginning and an end point – can also be seen as beginning and ending at the same point, approximately.

So when, as explained in Chapter 15, I was told that human thinking evolved from distant, primitive and magical beginnings and ended up as today's sophisticated scientific method, I was able to suggest that the process had been circular, rather than linear. The use of observation as the ultimate test for truth, while characteristic of modern science, was surely also the first ever test for truth, being characteristic of any learning animal.

On the one hand, I could see that today's science was very different from a baby's first exploration of its universe. On the other hand, I could recognise that it was a similar quest for repeatable data – distinct, and yet the same. So I saw the evolution of thought as a circular tour instead of a journey away from a primitive past.

4. We now leap out of scientific acceptability and into more magical and artistic thinking. If I said that the ability to see the circle was “magical”, then rational hackles would rise, so let’s just describe it now as “artistic”. The toddler points to the circle when asked, and I do not think that anyone would punish him for being so wrong. For, of course it is not actually a circle, just a set of approximate broken arcs of a circle with no continuity between them – the child is a downright liar. On the other hand he wins our praise for his perspicacity.

And don't make the excuse that "of course we are just making allowances for a little child". If the world's greatest art collector and critic commented on my picture saying: "notice the central circle motif so characteristic of this great artist's oeuvre" then we would not call him a liar (well, perhaps only for describing me as a "great artist"). To see a circle when there is nothing more than a set of broken arcs is not madness, it is a skill. But if I replace the word "art" with "magic", the skill is immediately dismissed as folly.

If I can see, and describe in this book, a cycle of human development – through science, magic, art, religion, and back to science – and a distinguished historian denies the reality of this cycle, then many critics would agree with the historian and insist that my foolish magic-befuddled brain had imagined the cycle. Why should they not rather celebrate my greater perceptive skill?

5. Now for the biggest leap, the greatest departure from reality into “mere imagination”. A child is asked how many circles he can detect, it frowns, scratches its head and then its face lights up as it answers “three”.

As an intelligence test, rather than a test of pure perception, the child is rewarded for this deduction: the picture suggests three similar flowers in an angular vase, and we can see one straight on that shows it is circular in the middle. So, presumably there are just three circles in the scene depicted, and they could be seen as such if one was able to view the scene from three different perspectives.

6. Now we come back to where we started, with an acceptable scientific viewpoint. But it is of course nothing like the universe of information where we started, for this assumes a physical world of discrete atoms and particles. The argument has been circular, and yet not circular.

What I wish to achieve in this book is to reconcile statement 5 with statements 1 and 6.

Seeing cycles is innate to magical thinking and culture, because cycles are patterns that can be recognised if you have the necessary skill.

Scientific culture distrusts cycles because, like Heraclitus, it sees time as one-dimensional. You cannot have repetition if time has only one dimension: repeating would require a loop in time, and any loop would require at least two dimensions.

But what about a Morse code emergency signalling “Mayday, Mayday Mayday...”? Surely that is a single time dimension that repeats? But we cannot recognise that repetition without stepping out of the one dimension to view it from the side, or else using memory to register the repetition. Both methods – stepping out of the one dimension or accessing a record of the past, require another dimension of time.

So science’s insistence on linear time plus repeatability of evidence is itself a paradox. As explained in Section 20.3, like Heraclitus I do not accept that any scientific result can ever be repeated, so science’s key truth test is absurd. How does scientific thinking get round this? In the same way that it accommodated my six mutually contradictory true statements – by adjusting context to fit. I explained that

the cold fusion experiment could not be reproduced, because it would be in a different place, with different planetary alignments and done by different people...and yet all these differences would be dismissed as irrelevant by the scientific community, as long as the key experimental conditions were replicated. So scientific experiments are only “really” repeatable in an artistic sense: as one might repeat the performance of a symphony, or revive a Shakespeare play.

So return now to statements 5 and 6. As a magical thinker I was able to see cycles in human affairs that others might deny.

My teachers presented me with a single time dimension in which humanity grew from a distant past, in which they believed in and tried to practice magic, to our current understanding of the truth of science. As in statement 3 above, where they saw a line between two points, I could see a cycle that began and ended at a similar point. Then I could see a similar cycle – through magic, art religion and science – in my 18 years of growing up, and I could even see it repeating through the rest of my life.

If I changed perspective I could detect a similar cycle of around 70 years in popular fashion: periods of high style, new dance and health crazes, new art forms and speculation that end in a financial crash, a sense of guilt and a revival of religion or political alignment; that in turn gives way to a passion for science and technology; then the public grows weary of science and there is a revival of interest in magic... only to be replaced by another surge in style and speculation.

Then I could change perspective again and see a cycle of four five-hundred year phases, where an “axial age” of religious innovation gives way to an age of reason, which gives way to an age of magical thinking which gives way to a “dark ages” that later generations will populate with mythic heroes, and then the religious phase is reborn.

Then I could change perspective again and see a similar cycle made up of four bi-millennial phases.

Now, just as a cycle cannot happen in time unless there is a second time dimension, it is not possible to have helices, nor is it possible to have a whole set of cycles superimposed in this way on the single time dimension of recorded history, unless time is itself three (or more) dimensional. Like the clever child in statement three, I can step out of the “reality” framed in that 2 - dimensional picture and “imagine” that history is three dimensional, and so I can mentally explore it from different perspectives. It is only for that reason that I am able to claim a whole series of cycles superimposed on what science and Heraclitus consider to be a single dimension of historical time.

Thus we find that my magical thinking posits not only an immeasurably larger continuous universe but also one that has mathematically pleasing symmetry: balancing three dimensions of space with three dimensions of time – as suggested by the chaos magician Pete Carroll in his book *The Octavo*.

Take astrology as an example of magical thinking. Saturn, like other planets in our solar system, returns to the same position in the zodiacal circle at regular intervals – in this case about 29 years. So, in the sense of statement 3 above, a 29 year cycle is shown to exist: although historical time has moved on and cannot repeat (according to Heraclitus and a single time dimension), there is another sense in which Saturn can be said to repeat its motion after 29 years. With that understanding, an astrologer can look at any sequence of events from a Saturnian perspective, and look for a cycle of 29 years in which a sense of responsibility and other Saturnian qualities can be said to repeat itself cyclically.

This cycle makes it possible for the astrologer to predict, for example, that as any person approaches the age of thirty they will have a sense of apprehension about whether they have made the right choices in their life. Such is the astrologers' confidence in this cycle that it can even be used for "cold reading", ie without even seeing a person's birth chart: if the subjects look as if they are in their late twenties, a reading can suggest that they are having such concerns, and the majority of subjects will be impressed by the astrologer's perspicacity.

I chose astrology, and the Saturn cycle, as an example, but I could have selected any other astrological cycle, or a cycle based on the major arcana of the tarot, or on the runes, or the hexagrams of the I Ching, or a host of other cycles observed by members of the magical culture. So diviners can

shift perspective and, like me, become increasingly aware of their chosen cycles. To me that is not so unusual, what is stranger is that the clearer the cycle becomes – to the point where one need no longer use divinatory tools but simply use the cycle as “cold reading” – at that point the system of divination will, in the eyes of those believers who call themselves “skeptics”, have proved itself to be a delusion. Repeatability is recognised as a signal of truth in scientific culture, but is seen as a signal of delusion when it occurs in a magical culture. If one person claims to see a flying saucer they are probably just mistaken; if thousands repeat the claim, it is clearly a “mass delusion”.

When members of an arts culture can detect subtle patterns – common psychological themes across an author's oeuvre, echoes of a theme in music, rhythmic shapes in a landscape – they are heralded for their perceptive genius. When members of a magical culture do the same, they are derided for their over-active imaginations, their selective perceptions. As if the scientist who weighs the precipitate and yet ignores the phase of the moon was not being selective...

But magical thinking does not only register cycles, but all sorts of patterns. Taking my example of an astrologer from Chapter 14 who says: “Last Tuesday I nearly forgot I had an appointment at 10, so dashed to get my car and it would not start! I seem to have mislaid the driver’s handbook so decided to call the RAC, only to find that my mobile phone was out of battery...” and so on, ending with: “You’ll never guess what: Tuesday was the very day that Mercury went retrograde!”

Matching all those distinct events to the archetypal pattern of Mercury Retrograde is a skill of perception. The astrologer is looking at life's complex tapestry and seeing a picture, while scientific culture would rather pull out the threads of the tapestry and examine them separately – “You put off having the car serviced until it was too late, you forgot to put your mobile on charge etc” – no great pattern, just a series of unhappy coincidences.

The scientific culture looks for sequences of cause and effect to unravel each part of the picture, and yet this is a delusion because, in the quantised atomistic universe of the ancient Greeks and modern science, there can be no continua of cause and effect, no continuous lines, only distinct pixels of the picture. If information is to be transmitted from one quantum state to another it would need to travel across the gap in between, which has no observable existence, because it is “irrational”.

To explain the magical approach in similar terms I need to choose a convenient myth, and I will choose the idea that all our experience is mediated in a physical brain – a truth to scientific culture, a convenient myth to the magician. This suggests that impressions are based on archetypal patterns spread across a squishy

structure rather than each occupying a small discrete part of the brain. So when the child sees a circle in step 4, it is not detecting a true mathematically exact circle, but a pattern that echoes humanity's archetypal circular experiences – from the perfection of the solar disk or full moon, to the near circles of nasturtium leaves, through people holding hands and dancing in what could be called a circle, to an argument that wanders all over the place and ends up repeating itself and so being called a “circular” argument. The child looks at the middle of my picture and sees an echo of that great archetypal pattern, and calls it “a circle”.

This is a triumph of perception, and yet it could be dismissed as a subjective aberration based on the way the brain processes data – effectively seeing a circle that does not really exist. Instead we are encouraged in a scientific culture to favour the examination of those threads of cause and effect, even though they too must themselves be a subjective aberration based on the way the brain processes data as a sequences of causes in a subjectively imagined continuum, rather than as discrete events in a universe of countable particles.

The choice, therefore, is between two false visions of reality, and I am at this point defending the magical vision as being far more sophisticated, rather more coherent and one heck of a lot more fun.

PART SEVEN

What is
happening now?

25. Moving out of my head into the “real world”

For this last section of my book, I need to shift gears.

The title of the book is “My Years of Magical Thinking”, so it is definitely concerned with mine own experience and, as I have explained at length, “magical thinking” particularly addresses subjective experience. So I have based the book on mine own experience, impressions and understanding throughout, and have avoided diluting the argument with statistical evidence, quotations from other sources, or reference to objective realities.

It is very tempting and very normal to build an argument on second hand experiences that are presented as facts. The problem is that facts are subject to constant revision and, when the facts have been revised, it is often assumed that the argument has therefore been invalidated. Where I write “subject to revision”, others might insist on “subject to refinement” – because they assume that observation leads towards truth. But my experience here suggests that observation can lead to a range of different “truths”, depending upon the observer’s orientation.

When I was learning pure mathematics, the criterion of acceptability was that the sequence of statements should flow more or less logically in the context of what had already been stated. In other words: I should present a story that is consistent in itself rather than jump out of the story to collect evidence from other people's stories. $2x = 4$ implies that $x = 2$, and nothing is gained in this context by inserting statistical data about the percentage of the population that would agree with that deduction.

So I have avoided demonstrations and instead presented the reader with “thought experiments”. In fact you could say the entire book has been one big thought experiment. Even when I use recognised terms such as “Platonic” and “Aristotelian”, I am simply referring to my own understanding of a particular distinction attributed to Coleridge, rather than relying on detailed knowledge of the entire Platonic corpus and its later developments.

If truth were the sole measure of worth, this book would be impeccable: because I am the world's leading expert on myself. There might be pretenders to that throne – neurologists or psychologists claiming to know my mind better than I know it myself – but the moment their knowledge was communicated, it would become just one more addition to my experience – and I would still be the world's greatest authority on myself.

In magical culture, however, I found that effectiveness, or usefulness, was more important than truth. So why would I think that any reader should be sufficiently interested in my personal “inner world” to justify writing this book?

The answer is that I have written in this manner over many years and, although my readership has been very small by world standards, it has included a very high proportion of people who have found my ideas helpful as well as interesting. From that I deduce that their subjective experiences could, to a significant extent, be aligned with mine own.

But in this book I would like to reach out to a wider readership embracing a broader range of subjective experience and ways of thinking that are different from mine – so what common ground can I share with those readers?

My answer for these final chapters is to turn to face the “real world” that is assumed to cast all the shadows we experience.

The first six parts of this book remain as instructions on how I constructed a compass to explore my world: in part seven I invite the reader to explore with me and see whether the same compass is useful for finding our way in the world of today. I base these final chapters on examples of what is supposedly happening nowadays in physical reality, hoping that more readers will then resonate with my ideas.

The point of any compass is to find one's way about and to map unfamiliar territory. It does not really matter whether it is true or not that the world really is divided into four regions called North, South, East, and West – in magical culture usefulness is more highly prized than truth.

25.1 The sort of book to write, or not to write

I said it was “very normal” to build an argument on quoted facts, but I had avoided doing that. During the later stages of writing this book I came across *The Better Angels of Our Nature* by Steven Pinker. The subtitle is quite striking: “The decline of violence in history and its causes” – so striking indeed, that a critical visitor to our house, reading that subtitle, commented: “I wonder what planet HE comes from”.

The idea that violence is in decline must seem to many people to be as radical as my own suggestion that magical thinking is better seen as post-scientific rather than pre-scientific. So how does Pinker support it?

His book is a massive work with about 75 closely printed pages of notes and references, and illustrated with umpteen charts of statistical data. I liked the book and was happy to accept its well-presented argument. But did I accept it on the strength of this supporting data?

Actually no. I have no sound evidence on whether the data quoted is correct. It took me so long to read the book that I was in no position to check each reference: 1) to see if Pinker had correctly quoted the original research; 2) to examine the original research methodology in each case to be sure that its conclusion was valid; nor 3) to repeat the research myself in order to replicate its findings and so reinforce the possibility that the data were objectively true. So I was not accepting the argument on the basis of the sort of peer-review process expected of a scientific report describing a radical and surprising new discovery.

What I did do was to look carefully at each diagram and satisfy myself as a mathematician that the conclusions drawn from it were reasonable (and I suspect even that was more than some readers would have done). Apart from that, I looked at the relative consistency of his overall argument, and how I felt about it. Although I had no guarantee that his data was correct, it seemed to be presented in an honest and open manner. So I accepted his argument largely on the grounds of observation and feeling: it did not look like an elaborate scam and the argument felt sensible.

You could therefore say that I accepted the book as “good magic” in the way that one might recognise and value a good tarot reading. So why flab it out with all that unnecessary supporting data when anyone with doubts could simply go to Google to check the facts?

The answer is that those pages of notes do have a talismanic power that is commercially more effective than their quasi-scientific justification. Anyone presenting a surprising or radical argument does well to dress it up in academic robes in order to invoke respect from the publisher, the book trade and subsequent reviewers.

I, on the other hand, am writing about magical thinking while trying not to over - use it.

25.2 Pax Romana – is it repeating itself?

I mentioned Pinker's book because, like this book, it argues against conventional wisdom and yet, to justify the argument, it uses a very different technique from mine. But the book has a further significance here, because it emphasises a linear view of history whereas I have emphasised the cyclic view. Pinker decides that violence has long been falling, but he does not see any significant cyclic patterns in its decline.

So what about "Pax Romana" and the concurrent "Pax Chinensis"? These phrases do not appear in the book's index, but I did find the following reference in the text:

Though the first centuries of Christianity took place during the Pax Romana (The Roman Peace) the alleged peacefulness has to be understood in relative terms. It was a time of ruthless imperial expansion including the conquest of Britain and the deportation of the Jewish population of Judah following the destruction of the Second Temple in Jerusalem.

It is not that Pinker overlooked or ignored the possibility of cyclic patterns. He takes the idea seriously and presents evidence before concluding that there are no significant cyclic patterns. Most of the book's reliable evidence begins with the collection of statistics in recent centuries, and Pax Romana would not feature in such a search. He also looks at broader trends, as suggested by archaeological evidence over several millennia, and on that scale too, Pax Romana hardly features.

So it looks to me that the Roman and Chinese periods of outstanding peace may have slipped through Pinker's net by being, on the one hand, too brief for his long term filter and, on the other hand, too remote to be included in his finer historical filter based on recent centuries.

This is relevant, because I have suggested that we are at a turning point similar to the early years of the Roman Empire: when “scientific culture” is becoming overlaid with magical thinking. If both periods saw a significant rise in peace, as well as a return to magical thinking, then what else might they have in common?

What similarities can we see between our present condition and what took place two thousand years ago when a similar transition from scientific to magical culture was taking place? That will be the theme of my next chapter.

25.3 Does history repeat?

According to Enlightenment thinking, history is progressive and should not repeat – for “no man can step into the same river twice”. Magical thinking, however, looks for patterns and so puts greater emphasis on cycles – but recognises that each cycle is an evolution beyond the last. While seeking parallels to the last time that scientific culture gave way to magical culture, I will not expect them to be exactly the same.

These cycles seem to me to be natural, but that does not mean they have to be any more regular and predictable than, say, the stages of a human growing from infancy to adulthood. Taking my eight millennia cycle of values: the last time that scientific values might have been dominant would be between six and four thousand years before Christ. I do not know enough about that era to draw any comparisons, though it might have marked an important time for the development of agriculture and a need to predict the seasons – in other words an era when there would be greater perceived value in universal, repeatable demonstrations of truth than in artistic, religious or magical concepts.

