



— ROSICRUCIAN —
BEACON

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On the left, Emperor emeritus Fr Christian Bernard wishes our new Emperor Fr Claudio Mazzucco Peace Profound and blessings in abundance for a bright new future as Emperor and President of the world-wide Rosicrucian Order.



ROSICRUCIAN BEACON

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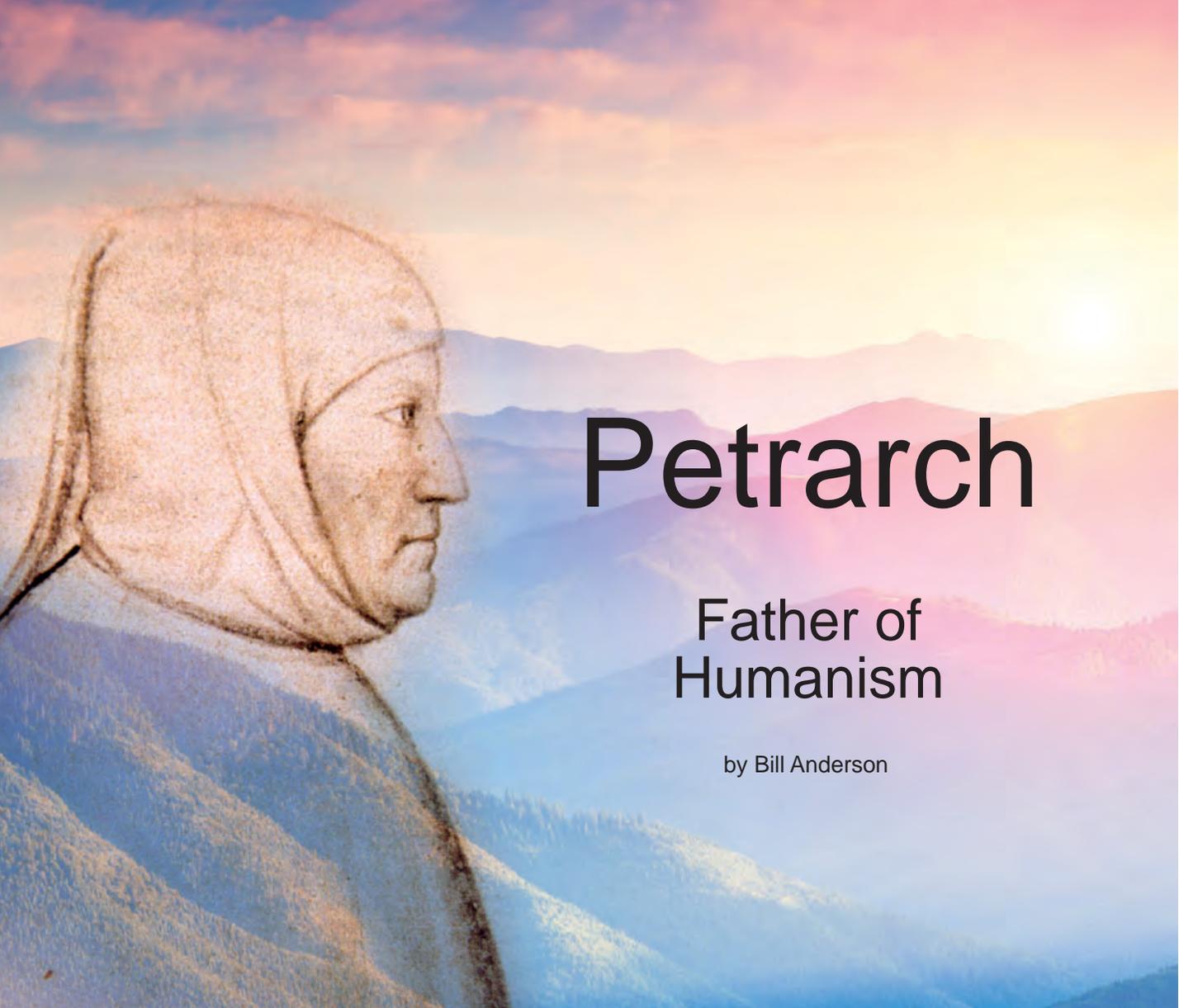
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Cover spread

Hidden Life in Frozen Waters





Petrarch

Father of Humanism

by Bill Anderson

FRANCESCO PETRARCA (20 July 1304 – 19 July 1374), commonly anglicised as *Petrarch*, was an Italian scholar and poet of the period known as the *Trecento* (1300s) in Renaissance Italy. His rediscovery of Cicero's letters is often credited for initiating the 14th Century Renaissance. Petrarch is often considered the founder of *Humanism*, and as a poet, his sonnets were admired and imitated throughout Europe during the Renaissance, and became a model for lyrical poetry.

Setting the Scene

Petrarch lived in the 14th Century: tumultuous times. The last Cathars who had fled to northern Italy were being hunted down and murdered. The Knights Templar were being harried throughout Europe after their Order was dissolved and their wealth seized by European rulers.

And the Black Death decimated the continent between 1347 and 1353, reputedly reducing its population by a staggering 60%.

The bitterly cold winters and drenching rains of the early 14th Century announced the end of the *Medieval Warm Period* (MWP) when Europe had expanded dangerously close to the limits of its resources. Four centuries of unusually mild temperatures, the highest in 8,000 years, prompted the continent's farmers to plant crops on large tracts of land previously unsuitable for agriculture. The increased food supply in turn fuelled a population explosion that tripled the number of people in medieval Europe. A series of famines and plagues, beginning with the Great Famine of 1315–17 and especially the Black Death, reduced the population perhaps by half or more as the first century of the Little Ice Age began. It took 150 years for the European population to regain the levels of 1300.





Petrarch was born in the Tuscan city of Arezzo in 1304.

There is an account of grain prices in Europe in which the price of wheat doubled from 20 shillings per quarter in 1315 to 40 shillings per quarter by June of the following year. Grape harvests also suffered, which reduced wine production throughout Europe. During this climatic change and subsequent famines and diseases, Europe's cattle were struck with *Bovine Pestilence*, a pathogen of unknown identity. The pathogen began spreading throughout Europe from Eastern Asia in 1315 and reached the British Isles by 1319. The lower temperatures and a general lowering of nutrition levels among cattle, lowered herd immunities, making them ever more vulnerable to disease, and the proliferation of dead or unhealthy cattle drastically affected dairy production. Much of medieval peasants' protein was until the early 1300s obtained from milk in its various forms. Milk shortages therefore caused marked nutritional deficiencies in human population centres throughout Europe. Famine and pestilence, exacerbated with the prevalence of war during this time, led to the death of an estimated 10% to 15% of Europe's population. This, then, was the Europe into which Petrarch was born.

Letter to Posterity

Petrarch himself wrote a letter introducing himself, called his *Letter to Posterity*, parts of which are reproduced below:

To begin then with myself. The utterances of men concerning me will differ widely, since in passing judgment almost everyone is influenced not so much by truth as by preference, and good and evil report alike know no bounds. I was, in truth, a poor mortal like yourself, neither very exalted in my origin, nor of the most humble birth, but belonging, as Augustus Caesar says of himself, to an ancient family.

My parents were honourable folk, Florentine in their origin, of medium fortune, or, I may as well

admit it, in a condition verging upon poverty. They had been expelled from their native city, and consequently I was born in exile, at Arezzo, in the year 1304 on the 20th July, on a Monday, at dawn. I have always possessed an extreme contempt for wealth; not that riches are not desirable in themselves, but because I hate the anxiety and care which are invariably associated with them. I have, on the contrary, led a happier existence with plain living and ordinary fare. So-called convivia, which are but vulgar bouts, sinning against sobriety and good manners, have always been repugnant to me.