Another approach might be to consider the inverse situation, a time when human values were based on magic while thinking became increasingly scientific – that should have been around 2500 to 2000 BC. Most of the Egyptian pyramids were built around that time and, although they are often considered to be religious monuments, I suspect that these pyramids had more of a magical purpose. There is a strong sense of magical culture in Ancient Egypt at the time, and it is amusing for me to imagine scientific thinking – in the form of early measurement and technology – having to be made “respectable” by being dressed up in magical terminology as much as today’s magical culture will hide behind pseudo-scientific labels.

Rather than risk such distant territory, the next chapter will fall back on a comparison between now and the rise of the Roman Empire – the last time that a rationalist culture turned magical.

26. What really happened to the Enlightenment?

I introduced this book by referring to the number of articles that appeared in the broadsheet press during the 1990s all basically asking the same question: “What happened to the Enlightenment?” Why, after five centuries of rationalism and humanistic education does there appear to be a resurgence of mumbo jumbo: astrology, tarot reading, New Age fads, witchy covens and such nonsense? Surely – the argument goes – a scientific education, even at the simplest level, should armour society against ever slipping back into such superstitious folly?

My immediate answer is that existence is far messier and more complex than the (relatively) simple “end of history” argument that places scientific thinking as the end point of millennia of cultural evolution, while implying that science provides a method for answering all life’s big questions, so we can begin filling in the details of that “theory of everything”.

To address this greater complexity, I lent the reader a compass that I have found helpful in my own life. The compass does not divide the world into four zones, it simply indicates four directions: Science towards Truth; Magic towards Wholeness; Art towards Beauty; and Religion towards Goodness.

26.1 A walk on the wild side

Having introduced my compass, I now invite the reader to join me on a tour of our current environment in order to explore the compass' utility. When we turn away from idealised Platonic images of objective reality and face the mess and confusion of sensory data and everyday experience we address a staggeringly complex environment. What has until now been a relatively clear mental journey will now become cluttered with "facts".

A compass offers a sense of direction, but does not guarantee safety: the compass bearer could tread on a snake, fall down a mineshaft, or be trespassing across private territory. If you think that the following examples are misleading, it could be my choice of facts that is wrong rather than the compass.

So the following explorations are not offered as definitive analyses of world events, but as indicators of areas where people more qualified than myself might wish to explore further.

26.2 Do not expect the obvious

I observe magical thinking on the rise, and yet I do not see wizards with pointed hats or witches on broomsticks casting spells on every street corner. Because magic is granted so little respect, it tends to seep into our culture under many disguises, and we need to look for more subtle signs.

With hindsight I have indicated some obvious signs of magical thinking arising in the Roman era – the birth of astrology, the transformation from metallurgy to alchemy, the use of charms and spells and the rise of holistic medicine – and I predict that later centuries will be able to look back and see such obvious manifestations in our own era. But what was life really like back in Roman times?

Remember that around zero anno domino was not just a time when thinking was turning from reason to magic, but also a time when the sense of values, the highest guiding authority in human affairs, was moving from art and culture towards religion – as described in Section 16.5. In the classical era, there had been less concern about barbarians worshipping the wrong gods, as there had been about their relatively decadent or brutal cultures. So, whereas there had been millennia of battles over culture and its artefacts – including a famous war over a beautiful woman in Troy – humanity was entering an era when religious values would have greater influence, when wars would be increasingly driven by religion, and even scientific endeavour would be initiated by a desire to explore the wonders of God's creation.

In the Roman era, therefore, the need was to justify magical thinking in the context of increasingly religious values. The fundamental unacceptability of Christianity or Judaism in those early days was because those monotheistic religions refused to recognise the Roman Emperor as another god. Meanwhile magical thinking flourished because it was dressed up as religion with an emphasis on its political value by using pagan religion as a symbol of Roman dominance.

It is said that the emperor Constantine had a vision of the Christian Chi Rho symbol with the message that he would conquer by this device. So he asked his soldiers to paint it on their shields, and a marvellous victory followed. This was reason enough to make Christianity the new official religion: because it had proved its magical efficacy. So, in searching for signs of magic in the Roman era we do not simply look for “in your face” magic, but also for magical practice in religious guise.

My understanding of Roman religion is that the citizen was offered a wide choice of temples to different gods, and that it was normal to choose an appropriate deity and visit the temple to ask for appropriate favours. That, to me, suggests that the underlying impulse was more magical than religious.

To give the modern parallel: there has been a lot of recent research about the psychological benefits of religious practice, suggesting that the value of religion now needs more scientific justification. So is it religious or is it scientific to attend church in order to cure depression? I would suggest neither. The element of choice and experiment suggests the game playing attitude of magical culture – an emphasis on “what works”, rather than “what is true” – rather than the sincere belief and commitment of truly religious practice. Nor can this sort of experimentation be called properly scientific: because a scientific test by an individual would require a level of objectivity that would probably reduce the healing effect to placebo levels. As a magical experiment, however, it requires giving a gift of belief to the religion, and throwing oneself

emotionally into the experience – similar to a worshipper at a Roman shrine.

This practice of religion as a magical solution is quite prevalent now, even where actual religious belief is in decline. There are Christian churches in the USA that preach prosperity and offer healing, and I have even heard of humanist or sceptic groups holding weekly “services” of reading and singing in order to reap some of the community spirit and psychological uplift of church attendance, but without the burden of belief.

I can interpret all such practices as pseudo-religious magic: the magical aspect of the experiment being made more respectable by placing the emphasis on outcomes that have greater value in a scientific culture – such as economic empowerment or psychological healing – rather than presenting it as a religious experience.

So, just as I would expect the rise of magical thinking in the Roman era to be often disguised to look like religion, I now expect the rise of magical thinking to be disguised to look like science, as suggested in Section 16.5. Typically this means a preference for pseudo scientific nomenclature such as “neuro-linguistic programming” or “scientology”; it also means that practitioners of many magical fringe disciplines – such as marketing, psychology and astrology – will tend to take offence if you describe their practice as “magic”, but will feel flattered if you describe it as “science”.

26.3 Magic presented as science

More subtly, magical thinking can creep into scientific culture itself and be accepted, so long as it is still seen as science. Provided scientists put the emphasis on exploration, on being “open minded” and prepared to put way-out ideas to the test, then they can get away with levels of magical thinking that would have caused outrage in 19th century scientific communities. This is especially true in fields such as particle physics, where one can write semi-popular books drawing parallels between quantum physics and traditional religious ideas from the Far East.

I also showed in Section 13.3 how a respected scientific theory could evolve into a magical theory when it becomes so widely accepted that its field of application begins to extend beyond the original rigorous formulation towards becoming a universal formula. My examples included the theory of the four elements and the theory of natural selection.

In the late 1990s I attended a talk at the Cheltenham Literary Festival by Richard Dawkins who was then a professor in the “Public Understanding of Science”. Earlier I had seen him speak on television, criticising the continuing public interest in topics such as astrology and divination, so I was very keen to hear him responding to Keats’ playful criticism of Newton having “unwoven the rainbow”. He did give a good and inspiring talk about the wonder and beauty in science but did not, in my opinion, provide a scientific response to Keats. By scientific response I do not mean a “science proper” demonstration but rather the sort of argument (based more on observation and reason) that I would expect from a vigorous science culture.

So I certainly did not expect a man of his calibre simply to dismiss poetry as “poppycock” and insist that science is

the only way forward. But I was expecting something more along these lines: “yes, there is beauty and awe in the rainbow [observation of subjective and shared experiences] and that is lovely; but [more objective observation] brain scans show these experiences notably registering in parts of the brain we share with primates and other animals; whereas the scientific analysis of the rainbow activates more recently evolved human brain structures and so suggests an evolutionary advance on poetic wonder [deduction]; it would therefore surely be better for human progress to encourage enthusiasm in scientific endeavour than to wallow in regrets about lost feelings”. I am not putting the above statement forward as a great example of scientific discourse, simply suggesting a style of argument.

Instead of arguing along such

progressive lines, Dawkins was manifestly setting out to change the “dry and boring” image of science by telling us about the subjective sense of wonder and beauty it could evoke. So he was addressing Keats’ challenge indirectly by attempting to change people’s perception of it – in just the way a magical culture would tackle the problem. This is the approach you would expect from a New Age counsellor, an advertising executive or a ritual magician, as explained in Section 13.5. (Reading this two decades later I note that today’s Financial Times features a substantial interview with Carlo Rovelli, introduced as “the physicist changing how we see the universe” and describing his delight in transforming such perceptions, with no reference to quests for truth, or banishment of misconceptions.)

To champion science as being beautiful, poetic and full of wonder is nice, but a bit of a fudge, considering the way that such subjective feelings are excluded in serious work.

Scientific reports would never accept phrasing such as: “we were all thrilled to achieve such awe-inspiring results”, or “our conclusions on global warming turned out to be so depressing that we beg our fellow meteorologists to try harder to refute them.”

After a very good presentation – and I did feel different about science on account of what he said – there were questions from the floor. A hand went up and someone asked Dawkins what he thought of “Deepak Chopra”. The reaction was as if the querent had pressed a button to de-activate Dawkin’s higher brain functions. I do not remember if he actually used the word “poppycock” but, relative to his earlier talk, he became incoherent in response to this question. Rather than quoting and demolishing Chopra’s ideas, Dawkins mostly expressed distaste that Chopra’s books were making more money than his own books.

To the audience it appeared that Dawkins had not only been using the magical technique of popularising science by altering public perception, he had also extended evolutionary theory from its specific biological context into a universally applicable magical theory. The fact that Chopra's books were making more money than his books could then suggest that Chopra's ideas were the fitter to survive – and that conclusion would be scary to a man whose role was to increase the public understanding of science.

The danger here was not that Dawkins was practicing magical transmutation, but that he was doing it in the name of science. And this is the key message in this book: magical thinking is no better or worse than other forms of thinking but it could lead to problems if we keep refusing to admit that our thinking has turned magical.

26.4 Science presented as magic

There is another related tendency in a society that is increasingly basing its values on scientific criteria, and that is a tendency to ascribe all successes to science. This sometimes amounts to suggesting that science itself possesses magical powers.

I recently watched the TV series Harley and the Davidsons. Having watched it, I would not disagree with someone who said: “Thanks to the engineering genius of Mr Harley, we now have fast, reliable motorcycles.” Just as I would not argue with someone saying something like: “thanks to science, life expectancy increased by 30 years in less than a century”, provided that these things are said as indicators of the value of science. If, however, they were used in an argument against my other three cultures, I would not agree.

In Harley and the Davidsons there were indeed several scenes where Harley's engineering genius solved technical problems in a way that was to advance the whole motorcycle industry. But the major drama of the series came from the endless struggles that the lads had against poverty, prejudice, conformity, commercial greed, conservatism and other competing emotional issues. The same is surely true of science's contribution to life expectancy: science enabled certain vital discoveries, but it would take years of struggle to realise their value.

Consider the discovery and role of antibiotics. It is simply not true that scientists went into their laboratories and did science with the effect that people around the world began to live longer. The discovery of penicillin surely involved far more than an

observation that microbes died when moulds formed. Was there: scepticism about what was observed? Speculation that it might be mere coincidence?

Attempts to persuade sceptical colleagues that this was a valid result, and maybe being sent back to repeat the experiment many more times?

Pharmaceutical companies having to be persuaded that product development was a worthwhile investment?

Promotional campaigns needed to persuade doctors to prescribe new drugs, others to reassure the public that these are safe, and again to gain government acceptance for the widespread use of antibiotics? And let us not overlook Harry Lyme in *The Third Man* running a black market in dangerously diluted antibiotics, nor the over-promotion of antibiotics as a remedy for viral diseases that has encouraged the evolution of superbugs.

Thus science provided a valuable discovery whose effect was only realised through a vast and complex process made of activities that are often better described in terms of my religious, magical and artistic cultures. To what extent can persuading a busy tycoon to take your discovery seriously be described as a repeatable scientific experiment conducted under controlled conditions, or to what extent is it a manipulative exercise in mind control, suggestion and altering perceptions – probably assisted by artistically designed brochures and artfully worded phrases?

That is why I am happy to accept those extravagant claims as long as they are presented as an indicator of science's value, but not when they are presented as part of a strategy to downplay the role of magical thinking in our society.

The implications of what I am saying can be quite serious. In this Platonic world of shadows we see signs that the Earth is warming up and there are chaotic weather effects. One version of “Truth” tells us that all is God’s will and that he loves us and will protect the righteous from harm. Another “Truth” tells us that the world can be considered as a partially closed ecosystem that is subject to greenhouse gasses, so that society merely needs to reduce their production by a certain amount in order to re-stabilise the system. Both these higher truths have their value, but unless we also open our eyes in our “world of shadows” and recognise that it also includes human conservatism, inertia, commercial greed, rivalry, delusion and a host of other interacting “demons”, then we will get no-where.

What we actually need to save our world is a blend of science, righteousness, a love of beauty AND a whole lot of “causing change in conformity with will”.

26.5 Psychics and Sci-chicks

The magical culture I have described does contain a significant subgroup that would be utterly delighted when a Professor in the Public Understanding of Science starts appealing to human emotions and aesthetic values in order to popularise science, or even to defend it from its critics. For there are many people today that are asking for a “new science” that addresses and incorporates feelings, intuitions and things like “love”.

I recall a talk in Winchester in the late 1980s where some distinguished speaker gave a passionate presentation on the formation and evolution of the universe. When it came to question time one elderly lady spoke along these lines: “you have spoken most eloquently for nearly an hour about the universe, and yet you have not once mentioned the word ‘love’!”

An approving murmur from some members of the audience said a lot about the sort of gathering being addressed: it was a conference of New Agers.

There is a vigorous New Age current that considers that most of the world's problems would be solved if only scientists could embrace feelings and spirituality: that what we need is “a new feminine science”. They also argue that “religion must become less dogmatic” and embrace a more universal spirituality.

The widespread desire for new, fluffy versions of science and spirituality provides further evidence for a resurgence of magical thinking. Some might point to the current popular enthusiasm for TED talks as counter-evidence that science is in the ascendant. What I see more often is enthusiasm in response to science becoming less scientific – either as a form of artistic impulse, or a rediscovery of spiritual concepts, or providing evidence for the value of New Age practices and dietary fads.

There is popular delight when scientists publish books that show their feelings or spiritual beliefs, when religious writers salute scientific developments or when science is presented as a form of art, and I too rather like it, on one level. But really I would prefer each culture to recognise itself and be true to itself rather than try to deny or absorb other cultures. I really like and value the effectiveness of “hard science”, but am irritated when people try to use it to prove that God does not exist or that crystal healing “cannot possibly work”.

In the nineteenth century people like Thomas Huxley had a big struggle to get science recognised by the religious culture of academia, and now science has become a dominant power in that culture. But it has in the process taken on much of what I see as the vices of academia – the elevation of style over content; the fear of exploration that might not reach an acceptable conclusion, or confirm what is already known; the belief that the value of a body of work is proportional to the weight of its published pages and so on.

It might be little harsh to say that people get the science they deserve...

Oh come on... do let's be harsh.

26.6 Pax Romana revisited

I am intrigued by Stephen Pinker's suggestion (see Section 25.1) that we are witnessing a decline in violence, while at the same time feeling convinced that violence is on the increase. He dismisses the significance of Pax Romana by reminding us how brutal Roman society really was in terms of public demonstrations of slaughter to entertain the masses. He does also point out that today's populace seems to have a similar inexhaustible appetite for violence and murder as entertainment – but things have changed, because today's fictional slaughter is nothing but clever acting and special effects.

All-in wrestling fans enjoy acts of violence and, when the rules of combat are apparently broken by foul play, the use of furniture and fittings as weapons etc, this savagery is seen as part of the fun rather than being forbidden as un-

sporting behaviour. The effect is vicious, a fight to death, but it becomes clear that it is largely theatrical: a huge muscular wrestler will turn on a smaller man, apparently beat him to a pulp and when the referee tries to restrain him he will break out and go on kicking the fallen victim in the face – why is this allowed? Because that wrestler has been allocated the role of vicious, unsporting bully – “the man we love to hate” – to provide added drama to what might otherwise become a tediously repetitive performance. The two combatants are equal players in this archetypal scene of apparent bullying: the one acting vicious, the other acting the victim of what are actually skilfully choreographed assaults.

My question is this: was human nature so profoundly different in Roman times? Is it not possible that gladiatorial impresarios might also have discovered that even murder can lose its appeal with repetition, and that globs of tomato paste can do more for a swordfight than mere death?

Even in a society where life was cheap, each well-trained, physically exceptional and highly promoted gladiator must have represented a significant investment in time and resources. So why allow him to be simply killed when he could act out a dramatic, lingering and violent fake death, be secretly sold for the sort of massive fee we now expect for football heroes, then live on to fight in some other province under a new name?

I am not so much trying to deny that life was brutal in Roman times, as to suggest that the decline in warfare and serious conflict during Pax Romana might have been compensated for by the same sort of violent and bloody drama that is so popular today. If it is horrific to think of the Romans looking forward to, maybe, one afternoon a week of semi-real bloodshed, then what of today's entertainment, where nearly every household enjoys over a hundred TV channels and can watch endless murder, war, rape and destruction every day, every night and minute of the week?