I possessed a well-balanced rather than a keen intellect..., one prone to all kinds of good and wholesome study, but especially inclined to moral philosophy and the art of poetry. The latter, indeed, I neglected as time went on, and took delight in sacred literature. Finding in that a hidden sweetness which I had once esteemed but lightly, I came to regard the works of the poets as only amenities.

Among the many subjects that interested me, I dwelt especially upon antiquity, for our own age has always repelled me, so that had it not been for the love of those dear to me, I should have preferred to have been born in any other period than our own. In order to forget my own time, I have constantly striven to place myself in spirit in other ages, and consequently I delighted in history.

So, Petrarch in his own words. What he says about himself seems to be true, and not boasting at all.

Early Life

As he says, he was born in the Tuscan city of Arezzo in 1304. He spent his early childhood in the village of Incisa, near Florence, but spent much of his early life in France at Avignon and nearby Carpentras, to



where his family moved in order to follow Pope Clement V (reigned: 5 June 1305 to 20 April 1314). This is the Pope who abolished the Knights Templar. He was also the Pope who moved there in 1309 to begin the Avignon Papacy. Petrarch studied law at the University of Montpellier (1316–1320) and the University of Bologna (1320–23). Because his father was in the legal profession, he insisted that Petrarch and his brother study law as well. Petrarch however, was primarily interested in writing and Latin literature.

Petrarch travelled widely in Europe, served as an ambassador, and has been called the world's *"first tourist"* because he travelled purely for pleasure. During his travels, he collected crumbling Latin manuscripts and was a prime mover in the recovery of knowledge from writers of Rome and Greece. In 1345 he personally discovered a collection of Cicero's letters not previously known to have existed.

Disdaining what he believed to be the ignorance of the centuries preceding the era in which he lived, Petrarch is credited with creating the concept of the historical *'Dark Ages'* of Europe. He regarded the post-Roman centuries as *'dark'* compared to the light of classical antiquity. The phrase *'Dark Age'* itself derives



In 1345 he personally discovered a collection of Cicero's letters not previously known to have existed.

from the Latin *saeculum obscurum*, originally applied by Caesar Baronius in 1602 to a tumultuous period between the 10th and 11th Centuries. The concept thus came to characterise the entire Middle Ages as a time of intellectual darkness between the fall of Rome and the Renaissance, a view particularly prevalent during the 18th Century Age of Enlightenment.

He said he was the friend of kings and others whom he met on his travels. He was close friends with Francesco Landini (1325/1335 – 1397) of Florence and one of the most famous and revered composers of the second half of the 14th Century, and by far the most famous composer in Italy. His music has echoes of the Byzantine Imperial Court in Constantinople and he was the foremost exponent of the Italian Trecento style.

Another friend was another Florentine: Giovanni Boccaccio (16 June 1313 – 21 December 1375), the Italian writer, poet and important Renaissance humanist. Boccaccio wrote a number of notable works, including *The Decameron*. He wrote his imaginative literature mostly in the Italian vernacular and is particularly noted for his realistic dialogue which differed from that of his contemporaries.



Petrarch was close friends with Francesco Landini, one of the most famous and revered composers of the second half of the 14th Century.



Another friend was another Florentine: Giovanni Boccaccio, the Italian writer, poet and important Renaissance humanist.



Father of Humanism

Petrarch is traditionally called the “*Father of Humanism*” but is considered by many to be more generally the “*Father of the Renaissance*.” This honorific is given both for his influential philosophical attitudes, found in his many personal letters, and his discovery and compilation of classical texts.

In his work *Secretum meum* he points out that secular achievements did not necessarily preclude an authentic relationship with God. Petrarch argued instead that God had given humans their vast intellectual and creative potential to be used to their fullest. He inspired Humanist philosophy, which led to the intellectual flowering of the Renaissance. He believed in the immense moral and practical value of the study of ancient history and literature..., that is, the study of human thought and action.

Petrarch argued that God had given humans their vast intellectual and creative potential to be used to their fullest.

As Petrarch learned more about the classical period, he began to venerate that era and rail against the limitations of his own time. Though he felt that he lived “*amid varied and confusing storms*”, he believed that humanity could once more reach the heights of past accomplishments. To him, Latin was not merely a self-justifying discipline, but the means to re-enter the realms of classical thought and imagination, to find new ways of thinking and investigating yourself and the world at large. His travels around Europe, “*I am a citizen of no place, everywhere I am a stranger*”, introduced him to different cultures and his poetry, for which he is best known, was not only a way of writing, but also a manner of thinking.

He owned a Greek manuscript of Plato and read the *Timaeus* and *Phaedo*, which were available to him in Latin translations. He also gathered information on Plato in other Roman authors and cited some Platonic doctrines. However, more important than these occasional references to specific theories is his conviction that Plato was the greatest of all philosophers.

A highly introspective man, he shaped the nascent Humanist movement a great deal, because many of the internal conflicts and musings expressed in his writings were seized upon by Renaissance Humanist philosophers

and argued continually for the next 200 years. For example, Petrarch struggled with the proper relation between the active and contemplative life and tended to emphasise the importance of solitude and study. He asserts that man and his problems should be the main object and concern of thought and philosophy. In a clear disagreement with Dante, in 1346 Petrarch argued in his *De vita solitaria* that Pope Celestine V’s refusal of the papacy in 1294 was a virtuous example of solitary life. Later, the politician and thinker *Leonardo Bruni* (1377-1444) argued for the active life, or “*civic humanism*.” As a result, a number of political, military and religious leaders during the Renaissance were inculcated with the notion that their pursuit of personal fulfilment should be grounded in classical example and philosophical contemplation.

Climbing Mount Ventoux

Petrarch wrote an account of an ascent that he and his brother made of Mount Ventoux in France. It may have been an actual journey, but whether it was or not, it is filled with allegorical allusions and hidden meanings that resonate well with Rosicrucians. Below follows a portion of this account, long in words perhaps but steeped in allegorical meaning.

Today I ascended the highest mountain in this region. For many years I have been intending to make this expedition. You know that since my early childhood, as fate tossed around human affairs, I have been tossed around in these parts, and this mountain, visible far and wide from everywhere, is always in your view. So, I was at last seized by the impulse to accomplish what I had always wanted to do.

I now began to think over whom to choose as a companion. It will sound strange to you that hardly a single one of all my friends seemed to me suitable in every respect; so rare a thing is absolute congeniality in every attitude and habit even among dear friends. One was too sluggish, the other too vivacious; one too slow, the other too quick. One was duller, the other brighter than I should have liked. This man’s taciturnity, that man’s flippancy; the heavy weight and obesity of the next, the thinness and weakness of still another were reasons to deter me. The cool lack of curiosity of one, like another’s too eager interest, dissuaded me from choosing either. All such qualities, however difficult they are to bear, can be borne at home: loving friendship is able to endure everything, it





“Today I ascended the highest mountain in this region. For many years I have been intending to make this expedition.”

Mont Ventoux in the distance.

refuses no burden. But on a journey, they become intolerable.

Thus, my delicate mind, craving honest entertainment, looked about carefully, weighing every detail with no offense to friendship. Tacitly it rejected whatever it could foresee would become troublesome on the projected excursion. What do you think I did? At last I applied for help at home and revealed my plan to my only brother, who is younger than I. He could hear of nothing he would have liked better and was happy to fill the place of friend as well as brother.

We left home on the appointed day and arrived at Malaucène at night. This is a place at the northern foot of the mountain. We spent a day there and began our ascent this morning. From the start we encountered a good deal of trouble, for the mountain is a steep and almost inaccessible pile of rocky material. However, what the Poet says is appropriate: “*Ruthless striving overcomes everything.*” (Vergil: Georgics & Macrobius, Saturnalia.)

The day was long, the air was mild; this and vigorous minds, strong and supple bodies, and all the other conditions assisted us on our way. The only obstacle was the nature of the spot. We found an aged shepherd in the folds of the mountain

who tried with many words to dissuade us from the ascent. He said he had been up to the highest summit in just such youthful fervour fifty years ago and had brought home nothing but regret and pains, and his body as well as his clothes torn by rocks and thorny underbrush. Never before and never since had the people there heard of any man who dared a similar feat.

Young people’s minds do not give credence to advisers...

While he was shouting these words at us, our desire increased just because of his warnings; for young people’s minds do not give credence to advisers. When the old man saw that he was exerting himself in vain he went with us a little way forward through the rocks and pointed with his finger to a steep path. He gave us much good advice and repeated it again and again at our backs when we were already at quite a distance. We left with him whatever of our clothes and other belongings might encumber us, intent only on the ascent, and began to climb with merry alacrity. However, as almost always happens, the daring attempt was soon followed by quick fatigue.

Not far from our start we stopped at a rock. From there we went on again, proceeding at a slower



pace, to be sure. I in particular made my way up with considerably more modest steps. My brother endeavoured to reach the summit by the very ridge of the mountain on a short cut; I, being so much more of a weakling, was bending down toward the valley. When he called me back and showed me the better way, I answered that I hoped to find an easier access on the other side and was not afraid of a longer route on which I might proceed more smoothly. With such an excuse I tried to palliate my laziness, and, when another would have already reached the higher zones, I was still wandering through the valleys, where no more comfortable access was revealed, while the way became longer and longer and the vain fatigue grew heavier and heavier.

With such an excuse I tried to palliate my laziness...

At last I felt utterly disgusted, began to regret my perplexing error, and decided to attempt the heights with a wholehearted effort. Weary and exhausted, I reached my brother, who had been waiting for me and was refreshed by a good long rest. For a while we went on together at the same pace. However, hardly had we left that rock behind us when I forgot the detour I had made just a short while before and was once more drawing down the lower regions. Again I wandered through the valleys, looking for the longer and easier path and stumbling only into longer difficulties. Thus I indeed put off the disagreeable strain of climbing. But nature is not overcome by man's devices; a corporeal thing cannot reach the heights by descending. What shall I say? My brother laughed at me; I was indignant; this happened to me three times and more within a few hours. So often was I frustrated in my hopes that at last I sat down in a valley. There I leaped in my winged thoughts from things corporeal to what is incorporeal and addressed myself in words like these:

"What you have so often experienced today while climbing this mountain happens to you, you must know, and to many others who are making their way toward the blessed life. This is not easily understood by us men, because the motions of the body lie open while those of the mind are invisible and hidden. The life we call blessed is located on a high peak. 'A narrow way,' they say, leads up to it. Many

hilltops intervene, and we must proceed 'from virtue to virtue' with exalted steps.

On the highest summit is set the end of all, the goal toward which our pilgrimage is directed. Every man wants to arrive there. However, as Ovid says: 'Wanting is not enough long and you attain it.' You certainly do not merely want; you have a longing, unless you are deceiving yourself in this respect as in so many others. What is it then that keeps you back? Evidently nothing but the smoother way that leads through the meanest earthly pleasures and looks easier at first sight. However, having strayed far in error, you must either ascend to the summit of the blessed life under the heavy burden of hard striving, or lie prostrate in your slothfulness in the valleys of your sins.

There is a summit, higher than all the others. The people in the woods up there call it 'Sonny', I do not know why. However, I suspect they use the word in a sense opposite to its meaning, as is done sometimes in other cases too. For it really looks like the father of all the surrounding mountains. On its top is a small level stretch. There at last we rested from our fatigue."

And now, since you have heard what sorrows arose in my breast during my climb, listen also to what remains to be told. Devote, I beseech you, one of your hours to reading what I did during one of my days. At first, I stood there almost benumbed, overwhelmed by a gale such as I had never felt before and by the unusually open and wide view. I looked around me: clouds were gathering below my feet. From there I turned my eyes in the direction of Italy, for which my mind is so fervently yearning.

I rebuked the weakness of a mind not yet grown to manhood...

The Alps were frozen stiff and covered with snow - those mountains through which that ferocious enemy of the Roman name once passed, blasting his way through the rocks with vinegar if we may believe tradition. They looked as if they were quite near me, though they are far, far away. I was longing, I must confess, for Italian air, which appeared rather to my mind than my eyes. An incredibly strong desire seized me to see my friend and my native land again. At the same time, I rebuked the weakness of a mind not yet grown to manhood, manifest in



both these desires, although in both cases an excuse would not lack support from famous champions.

Then another thought took possession of my mind, leading it from the contemplation of space to that of time, and I said to myself:

“This day marks the completion of the tenth year since you gave up the studies of your boyhood and left Bologna. O immortal God, O immutable Wisdom! How many and how great were the changes you have had to undergo in your moral habits since then.”

I will not speak of what is still left undone, for I am not yet in port that I might think in security of the storms I have had to endure. The time will perhaps come when I can review all this in the order in which it happened. Thus, I revolved in my thoughts the history of the last decade. Then I dismissed my sorrow at the past and asked myself:

“Suppose you succeed in protracting this rapidly fleeing life for another decade, and come as much nearer to virtue, in proportion to the span of time, as you have been freed from your former obstinacy during these last two years as a result of the struggle of the new and the old wills. Would you then not be able, perhaps not with certainty but with reasonable hope at least, to meet death in your fortieth year with equal mind, and cease to care for that remnant of life which descends into old age?”

I was grieved by the fickleness of all that men do...

These and like considerations rose in my breast again and again. I was glad of the progress I had made, but I wept over my imperfection and was grieved by the fickleness of all that men do. In this manner I seemed to have somehow forgotten the place I had come to and why, until I was warned to throw off such sorrows, for which another place would be more appropriate. I had better look around and see what I had intended to see in coming here. The time to leave was approaching, they said. The sun was already setting, and the shadow of the mountain was growing longer and longer. Like a man aroused from sleep, I turned back and looked toward the west. The boundary wall between France and Spain, the ridge of the

Pyrenees, is not visible from there, though there is no obstacle of which I knew, and nothing but the weakness of the mortal eye is the cause. However, one could see most distinctly the mountains of the province of Lyons to the right and, to the left, the sea near Marseilles as well as the waves that break against Aigues Mortes, although it takes several days to travel to this city. The Rhone River was directly under our eyes.

I admired the nobility of the mind...

I admired every detail, now relishing earthly enjoyment, now lifting up my mind to higher spheres. I was completely satisfied with what I had seen of the mountain and turned my inner eye toward myself. From this hour no one heard me say a word until we arrived at the bottom. These words occupied me sufficiently. I could not imagine that this had happened to me by chance: I was convinced that whatever I had read there was said to me and to no one else. Silently I thought over how greatly mortal men lack counsel who, neglecting the noblest part of themselves in empty parading, look without for what can be found within. I admired the nobility of the mind, had it not voluntarily degenerated and strayed from the primordial state of its origin, converting into disgrace what God had given to be its honour.

How often, do you think, did I turn back and look up to the summit of the mountain today while I was walking down? It seemed to me hardly higher than a cubit compared to the height of human contemplation. How intensely ought we to exert our strength to get under foot not a higher spot of earth but the passions which are puffed up by earthly instincts.

And thus, gather from this letter how eager I am to leave nothing whatever in my heart hidden from your eyes. Not only do I lay my whole life open to you with the utmost care, but every single thought of mine. Pray for these thoughts, I beseech you, that they may at last find stability. So long have they been idling about and, finding no firm stand, been uselessly driven through so many matters. May they now turn at last to the One, the Good, the True, the stably Abiding.



“The life we call blessed
is located on a high peak.”



The summit of modern-day Mont Ventoux.

Later Life

Petrarch spent the later part of his life journeying through northern Italy as an international scholar and poet-diplomat. His career in the Church did not allow him to marry, but he is believed to have fathered two children: a son Giovanni (born in 1337), and a daughter Francesca (born in 1343). Both he later legitimised.