What then about the Roman conquest of Europe? If relative peace was obtained by bringing so many warring tribes under a single empire, then surely the battles of conquest by a mighty Roman army were a bloody price to pay for such relative peace? It is a powerful image, to see a map showing the spread of the Roman Empire and to marvel at the military might that could allow one culture to dominate such a huge territory. But then I suspect that this too is an over-simple version of history.

An alternative version is that, as the Roman Empire spread, it became very costly to maintain a conquering army. An obvious solution would be to recruit people from conquered territory into the army rather than rely purely on Roman citizens, but that poses the risk of creating a population of non-Romans armed with all the equipment and military skills that once belonged only to the conquerors.

So an alternative strategy evolved: instead of conquering the local tribe, its ruling class would be introduced to the privileges of Romanisation – impressive stone houses with mosaics and under-floor heating, marble statues, fountains, hot baths and the glories of civilised city culture. To become Roman, it was suggested, was to become more than just a local tribal leader but a privileged member of a great empire. The only price of this honour was a duty to collect taxes from the tribes on behalf of Rome – and of course they had the right to bleed off some of that income in order to sustain their sophisticated lifestyle.

The result was to create a huge gulf between a few massively rich lords and the oppressed masses, a gulf that steadily increased with the cost of empire and the greed of the rich. This, it has been suggested, is why the glorious heritage of Roman civilisation was not better preserved after the fall of Rome: it was not so much that the barbarians were too stupid to understand its value, but more because they detested these remnants of centuries of exploitation.

The reason that I like this version of Roman conquest and decline is that it so clearly fits my experience of Western imperialism today. Taking Africa as an example: yes, it was initially conquered by the discipline, technology and strategy of European armies but, by the second half of the 20th century, it became increasingly expensive to maintain such military

might overseas. Instead of conquest by military force, what often happens now is that the top brass in any third world country will be introduced to the privileges of Western culture – fast cars, private jets, mansions full of wide screen home movie equipment and, no-doubt, gorgeous women. All they have to do to receive all this wealth is to hand over certain rights or projects to Western institutions and so generate a steady flow of money and resources out of the country to support those institutions.

So the rise of peace in third world countries does indeed go hand in hand with the spread of Western capitalism – it used to be said that there had never been war between two nations colonised by MacDonaldis burger bars. Stephen Pinker suggests: “...the decline in violence is an accomplishment we can savor, and an impetus to cherish the forces of civilisation and enlightenment that made it possible”.

It is just a pity that this decline in violence is so closely linked to a growing gulf between rich and poor, and an exhausted population having to work ever-longer hours to sustain a wasteful lifestyle and to support overseas economies.

26.7 What has Pax Romana got to do with magical thinking?

So I again see a parallel between the present time and the Roman era in terms of evolution from classical “Enlightenment” ideas of rationality, equality, humanism etc, towards what I call magical thinking; and I also suggest that today’s remarkable decline in violence described by Pinker might have its parallel in the Roman era if we studied it more closely. But is there any connection between these two changes?

In Section 17.2 I suggested some subjective reasons why one might shift from the solid realities of scientific culture to the uncertainties of magical culture. Colonisation by conquest, both then and now, was made possible by applying scientific thinking in terms of strategy, repeating successful tactics, developing superior military technology and so on. It can also be powered by “religious” beliefs that one has absolute rights to conquer, and so on. But as the conquest spreads, the complexity soars, and complexity is what tends to shift humanity towards magical solutions. The need for absolute truths and certain victories becomes a handicap when faced with complexity, a more holistic solution could embrace falsehood as well as truth: if the problem seems unsurmountable, then maybe the solution would lie in shifts of perception?

So what I am suggesting is that in both cases the strategy shifted from military conquest towards greater reliance on a process that could be described in various ways. Religious critics would call it a “demonic invocation” or “the worship of false gods”, while today’s chaos magicians would rather say that it became necessary to “create a servitor” for assistance. Neither term means much to most of the readers I hope to reach, so I will explain the process in marketing terms: it became necessary to alter the perception of colonisation from a “conquering imperialist force” to a “cool and desirable brand”.

Although there are probably people across the globe that respect America (as a symbol of Western culture) for its smart bombs, I am pretty sure that they are a small minority compared with the billions who consider US (and more generally Western) culture to be “cool”. Even those who rebel furiously against US culture do so with a hint of “it’s so goddam cool that I hate it”.

So I am confident that third world despots – lured by promises of yachts, private helicopters and glittering watches to hand over their national economies to Western corporations – are acting on very similar motives to those tribal leaders that signed up to the Roman empire. What does the reader think?

26.8 The profit motif

One objection I have received to this comparison between Roman and Western cultural imperialism is that the Roman model was based on encouraging high taxation to bleed the tribal economies, whereas today's capitalist culture positively discriminates against taxation by encouraging the participating nations to minimise government, privatise industry and reduce taxation where possible. That is true, but it simply provides further evidence of magical thinking.

The Roman Empire certainly gave taxation a bad name: early on Jesus was saying “render unto Caesar the things that are Caesar’s”, but by 500AD the Empire was on its last legs because of all those who had suffered too much taxation. This bad name has persisted to today, when taxation has such a poor image – reflected in phrases such as “a taxing role” – that it amounts to political suicide for anyone to suggest increasing taxes.

This is no mere prejudice, for there is a rational argument against excessive taxation in that it amounts to putting the brakes on the economy. If a transaction has, say, a ten per cent tax imposed on it, then it means that ten per cent of the transaction value has effectively been removed: it is no longer in circulation, and that is like taking blood from a living being. The counter argument – that eventually it might pass back into the economy as public spending – does not alter the fact that the lengthy processes of bureaucracy will delay that re-spending, and maybe divert the money to pay off national debts instead of recharging the national economy.

The real argument between left and right politics is not so much whether or not to tax, but rather what level of taxation can hit the right balance of providing essential services without damaging the economy too much.

So, even relatively left wing governments need to find a word with positive associations to replace “taxation”, and the chosen word has been “profit”. You make a big show of reducing tax by a small amount, and then you turn public services into “profit centres”. The public pays for the service, the department is congratulated for making, let us say, a ten per cent profit, the public is thrilled not to be paying so much tax: meanwhile the additional amount they have been charged in order to generate ten per cent bottom line profit has been removed from the economy – just as if they had been taxed by that amount.

Turning a public service into a profit centre is not only a trick to introduce stealth taxation, it also leads to higher taxation. I had the unhappy experience of interaction with one of these new profit centres when I had to renew my passport a few years ago. Just as the Post office in the 1960s had allowed postal services to deteriorate so badly that people would welcome the inauguration of a more costly “First Class Post”, so did the remodelled Passport Office begin offering such diabolically slow, unpredictable and opaque service that I would have been willing to pay even more for a “Gold service”. Such a process will build towards a “black card” service that actually delivers a passport without unnecessary delay, but at a price only affordable by the mega rich.

The growing number of such mega rich customers is conveniently

supported by the fact that profit not only gives taxation a positive spin, it also privatises the process. Any company, let us say a supermarket chain, can end its year making that ten per cent bottom-line profit and be praised for having bled that sum out of the economy and into the accounts of shareholders. As with taxation, that money will barely even trickle back into the economy because such shareholders are mostly too rich to need to spend the money. One might wish companies that generate such market inefficiency to be ordered to restore that bottom line profit to the economy by paying an appropriate penalty. They should be made to reduce the cost to the consumer, or pay higher wages or spend more on research and development in order to restore market efficiency. But instead these parasites are hailed as

champions.

So positive is the image of profit that I have even witnessed several presentations to industry by socialist and environmental pressure groups that began with the words: “Of course we fully understand that the business of business is to make a profit, however...”

So what I am suggesting is that today’s flow of wealth from third world countries into Western economies is basically no different from the process that once bled the wealth of Europe’s tribes into Rome – except that it has been magically transformed by a change of branding or image. The same growing divide between rich and poor, the same wage-slavery of the masses – but now it is in the name of liberty rather than oppression.

Will it take five more centuries before the word “profit” becomes as hated as “tax”?

26.9 In the beginning is the word

That last section suggests the close links between magic and language. I drew attention in Section 22.3 to the fact that the birth of magical thinking seems to coincide with the origins of language – from the magical thinking of a toddler first learning to speak, to the birth of humankind and the magical thinking of a pre-literate society. In the confusion and complexity of undifferentiated experience, the naming of things brings power over them by grouping them into patterns. This magical process becomes also a means to share with others, and this initiates the demise of magic and the growth of art – until the point where an experience is only authorised if it is accepted by the whole religious group. And there lies the peer review process at the heart of scientific culture.

In Section 13.2 a distinction was drawn between the scientific use of language – where a word is chosen for the meaning it has – and the magical use of language for the meaning a word conveys or transports (as in the Greek word μεταφορα). Thus the word “Turbo” on the back of a car has some meaning, whereas the same word on a bottle of aftershave has no literal meaning and yet does convey images of masculinity and power to enough people to justify marketing the product.

Among the few languages I am acquainted with, English stands out as being unusually magical in this respect. Probably because it is a hybrid of so many cultures that have in the past invaded Britain and left linguistic traces, the English language is left with an enormous number of near-synonyms with almost identical meanings.

I recall as a child climbing the spiral staircase in Bristol's Cabot Tower with my mother, when a large gentleman came puffing up behind us complaining that the staircase was so small. My mother asked him if he was of German extraction and he said yes – but how could she know that, because his English was so perfect? The answer was that instead of using the word “narrow” for the staircase, he had said “small”, a word apparently derived from an equivalent German word. I later gathered that such tiny idiomatic distinctions made it very difficult for German spies to avoid being detected in the Second World War.

I am one of those people who believe that after a good meal the correct thing to do is not to stay seated at the table but to retire to an easy chair to drink coffee. So I would like to say “Shall we take coffee in the...” Now you can complete that sentence in at least three ways – by saying “drawing room” “sitting room” or “lounge” – and I once had a friend who could with some accuracy deduce a whole lot about one’s upbringing simply from the words chosen to complete such a sentence.

Indeed the words chosen in the English language convey a whole raft of significance beyond their literal meaning, so that they often say more about the speaker than the actual message the speaker wishes to express.

So is

it so fanciful to align the global diaspora of magical thinking with the spread of English language? But perhaps other languages are equally magical? Please enlighten me.

What is the impact on our supposed Enlightenment culture when it becomes increasingly propagated in a language where meaning is subservient to impact, where the key principle of equality is itself eroded because two properly equal words can bear vastly different payloads, and where “it ain’t what you say but the way that you say it”?

Strictly speaking, any discussion of where today's revival of magical thinking is coming from, or what causes it, has no place in this book, because causality and justification play little part in magical thinking. But, as they say, when the finger is pointing at the Moon, it is the Moon we should see and not the finger – so the spread of English language and British culture does suggest another line of enquiry for those seeking new avenues for research.

Beginning with “magic proper”, there is a case to be made that Britain must carry a lot of the blame for a global revival in “hard core” magical thinking. The most quoted authorities, and the authors of reference books for today's magical theorists include Aleister Crowley, Austin Spare, Dion Fortune, Gerald Gardner, WE Butler, Gareth Knight and several members of

the Golden Dawn occult society that reached its zenith at the beginning of the twentieth century. More recent sources of inspiration include Kenneth Grant, Pete Carroll, Phil Hine, Ray Sherwin, Ramsey Dukes, and other members of the British chaos magic current. There are plenty of other occult influencers – Eliphas Levi from France, Madame Blavatsky from Russia and a new wave of chaos and Crowley-inspired magical writers emerging in the US and across the globe – and yet a surprising amount of magical theory can still be traced back to Britain, a small county that had already earned its magical reputation in Roman times.

Extending to the broader magical culture that I first introduced as a “game-playing” culture, then there is a definite case to be made for Britain’s role in promoting games. As well as being a source for specific games such as cricket, rugby and football, Britain played a major role in reviving today’s Olympic games. There is also something very English in Stephen Potter’s “Lifemanship” concept – seeing all of life as a series of games.

The sanctification of profit to disguise taxation, described in Section 26.7, has much to do with the formation of the Bank of England and what happened in London's 17th century coffee houses. Britain also played a major role in the revival of branding and marketing, and there could also be a direct connection between this type of magic and the metaphorical nature of the English language.

I saw further evidence of Britain's role in eroding Western Enlightenment values in a recent movie about the birth of the CIA. Nascent American intelligence forces, brought up in the Enlightenment traditions of transparency, integrity and honesty, had to receive instruction from the British Secret Service on how to lie, dissimulate and deceive (and their teachers did a superb job, by the way).

A more recent history-based movie, *The Imitation Game*, illustrated the paradoxes of game playing to the point where the team at Bletchley Park, having cracked the Enigma code, realised they could not use their power directly to save allied lives – because to do so would lead the Germans to conclude that they must have cracked the code, and so the whole secret advantage would be lost.

Replace transparency and openness with such secrecy and you have the basis for an occult sect that garners power by deception and creates alternative realities where men can kill goats by staring at them, where remote sensing can track enemy submarines, where something as (undesirably) life-affirming as a microbe can be re-labelled as “a weapon of mass destruction” or, even more ominously, a “WMD”, and where the very non-existence of WMDs becomes sufficient reason to believe in them.

Put the fate of your nation in the hands of occultists and you will indeed have reason to wonder: “whatever happened to the Enlightenment?”

One might even be able to reframe my theory of four cultures along these lines: Religious culture is the one that defines a game and sets the rules; Scientific culture is the one that tests the rules; Arts culture is the one that breaks the rules; and Magical culture is the one that plays by the rules, but knows it is “just a game”.

26.10 In the beginning is the word – part 2

A very basic technique in demonology is to gain power over a demon by knowing its name, and this tendency is also on the rise. Since coming to South Africa I have occasional annoying bouts of sneezing, while those around me tell me it is “hay fever”; I used to suffer extended periods of melancholy while others in a similar state label would label it “depression”.

All around me I see notices about new conditions such as “irritable bowel syndrome”, and people experiencing a measure of immediate relief, or a sense of power over the condition, simply because a doctor has given it a name. Politicians, pharmaceutical and other companies understand that, once a label has been given to a tendency in society, it can then be directed as a source of power, money or votes – a pact with a demon instead of mere banishment. Similarly one can change a demon’s name and make it seem like an angel – as with the transmutation of taxation into profit.

It is interesting to compare the rejection of the word “magic” with other demonised words such as “communist” or “fascist”. The religious tendency is to form exclusive tribes and it is often easier to define a cult in terms of what it is not rather than what it actually is. So there will be a word used to describe the heresy of an outsider, and this word serves as a weapon to defend territory, but that word must not be allowed to fall into the enemy’s hands.

Take my apparent criticism of capitalism in Section 26.6: it might lead some readers to label me a “communist” and they would not allow me to deny that label. But were I to read up Marx and Engels and decide that maybe I am a communist, then similar critics would insist that I was not a communist, but merely a “lefty poseur”. Suggest, in leftist circles, that there is virtue in discipline and you will be labelled a “fascist”; read up the original Italian fascist philosophy and decide that maybe you are at heart a fascist, then the same people will insist that you cannot really be a fascist unless you also believe in exterminating Gypsies and Jews.

Similarly with the politically incorrect word “magic”: those who express their enthusiasm for astrology will be sneered at for “believing in magic”, but when I try to explain why and in what sense I do believe in magic, similar critics will insist that what I am describing is “not really magic”. It is incongruous that those who deny magic should also claim to understand it better than I do.

There is a further, rather subtle relationship between magic and language that I will mention here, even though it is more the domain of “magic proper” than my general discussion of magical culture. Just as magical thinking appears to emerge like some weird miasma from the pre-verbal abyss, so does magical practice often include a process that resembles a rising out of those depths to verbal clarity and then plunging back into pre-verbal incoherence.

The British magician Austin Spare popularised this technique by encapsulating a wish in a “sigil”. In essence the process consists of first clarifying the wish as accurately as possible into one simple sentence, and then re-obscuring it by compacting that sentence into a simple but apparently meaningless shape that still contains the sentence in essence but not in appearance. His justification of this technique is that – by distilling a vague desire into a precise format then rendering the clarity apparently meaningless – so will the encapsulated wish bypass human consciousness and speak directly to the unconscious mind.

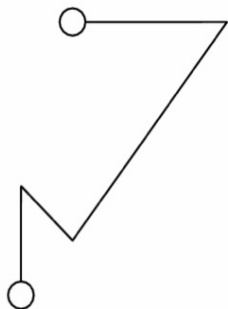
Can the rational mind think of anything more absurd than to make all the effort of obtaining clarity and then undoing the good work by reducing the result back to obscurity? It may be absurd, but something very similar has become normal practice in our society, with a growing demand for all communications to be encrypted.

Consider also the phrase already referred to: “irritable bowel syndrome”. This is a relatively clear and meaningful verbal expression of a condition, and yet it gains its greatest social power when shortened to the acronym IBS. To the outsider all meaning is obscured, to the initiate all meaning is there and becomes all the more meaningful for becoming the password to a relatively exclusive cult. Acquired immune deficiency syndrome sounds bad enough, but shortened to AIDS it becomes a demon so scary that it has ruined reputations, shaken governments and driven people to suicide. And in recent years the letters WMD have provided reason enough to destroy nations.