Giovanni died of the plague in 1361. In the same year Petrarch was named canon in Monselice near Padua. Francesca married Francescuolo da Brossano who was later in the same year named executor of Petrarch's will.



Portrait of Petrarch.

In 1362, shortly after the birth of a daughter, Eletta (the same name as Petrarch's mother), they joined Petrarch in Venice to flee the plague then ravaging parts of Europe. A second grandchild, Francesco, was born in 1366, but died before his second birthday. Francesca and her family lived with Petrarch in Venice for five years from 1362 to 1367 at Palazzo Molina; although Petrarch continued to travel in those years. Between 1361 and 1369 the younger Boccaccio paid the older Petrarch two visits. The first was in Venice, the second was in Padua.

About 1368 Petrarch and his daughter Francesca, with her family, moved to the small town of Arquà in the Euganean Hills near Padua, where he passed his remaining years in religious contemplation. He passed away in his house in Arquà early on 20 July 1374..., his 70th birthday!

He was a great poet, writer and scholar, as well as an ambiguous and transitional figure in his role in the history of philosophical thought. His thought consists of aspirations rather than developed ideas, but these aspirations were developed by later thinkers and were eventually transformed into more elaborate ideas. As one of the world's first classical scholars, Petrarch unearthed vast stores of knowledge in the lost texts he discovered, while his philosophy of humanism helped foment the intellectual growth and accomplishments of the Renaissance.

He is important in the history of the western world because he expressed, for the first time, that emphasis on man which was to receive eloquent developments in the treatises of later humanists and to be given a metaphysical and cosmological foundation in the works of Marsilio Ficino and Giovanni Pico della Mirandola.



Touch Therapy

by Heather Newsome



IN THE EARLY 1990s many East European countries managed to throw off over 45 years of harsh totalitarian rule that the majority of their people had been forced to endure for so long. But with the new freedoms that arrived, came freedom of the press as well, and soon afterwards, reports started emerging of one country in particular where appalling conditions had existed for decades in their state controlled orphanages due to basic lack of knowledge and experience by the carers employed in them. From those stories of neglect and indifference to small, orphaned children, people the world over learned a lot about the fundamental

importance of providing children with stable, loving and caring environments in which to develop their innate abilities from as young an age as possible.

Children were packed into cramped, cold conditions in these institutions and segregated by age. There was an insufficiency of food, heating and clothing, but more importantly, a huge deficit in physical contact and interaction both with adults and with other children of their own age. These institutions were stark, quiet places where the normal sounds of laughter and of children at play was entirely absent; and the children were listless and prone to illness.



Many well-researched studies have looked at the affects of the deprivation of contact that these children had to endure and the awful consequences of mental and physical underdevelopment that were common among these children later in life. While the children displayed developmental delays and poor emotional, cognitive, language and behavioural skills, when environmental factors changed for the better, and the children received nurturing and physical contact, they showed remarkable improvements. Those who were adopted and nurtured before the age of six months rapidly improved and were soon at the developmental level of other children. Those who were adopted after the age of six months also showed big improvements, but lagged behind those of other children for many years before catching up with them. One of the primary conclusions of the studies was that something as simple as physical touch given with kindness is a vital ingredient for the wellbeing of children, and indeed for adults.

What is there about the sense of touch, and especially touch that is given with caring, loving hands, that can bring about such miracles of physical, emotional and spiritual healing? Something, without which our lives can seem so empty, hard, sick and indifferent, is undoubtedly the *touch of kindness* that someone bestows upon us. Without this caring physical contact, we can lose our sense of will and purpose in life. From the bright, beautiful colours of a happy life surrounded by caring, tactile friends, without them, we soon descend into a monochrome world of dull shades of day upon day of more of the same.

In past decades, parents were encouraged not to express emotions of love and caring on children, as they should learn to grow up and take the knocks of life on their own. The stiff upper lip approach was to 'allow' children to develop 'in their own way', and ideally to experience the rough edges of life as early on as possible in order to



'toughen them up.' Thankfully times have changed and parents are now encouraged to hold and show affection to their children. There is no longer a social stigma in showering one's child with love and caring, and that, thankfully, is one product of recent decades we can be deeply grateful for.

Some experiments in sensory deprivation have been performed with human volunteers. While physically confined, they were subjected to no sounds, sights or temperature changes, and this deprivation of normal sensory input led their minds to wander and they entered worlds of fantasy and delusion, and very often ended up having hallucinations for the first time in their lives. So, while extensive and intensive sensory deprivation is without doubt harmful for adults, it is much worse and more lasting for infants and young children! The world of sensory input is of crucial importance for us all, and absolutely fundamental for the growth and maturation of our brain and its associated thought processes. Without a wide variety of input that only a varied life can give, we stunt our growth on all planes of our being, and gentle, well-meaning tactile contact with other humans is very important for our wellbeing.

Whereas our senses sight, sound, smell and taste have been extensively explored over the past century, our sense of touch is the least understood of them all, despite the fact that it may be the most important one for our long-term well-being. For there is a close relationship between our skin and our nervous system, and furthermore with the mental image we possess of the world around us. In the early days of our foetal development in our mother's womb, our body-to-be is composed of three sets of special cells. One set, the mesoderm, will form our muscles and bones. Another set, the endoderm, will form our inner organs such as our stomach, intestines, kidneys, liver, lungs, etc. The third set, the ectoderm, forms our nervous system and skin. So, in one sense, our skin emerges from the same tissue from which our brain is formed, and can therefore be viewed as our 'outer brain' or an outer extension of our brain. The skin is so full of



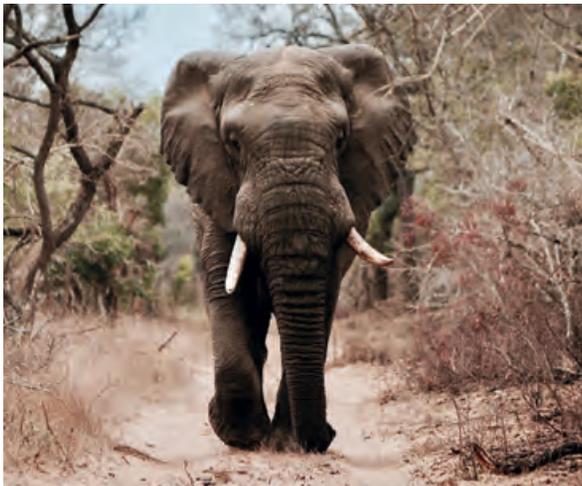
mechanoreceptors (tactile nerve endings) that if we could see only a person's nervous system we'd have no trouble outlining the complete shape of the body, all due to the immense complexity of the nerve endings that give us our wonderful tactile sense.

Doors to Our Consciousness

The skin contains millions of sensory receptor organs. They are the doors through which the physical world enters our consciousness. How many types of these sensory receptor end organs do we have? We believe we have, all told, five senses. However, the actual number of senses is debated in the scientific community, with numbers ranging from 12 to 22.

The more obvious of these message receivers are our eyes, ears, nose and tongue. But even these four can be further subdivided. The eyes have rods in the retina to detect dark and light. They also have cones in the retina to detect various colours. The tongue has sensory receptor organs for salt, sweet, bitter, sour and umami, but maybe one or two other vestigial ones from our ancient past that we're not aware of yet. Our ears can hear a range of pitches and various intensities of sound from roughly 20 cycles per second to 18,000 cycles per second. Yet, we're oblivious to very high frequencies that can be heard by some birds and bats, and very low frequencies that can be perceived by elephants through the pads of their feet. In a very real sense then, elephants can 'hear' certain frequencies, not through their ears, but through the tactile sense in their feet.

While humans are inferior to some animals in the realms of sight, hearing, smell and taste, they make up for it in imagination and intellect, as well as the electronic instruments they can use to perceive what



Elephants can 'hear' certain frequencies, not through their ears, but through the tactile sense in their feet.



The part of a dog's brain devoted to analysing smells is proportionately 40 times larger than that of humans.

only certain animal species can perceive. But smell may be the last frontier in our drive to surpass the sensory scope of other creatures. Dogs possess up to 300 million olfactory receptors in their noses, while humans have a mere 6 million. And the part of a dog's brain devoted to analysing smells is proportionately 40 times larger than that of humans.

There are at least 11 distinct senses that compose touch, with millions of sensory end organs in the skin. Yet, the sensitivity and end organ density of the palm of your hand for example is only one quarter as dense as the tip of your index finger, which is why you feel most sensitively with the tips of your fingers, not with the palms of your hands. Despite this, touch is probably the most overlooked of our senses. We all receive tactile information about the world around us constantly throughout the day, and even while asleep. Right now, if you're sitting, you feel the chair cushion below your buttocks. Your fingertips are probably touching a mouse or swiping the glass on your mobile phone. And all this information is so omnipresent in fact, that the only way to make sense of it is to tune out from most it and allow the subconscious mind to deal with it. Indeed, you probably weren't paying attention to these sensations until you read those words. David Linden, a neurobiologist at Johns Hopkins University once said:

You can't turn off touch. It never goes away [...] You can close your eyes and imagine what it's like to be blind, and you can plug your ears and imagine what it's like being deaf. But touch is so central and ever-present in our lives that we can't imagine losing it.

The touch receptors come in four varieties according to Linden. There's one receptor for perceiving vibrations, one for tiny amounts of slippage, one for stretching of the skin, and one that senses the finest kinds of textures.



They range from light touch to deep pressure and pain. Again, their distribution in the skin varies as to type and quantity that the body deems necessary for each area under consideration. If you place two fingers an inch or two apart on a person's back, the person may not be sure whether you have placed one or two fingers. The human back has far less light touch receptors than other skin areas. This is why patients are often very vague as to the exact location of a back pain. Oddly enough, it's in this lack-of-touch receptor areas of the back that we seem especially receptive to psychic impressions. Our intuitive flashes seem to come from the part of the back between our shoulder blades, directly behind the heart.

We find a more profuse distribution of tactile sense receptors in areas where our outer skin meets our inner, mucous membrane, skin, such as our lips and nasal openings. Also, our fingertips are rich with tactile receptors. Aside from being marvels of dexterity, our hands are our main medium of literally keeping in touch with the physical world. Hands thrive on activity and doctors must take care not to bandage them for long, as they are quick to stiffen under constriction. In a sense, hands represent our life's work. The use of our hands often marks our talents, our character and our culture. They have come to symbolise life itself. Through human hands have come our great paintings, sculptures, writings, music and so on. And in science, hands have built cars, ships, rockets and computers. Yet, perhaps the most noble use of the hand is still to extend it in kindness to a fellow human being.

Hands and Healing

The earliest recorded use of the human hand for therapeutic purposes goes back to ancient Egyptian times where they wrote about feeling a therapeutic energy (*sa ankh*) flowing from their fingertips. It is recorded that the pharaoh or his high priest held daily morning healing sessions during which he made vertical passes with his fingertips up and down a patient's back. This was an early, yet still highly sophisticated, form of hand therapy. The highly sensitive fingertips were approximating the insensitive human back.

The ancient Greek Epidaurus tablets, texts inscribed at Epidaurus, giving details of diseases and cures for worshippers who sought the help of the god of healing at this major sanctuary site, showed how they manipulated the spine of patients. Hippocrates, Galen, and Soranos of Ephesus fostered this therapeutic approach. Hippocrates said: "*In all disease look to the spine...*" and this may be one of the earliest forms of chiropractic practice.

The chiropractor finds an area of spinal irritation and then manipulates the area to reduce the irritation and



normalise nerve impulses from the spine. The osteopath will do soft tissue manipulation of these lesioned spinal areas. The Rosicrucian technique is to apply the fingers and body's electromagnetic energy to the sympathetic chain ganglia that lie on either side of the spine. Massage and digital acupressure are yet other hand techniques used to in improving human health.

Tender Loving Care

We should not overlook the benefit to people who are ill or children on the spectrum of tender loving care. I refer to the turning and massaging of the patient, propping a pillow, changing bed sheets, as well as giving a gracious, caring smile. Sometimes a sympathetic hand on a fevered brow or simply holding their hand in yours is remembered longer and more endearingly than the most sophisticated treatment.

Aside from the therapeutic touch of others, your body's sense of touch can be an avenue for you to help yourself. Stretching is a tonic to certain touch organs. A rocking chair is good for your nervous system. So is a bath, shower, towel rub, hair brushing as well as the grooming of the face and body. Applying deep pressure on your cramping muscles will relax them. We really should find the time to expose our skins to the four elements: earth, water, air and sun.

We need to seek out those experiences that are most the wholesome, uplifting, creative and beautiful for us. Without a doubt, this includes being 'touched' inwardly by beautiful sights, pleasant sounds, delicious tastes,



fragrant aromas, as well as the palpable touch of love. We also need the more formal human relations side to touch, such as a friendly hug at a crucial time, or a kind word to someone needing upliftment. Despair and tension lock your shoulder muscles tight. A sincere, friendly hand helps the muscles relax, if not physically from the other person, then through the mental reset that the recipient receives from the kind gesture. Similarly a heartfelt hug from a friend is always welcome and teaches us to do the same for others and to bond with ever greater portions of the vast egreore of humanity itself.

Talking and exchanging ideas is good, but friends and loved ones need more. They need the occasional physical touch generated from sincerity, genuineness and love. Parents should get down on the living room floor and play with their children. Most animals follow their instincts and play with their young ones. It's fun and it's healthy. Even the most ferocious of animals have been known to become domesticated pets through large doses of petting and affectionate care.

Probably the most helpful thing to do to a withdrawn, frightened or badly-disturbed child is to hold them, hug them and talk softly to them. In this way the boy or girl knows you are concerned. Such human contact through the loving sense of touch absolutely and without the slightest doubt heals deeply and precisely where healing is needed. A judge who had hundreds of juvenile offenders and their parents before him over many years on the bench, made an observation that bothered him. In virtually all of those cases, he never saw a parent put a loving protective arm around a youngster's shoulders. What a difference it would have made if just a friendly, protective hand had rested on the offender's shoulders.

Is part of our trouble with today's youth due to a 'no touch' society? Does the lack of the loving touch in our early years lead to emotional instability in our later years? Many researchers believe so, and we should never miss an opportunity of applying a loving touch. It should be done with genuine concern for another's welfare and is a way of saying: *"I care for your wellbeing and love you as if you were my closest sibling."*

When is the last time you firmly hugged your partner as if s/he were your whole life to you? Your spouse or partner may well be just that. The protective sense is no small matter. An evil person will think twice before interfering with a parent protecting a child. The protection of others brings out powerful forces in us for good. Have you held an infant lately? Have you cuddled them? They need so much loving physical contact in those early years. Have you ever unashamedly hugged a good



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friend? It's friendly and healthy, and reinforces crucial bonds that last in some case throughout life. With others make your handshake warm, sincere and definite as you extend it in friendship.

Touching Others

It's widely understood within psychological research that a 'no touch' society is a society in need of healing, and at the very least, is out of touch with the needs of the human psychic and nervous systems. All this is not to say we should go around touching everyone indiscriminately, but we can place a greater genuineness in our contacts. We can also touch people with our eyes, posture, voice, dress and good manners. We can particularly touch people with kind, sympathetic, understanding words; words that encourage and give strength. Such words help bring to fruition the seeds of greatness we see in each other. We can be touched by beautiful music or the sound of a voice from the heart. We can be touched by beautiful sights, by the smells of nature and the taste of good food.

The greatest handiwork of humankind has been rendered through the heart. Great writers put their hearts on paper with their hands. Great artists put their hearts on canvas with their hands. Try to put your heart into whatever you do with your hands. To work the magic of touch there is one guide for all of us. Let it always be from the heart, and let your heart touch people.