These magical sigils can take many forms and need not include recognisable symbols such as letters of the alphabet. One politically-correct “non-magical” term is to call it a “logo”, but the symbol can equally be a short musical phrase, a specific colour registered as a trade mark or whatever. One more example will simply illustrate the diversity rather than outline the scope.

In ancient evocations of a planetary spirit one way to construct the spirit’s sigil was to take the magical square of the planet (an array of integers associated with that planet) and connect certain integers in sequence with straight lines to create a sort of zig zag line that is then lifted from the square and used as a symbol to assist evocation.

6	32	③	34	35	1
7	11	27	28	8	30
9	14	16	5	23	24
18	20	22	21	17	13
25	29	10	9	26	12
36	⑤	33	4	2	31



This figure shows the magic square of the Sun, and the sigil of the Sun's planetary angel Nachiel generated in this way.

I have seen a similar technique applied by marketers to encapsulate and evoke the spirit of an organisation. Eight radiating lines are drawn from a point and treated as axes for eight parameters of organisational character – something like Coolness, Innovation, Reliability, Profitability, Social Conscience, Reputation, Longevity, Staff Loyalty, or whatever. The organisation is scored from one to ten in each quality and the scores are marked on the eight axes and then once again the points are linked by straight lines to produce, in this case, a zig zag star shaped sigil that is used to encapsulate and evoke the company spirit – more properly described as the company’s “brand”. I am told that such “octoanalysis” can be used to encapsulate the character of a game.

The secret of success in magical sigilisation is to distil the symbol to extreme simplicity – and so open a door to the most universal “forces” – and yet retain some vestige of meaning. Going back to the Roman era, Christianity worked through a number of logos – a fish symbol, then variations on a Chi Rho circle – before hitting on the winning formula of a simple cross that embodied both sacrifice and the sword of victory.

When it comes to the design of today's corporate logos, again the emphasis is on simplicity, but also a similar requirement to invoke "meaning" into the logo. In Chapter 15 I described a New Ager finding a piece of quartz crystal and deciding to ritually cleanse it, meditate with it etc – a process that I likened to planting and cultivating "seeds of meaning" until the crystal is transformed into a "power object". On the Internet I came across a similar notion expressed by a partner at a graphic design firm Chermayeff & Geisner & Haviv, creator of many winning logos: "It's never love at first sight," he claims. "A good logo, a good trademark, gains meaning and power over time."

26.11 A rise in talismania

Related to the almost universal adoption of logos is the magical creation of talismans to achieve a particular goal. As with the sigil, the talisman is constructed by incorporating as many symbols of the desired outcome as possible and then distilling them into a single material object designed to attract that outcome. This is most noticeably practiced in the popular end of the arts culture: the plot of a movie will be shaped to a particular formula associated with audience popularity and certain images and themes associated with commercial success – a car chase, a romance, some evil Nazis and so on – will be woven into the action in order to create something that lies somewhere between a work of cinematic art and a talisman for invoking commercial success.

In our supposed age of reason we are

no longer surprised when Olympic athletes and top sports personalities will not perform without wearing their favourite talisman. Glossy magazines are financed by pages showing a picture that encapsulates some desirable condition – such as a relaxed group of glamorous people aboard a luxury yacht beneath blue skies – and the shape of the advertisement will direct the eye towards a particular object, such as an expensive watch adorning a tanned wrist, in order to present it as a talisman that embodies such a glamorous lifestyle. Enough people will spend money on this talisman to pay for the advertisement and keep the magazine alive – and I have already commented on the people who will pay to wear a logo that is believed to make them appear cool. If you do not practice magic, you become its victim.

Talismans are widely adopted to invoke good fortune, but they also provide protection against evil. Just off the town square near where I live is a prominent notice that reads:

DISCLAIMER

Any person entering the premises
does so at his/ her own risk.

The owner of the premises (including the employees and agents) shall not be held liable (and any person acting in a capacity as guardian indemnifies the owner, its employees and agents) for any loss and or damage for personal injury (including fatal injury) or to property arising from any cause whatsoever, directly or indirectly, out of any negligent act or omission of the owner or its employees or agents.

**PRIVATE PROPERTY
RIGHTS OF ADMISSION
RESERVED**

This is a recent replacement for another even more vague notice that stood there for years, so it is clearly considered to be important to someone.

The trouble for me is that this notice is on a wall in an open area with no indication whatsoever as to what or where “the premises” is. You might expect it to refer to the area beyond the wall, but that is inaccessible; or does it refer to the area where the reader is standing, but this appears to be open space with no obvious boundary. In terms of actual meaning, I gather from the notice that, should the owner absent-mindedly detonate a car bomb nearby, then all present must consider the attendant malaise to be just “tough luck”.

On the other hand, if such a disaster should happen, the recent and prominent appearance of this notice would suggest somewhat suspicious prescience on the part of the owner.

So I find it easier to interpret this notice as a talisman against some undefined evil. As with the notice on a recently purchased bottle of almond butter – warning the purchaser that the product might contain nuts – I assume that the people who paid for these notices had heard rumours or been approached by a smartly convincing person in a suit who told them that their business and fortune would be severely at risk unless they arranged a consultation for a suitable talisman to be personally tailored to “protect their interests”.

As with so much magic nowadays, this would be disguised as science. I have already explained why I ascribe legal thinking to a place in scientific culture (though, of course, the legal profession itself is a religion) – so I assume that such talismans are promoted as legal necessities or safeguards, rather than a means to drive away witches or bad luck.

Often I am faced with a downloaded software update that will not work unless I hover the cursor over a button with AGREE written on it and click the mouse. Is it assumed that my action amounts to acceptance of some agreement? If I was truly believed to be giving an affirmative answer to a question, then why was there no question mark after the word AGREE? What I see written on the button is a command, not a question. More elaborate software gets round this

problem with a statement that clicking of the NEXT button will imply an agreement to certain conditions, but is this really legally binding? A proper legal document would surely require my written signature to be supported by the dated signatures of two professional witnesses, in order to exclude the possibility that I had accepted the conditions under duress, or while not of sound mind.

There has been a long tradition of keeping a formless tide of evil at bay by the sale of protective amulets, spells and talismans. In South Africa every third TV advert seems to include the meaningless phrase “Ts and Cs apply”. A voodoo doll on the dashboard can deter certain car thieves, crossing my left foot when I see a single magpie certainly does reduce sorrow, and so it is nice to think that the plaque near Simon’s Town Square is helping someone to sleep better at night. But I do wonder whether a traditional African Sangoma might not provide a cheaper service than a lawyer.

26.12 Narcissism and the problem of power

In Chapter 23 I argued that it is wrong to equate magical culture with extreme narcissism and the lust for power. But I did also admit that these are big factors in encouraging people to resort to magic, and narcissism and lust for power can be very obvious among newcomers to any magical culture.

The significance here is that, just as the myth of Narcissus became popular around the time when magical culture was beginning to take off at the start of the Roman era, so has a rediscovery of the myth returned with the current resurgence of magical culture.

Narcissism was a popular theme taken up by Oscar Wilde and other artists around the late Victorian magical revival, when it was also used to describe pathological self-obsession. But it re-emerged with new vigour towards the end of the twentieth century magical revival in a book *The*

Culture of Narcissism by a man appropriately named Lasch – as he lashed out at a lot of the signs of magical culture that I have been suggesting. We had already been told about the “Me Generation”, and similar accusations are being rehashed with a number of recent articles on the subject appearing in The Boston Review, The New York Times, The Week and other journals. I do not want to get further into this discussion, but simply to point out that a rise in narcissism both as a positive self-exploration and as an obsession is for me another sign of a nascent magical culture.

More disturbing to me is the lust for power aspect. I recall a remarkable discussion in BBC's The Forum podcast: it was a group of women from places as diverse as Iceland, England and the Middle East brought together to discuss the "glass ceiling" and the need for more women in high places. Unlike the earlier examples of New Age thinking in Section 26.4, this was not as simple as "all you need is female gender", because there was recognition that it was possible to have a woman at the top and still end up in the same mess – with Margaret Thatcher as an example. What was remarkable was the number of times in the discussion that the phrase "more women in positions of power" was repeated, while I do not recall having heard them even once say "more women in positions of responsibility".

The idea that being in government offers positions of power and not responsibility is incongruous in my scheme, where politics is seen as a religious culture. This is because, as explained in Section 23.4, I recognise lust for power as a vice in magical culture, whereas the emphasis in religious culture is more properly on surrender and responsibility. So becoming a government minister should really be recognised as the shouldering of a burden, taking on a serious responsibility, in return for which one may be granted some compensatory privileges.

Instead of this religious attitude, the rise in magical thinking encourages a belief that being “on top” is not so much a sacrifice as a reward for having fought so hard to get there; and that the attendant privileges are also a reward, rather than a crutch to ease the burden and enable efficient governance. Given this set of beliefs, “being on top” implies a position of power and this is highly attractive to the sort of penis expanders, cod martial artists, sociopaths and criminals that would normally gravitate towards magic.

These are the people who now populate our boardrooms and governments. One might say “good riddance” for having found somewhere to dump them, except that government and boardrooms are no more than fake substitutes for worthwhile magical cults. Take martial arts as a very good

example of magical culture: as suggested in Chapter 23 I cannot deny that it attracts many young people for disreputable reasons – the desire to beat up your enemies is very human, but it is frowned upon in a society steeped in religious and Enlightenment values. But, being a magical discipline, it can be the finest remedy for young thugs, because they soon discover that its teachings are based on honour, inner strength, discipline, right action and all sorts of things beyond even my understanding. As with many magical cultures, some of these thugs will give up in disgust and become businessmen or politicians, but those who persevere with openness to the magic may become even more enlightened than The Enlightenment.

So, once again, I am looking for evidence of a swing towards magical thinking and I am finding it. The top of any business or government hierarchy is, from my social point of view, a religious posting – and the word “hierarchy” does imply a sacred structure – and so the label over the door to such a position should bear the word RESPONSIBILITY writ large. But if this is torn down by wishful thinkers and replaced with the word POWER, then it will attract to that position the sort of scum that could find healing in a magical culture but will only find greater inflation in a relatively extroverted religious culture.

It might be a little harsh to say that society gets the rulers it deserves...

Oh, come on again... Let's be harsh!

26.13 Conjunction as magic

Having thrown up so many suggestions for exploring subjects about which I know so little, it is a pleasure to turn to one that is quite familiar to me. I have always had a love of and interest in what used to be called “conjuring” but what is increasingly adopting the label “magic”. (That one fact makes it an outstanding and interesting exception to the general rule that most practitioners of magical culture would far rather avoid the word “magic” and pretend to be practicing science.)

It was not always so. When I became an associate of The Magic Circle around 1980 there was the beginning of change in the air, but conjuring still did not have a very good public image: it tended to be seen as entertainment for children, or associated with brash, loudly dressed performers relying on “adult” jokes and the materialisation of women’s panties to get a laugh.

That is not to say that the art was altogether in decline, for there had been many superb performers like Dai Vernon and Lewis Ganson but their emphasis had been more on “conjuring for conjurers”: demonstrations of skill before an audience of fellow conjurers rather than a massive general public. So this was what I was expecting when I began attending Magic Circle evenings in London.

One of the first evenings I attended focussed on “mentalism”, the mind reading type of conjuring, and I was astonished when the elderly performer began with a speech along these lines: “Before I begin I would like to make it absolutely clear that the demonstrations you are about to witness are based on simple trickery and I make no claim whatsoever to any occult or psychic powers...”

The performer was making every attempt to distance what he was doing from “real magic”. How different from the heyday of public magic around 1900, when the performer would very likely have pranced about in exotic garb and made a melodramatic speech suggesting that he was about to attempt very difficult and dangerous experiments in mind control that he had only managed to master during privileged years spent at the feet of mysterious Himalayan adepts...

This performer, however, was basically making every attempt to banish such magic and reduce his show to a sequence of puzzles – “how was that trick done?” – without the courtesy of revealing the answer to the puzzles at the end of the evening. Just to underline the absurdity of this act, it was presented to a closed group of Magic Circle members, all of whom would already be fully aware that they were watching a show of trickery. So why this exaggerated and unnecessary denial of magic?

I decided that was a reaction against another movement that actually did dare to embrace magic. Some years earlier Uri Geller had astonished the world by demonstrating his ability to bend metal by mental power alone, and mainstream conjurors were shocked that, at a time when serious conjuring had such a low reputation with the general public, a second rate performer could create such a sensation by simply not mentioning that he was a conjuror – and so becoming a magician in the public eye.

Rather than follow his example, the conjuring fraternity mostly reacted by distancing itself from Geller – following the unspoken rule that the closer your position to some unpopular community might seem, the harder you must denounce it. Rather than admit that Geller was providing something that the public wanted, they rejected him as a fraud and a charlatan. While Geller had woken people to mystery – and stimulated months of speculation about life, the universe, what might be possible and what the human mind might achieve – most conjurors went on simply “doing tricks”.

Meanwhile a few performers like Cameron in Scotland, Doc Shiels in England and Eugene Burger in America were developing a new movement called “bizarre magic” that did go out of its way to restore drama, pretence, storytelling and glimpses of the grotesque to their conjuring shows. Why levitate a shiny ball under a silk handkerchief when the same basic trick could present a skull, supposedly looted from an Aztec temple, levitating beneath an ancient and cursed mummy’s shroud?

There is still a division in the magical fraternity between those who want to be seen as clever illusionists and those who wish to demonstrate mysterious powers. And between those extremes lies a whole spectrum of performers who, in various degrees, make no obvious claim to occult powers but like to present strange happenings and leave the public to decide for themselves whether they are witnessing trickery, superhuman skills, or actual paranormal phenomena.

What really interests me is the changing response from the public to these shows. When today's street performers do their stuff on television, we keep hearing responses like: "Oh my God! He walked straight through that wall!"; "the bottle just vanished!"; or "he looked at me and immediately knew what I was thinking!" Whereas I, and people of my generation, would more typically say: "It looked like he walked straight through that wall!"; "the bottle just seemed to vanish!"; or "he seemed to know just what I was thinking!" This might seem a small difference, but I suggest that it reflects an important change in attitude during my own lifetime.

I described at the start of this book how the 1950s were a heyday of scientific materialism – scientific thinking was still high fashion before the hippy magical revival, and the

slower shift towards magical thinking I am describing in this chapter had not progressed so far. I also remember the experience of a hypnotist at that time, giving a show for wounded war veterans where one man was so sceptical that he did not even accept the reality of hypnotism despite all the demonstrations. This was the extreme materialist viewpoint of the 1950s, the sort of person who would say: “don’t give me all that psycho nonsense or fairy tales. I want hard evidence and facts.” Such a person would insist that “only seeing is believing”, and would resist any suggestion that you could trick him into experiencing something that was not real. In this case, as the hypnotist presented the sceptic with more and more extreme post hypnotic suggestions, there was little response – until the point when the subject witnessed something that simply could

not be explained away, and had a sort of temporary mental breakdown at the shock of what he had seen.

So the relative unpopularity of conjuring in the 50s, 60s and early 70s was not totally the fault of conjurors: there was also a significant number of people then who did not want to be fooled or surprised by apparent miracles, because that would present a challenge to their trust in the rock-solid certainty of visual evidence and experience. Such people are still around, I guess, but my generation more typically learned to accept the possibility of illusion, including hypnotism, suggestion and tricks of perception.

Neo-Platonism developed in the Roman era as a means to make some rational sense or explanation of an increasingly magical worldview. It did so by providing a framework to bridge

the gap between spiritual or paranormal experiences and what should happen. In a similar fashion, a new form of Platonism was developing during my adolescence, of the sort described in Chapter 6. In this revived Platonic version of reality it again becomes permissible for me to have psychic or spiritual experiences, to see miracles or be healed by Reiki, because the subjective world I live in is deemed to be just a fleeting shadow of a real, objective world that is made up of subatomic particles subject to a set of physical laws; and that this reality is projected onto my screen of experience via five senses and modelled within a brain that is part of that higher physical reality.

So, unlike that old-style materialist, I could witness something like the Indian rope trick without having a nervous breakdown: because I would know that my “senses must be deceiving me”, and I must be experiencing a demonstration of mass hypnotism or a clever trick. Instead of being threatening, conjuring becomes enjoyable and it even provides the reassurance of confirming our new Platonic worldview.

I remember discussing this with the famous skeptic Martin Gardner at a magic show, and I explained to him that when I saw really good conjuring I actually did not want to know how the trick worked, as I got my biggest pleasure from the experience itself. It was enough simply to know that it must be a trick.

But today's conjuring fans seem to go further. It is no longer so important even to know that it must be a trick. The first reaction is no longer "he seemed to vanish" but rather "he just vanished!"

Now I am still pretty sure that, if you took these people aside after the show and interrogated them to see whether they really believed that they had just witnessed a paranormal demonstration, then you would find them demurring and mostly agreeing that it "must have been some sort of trick". But my point is that the immediate reaction is far closer to an acceptance of "real" magic. Where my generation would see an illusion, and the earlier generation would refuse even to look, today's generation actually sees magic – even if it later retracts from that full acceptance.

This level of acceptance of mystery is still far from a total belief in or acceptance of magic, but I see it as a significant change to have happened in just half a century, and in face of five centuries of Enlightenment values.