We're most wholesome when our heart is expressed in our handiwork and when our heart is touched by the handiwork of others. Our birth leaves us with no apparent physical attachments. But let's not fool ourselves..., we all still need occasional elevating physical contacts. Our nervous system, emotions and heart thrive on it. We need to touch those we love and care for, and they need our heart-felt touch. So, remember: wherever there's genuine love and true concern, there's magic in the human touch.



Self Awareness

by Edgar Wirt

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WHAT IS MEANT by being self-aware? What can we know about our self? How do we recognise our self and know that it is the most intimate part of what we are? How do we differentiate between the various levels of our self? And how do we recognise and even communicate with the deepest and most stable of all our layers of self, the soul itself? These are all pertinent questions but there are admittedly few really satisfying answers.

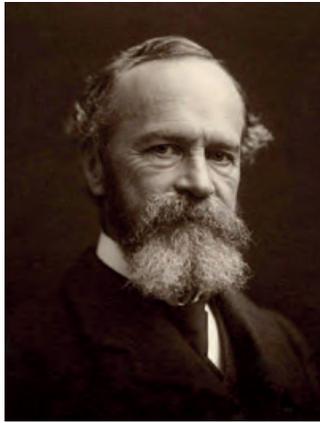
Starting with William James in 1890, psychologists have given much attention to different aspects of the self; how well we can know them and how they affect our behaviour. To make this more pertinent, take just one quality of self that might be labelled honesty. Are you honest in all ways and in all circumstances? How do you know this? A truthful answer might be: *“I don’t know; I haven’t been completely honest in all circumstances, but I hope I am never put to the test.”* We might not be able to



fathom fully how we would act when delving into each aspect of our character. Yet even though we don't have this complete knowledge, each of us has a concept of our self, a 'self-image' that can be described only in terms of its parts or aspects, all of which are changeable. In general, there have been three untested, uncritical assumptions about this self.

- The image we have of our self changes in direct response to incoming information relevant to the self. What we feel and do, what we achieve or fail to achieve, alters our self-image and our self-esteem.
- Conversely, the components of self have a constant and predictable effect on our behaviour.
- We have ready access to knowledge of the various layers or components of self and with training can give accurate reports on them. Subjective as our reports may be, we are convinced of their accuracy because we are the ones making the observations and cannot doubt what we 'see.'

These assumptions do not hold up, however. According to experimental work, before any component of self comes to play a significant part in psychological functioning, it must first become an object of the person's attention. For the most part the components of self lie dormant, even undiscovered, until attention turns inward upon them. Consequently, self-reports about various qualities of self do not necessarily correspond with those



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qualities..., not unless there has been prior awareness of those traits. It turns out in fact that people's self-descriptions often have very little to do with the actual nature of their multi-layered self.

Therefore, to be self-aware, to 'know thyself', would require self-attention to many traits, some of which we aren't even aware of. Psychologists ask more specific questions: How do we acquire direct knowledge about our selves? In what circumstances do we become aware of aspects of self? In what circumstances does a component of self influence our behaviour and experience?

Becoming Aware

Another new principle, but a long-known fact, is that self-awareness is relative; at best it is a part-time state. Waking state attention does not spread widely (as it does during meditation for example) but focuses pretty much on one thing, or at most a few things at a time. It can be directed either to self, or outside away from self, but it cannot be shared between the two at the same moment.

Certainly, the brain has the ability to multitask or time-slice events taking place within oneself with those taking place outside of oneself, and this gives the illusion of being focused on more than one thing at a time. In actual fact though, this ability is undeveloped in most people and even when developed, is merely a rapid oscillation between states of consciousness. The extent of self-directed attention is therefore reduced by a variety of distracting influences, especially sensory stimuli that capture our interest, and activities that demand involvement.

A woman for example who is not self-conscious, gives little time or attention to self-reflection. She is typically extroverted, unaware of aspects or components of self, and thinks of herself as a single work of art, just one piece, not many smaller, cooperating pieces. Even a 'self-aware' person is not totally self-oriented, otherwise he or she would not be able to assimilate any external feedback whereby self-awareness can be altered or extended. Every day there are many occasions and circumstances that prompt self-awareness, especially in connection with social interaction and attention from others. For example, if I hear what someone said about me, or if I wonder what someone notices about me, I am prompted to think analytically about some aspect of myself. According to another principle, when self-directed



attention comes into play, no matter what the cause, it will gravitate toward whatever feature of self is most salient, and not to the entire self.

However, there is a tendency in these situations for some other aspect of self to become the object of attention. For example, when attention is brought to bear on the material, physical self, it is prone to focus next on some other self-component which can be an aspect of the material, the social or the spiritual self. The different aspects of self are not separate but interconnected in ways that enable self-attention to shift among them. The more frequently one turns one's attention inward to any component of self, the more likely one will explore further into other components.

A few decades ago, Professor Robert A. Wicklund, at the University of Texas in Austin, summarised these

It turns out in fact that people's self-descriptions often have very little to do with the actual nature of their multi-layered self.

findings and principles in an article in *American Scientist*¹ from which most of the foregoing and following comments have been taken. He also described an interesting (and now well-known) experiment by C. S. Carver² that illustrates these principles and has further implications, especially for Rosicrucians.

An Experiment in Self-Awareness

For this experiment, a number of college students were questioned as to whether they thought that punishment is effective in learning, and whether they would be willing to use this tactic in teaching. They were then divided into three groups according to their responses: those who were clearly for punishment..., those who were against it..., and a middle group who were not decided either way. This last group was left out of the experiment.

Each of the remaining students was then asked to teach some prescribed verbal material to another person. It was understood by each 'teacher' (but was in fact not true) that the 'pupil' was wired up to an electric shock device and that each time the pupil gave an incorrect response the teacher was supposed to administer a shock of arbitrary intensity. Records of the experiment showed instances in which each teacher thought s/he was administering a shock and the intensity of each shock s/he prescribed.



The brain has the ability to multitask or time-slice events taking place within oneself with those taking place outside oneself, and this gives us the illusion of being focused on more than one thing at a time.

Comparison of results for the two groups showed that they were equal in their use of punishment, namely, their behaviour was not consistent with their self-images as punishers or non-punishers. Perhaps they did not 'know themselves' as well as they thought.

However, the results were different in a later repetition of the experiment in which one major circumstance was changed: now, in the place where each teacher did his teaching, he also faced a mirror. Whenever he looked up, he saw his own reflection. His own movements, whose reflection he caught in the periphery of his vision, prompted him to look up more often. In this circumstance, those who were pro-punishment used punishment more severely, and those who were anti-punishment used it less. In other words, their behaviour was now more consistent with their self-image! Why would a mirror make such a difference?

Facing Oneself

The experiment bore out several of the foregoing principles. Awareness of their images in the mirror prompted the students to think about themselves momentarily. Their self-attention fell first on their physical selves as seen in the mirror, but then shifted to another salient aspect of self. The most salient aspect at that moment had to do with their self-images as either punitive or non-punitive. As their attention turned to it again and again, this aspect had an increasing effect on their behaviour.

In another experiment by Diener and Wallbom,³ also reported by Professor Wicklund, students were left alone to take a test with the instruction that they were to stop work the instant a bell sounded in the room. Each student was observed and monitored secretly. For half the group, each student had full view of himself in a mirror, and at the same time could hear the playback or a recording of





Nearly everyone uses a mirror at times for self-grooming, and one can wonder whether this leads to self-evaluation in any respect other than the appearance of the physical self.

his own voice. The other half were not working in these circumstances.

Continuing to work on the test after the bell sounded was a form of cheating, and all these students honestly felt that they were opposed to cheating. However, in the 'mirrored' group 7% worked past the time signal, and in the other group 71%! Even an accepted social norm (fair play, no cheating) is not brought into play unless self-awareness is directed to it. No doubt this is in part the rationale for sensitivity sessions, role-playing and other educational tactics used in moral training.

Self-Evaluation

Once attention comes to bear on a specific aspect of self, self-evaluation takes over (quite automatically and involuntarily) and can bring forth a concern about it. People who are self-aware become aware of any discrepancy or disparity between their actions and self-image. Or in a social situation they may first become aware of a difference between their own ideas and behaviour, and the ideas and behaviour of others around them, which turns their attention critically to themselves in the first place.

One possible reaction to this is to try reducing the discrepancy by substituting different behaviour, as the students did in the mirror experiments. Another possible

reaction, especially in a social situation, is to reaffirm the self-image and one's own behaviour and to consider the actions and behaviour of others as incorrect.

Still another possible reaction is to try to avoid self-evaluation, to turn attention outward to other things. This is more difficult in the presence of stimuli that tend to generate self-awareness, such as a mirror, in which case the person may try to avoid any such reminder of the self. In several other experiments with students, when their self-image had been jolted, when they had received negative feedback as to some aspect of themselves, they tended to shun pictures of themselves, to leave a room where there was a mirror or TV camera, or to avoid the sound of their own voices from recordings. To use a common expression, they 'hated themselves' at such a moment. It may sound a bit extreme, but 'hating oneself' does nothing to reduce the discrepancy between one's self-image and the evidence contrary to it.

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grooming, and one can wonder whether this leads to self-evaluation in any respect other than the appearance of the physical self. Rosicrucian students use a mirror for various psychic experiments and home exercises, and in light of the foregoing reports, one can wonder whether studying in front of a mirror would tend toward greater self-evaluation and self-honesty, or would distract from the object of study, or would make a person so uncomfortable that he or she would abandon the study period.

The Total Self

Apart from the factual material presented by Professor Wicklund, there are some other considerations. All of the foregoing deals with self in a piecemeal fashion, with its aspects or components rather than the whole. This is the everyday self, the outer self, that is involved in all our daily doings. When attention turns inward to the outer self, it embraces only one or a few salient aspects, but not self as a whole.

Some will of course be uncomfortable with this viewpoint. In fact, a popular slogan used today is be





“According to mystical lore, we gain ‘knowledge’ of this inner Self by developing psychic awareness...”

holistic, which means that a person should consider him or herself as a single though multifaceted whole..., whether in healing, teaching, adjudication or any other relationship. However, it is doubtful that the totality of a person can, with the outer self, ever be fully conceived (embraced) by his or her full conscious attention.

Many people are already familiar with a different concept of self, known as the inner self, the true self, or quite simply as *Self*, with a capital ‘S’. This Self is considered to be partly mortal and partly divine. The divine part, the part that is beyond intellectual analysis, is considered to be indestructible, whole, and not fractioned into parts as the other, outer, multi-layered self is. The Self might be construed as the core of self as opposed to the components of self. According to mystical lore, we gain ‘knowledge’ of this inner Self by developing psychic awareness, which means in effect, bypassing the component parts of the outer self that are manifested in day-to-day affairs. A psychologist, however, might suspect that this is merely a form of evasion, avoiding self-evaluation by withholding any effort to reduce discrepancies between an idealised self-image and actual behaviour.

The idea of the Self, namely, the core of or the aggregation of all aspects of the multifaceted outer self, taken as a single unit of consciousness, is abstract at the very least and almost certainly beyond ordinary knowledge, even though it may not be beyond experience. It is therefore a very tricky area of investigation for hard science. If one begins with the abstract concept of the Self, one may assume, and try to realise a concrete entity that fits the picture of a psychological process. This is called reification. Also,

there is a question as to one’s point of reference or viewing point. Who and where is the observer who is to become aware of that whole, immortal Self? It can be none other than the familiar, practical, mortal outer self, the one that is aware of the world and of itself in the world, but cannot perceive its complete totality.

That is not unfortunate. A sane person cannot escape the outer self and has no choice but to go right along with it. In the end, if the personality (or soul personality) is to develop during this life span, it will be in terms of its daily experiences and responses, with piece-meal accretions to and transmutations of its own awareness: To ‘know thyself’ is a matter of self-attention to its many component parts, and truly knowing thyself is beyond the scope of all enquiry.

Where the grand concept of the total, divine Self has great value is in connection with cosmic principles and cosmic factors whereby such transmutations can be brought about more readily in our daily lives. The ideal of the divine Self is the pattern toward which these transmutations can advance as in the mystical saying: “*As above, so [be it] below.*”

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Florence Nightingale: Spirituality and Egypt

by Connie James



Temple of Hatshepsut near Luxor in Egypt

FLORENCE NIGHTINGALE was born on 12 May 1820 into a wealthy, upper class and well-connected British family in Florence, Italy and named after the city where she was born. She is best known as the founder of modern nursing “*The Lady with the Lamp*”, a reformer in the field of public health, and a pioneer in the use of statistics.

Suggestions for Thought

However, it is not widely known that Florence was at the forefront of the religious, philosophical and scientific thought of her time. In a three-volume work that was never published, “*Suggestions for Thought*”, Florence presented her radical spiritual views, motivated by the desire to give those who had turned away from conventional religion an alternative to atheism. In this article I hope you will find the essence of her spiritual philosophy and from whence it came.

Suggestions for Thought illuminates a little-known dimension of her personality, illustrating the ideas that served as the guiding principles of her work. It is also an historical document, presenting the religious issues that were fiercely debated in the second half of the 19th Century. This 800-page work is designed to make the essence of her spiritual philosophy accessible to the general public, as well as to scholars and students.

In many ways, much of the book is surprisingly

relevant today, when humanity is still trying to reconcile reason with faith. In this book, you have the opportunity to experience one of the great practical minds of modern history as it grapples with the most profound questions of human existence. As these basic human issues are universal and timeless, her words are as immediate and compelling now as they were over a century ago.

To give man a will, an identity, a freedom of his own, and yet so to arrange that his will shall become freely one with the will of God, is the problem of human existence. For the will of God being the will of perfect love and wisdom, is the only will that can lead to perfect happiness. The will of man therefore, in order to attain happiness, must be the same as the will of God.

Travels in Egypt

It is little known that Florence visited Egypt and Greece. Her writings on Egypt in particular are testimony to her learning, literary skill and philosophy of life. Sailing up the Nile as far as Abu Simbel, she wrote of the Abu Simbel temples:

Sublime in the highest style of intellectual beauty,



intellect without effort, without suffering..., not a feature is correct but the whole effect is more expressive of spiritual grandeur than anything I could have imagined. It makes the impression upon one that thousands of voices do, uniting in one unanimous simultaneous feeling of enthusiasm or emotion, which is said to overcome the strongest man.

Her letters from Egypt indicated that she had a gift for writing. At Thebes (Luxor), she wrote of being “*called to God*”, while a week later near Cairo she wrote in her diary: “*God called [...] and asked: would I do good for him alone without reputation.*”

Prior to *Suggestions for Thought*, she wrote *Vision of Temples*¹ after her travels along the Nile. Like so many before and after her, Florence found something deeply spiritual about the land and its enigmatic ruins. Her *Vision* was appended to her letters in 1854 where she wove fact and fiction to explain the origin of several major Egyptian temples..., the temple of Hatshepsut at Deir el-Bahri, the Luxor temple, Qurna with its mortuary temples, Karnak and the temple of Amun, the Ramesseum (Ramesses II) and Medinet Habu (Ramesses III). Two major themes are presented in the *Vision*:

- That our concept of God is imperfect.
- That our understanding of the divine nature increases through an evolution of consciousness.

These ideas were later explored further in *Suggestions for Thought*, the first draft of which she completed within two years of returning from Egypt. In the *Vision*,



Karnak Temple, Egypt

she presented her concept of a benevolent God whose creations function according to universal laws. It was through these laws, she maintained, that we undergo an evolution of consciousness to become one with God.