26.14 Tales of the unexpected

A similar openness to wonderment is permeating other forms of public entertainment. Even during times of greater rational scepticism, there was always a place for ghost stories and magical fantasy. When Conan Doyle wrote *The Hound of the Baskervilles* at the turn of the twentieth century he presented a splendidly creepy ghost story but adopted a convention that has lasted for a long time in fiction. That is to end a mysterious tale with an explanation that the whole thing had been a clever hoax: the hound had been dressed up to frighten the local population away and leave the field clear for smugglers under the cover of darkness.

That tradition survived pretty well into the 1960s but began to give way to a different convention: one where the mystery was mostly explained, but left some loose ends. This is the type of plot where the hero realises that the whole Voodoo experience had simply been a drug-induced hallucination and yet... where had that mysterious little tattoo on his left hip come from? Or the village vampire story that turns out to be a complete delusion and ends with a service of remembrance by the graveside: then, as the mourners walk away in a state of grief and relief, the camera moves closer to the gravestone and we see it shudder ever so slightly...

This quasi-explanation is the sort of supernatural tale my own generation expects, and there was a lot of it in shows like *The X Files*. Now, well into the twenty-first century, there is a new breed of supernatural drama where some magical happening is accepted apparently without question and it forms the basis of the ensuing plot: how do ordinary people cope with a magical reality?

Take the TV series *The Leftovers* that begins with the mysterious and immediate vanishing of one tenth of the population across the world. Or *The Misfits*, where a mysterious storm leaves a group of teenage miscreants each in possession of a magical power. Or *The Da Vinci Files* where the psychic investigator is assisted by a ghost. Or *Outlander*, where the heroine faces the very realistic challenges that might confront a twenty first century woman being suddenly transported back to Jacobean times.

In my own lifetime I have seen tales of the unexpected morph from “you may still believe in magic, but you would be wrong” to “magic might actually happen, so how might people cope with it?”

26.15 The kingdom of the trolls

I could go on forever, selectively finding evidence for a return of magical thinking – that is how magical thinking itself operates. So let me seek in this week’s news on the Internet for one truly up-to-date example as I write this section.

An article in the BBC News magazine, based on an edited transcript of Jamie Bartlett’s Four Thought, describes his meeting with Internet trolls “those people who take pleasure in offending or insulting strangers via the net”. He meets Zack whose “favourite technique is to join an online forum of a group he doesn’t like, intentionally make basic grammatical or spelling mistakes, wait for someone to insult his writing, and then try to lock them into a brutal argument about politics.”

This can be extremely hurtful to the victims, but Zack is quoted saying: “Trolling is not about bullying people. It’s about unlocking situations, creating new scenarios, pushing boundaries, trying ideas out, calculating the best way to provoke a reaction... Creating a scene in order to get more people to think about the issue being raised”.

Having little experience of this, I will invent an example that might cast light on the cruelty and maybe also some of the thinking behind trolling. Imagine a lonely handicapped person who starts a campaign to bring together others like himself for mutual support. A web forum is created where other handicapped people can share information about inadequate facilities or misunderstanding about their challenges, as well as sharing positive advice and news about where to find good provision.

This is a wonderful and worthy “religious” project in that it brings together isolated people with a common cause and a real sense of fellow feeling and much needed mutual support. So imagine how they might feel when a troll joins their forum and posts the following pastiche of illiterate sniping: “I hate this fucking self-rightous twaddle. You cripples are a real drag on soceity, holding up traffic and wasting valuable space with your bloody pushchairs and ramps. Why you don’t the decent thing and kill yorselves so that real people can breed proper helthy kids without your dodgy genes?”

A furious reaction might well result, tearing into this “illiterate and unfeeling slob who clearly knows nothing about medicine, the dangers of Nazi euthanasia madness or the problems of the disadvantaged in our society”. Who could tell whether the troll’s attack was anger or sheer sadism?

Can there be any value in such an unprovoked attack? It is hard to see it, but imagine what also might happen to someone who opened a small restaurant on a first floor site – being unable to afford a shop front – and built up its reputation until it won a Michelin award. A member of the handicapped forum wants a table at this restaurant, rings on a very busy night and is told, a little brusquely, that there is no wheelchair access. This touches a nerve and results in an angry posting on the forum that escalates into a campaign for a mass boycott of the establishment. This is unfortunate because the same might happen even if the owner had actually considered the problem and wanted to provide access, but had been overwhelmed by the problem of making structural changes in a listed building.

What can happen is that a group founded on mutual love and support to defend itself against bullying from an uncaring society, then itself morphs into an uncaring bully prepared to go to war against disadvantaged people that dwell outside its circle. You could say that the troll is playing a game by putting the cat among the pigeons to see what happens. Could it be, as Zack claims: “That is what trolling is all about – creating a scene in order to get more people to think about the issue being raised.”

This looks to me a very good example of the tension between magical and religious cultures. The forum I suggest epitomises the value and fraternity that a religious body can provide, how it can seem utterly blameless to its members and to most of society until it crosses the path of an outsider – in this case an innocent restaurateur – and the knives come out. Meanwhile we have another outsider who is curious to put them to the test, to explore human nature and, when challenged, respond in such an unfeeling manner. This could be the action of a magical thinker, a “game player” of the sort I have described.

This is one of the hardest things for a liberal like myself to face: how religious culture can both unite and fragment society. Yugoslavia had reason to be a proud nation because it had achieved a form of Communism that was in many ways the most successful of all. Then that religious belief became overlaid with another one that turned Christians against Muslims, and the resulting fault lines split neighbours and even families and lead to vicious civil war.

Perhaps we do need cruel trickster jokes to remind us of these dangers. Asked if he reckoned he was succeeding, Zack replied: “I dunno, but it was fun.”

26.16 Brexit as magical thinking

Torn between two inclinations – the idiocy of trying to extend my model into areas about which I know very little, versus the wish to make my examples reasonably up to date – I have decided to add a further comment, this time based on the “Brexit” referendum that happened as I edited the book.

In this chapter I have drawn parallels between current times and the centuries of the Roman Empire. In a sense one might see the European Union as an attempt to reconstruct the Roman Empire, except that the latter survived for five centuries while some are questioning whether the new Europe is going to survive much more than five decades.

The common notion is that the Roman Empire fell because the tribes it united were too stupid or disorganised to maintain its structures, but I referred to the alternative theory: that it fell because the common people actually did not like an empire that taxed the poor so heavily for the benefit of the wealthy few. Some commentators seem to be suggesting that similar doubts helped to support the Brexit vote.

This is a pity. Although I am one of those people who accept the label “English” rather than “British” when I fill in forms, I also see myself as a European. I choose English rather than British because it is a label that most people think suits me – even though I am half Scottish. Though not greatly travelled, I have not been to any European country that has failed to delight me. Yes, I love Europe.

Not only do I believe that the majority of UK citizens love Europe, they were also, I believe, fed mountains of very wise advice from distinguished experts as to why they should vote to remain in the union, and why it would be a disaster to leave it. This, it occurs to me, might have been part of the problem.

Consider what was said in Chapter 6 about the “common man” enthralled by mere shadows on the wall of a cave, whereas the wise Platonist understands the higher, objective truth that is casting those shadows. This idea was dominant for centuries across the classical Greek Empire then, in Section 16.4, I suggested that it lost ground during the Roman centuries. People lost faith in the authority of the experts; they turned back to those shadows and subjective magical thinking. Direct experience regained precedence over received wisdom.

I explained that the Platonist has the natural advantage of superior knowledge: you may think that working with crystals or a good tarot reading has brought you healing, but the Platonist can explain that this is simply the devil, or your own brain, deceiving you. You may be riding the comet’s tail

of a glorious love affair, but an expert will explain it away in terms of emotional projection, another expert will say it is simply a mechanism to improve genetic survival, whereas a third expert can dismiss both those explanations as woolly pseudo science by showing that it is “actually” caused by hormonal activity in the body. Your life could be transformed by watching a great movie, but one expert can point out that it is simply a made up story being acted out against a backdrop of special effects, until another expert points out the “real truth” that the whole experience was simply decompressed from set of binary digits on a DVD disc.

Put in those terms, it is easier to understand why the “common people” eventually lost their respect for the Platonic experts and turned back to their subjective shadows that retained so much more meaning and value than the explanations behind them.

Now I have heard it suggested that something similar might have happened with the Brexit vote, especially in the relatively impoverished and under-employed North of England. While the experts were giving excellent advice on the advantages to the British economy from staying in Europe, many ordinary folk were looking around them, not feeling that they had benefitted much from the economy so far, and concerned that new people were arriving in their locality faster than they could get to know and befriend them. So they turned against the experts and their wisdom.

As such, it seems a perverse but maybe understandable reaction. Perverse because it meant rejecting an intelligent plan to build a strong European union. But had not other experts been for years arguing against intelligent design and purpose in our universe? Have we not been told that the creator and driver has always been chance, not design? So is there not a certain reason in turning back to our creator and invoking chance in times of crisis? If our existence is but a gamble, why not gamble our way onward? So let us shuffle the tarot pack and hope to be dealt a better hand next time. Let us vote to leave, and see what happens.

It has been suggested that those who voted for Brexit felt something of that impulse. If so, it does sound a warning. There is a distinction between understanding the magical path and making and owning conscious decisions based upon it, versus becoming an unwitting victim of other people's magic. I will return to this theme in the following chapter.

One last point: if the European Union does fall apart, why was the Roman Empire able to survive so much longer? It could be because the system of values at the time of the Roman Empire was religious – as I suggest in Section 16.5 – whereas our values are now increasingly based on scientific criteria. Whereas the Roman Empire had the advantage of style and glamour – it was a union that one aspired to associate with – today’s unions need to meet the more scientific criteria of measurable performance. We increasingly ask for proven benefits, rather than grand rhetoric, when making important choices. I believe the European Union can demonstrate those benefits, but it needs to do so very clearly and repeatedly in order to retain our support.

26.17 Magical thinking and “Post-Truth Politics”

Following the Brexit story, The Economist of September 10th 2016 ran an article Post-truth politics in the age of social media. This article has explained a lot to me about why cuddly leftish liberals – the sort that I was brought up with and feel so at home amongst – should be the very people that find it so hard to accept, or even acknowledge my ideas about magic.

A few disjointed quotes from the article will show how relevant it is to this book:

For many observers, the exchange was yet more proof that the world has entered an era of “post-truth politics”. Mr Trump appears not to care whether his words bear any relation to reality, so long as they fire up voters.

There is a strong case that, in America and elsewhere, there is a shift towards a politics in which feelings trump facts more freely and with less resistance than used to be the case.

Following Mr Oliver's ideas about the increasing role of "magical thinking" on the American populist right, The Economist asked YouGov to look at different elements of magical thinking...

"Information glut is the new censorship," says Zeynep Tufekci of the University of North Carolina, adding that other governments are now employing similar tactics.

...that the post-truth strategy works because it allows people to forgo critical thinking in favour of having their feelings reinforced by soundbite truthiness...

It all sounds pretty horrid, but is this not what I have been advocating in this book: magical thinking, the role of feeling in gauging truth, “effectiveness” proving to be even more valuable than “truth”, and so on?

In the previous section I doubted that most who voted for Brexit were deliberately practicing the sort of magical thinking that I have been writing about. Were the voters consciously choosing to explore beyond the rational? Or were they being manipulated by unscrupulous politicians, as unwitting victims, rather than practitioners, of such magic?

As suggested in The Economist article, I have seen the way that media people interview politicians or experts: they increasingly interrupt them, so as to break longer arguments into shorter phrases. They are generating “sound bites” in response to a public that is becoming less interested in arguments to inform their decisions in advance, and more open to incantations to support decisions already made.

The difference between a rational argument and an incantation or spell is that the former loses effectiveness with repetition, while the latter gains power. It may take a few repetitions of a complex argument before it is sufficiently understood but, once that point is reached, further repetitions become irritating and are no longer listened to. A spell, however, becomes increasingly effective when repeated – this is because it is a spirit invocation.

Imagine a debate where a pro-EU campaigner is presenting a data-driven economic and sociological argument for Britain to remain in the European Union. Members of the opposition might create a Brexit slogan such as “England for the English” and start chanting those words until they catch on with the audience, which turns into a mob until the argument is drowned out and banished. Yes, that is an application of magical thinking – but is that the sort of magical culture I am encouraging?

Compare this with the confidence tricksters described in Richard Dawkins' TV series *The Enemies of Reason*. He interviewed Derren Brown on the subject of cold reading and used that as a springboard to suggest that the entire magical culture – including, divination, the New Age, alternative medicine and spiritualism – should be outlawed. But I argue that he should be directing his campaign not against magic but against confidence trickery.

Every day I receive a torrent of e-mail spam offering the latest “scientifically proven” remedies and get-rich-quick betting algorithms. You might have thought from my on-line profile that I would be a target for spiritual scams, but today’s con artists prefer bogus scientific claims to spiritual promises. I also know that a lot of scientific research is funded by the military, and a lot of its resultant technology is being used to kill people and harm the environment. And yet, despite all this evidence of malpractice, I would never accuse scientists of being “the enemies of the people”. On the contrary, I would argue for broader and better scientific education – just as I am arguing for better understanding of magical thinking and culture – to reduce public vulnerability to confidence tricksters.

The same applies in the political arena. Are people like Donald Trump and the Brexit campaigners trained and experienced magicians applying “meme-magick” expertise to win votes? Or is this an example of “the sorcerer’s apprentice”, where they are unwittingly invoking forces that they cannot control? I suspect the latter: it is more like people from a scientific culture blundering blindly into magical territory.

A spell like “England for the English” is a spirit evocation. But someone from a scientific culture mistakes that for a formula: they study the demographics and opinion polls and estimate that one could apply this particular formula and win a certain approximate number of extra votes. A formula can be applied, then put aside when it has done its job – the same is not true of a spirit.

What is the spirit that is being evoked by “England for the English”? It is a very lovely spirit, incorporating rambling cottage gardens, the sounds of cricket on the village green with a pint of ale that is cool enough to quench thirst but not so cold as to make one hiccough, a culture that allows room for eccentricity, the music of Elgar and so on. So what is wrong with evoking something so lovely? There is nothing wrong, as long as you recognise it as a spirit. A lovely cat is also a spirit: treat it rightly and it is a delightful companion, but mistreat it, neglect or starve it and it can turn on you. The spirit of Englishness is famous for its relative ability to tolerate dissent and alien cultures, and yet under attack it can revert to insularity, paranoia and panicky fear of invasion. Englishness is widely recognised for its witty, self-deprecating modesty, and yet it can

display such arrogance as to believe it has the right to colonise the world. If politicians think they are simply applying a formula that can be dismissed when it has served its purpose, they are mistaken. They should read Section 14.1 for insight on how to work with spirits as opposed to mechanistic formulae.

So I am saying “yes” to magical thinking in the political arena – but only if it is done wisely. “Mr Trump appears not to care whether his words bear any relation to reality, so long as they fire up voters” – but is he doing so in a consciously nurturing manner that could unite the American public and restore it to greatness? Or is he just unleashing demons that will tear the country apart?

Assuming that the above quote is an accurate description of his method, is it also accurate to label it “post-truth politics”? Is not-caring about truth the same as denying it?

In Chapter 6 I described Plato’s notion that the world we inhabit is just a shadow of a higher world of truth, and I aligned magical culture with Aristotle’s later argument that human knowledge would better be built firstly on the “data” we observe and only after that on speculation about higher truths beyond the senses. Like fish in a pond: we should master the water we are equipped to live in, before speculating about the greater world of air that might exist above the surface. Magical culture does rely more on effectiveness than on truth, but that does not amount to saying “there is no truth” – a paradoxical statement when it is itself presented as truth.

The very expression “post-truth politics” can itself become a spell to frighten members of a scientific culture by evoking visions of post-modern intellectual anarchy undermining the foundations built by science. Is this a re-run of the 1950s battle between science and the intelligentsia that was healed by CP Snow’s two cultures? Might I defuse this new battle with my description of four cultures?

When Pontius Pilate asked “what is truth?” – rather than “what is the truth?” – he was heralding the rise of magical thinking. But words for “truth” did not subsequently vanish from human language.

26.18 So then, what has happened to the Enlightenment?

In this chapter I have given several examples to support my idea that we are experiencing a resurgence of magical thinking on a scale unprecedented since the rise of the Roman Empire. The examples were chosen because they were less obvious, and often disguised in one of the following ways:

- Magical thinking popularly seen as (more or less “fringe”) science: NLP, new management paradigms, astrology, homeopathy etc
- Magical thinking aspiring to be recognised as science: homeopathy, radionics, advertising, pop psychology and whole lot of “energy” healing systems

- Magical thinkers that wish the scope of science to extend and embrace their “feminine” or “non-materialistic paradigms”
- Scientists proper extending their methodology by adopting subjective criteria without recognising the magic in their approach
- Magical thinkers who embrace magic but continue in a scientific mind-set, wishing to “prove that science is wrong”

In harvesting these examples I often moved into territory outside my field of expertise, hoping that the suggestions would prove sufficiently interesting, or else downright wrong, to encourage others to research further. What I have not dwelt on for this chapter is my own core interest in those who consciously recognise magical thinking and are happy to accept the label – even if they do not exactly shout it from the rooftops.

I have barely mentioned the examples more typically quoted in articles that ask what happened to the Enlightenment, for example, the revival of sun-sign astrology. The recognition of astrology as distinct from astronomy can be traced back to Ptolemy in the second century. The growing study of horoscopes supported an experiential, geocentric viewpoint where the faster movements of the Moon and ascendant

make for more accurate readings. The transition from metallurgy to alchemy at that time has been ascribed to the political pressure to impose secrecy and restrict the free flow of technical information, and this has its parallels in the fragmentation of science that resulted when Germany was isolated in the World War 2, and the rumours of paranormal research during the Cold War. The growth of holistic alternative medicine has echoes of the transition from Hippocratic medicine – described as “the silent art” as it avoided discussion in favour of an objective analysis of symptoms – to Galen’s interdisciplinary approach.

The more obvious revivals of magical thinking are too obvious to need being repeated here at length, so I have focused on less obvious or hidden examples. The present change seems much larger, more interesting and pervasive than the mere appearance of star-sign columns in “quality” newspapers.

27. To reject or to explore magical thinking?

The broad implications of the previous chapter suggest that we are in an age where scientific thinking is yielding to magical thinking. So how, as an individual, might one best adapt to this change?

Or should one resist it? Even if you do not accept my view that this is simply a cyclic pattern, and prefer to see it as a temporary lapse into primitive thinking in response to an age of uncertainty – or even as the ultimate collapse of civilisation itself – then it might still be worthwhile to dabble in a bit of magical thinking in order to better understand why people fall for it.

Either way, this chapter offers advice on magical culture as a practical solution, and magical thinking as a workable technique for addressing complexity.

Let us begin from today's typical cultural position that highly values a Platonic distinction between what is real and what is not: so that everything we experience subjectively through our senses has been mediated, and can be interpreted as a sort of shadow cast by real events that happen in a 'higher' objective reality. There are different versions of that higher reality: it can be a divine reality as suggested in religious scriptures; it can be a world of material atoms and evolving biological systems; it can be a world of subatomic particles, or a world of strings and so on.

Then let us imagine that you experience an anomaly that clearly cannot happen in that real world. You might see a fairy, or experience an uncannily good tarot reading; or hear the voice of a deceased parent; or be healed by a homeopathic remedy. Then do you:

- Dismiss the anomaly as an illusion of no value?
- Accept the anomaly as proof that the chosen “real world” might not be perfectly understood, and so needing to be revised to accommodate this anomaly?
- Or do you convert to a different faith, a version of reality in which the experience is not an anomaly?

Alternatively, you could explore the anomaly itself: consider it as an experience filtered through the subjective senses that might actually offer some sensual and psychological learning.

To illustrate such magical thinking: if you have just experienced a life enhancing tarot reading, but insist that this must be the Work of the Devil, then why not explore further the reasons why God apparently allowed the Devil to give you this advice? Might this not be a test, a life experience worth accepting, rather than something to be avoided?

Or, if you have just heard your father speaking to you, but know that it is impossible because he is dead: then why not consider the fact that your “real” experience of your father when he was alive must have been mediated by a subjective model of him that was shadowed within the structure of your brain. Putting aside the unlikely possibility that your brain could have undergone a fundamental re-structuring since that time, then presumably the “illusion” of his voice is now being generated by similar internal processes. The only difference now lies in his presumed absence in that higher reality that is presumed to lie beyond sensory experience. Might it not, therefore, be worthwhile to explore the experience further, rather than simply dismiss it as an illusion?

You do not have to call explorations along similar lines “magic”. If it makes you more comfortable, by all means choose terminology with a more acceptable business or pseudo-scientific ring, such as: “psychology”, “marketing”, “neuro-linguistic programming” or “NLP”, “the hermeneutic of participation”, “scientology”, “homeopathy”, “outcomes-based healing”. In fact anything rather than use the word “magic”. In other parts of the world, notably some regions of North America, religious culture still plays a major role, and it might be even safer to frame your magic in religious terms as “prayer”, “contemplation” or “communion”.

Some new wave protestant evangelical churches, like the Vineyard Christian Fellowship, take the demonolatry approach described in Section 14.1 to its limits by, for example, laying an extra place for Jesus at the dining table, chatting with him in a conversational manner and listening for answers. To quote their Pocketguide to Talking with God: “It’s really important to understand that God is not an impersonal force. Even though he is invisible, God is personal and He has all the characteristics of a person. He knows, He hears, He feels and He speaks”.

27.1 First steps into magic

There is no shortage of practical books on these subjects but, if you have the courage to bypass pseudo science and pass directly to magical thinking, at least in private, you could start with the six-week course described in a small book by Ramsey Dukes called *How to See Fairies* – a short introductory course in how to read the tarot, dowse, see auras, explore Feng Shui, see and talk to fairies etc.

This book directly addresses the transition from scientific towards magical thinking by showing how to first put reason and doubt (skepsis) on hold in order to experience magical results, and only when that has been achieved should one reapply reason to analyse those results and sift them for quality. This is an important point, and some reassurance for those who fear that any move to magical thinking might require kissing reason goodbye once and for all.

Magical experimentation is different from scientific practice, where reason is applied first in order to reduce the amount of data that might be considered irrelevant to the task. So for example, when testing the effectiveness of a new drug, the scientist might reason that the phase of the moon or the subjects' religious beliefs were irrelevant, but their ages and previous medical history should be taken into account. Then, only when this rational sifting been applied, does the actual test begin.

In magical practice, however, we first observe and feel everything that we can – and afterwards invite reason to play a secondary, but nevertheless important role in sorting out the results. When you converse with fairies or extra-terrestrials, you typically tap a torrent of new data, much of which is trivial and some is utter rubbish – witness the available volumes of “channelled writing”. But there are also likely to be some life-enhancing gems: find them, and use them. That is magic. Aleister Crowley initially dismissed the channelling he received in *The Book of the Law*, and it was only after he had minutely examined its cross-correspondences that he began to recognise its value and mine it for further meaning.

27.2 The importance of secrecy

You have already been warned against admitting to an interest in magic rather than science. When it comes to actually practicing magic for results it is better not to talk about it at all, even if under pseudo-scientific disguise, and certainly not to boast about it. This is because, in our traditionally religious and scientific Western culture, people are still very keen to rescue others from falling into magic.

Let us say that you have started to explore magic and are beginning to experience the greater richness and complexity of the subjective and magical universe – a universe where a tarot pack can offer great wisdom, where healing hands can ease your pain, where Guinness is good for you, where astrologers and psychics can plumb your innermost secrets, where beating a drum can heal your inner wound, where fairies can help you with your gardening, and where falling in love is nothing less than a glimpse of deity. If you keep silent, or only share these discoveries with committed members of a magical culture, then you may be left in peace. But if you mention your discoveries to members of a religious or scientific culture, then their missionaries will swoop in to save you.

The religious missionaries may claim that these wonderful experiences are really the work of the devil – because Satan is responsible for this world of the senses, creating an illusion to deceive us and lead us away from God’s truth. But nowadays you are more likely to come across scientific missionaries who want to rescue you by “enlightening” you. That is to say they want to restore you to the spirit of The Enlightenment.

Both types of missionaries accept the Platonic argument that these experiences you have been enjoying or suffering are “just” illusions – mere shadows cast by a “real world” that is objective and lies outside or beyond your sensory experience. So when, for example, you see a fairy, it must be a diabolical manifestation, or it must be that your visual senses have misread the data received from your “real environment”, or else that the visual data was correct but the brain has wrongly processed it and created a subjective illusion of seeing a fairy.

Both religious and scientific missionaries can also be subdivided into rescuers and iconoclasts. The rescuers – typically priests or doctors – essentially seek to heal you of magical thinking by lifting that veil of illusion; while iconoclasts simply wish to shatter your dream for reasons of their own. As described in Section 22.4, the latter have something of the spirit of the 15-year old kid who gleefully insists that: “God and fairies are bunk, ‘cos science says they don’t exist!”

Personally, I find the rescuers from scientific culture much more convincing than the religious saviours, because they typically support their arguments with sensory data that is almost as interesting as the magical data they are trying to discount. So, for example, when they hear that you have been conversing with a fairy or with God, they might show you brain scans of the actual mental activity involved, and only then explain how their reality is made up of chemical interactions or particles obeying the laws of physics, and how this leaves no room for fairies or God to exist.

Of course both scientific and religious rescuers have a problem in explaining how they can be so sure about the nature of reality while the devil, or their own brains, may be tampering with their own evidence. In particular, how can they articulate their true, objective reality via words and images at the same time as admitting that the data is being transmitted via flawed media.

The solution presented to this problem is two-fold: firstly that scientific (or religious) culture has access to a better understanding of reality because it has been built upon centuries of experience and learning; secondly, that scientists have learned how to overcome the inconsistencies of their own subjective experience by sharing data and building up a consensus view that is steadily growing closer to the true Platonic reality that lies behind apparent manifestation – rather as priests did in the past, except that priests were mistaken about the actual nature of the Platonic truth.

That adds up to quite a powerful argument, and one I find easier to accept than a religious defence based on the veracity of scripture. But if we are to adapt to a magical way of thinking, we need to find ways to resist the negative implications of that argument in order to remain open to magical experience.

Remember then what was said in Chapter 12 about the game-playing nature of magical culture: where other cultures might insist that what they do is the only sensible option because it is “true” or “proven” (scientific) or “the done thing” (religious), the magical justification would be to say that a choice was made simply because it works – not because it was absolutely true or even socially acceptable. To better illustrate this choice, I will present it as another thought experiment, or analogy.

The “Enlightenment” worldview is based on Plato’s notion that we are looking at shadows on the wall of the cave and believing them to be reality, while we should instead be turning our heads to see the actual light and the real objects casting those shadows. So, imagine me taking a DVD of the movie Avatar, and showing it to you on a big 3-D screen, and inviting you to put aside, for the time being, any critical thoughts about whether 3-D is just a gimmick and whether Cameron is merely a commercial, block-buster director and perhaps not in the same league as...

So you can watch the movie in that open spirit and enjoy a ravishing experience involving a whole new world with life forms evolving along different lines from ours, also a thrilling tale of human emotions, moral choices and more. But should you share your sense of wonderment with a rescuer, they might choose to enlighten you by revealing the actual truth behind this illusion. Taking the DVD disk and a microscope, they can demonstrate that this apparent magical world of your recent experience is actually just a subjective illusion triggered by a one-dimensional sequence of on/off binary states embedded on a plastic disk. While you have experienced a continuum of wonder: the “actual reality” was just one very large, but still only finite, number.

Similarly, a breath-taking performance of a great work of music – one that transports you to the heights of rapture – can also be proven to be just a series of binary digits on a plastic disk. In worldly terms the numbers involved are enormous but, in the cosmic scale, they can truly dismiss even the world's greatest symphony as being no more than “a nice little number”.

In religious or scientific culture, the rescuer is forcing you to reject Illusion and accept Truth, because both cultures believe in objective truth. But in magical culture, you are simply being offered a choice between two alternative viewpoints, and the real issue is “which one offers the best value?” The convention that a bishop can only move along diagonal squares that are not occupied could be the nemesis of a chess master, while the sceptic could laugh it away by lifting the piece off the board and placing it anywhere between squares.

So the magician is the one who also recognises that chess is just a game but, instead of taking that as a reason for breaking or ignoring its rules, the magician understands their value, and can choose to enrich life by accepting and playing by those rules.

Let us say that you have fallen madly and deliciously in love and also suffered the agonies of being rejected. The religious saviour might explain about the temptations of sin and how God allows this as a test of your spirit – a solution that would be dismissed by a sceptic, but one that actually can offer healing if taken in the right spirit. The scientific saviour might explain that you have suffered a hormonal imbalance, are now clinically depressed and can offer pills containing chemicals to reduce or heal the depression. So both scientific and religious cultures do offer a useful way “out of the problem”. But, for those with greater daring, the artistic and magical cultures can offer something a lot more exciting, and potentially instructive.

For a real “walk on the wild side” the artistic culture would encourage you to make your agony known, in a novel, or as music, a painting or other work of art. This might, as catharsis, also provide a solution – but that is not the real emphasis in an artistic context: as explained in Section 23.6, if you remain utterly depressed and subsequently commit suicide, then the resulting masterpiece might actually be more highly esteemed in artistic circles than if you were healed. Art is a culture that reaches further than magic’s individualist criteria, it puts greater emphasis on universality: so an artist suffering depression may be seen not so much in terms of their personal problem and rather more in terms of their gift to humanity.

Magical culture, however, offers something in between: to accept the joy and the pain as being real parts of a whole, and to find a way to reconcile them to each other and to oneself and form a relationship. If your magic is psychology, you might, for example, see the experience of love and failure in terms of Jungian archetypes and pointers along the path to individuation. If a New Ager, you might see the experience of falling hopelessly in love with a woman as an invitation to “work with your inner feminine”. As a ritual magician you might seek knowledge and conversation with a love goddess. As an advertising executive you might decide to update your personal brand.

It is arguable that the magical and artistic resolutions are more dangerous than religious or scientific cures – God knows we need more danger in today’s safety-obsessed culture – but that is not to say that they are foolhardy. Let us imagine that you have struggled with depression from unrequited love, have invoked goddesses, read Jung, studied your horoscope and bought an Italian suit, and yet still feel like committing suicide: then you still have the opportunity to go to a doctor and be prescribed anti-depressants. As long as you do that in the spirit of a gamer – and not kidding yourself that taking pills means that you are “facing up to reality” – then you are still choosing a magical solution to the problem.

27.3 Superstition?

Once the decision has been made to value human and personal experience in its own right, rather than as a pale shadow of some objective truth, then the next step is to open yourself up more fully to such experience. This involves not just refusing to shut the door on it – as when dismissing synchronicity as “mere coincidence”, or acupuncture as a placebo – but also a positive opening to experience as suggested in the How to See Fairies book.

I own an electric toothbrush, one that encourages me to brush thoroughly for two whole minutes. It does so by dividing that time into four intervals of thirty seconds and adding a slight change to its buzz to mark the boundaries: I am supposed to note the change and move to another area of my mouth at that point. I have also learnt to stand on the tiles of my bathroom floor in such a way that my feet will not be crossing the lines between tiles at the moment this change happens. Is this, or is this not, to be dismissed as superstition?

To help answer that question, I will give another example of my personal habits. My office outside the house has a burglar alarm so, when I enter the office it makes a shrill sound until I key in a code to silence it. However, I often prefer to disarm it from inside the house before I go down to the office, even though this demands two further keystrokes and a couple of metres further to walk. Why do I perform this apparently unnecessary extra ritual?

The broad answer is that I prefer to make my own decisions rather than be ordered by someone else – unless I greatly respect the person giving the commands. If I turn off the alarm first, then I am in control. If instead I enter the office with a bundle of papers in my hands and the alarm is shouting to be turned off, then I am forced to put down my load and rush to deactivate the alarm before it calls “armed response” to the house. So the small ritual of apparently unnecessary labour is actually a psychological trick to allow me to begin my day’s work with a greater sense of control and less feeling of being harassed – a simple example of magical thinking to solve a problem.

There is something similar about my toothbrush. It is hard to predict when it will change tone in my mouth. Of course I have tried counting thirty seconds to be ready for the change, but it is easy to be a fraction of a second too soon or too late. It still catches me out, and I do not like that. But when I have positioned my feet in the right way on the bathroom floor, I feel prepared. Like a Tai Chi master adopting the particular balanced stance that is at ease yet poised, I feel prepared for attack from any quarter. I still do not know exactly when the change will sound, but now I am “ready for it”.

These examples may seem trivial, but they have a broader relevance: for we are still moving from a mechanical, analogue world into a digital world. When I was young, clocks seldom caught you out: you could look closely and see the slow movement of the minute hand; if it was about to strike you would hear a preparatory click and the whirring of the governor before the chime. Electric telephones did not interrupt you without warning, because they made a slight hiccup before settling into ringing pattern.

But if you stare at a modern digital clock, you are suspended in a timeless present moment; it is very hard to catch the instant before you are thrown into the next minute. Digital life is a world of sudden unannounced or unexpected happenings: alarms that sound, phones that interrupt trains of thought, bleeps from incoming messages. We are cast back into the world of our earliest ancestors as outlined in Section 13.8 – a world of mysterious and unexpected happenings, a world where magical thinking developed and where carrying an amulet against evil became more effective than struggling to anticipate it.

So, the way I am standing as I wait for a digital device to make its apparently arbitrary and other-worldly decisions, will effect my sense of ease. I feel more like the warrior poised for action than the helpless citizen that succumbs to a street mugger out of sheer surprise and unpreparedness. I am more alert, centred and aware of the moment – a mental state that is itself widely recognised by magical schools, from Gurdjieff to the New Age, as being psychologically healthier than the normal state of half awake-ness in which most people spend their days.

Is this simple, practical example of magical thinking mere superstition? The problem lies not in the practice itself, but in our transition between cultures. The inherited religious and scientific cultures believe in absolute truth behind apparent reality, and

science in particular encourages us to think that repeated results might be an indicator of such truth. So, if you find that life in the digital age is better when you adopt the spiritual warrior approach, then it is tempting to assume that it might in some way be “true”, and not just your individual act of successful magic. Then a book appears on *The Path of the Digital Warrior* and a cult develops and the practice is taken up by thousands of people. The further the idea catches on, the more likely it will be adopted by people for whom the technique is less well suited. Thus the technique’s effectiveness becomes diluted by trendiness, it becomes discredited, and the world looks out for a new cult sensation.

So, when practicing such magic, remember once more the four powers of the Sphinx quoted by magicians of old: “To know. To will. To dare. And to keep silent!”

27.4 Observation as the test for significance

In Section 9.1 I referred to the idea that humanity’s test for truth had evolved from feeling to reliance on authority, and from accepting authority to the use of reason to test truth; and that in the age of science the ultimate test of truth was to experiment and observe. No matter how authoritative a theory’s origins, or how much it felt like “common sense”, even if it seemed like a logical extension of known principles, it would not now be eligible for the label “true” unless the theory could support demonstrable and quantifiable results. I explained how

this theory of evolution went with the linear view that our thinking had evolved from primitive magic to sophisticated science, where observation, as a test of truth, would trump all previous delusions. But then I suggested that it was not an end point, but that observation would lead us forward into magical thinking once more.

It is not that observation is a magical test for truth, but rather it provides a test for significance, in the way that logic or reason provides a test for scientific significance. A scientific culture will not waste time observing something unless it seems reasonable. Many experiments will be done to judge whether human activity is a major cause of global warming, because that is a logical possibility in terms of existing scientific theory. But I am not aware of much work being done to test whether tropical vegetation might have telepathically enlisted the aid of super-intelligent aliens in raising global temperatures in order to increase its potential footprint – a notion that would be considered irrational.

So when, for example, the student of magical thinking observes a coincidence or curious pattern, then that observation in itself would announce that the pattern is significant. Following that, a process begins where further observations will gather material that might end in the pattern being felt to be “true”. “True” in inverted commas because truth in magical culture is not an absolute measure but something closer to being “useful”.

Example: a series of triple disasters leads one to examine them and sense the conclusion that “things happen in threes”. This conclusion can be accepted as useful, but it is not “true” in the sense that it would negate the possibility of ever experiencing “a double whammy”.

So an aspirant to magical thinking will do a lot of observation. In fact much more observation than before, because the previously dominant religious and scientific cultures taught that the criteria of significance are authority and reason: so any phenomenon that is not in accord with accepted ideas, or does not make rational sense, would not be considered significant enough to justify the act of observing it.

Example: you feel a strong premonition that the roulette ball is going to land on the number four, but you do not act on it because you have decided that it would be irrational to do so. Or you feel strongly tempted to spend two thousand pounds on a doeskin cashmere blazer with Hermès silk lining, but you calculate that it would not leave you enough money to pay the household bills (plus a vague sense that vanity is a sin) so you dismiss the craving.

For the magical thinker the observed power of the urge in either case is already a demonstration of its significance – so what is the significance? For an answer, we must start to look more closely at the actual desire to buy that blazer.

Again we must transcend old habits: the scientific culture's attachment to the notion of an underlying physical reality has created a culture of materialism so, when I mention observing the desire for the blazer, the first assumption is that this means thinking of it as a desirable physical object and how good it would be to possess it. No, it is the subjective element, the desire itself that needs to be observed.

Feel it, seek its source; by all means dwell on the supposed physical object, but only if that enhances that sense of desire. Giving the gift of belief (call it “meaning” or “value” should you prefer) to the desire itself will bring out its more subtle qualities: to what extent is the desire itself pleasurable? Is it maybe more pleasurable than the physical ownership of the blazer? Does the yearning make one feel more alive, excited? If so, can one find a way to distil the essence of that yearning so as to foster that positive state without the need to spend any money? Or is the monetary sacrifice a vital element in itself? Or can the yearning itself be amplified to the point where it would become impossible for it not to be realised?

I mentioned “the more subtle qualities” and this is an important factor in exploring magical thinking: we must learn to notice and observe things that would previously have been dismissed as trivial or non-existent.

In Section 21.3 I mentioned how scientific thinking requires one to sever the infinite series of concurrent phenomena by deciding that, after a certain point, all further considerations would be too trivial to alter the outcome; whereas magical thinking embraces all those neglected terms in the equation. The book *How to See Fairies* begins by training us to notice things that would normally be overlooked, such as making a decision whether some music sounds better when heard standing, sitting or lying down.

The reason for starting with this exercise is to pacify reason: although the first rational reaction might be to think “what rubbish, it’s just the same music”, in fact there are plenty of acoustic and physiological reasons why the music might actually seem subtly different from different postures. So the exercise begins by observing to decide which is the most agreeable – rather than ignoring the difference as illusory – before moving on to less obviously rational things, such as “good feng shui”, tarot reading and, eventually, seeing fairies.

I have tried not to introduce fault lines into my argument by relying on other people's words, but cannot resist inserting here a quote that I have just come across in Robert Alexander's biography of ambisonics guru Michael Gerzon. In a 1978 BBC Radio 4 interview Gerzon is comparing the judgement of a naïve listener versus a trained listener who has "learned a lot about the individual aspects of the sound that can go wrong". He says: "An experienced listener will have his mind so busy when assessing equipment, listening to those aspects, that he will actually miss the more subtle aspects that are important to the naïve listener."

Having refined one's awareness, the next step is to learn to see meaning in everything that is sensed. In ancient times people would look to signs in nature for auguries or advice: three magpies before a birth would signify a girl, and so on. Coming from a scientific culture means that such divination would require extra effort, because it is no longer a natural habit. In fact the initial skill is not so much to see these signs, but rather learn how to recognize opportunities for signs.

Let us say you are driving to work in the middle lane of a busy motorway, and wondering if you should go to the doctor about the ache in your hand: there is not much chance to seek an answer from nature, except perhaps a glance up at the clouds to see if their shape suggests something. That cloud is a bit serpent-like, so what is the message: serpent as healer, or a warning of poison in the system, or does the serpent suggest a tendon? Difficult.

What else does the situation offer? Just a lot of cars with registration plates. The number plate B 794 IGN catches your eye, with a sense that it might be significant. The number adds up to 20 which adds up to 2, the word BIG jumps out, so what does N stand for? The magical assumption (not a belief in the accepted sense of the word) is that there must be a meaning, an answer to your question, but no guarantee that you have yet attained the wisdom to understand it.

So you can practice developing such wisdom by making up stories, as well as answering questions, according to random observations. It is like tea-cup fortune telling. You accidentally drop a glass and it shatters on the floor: before sweeping up the debris, spend a minute gazing with half-focused attention at the pattern of shattered shards on the floor; seek a message, a reason for the accident or, at the very least, can you use those shapes to make up a short story? The irritation or grief of losing the glass becomes transmuted into a conversation with existence itself. Instead of your world being contracted by the measure of one lost glass, it has now expanded into a new arena of experience.

Similar approaches can be used to extend the other senses. When my washing machine goes chug-chug-chug, I can distinctly hear it playing the tune Bobby Shafto. While others suffer noise pollution, I am surrounded by music – without needing an iPod.

So what happens when you begin to succeed, and are now getting really good answers? This is when reason is brought back as a dominant player in the game. Let us say the next number plate leaves you with a clear conviction that you should leave the motorway and call an ambulance, for the pain is life threatening: now is the time to thank the oracle and to examine the message critically for both likelihood and practicality – before finally deciding what action to take. And should you decide the message was “wrong”. then you might explore why you were open to a wrong answer.

27.5 Working with today's demons

In Section 14.1 I described personification as an important aspect of magical thinking. Just as most babies' understanding of the world increases significantly when they learn to project their consciousness into external phenomena – imagining, for example, that mother's actions might be better explained by assuming that she contains and is motivated by a mind like one's own – so can the magical thinker gain powerful and subtle insights by imagining that most objects and patterns of interaction in their environment are similarly “alive”.

I wrote a book – *The Little Book of Demons* – specifically on the subject of magical personification, how it is done and the benefits it can offer. I

have since had second thoughts about my choice of the word “demon” as a label for the intelligences assumed to inhabit natural phenomena, bad moods or runs of bad luck – even cars and copying machines. Even those who found my book useful still sometimes wanted further advice on how to “get rid of” these troublesome demons, even though I had tried to explain that my magical approach to demons is not to get rid of them, but to form useful pacts or partnerships. In Section 23.6 I explained that a religious or scientific culture favours banishing demons – though the scientific culture would avoid that terminology and speak more in terms of “curing” a “condition” or “syndrome”. The direction of magic is different: it is a move towards wholeness.

Magic therefore, seeks to integrate the demonic back into life rather than to get rid of it, and this is a difficult idea for people who have begun the process of personification and gained a grasp of the principle, but not carried it to completion. So let me present another thought experiment to illustrate the difference.

Imagine you are suffering a condition that is probably among the worst afflictions that any human can suffer: namely the challenge of parenting a problem child. Everything you try just seems to make things worse and deepens the gulf between yourself and your child, until in utter despair you decide to seek help from a specialist, say a social worker or a child psychologist. I am that specialist, and you make an appointment with me and spend an hour describing your problems in detail. At the end of the hour I say: “this is clearly a serious problem, but don’t worry. I will help you to get rid of that child.”

Is your reaction to my statement a surge of relief? An end to your problem? I would rather expect you to be shocked by my words. Yes, you do want a resolution of sorts, you do want a change that reduces the problematic aspects of the situation, and getting rid of the child might do that. But it is utterly unacceptable, for the problem child is not just a problem, it is also a child – not something to be simply disposed of.

Magical personification is actually most effective when you take it that far: the demon under consideration is not just allowed a measure of intelligence or autonomy, but is actually given the respect of having a soul. This is the “trading one’s soul” that so alarms religious cultures. Nor does this mean treating the demon as an equal, let alone bowing down before it as a superior being. In my example the child is considered to have a soul, but is still “just a child”.

Returning to my concept of demonology: the idea is to recognise a problem as a spirit with some measure of consciousness, or soul. Only then can you put oneself into its shoes to gain a feeling of how it might feel, leading to the beginnings of an understanding of its behaviour and so towards a more or less useful dialogue with it. Having gained some skill, in terms of the previous section, in looking for, seeing and interpreting subtle messages, it is now possible to address any problem as a living being and seek to negotiate a solution.

Let us say that you live in a property that includes an area where strangers might park their cars, and that someone has suggested that you are at risk unless you put up a sign saying: “WARNING parking a car here is done at your own risk. The owners of this land will not be held responsible...” and so on. The current culture would justify this action in pseudo-legalistic terms as a “necessary safeguard” or whatever.

I suggest instead that you focus on the significance of the sign as a talisman intended to keep evil at bay. Hold that protective sense in mind as you decide what typeface, layout and colour would be best for the sign. Strive to get a sense of the evil that is being kept at bay: it is unlikely to be a particular car or driver, but more an uneasy sense of a looming litigious and unfeeling society closing in like some foul miasma.

Carry that sign around the space with half closed eyes, sensing the rising and falling of its power of banishment, then install it where it feels most protective. You will very likely discover that you have placed it exactly where it would be most visible and difficult for anyone to deny that they had seen it.

27.6 A profoundly trivial example

Magical personification can develop into a powerful technique for dealing with major problems, and a lot of popular writing about magic chooses to emphasise its other-worldliness and potential for great spiritual transformations. Instead this book has focused more on ordinary life, and the small, overlooked seeds of magic that sprout between the cracks in concrete reality. So this chapter is not about big magic so much as initial, baby steps: how to adjust to a world of increasing, un-admitted magical thinking.

In that spirit, I will present a deliberately trivial example, based on what was at the time of writing a very minor and easily forgotten irritation. You could take this as an example of magic being applied not just for its healing power, but also for fun.

Last night we watched a movie that was on the one hand quite artistic, on the other hand violent and callous to the point of tedium. In one scene two thugs were beating up a man who seemed to make no attempt at resistance – outside of Christian iconography this is already inherently dull. But the assault not only went on a long time but it was also repetitive, the only development of the idea was when, after a brief pause the thugs turned from punching to kicking, by which time people who had been watching the film began to wander off to pee or make tea saying “call me back if anything happens”.

In another scene, by contrast, there was a very long and inconsequential dialogue that bore no relation to the development of the story. The result was a film that should have been unmemorable, and yet when I looked it up on IMDB I found that some people loved it, and it had actually won some sort of award. Others equally hated it. Opinions were strongly divided between those that considered it artistic and those that considered it trashy, violent and callous.

Such strong polarisation is a reliable sign of demonic presence, so who was the demon that was powering this clash? Early next morning the name of the demon came to me as: “Art Is Not Manly”. This demon was giving the movie a bad feel, was troubling the judges and creating division in the viewers. So, instead of attempting to exorcise the demon by crushing it under a mountain of examples of manly fascist art, instead I enquired about the demon’s parents.

The demon turned out to be an untruth born of two truths: “artists are sensitive” in congress with “sensitivity is un-manly”. (Note that we are in magical thinking here, so these are not absolute truths, just truths.)

I think it is widely accepted that sensitivity has an important function in artistic culture and, while the second statement is rather unfashionable now, it is still assumed to be true at a humble level. Rugby players seldom notice their injuries until after the game, and this is considered to be manly. Candidates for criminal gangs are often required to prove that they are manly by committing acts of violence without showing remorse. Soldiers are trained not to weep for those they kill, and little boys are encouraged not to cry at the dentist.

This demon Art Is Not Manly was troubling the film-makers' endeavours by, on the one hand making them eager to display their artistry in lengthy explorations of character at the expense of the story, and on the other hand extending violent scenes to the point of tedium in order to affirm that, although artistic, they were not unmanly. Similarly with the critics, there was the fear that any attempt to point out that the callous violence was spoiling the drama might lead others to dismiss such male critics as arty-farty pansies, rather than real men – and if female critics did not like it... well, no further comment.

The movie, the critics and the viewers thus became strongly polarised into the demon's two horns: the sensitive horn that found manly violence offensive, and the manly horn that was scared of being seen as sensitive. Although a lot of feeling was being expressed on both sides of the debate, nobody referred directly to Art Is Not Manly, because demons prefer not to be seen – so much so that I doubt that many critics today would even acknowledge Art Is Not Manly.

And yet this is a demon that has for quite a while played a major role in art culture. It had spawned artistic movements that prided themselves on foppish mannerisms, such as being seen in public brandishing a daffodil; it has also encouraged some critics to claim that the role of art must be to shock. In the 60s and 70s sex was considered to be more shocking than violence and so the arty movie of the day would dwell rather on extended sex scenes, where today's equivalent would treat sex relatively lightly and dwell rather on the violence.

[A few months after writing this I am half way through a wonderful novel *Black Swan Green* in which a thirteen year old boy passes thirteen months wrestling with this very demon. This time the demon hides behind a name more like *Writing Poetry is Gay*.]

It is not, however, that there is more actual violence in last night's movie than in the past: a similar clash in a 50s cowboy movie would have lead to a gunfight and at least a dozen deaths, whereas the offensive scene in this particular movie ended with only one man being hurt, and he was merely half dead. Less total harm – and yet the demonic presence left us with a feeling of far greater violence.

27.7 The journey to wholeness

So far I have simply given an overview of the sort of thinking encouraged in magical culture. If you decide to adopt it, then there is no shortage of books giving more explicit instructions.

In fact there is a whole bookshop category devoted to guidance on magical thinking, from astrology and tarot reading, through alternative medicine to modern paganism and weird science. It is given the clumsy name “Mind Body Spirit”, which suggests to me that the publishing world does not quite know where to place it. And a lot of MBS authors themselves would, I guess, rather be seen as alternative scientists than as magicians.

Faced with so many choices, systems and practices it would be easy to lose track. So I suggest that it would also be helpful to remember how this book pulls all those threads together and suggests that the ultimate movement will, or should, be towards wholeness.

On the one hand one is defining oneself as an individual, independent of the many labels that “religious” cultures require. I am, for example: British, white, Oxbridge educated, 71 years old, six foot tall, introverted, arthritic... and so on. But if I were not any one of these, would I cease to be myself? Strip away every single label and you will still be left with something very complete – a common humanity.

Meanwhile you can get to know your inner demons. One day I was driving with a magician friend in my car and a traffic bully “cut me up”. I was fuming, but my friend asked: “is that not, actually, quite a nice feeling?”

He was right: my testosterone-fuelled rage did present an agreeably butch vibe. So I recognised that, within my soul, there was a bullying demon but that I had put it in prison in order to maintain my sweet persona. Think magically and you will get to know a whole host of nice and nasty demons. Even the most rabid sceptic surely harbours a magical thinking demon (how could they otherwise recognise and despise magical thinking?), but they will have it constrained on some Anti-Social Banning Order (ASBO).

One of the great gifts that our scientific, Enlightenment culture has given the world is the idea of democracy. A great idea, but one that does not work well in practice: just note the sort of rubbish that gets itself democratically elected only to defecate on the electorate. I suggest that part of the trouble has been that we have not yet learnt to interiorise the concept of democracy by inviting it into our subjective magical universes.

Instead of locking up and denying all those unwelcome parts of our being, just let them free and give them the vote. I can, at times, harbour feelings as severe as those of a suicide bomber: that rage in me can at least express its opinion and yet, when it comes to an internal referendum, it loses the vote and I remain a nice guy.

Note that the vote itself does not amount to much in a case like this: the real significance is that the vote represents responsibility – something that my inner terrorist was never granted in my youth. Thus the right to vote presents a burden of responsibility that itself becomes the trainer to build both strength and wisdom into the demon.

First get democracy working in your soul, and you have a better chance of getting it to work out there.

Wholesome, yes, is it wholesome. They went in search of evil black magic and I gave them wholesome. Sorry.

27.8 Some like it black

Have I been “white-washing” magic in presenting it as a journey to wholeness rather than the evil pursuit of power by delusion that so many others assume it to be?

My intention has never been to suggest that magical culture is superior to religious artistic or scientific cultures, but that it is no better or worse than them. It is, however, a culture that appears to be on the ascendant during my lifetime so it needs to be better understood – and that has required me to analyse what I understand to be the more mistaken reasons that people reject or deny magic.

I began by explaining the impact of Albert Camus' book *L'Etranger* on my life as a starting point for my journey towards a magical culture. That journey has led me through many interesting and rewarding experiences, and yet very few of the terrible negative experiences that many people associate with magic. That is the story that I have told so far, but I do not wish to deny that others might experience a different, less happy journey.

As you explore magical thinking, you might find yourself having to make difficult decisions. There are plenty of dubious or arrogant claims being made, people who claim to reveal a "real magic" that is not so very different from what I have been describing, but pointing towards quite different ends.

To illustrate some alternative possibilities, here is one last thought-experiment. It adds two extra characters to Camus' story: an older and a younger brother. All three brothers share that same inclination to be fully open to their immediate sensual experience and inner responses to it, and all three grant their subjective awareness primacy over any conventional notions about what is "real", "true", or "proper".

The older brother does, however, weep copiously at their mother's funeral – not because he cannot do otherwise, but because he senses that it is necessary to do so for the sake of appearances. He is choosing to play the game, and this is how he will live his life from now on. Unlike Meursault, he chooses a magical 'game playing' path.

The person he becomes has been well portrayed in Felix Krull – the confession of a confidence man, by Thomas Mann. This book came out a few years after L'Etranger, and I see it as a sort of response to the latter book, an alternative working out of the same fundamental nature. It makes hilarious reading because it describes in such prim and elegant prose the same sort of voluptuous sensuality and feeling awareness as Meursault experienced, but in such a manner that the reader is almost compelled to disapprove.

For example: Felix' beloved godfather has him, as a fifteen year old boy, posing naked for paintings of Greek gods, and it is almost impossible for the reader not to judge this as pederasty – while Felix merely describes it, with great affection, as a significant contribution to his later character. We see him as a penniless

vagrant passing idle hours window-shopping among the most exclusive and expensive stores – surely the epitome of human greed and social inequality? But for Felix it is just an exercise in refining his taste and sense of values. I remember doing exactly the same when I worked in central London and would spend hours in Jermyn Street, Bond Street and the like, cultivating not only a love of beautiful materials and design but also a wonderful liberating feeling that there was so much expensive stuff in this world that I had absolutely no desire to possess.

So Felix is “playing the game”, and it is all the better for his liberating understanding that it is just a game. And yet he is not as free as Meursault, because he is succumbing to a “real” belief in his own superiority. Being able to play the game must prove that he is above the common herd, rather than simply outside it. He is becoming bound into a meta-game based on a “Platonic” assumption of ultimate standards – becoming every bit as shackled as those gamers that he claims to despise. Felix Krull, like Meursault is sent to prison, but as a confidence trickster.

Next imagine that the younger brother does not cry at their mother’s funeral, for the same reasons that Meursault does not do so. But he does go further in his inner exploration.

Although the younger brother sees no value in attempting to cry, he does have a feeling that something remains incomplete, that something more is needed. So he wanders out, searching for the answer, and finds himself sitting alone in the light of the Moon and feeling curiously moved to gaze at it and to speak. He finds himself talking to the Moon and, in his moments of silence, has an inner sense that could be interpreted as getting a response. This excites his curiosity, and he recalls traditional ideas about the Moon as a symbol of woman, and the mother in particular. He explores the idea of starting a dialogue with his dead mother, and he finds this satisfactory.

Following that refined inner sense of what is needed, he obeys an impulse to lay a circle of stones and place two candles in the circle and to continue more directly to dialogue with his dead mother. By morning he is exhausted, yet has a powerful sense that something has shifted, been resolved, and he can go to sleep for the rest of the morning. He has gained a sense of completion, of the sort I am suggesting when describing magic's search for "wholeness".

Which of these three characters would I consider to be magicians? The younger brother is certainly going that way. He needs only join a magical order, or absorb a few classic texts on magic, to become part of what I called "magic proper", at the very heart of magical culture.

Meursault, however, stands on the threshold of magical culture, but does not step right in. Just as scientific culture might take theory and then test it against observation, so would magical culture take observation and then test it against feelings. Meursault is observing, and he is also observing his feelings, but stops at that point. He remains on the threshold, seeing so clearly through human conventions and motivations, but refusing to play any games.

The older brother, however, is definitely playing the game: he is practicing magic by casting his spell over other people and manipulating their perceptions to create miraculous effects. In passages where Felix Krull describes other people's behaviour, and his sensing of the inner states that are causing that behaviour, he is the perfect model for similar passages in Derren Brown's much later book *Confessions of a Conjuror*. At one point he comes into money as a result of stealing jewels, yet keeps his job as a humble lift-boy in a grand hotel in Paris. He writes:

My secret wealth – or this is how my dream-acquired riches seemed to me – transformed my uniform and my job into a role, a simple extension of my talent for ‘dressing up’. Although later on I achieved dazzling success in passing myself for more than I was, for the time being I passed myself off for less, and it is an open question which deception gave me the greater inner amusement, the greater delight in this fairy-tale magic.

Arrogant, but by no means malignant: some of Felix’s miracles do a lot of good for other people – so you could compare him with a New Age therapist at times. But he is also an exploitive manipulator, so you could compare him with the spin-doctor, advertiser or psychopathic business executive – he is, after all, a confidence man.

What we are seeing is something that I played down in Section 23.4: those who practice magic in pursuit of power. This, for magic's critics, must be what magic is all about, whereas my own observation was that, even those who take up magic to gain power, usually end up more interested in attaining healing or "wholeness".

But this is not necessarily the case. There is a definite attraction in “playing the game” against those who do not realise that they are themselves in a game. In section 17.2 I painted a clichéd picture of a household of rationalist geeks puzzled by their failure to attract girlfriends. One of them succeeds by joining a pagan group and discovering the Goddess, his Inner Feminine or whatever, and is ridiculed by the media. Whereas the others spend their money on over-priced talismanic designer labels that serve as talismans to attract the opposite sex – and are celebrated by the media for being “cool”. I suggested that the first person was consciously practicing magic, whereas the second group were becoming its victims – relying on talismans, but not as magicians. Being a laboratory rat does not make one into a scientist.

In Section 26.16 I wondered to what extent those who voted for Brexit were consciously choosing to explore beyond the rational. Or were they also simply victims, rather than practitioners, of magic?

Using magical knowledge to manipulate innocent people can be fun and can provide a rather pleasing sense of potency. If there is any meaning in the popular division between “black” versus “white” magic – this could be where it lies. In Crowley’s words book *Magick in Theory and Practice* he describes the “black brothers” in terms of their fear of losing the Ego at the higher levels of initiation. Section 23.1 describes a situation when, having stripped off many of the labels that society demands, one finds oneself approaching a pure and relatively selfless state of common humanity. Instead of letting that happen, one might cling to the Ego and become a “black brother”. Rather than letting it melt into the wholeness, maybe the black brother sees their ego as being the whole.

According to Crowley, the black brother slowly disintegrates, while preying on others for his own self-aggrandisement. This “preying on others” fits what I am describing as magic in the pursuit of power, but whether it necessarily has to fail is, to me, still an open question. I love to picture a whole population of confidence tricksters, populist politicians, snake-oil salesmen, marketing executives and crooked psychics slowly and painfully disintegrating – but what does that make me? In section 23.4 I explored the inverse relationship between strength and power, in such terms Hitler, Thatcher and Hussein are examples of too much power making them too weak to survive reality without the support of reluctant sycophants.

These characters may have some part in the broader magical culture, but they are by no means exemplars of it. They are enjoying an illusion of freedom while being trapped in a sincere belief that, for example they are truly superior, or that they know or must serve the real truth, or that money really is that which makes the world go round. They are the magical culture's equivalent of "bad taste" in an artistic culture, of "heresy" in a religious culture or "pseudoscience" in a scientific culture.

The younger brother I described has no such limitation: he has found something that works for him and he continues to explore it. This is magic, but that does not mean that he is forever insulated from delusion. The better his magic succeeds, the greater the temptation to start to “believe” it in the non-magical sense, which implies that it is absolutely and objectively true. There could then arise a temptation to publicise his successes, to sell his technique as a “new healing paradigm”, to found a cult – and end up just as trapped as his eldest brother.

All three brothers would be called “outsiders”, because each has departed from the herd. All three risk being condemned: Meursault as an outsider or “creep”; the older brother as a criminal, and the younger as a witch. As the alchemist Thomas Vaughan put it in 1650: “A witch is a rebel in physics and a rebel is a witch in politics”.

Society is still keen to destroy its dissenters – even as I witness dissent becoming the norm.

28. In Conclusion

Around the turn of the century I was receiving a lot of junk mail advertising incredible get rich opportunities – often a software package designed to optimise success in spread betting, horse racing, currency trading or whatever. I was curious, but the software always came as a Windows .exe file, whereas I was using Mac. It was widely assumed in those days that everyone had a PC, and so there was no mention of software compatibility anywhere in the promotion.

It gave me a taste of how a committed Christian might feel in a totally secular society.

Things are better now. Most software packages seem to offer a choice of versions for different operating systems. But why had I chosen to be an Apple “outsider” in those heady dotcom days when there was a fortune to be made by simply going with the upward flow? There was a touch of aestheticism in my choice – there was a little more beauty in the Mac interface. But, unlike those junk mailers, I refused to accept that Windows was “reality” in a way that Mac was not. It was just that Mac “worked” for me.

I had learnt that sort of choosing back in my student days when, like many of my generation, I enjoyed exploring comparative religion and philosophy. Keen on yoga, I hugely admired and respected the traditional Indian philosophical systems, but they never quite stuck. Their interface was a little too complex for me with its rich imagery and lengthy Sanskrit terminology, whereas the moment I discovered Taoism I felt utterly at home. Similarly the classical gods of Greece and especially Rome were immediately alive for me whereas the hugely appealing and racially more appropriate Nordic tradition never quite fired on all cylinders.

By then I was learning not to draw absolute conclusions from my feeling choices. They provided no proof that Taoism was more true, or that tantra was not beautiful – as I might have assumed at an earlier age. Each of these philosophies presented a different operating system and the fact that they all had millions of users suggested that each one was fully compatible with the human brain, even if some ran a little more smoothly than others in my own head.

I remembered an uncle who was racist (I am glad to note that he was an uncle by marriage, not a blood uncle). This solid, down-to-earth Northerner from mining stock was convinced that non-white races were inferior in proportion to the depth of their skin colour, and this package did not feel right to me. In the scientific spirit of my age I offered objective evidence that his thinking was not “true”, by drawing his attention to a number of clearly intelligent, erudite and accomplished black speakers on television. But what he saw was “some jumped up darkies putting on airs”. I realised that the limitation when truth-testing a worldview by observation is that the operating system maintains stability by adjusting one’s very perception.

So I reverted to more traditional criteria and decided that his worldview was not “good” in the religious context of my family and Cotswold circles. But I also recognised that it might be judged “good” in a different context: such as if he was applying to the South African government of the day.

This was long before I had envisaged my compass of cultures, so I did not go on to judge his thinking in terms of “beauty”, but I now would recognise that it did point to a duller, less colourful society. More significantly: I recognise now that his thinking reduced this quite likeable uncle figure in my estimation – his idea made him smaller, more limited, less whole.

So how did my technical writing business survive in a world where the only reality was Windows? It was a struggle that got easier with the arrival of Virtual PC, which allowed my Mac to “think Windows” and communicate with my clients. Virtualisation is now a major factor in any large data centre: whatever software is required, the system can spin up a virtual machine with suitable memory, processing and operating system to accommodate it.

Something similar has been happening in our society. With widespread access to more philosophical systems, we have a growing choice of software to process our reality. Debating the state of the world you may hear a mix of political, psychological, sociological, evolutionary, economic and other viewpoints. Choose the right company and you might also hear a range of Christian, Muslim, Hindu or other opinions. Other groups might add astrology, alien contacts, spiritual ascension or original sin. And more people nowadays will have little problem running several of these models simultaneously in their search for meaning.

These models can be compared with the Platonic notion that our experience is a shadow cast from a higher reality. In a religious culture “higher” equates with goodness: in fifteenth century Europe it would be “good” to profess Christianity and “bad” to choose atheism, whereas in the 1950s atheism would be recognised for being more “true”. The model that is accepted as “good” or “true” can then be seen to shape the shadows that we experience – effectively adding a “Platonic Layer” to everyday living.

Accepting such a higher reality amounts to accepting the rules of a game, and those rules help us to filter, order and make sense of experience – rather than be overwhelmed by a flood of unstructured sense impressions, as when under the influence of LSD.

“Playing the game” requires accepting the locally agreed version of the Platonic Layer, whereas this book has been exploring a higher “Games Layer” that offers any number of alternative possibilities. Having the freedom to mix and match our brain software removes that sense of assurance that comes from a single Platonic model, but replaces it with an unlimited richness of content. It offers access to extensive suites of software for manipulating and ordering life’s content without relapsing into hopeless complexity.

The criterion of choice is no longer “goodness” or “truth” but what offers a feeling of growth towards wholeness – and that is why the choice is so much more open. Goodness is hierarchical: even if the seeker has decided that all the world’s religions are good, it would still be bad to choose any other than the most good. Truth is not so hierarchical, but it is still exclusive: even if the seeker decides that all scientific theories appear to be true, combining two or more mutually contradictory theories could not itself be true. Selection towards wholeness, however, can embrace contradiction as well as diversity.

That is why this book does not present the Games Layer as an alternative Platonic model, justifying its truth with experimental evidence, scientific theories or statistics that might simply be perceived differently by readers running different operating systems. Nor does it justify the Games Layer's "goodness" with quotes from acceptable authorities and leading academics that might not prove acceptable to every reader. I learned that lesson when a friend lent my first published book to a representative of the Rationalist Press Association and got a highly rational response along the lines: "on page three he mentions Jung – never a good sign".

Instead this book presents a series of thought experiments. In fact the whole book is one big thought experiment: a suite of programs for readers to run in their own minds. Not to judge if they are true, or good, or even beautiful, but whether they offer a feeling experience that is somehow bigger and more whole. That is how my own experience grew as a mathematician when I allowed the irrational and the imaginary numbers to explode the boundaries of the merely real.

Today, judgement by feeling is the way forward. I would no longer expect any scientific report to be refused by a respected academic journal on the grounds that it was blasphemous or evil, because it has long been accepted that what really matters is the truth – in terms of peer acceptance, repeatability, consistency and accuracy. And yet a little research on Google shows that a

surprising number of untrue papers are now being accepted, partly because it is harder to raise money for repeating research than for new work that might prove lucrative. The number of papers is growing faster than funding, so the review process relies increasingly on outward signs of intelligence (no spelling or grammatical mistakes), thoroughness (acceptable references – ie not too much CG Jung – all in correct format), and on there being nothing too radical in the conclusion. This is a very subtle form of decision-making, and hard to pin down in a scientific context. In magical terminology, however, it is simple: academic papers are increasingly accepted if they give off the right vibes.

This ability to choose between different sets of rules and play one's own game is what characterises magical thinking as an advance on religious or scientific thinking, rather than a backward step. It can accelerate human evolution by developing new modes and levels of experience. Some of these might offer further scope for development, others might congeal into a new version of accepted truth, while others might simply prove unworkable.

Might this indeed be what is “happening to the Enlightenment”?

THANK YOU

Towards the beginning of the 1970s there was a nature film that included a sequence about a large moth with a highly developed sense of smell that could locate a mate more than two miles distant (the film might have been *The Hellstrom Chronicle?*). A few years later, I used the image of that moth as a dedication for the first edition of *SSOTBME*, published by myself.

Having failed to woo a publisher, I was not confident that there were any other people that thought like me – was worth sending out this message? So I shaped these words to the image:

To a large white moth, phantom of the American night, so rare it finds its mate only by a scent, which carries on the wind (you could say it stinks). White pages flutter round the world, but we are a rarer breed, for we follow our separate trails with joy, not hope.

That second sentence reflected my intention (reiterated in Thundersqueak) simply to become aware that there are other explorers on the path, rather than any need to get together and form a movement. (As to the “large white moth”, I now suspect that it was the lime green Lunar Moth, and maybe it was filmed using night vision – so I simply assumed it was white.)

Since then I have over years and decades received many encouraging messages from like-minded readers: letters and visits in the 70s and 80s, then came e-mails and now an astonishing number of favourable comments via the Internet. Every one of these has been welcome, a source of inspiration, and further encouragement to keep going – even if I sometimes failed to respond in kind. So this book, a summary of my early thoughts, I dedicate with the utmost gratitude to every one of those past readers, as well as others to come.



A LARGE WHITE MOTH

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 so rare it finds its mate only by ascent which
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