Knowledge of ancient Egyptian history was fairly basic in her time, compared to what we know now. She begins the *Vision* with an introduction to the temples mentioned above followed by descriptions of pharaohs Tuthmosis III, whose throne name Menkheperre is used as the seal of the Rosicrucian Order. This is followed by Amenhotep III, the father of Akhenaten and grandfather of Tutankhamun. Next, she talks about Ramesses I and his son Seti I of the 19th Dynasty. But her greatest respect and admiration was for Ramesses II (the Great), and she ends with Ramesses III of the 20th Dynasty.

Her belief in reincarnation is revealed when she writes of pharaohs returning to see their works centuries later. She presents them in such a way in order to illustrate the human evolution in the concept of God, with Ramesses II as the sole living god of Egypt, being just one of many ancient expressions of that yearning desire to know the Infinite. These impressions were not based on fact of course, but on the impressions she received from the monuments of these pharaohs and how she then developed those impressions into thoughts, words and chapters. In a letter to her cousin it is clear she is considering reincarnation as a possibility after reading the works of Plato. In her book *Visions*, she added an element of hermeticism in a passage from the hermetic text *The Divine Pyramander of Hermes Trismegistus* from which she could quote at length:

Night is the genesis of all things, primeval darkness is the mother of the world. For darkness is more ancient than light, and day was born of night.

There's often a lot more to people than appears to the casual observer, and Florence Nightingale is a case in point. Nowadays, she is known mainly for the work she did as a nurse during the Crimean War; but as we have seen, there was a deeper, more spiritual side to her nature struggling to express itself in ever more complete ways..., as indeed there is with us all, if only we give it a chance to come to the surface.

1. “*Florence Nightingale in Egypt and Greece*”, by Michael Calabria ISBN: 9-7807-91431160.





Spiritual Evolverment

by Danielle Richardson

LIVING IN a city, I've come to cherish the times I can leave it all behind and take myself into the countryside where I can be alone and have time to sit down, relax and contemplate. My life is normally so busy with work and children that I find it difficult to get any time to myself. Last month I took advantage of some free time to reinvigorate my soul and body. I love trees and the outdoors and one of my favourite places is about an hour's drive away, in a wood with a small lake next to it. It was while sitting quietly in that serene setting that the following thoughts came to me, and I would

like to share them with you.

Every living creature has a soul, a guiding will, intelligence and purpose manifesting as harmonics superimposed on the Life Force which animates all living things. This is our direct link connect to God, or more precisely, the threads of connection that link us to parts of that unknowable and infinite source of all that is. Whether we call it God, the Cosmic, the Divine Mind or something else matters little, but we do know, through direct experience, that life expressions on Earth manifest aspects of this God or Cosmic Mind on all planes of life expression.



Rosicrucians aspire to attain Cosmic Consciousness and understand that a belief in the existence of one universal God constitutes the very beginning of spiritual development.

As we consider the Cosmic as something eternal with no beginning or end, it means I believe, that we too are eternal; at least the parts of us that express attributes of God. Those 'parts', those attributes of the Divine within us, are a conglomeration of all links we possess with our Creator...; and we know it by a name: our 'soul.' This segment of the Divine has the natural power to expand and elevate our outer consciousness toward an ultimate union with its source. Just as our five senses enable our intellect to develop the material side of earthly life, the soul enables us to reach the celestial heights and receive knowledge of the Divine, with its universal laws and omniscience. There is a quote from Plotinus (204-270 CE) that I particularly like:

You ask how can we know the infinite? I answer, not by reason [...] You can only apprehend the infinite by entering into a state in which you are [your] finite self no longer. This is the liberation of your mind from finite consciousness. When you thus cease to be finite, you become one with the infinite. You realise this union, this identity.

Rosicrucians aspire to attain Cosmic Consciousness and understand that a belief in the existence of one universal God constitutes the very beginning of spiritual development. As students on the path we come to recognise that our 'resident' soul is the sum total of what we can experience in human form of our God, and we must allow this expression of the Divine the freedom to unfold its beneficence and infinite wisdom within our finite being. In order to stimulate the soul's unfoldment, we must establish a spiritual living ideal, supported by continuous mental and physical efforts to accomplish that ideal.

The ideal most conducive to spiritual attainment is one that allows us to elevate our soul, mind and body with the aim of ultimately merging with the Divine. This is the highest plane in the universal order and is ever seeking to express more of its Light, Life and Love through the 'human collective.' I listed three points:

1. We should never cease trying to unite with our God, and serve in accordance with the 'original plan' we believe was meant for us in this earthly life.
2. We should try to understand the divine nature of our soul and give it the freedom to express itself ever more widely through our outer nature, leaving it fully unhindered by our petty daily affairs. We can do this by eliminating false beliefs, as and when our soul enables us to realise the errors of those beliefs.
3. We should put our 'physical house' in order by cultivating proper living, focus our minds of logical, compassionate and intuitive thinking, and cultivating healthy eating habits. By doing this, we maintain a clear mind and good physical health.

The Sublimation Process

Good physical health is important, but it's not the only part of our development. Developing our intuitive, psychic and spiritual faculties is just as important. As we begin opening ourselves up to these 'higher' aspects of our being, our sympathetic nervous system and various psychic centres within the body, serve as the body's preferred natural channels for the expression of the soul, and start expressing greater and greater activity within groups of energy of ever higher vibratory frequencies.

When our development has reached a point where the nervous system and psychic centres are able to resonate in sympathy with the vibratory frequencies of the soul, the intellect becomes fully conscious of the actual spiritual force within us. From a Rosicrucian manuscript of the early 20th Century we have the following: "*The universal mind as an intelligence permeates every cell of our being and is accessible as [an] infinite wisdom.*"

Eventually, after conscientiously working on this ideal, and continuously living consistent with the nobler ways of living and thinking engendered by the soul, we



come to experience a union of our soul with our outer intellect. And when these two merge, we are aware of being enfolded by an invisible, living intelligence, and become immersed in divine wisdom and creative thought that enables us to grasp cosmic truths intellectually and spiritually.

Feeding the Physical Body

Being infused with the Light permeating our lives from the Divine Mind through the constant presence of our soul, we are brought into a keener awareness of our body's nutritional needs. And because our body's cells serve to house the divine life essence, we need to keep those cells in a healthy state.

I've found from time to time, that my intuition prompts me to eat specific foods at certain times in order to correct various nutritional deficiencies. At other times I've felt a distinct need to take food supplements in addition to my normal diet, but when my inner needs have been satisfied, I discontinue them and return to the simplest and healthiest types of food I know. And I count in this the types of food I consider as ethically sourced and devoid of animal suffering. This I consider fundamental.

Nurturing Non-attachment

However, the harmonising of the Soul, Mind and Body is only the initial step in the ascent to the highest planes of Cosmic Consciousness. In the mystical process, the body is gradually conditioned to receive and withstand the higher and finer rates of cosmic vibrations yet to come. The intellect gradually becomes 'spiritualised' by the soul essence, and is then able to translate correctly the cosmic impulses into words it can understand. Just as neophytes at the outset of their respective spiritual journeys have to develop themselves on broad fronts in order to gain



sufficient strength and wisdom in gaining audience with the soul, the hoped-for ascent into ever higher planes of soul expression, through the outer human personality, requires a lot of time and practice, and repeatedly entering into deep states of contemplation.

As we journey towards Cosmic Consciousness, we are faced with the important task of readjusting values in the universal scale from the Cosmic down to our material plane. The speed and extent of our subsequent soul unfolding depends on the order in which we place those values. In my perusal it seemed obvious that the source of life should be at the apex, and that non-attachment to worldly things should slowly be developed in our everyday affairs.

The harmonising of the Soul, Mind and Body is only the initial step in the ascent to the highest planes of Cosmic Consciousness.

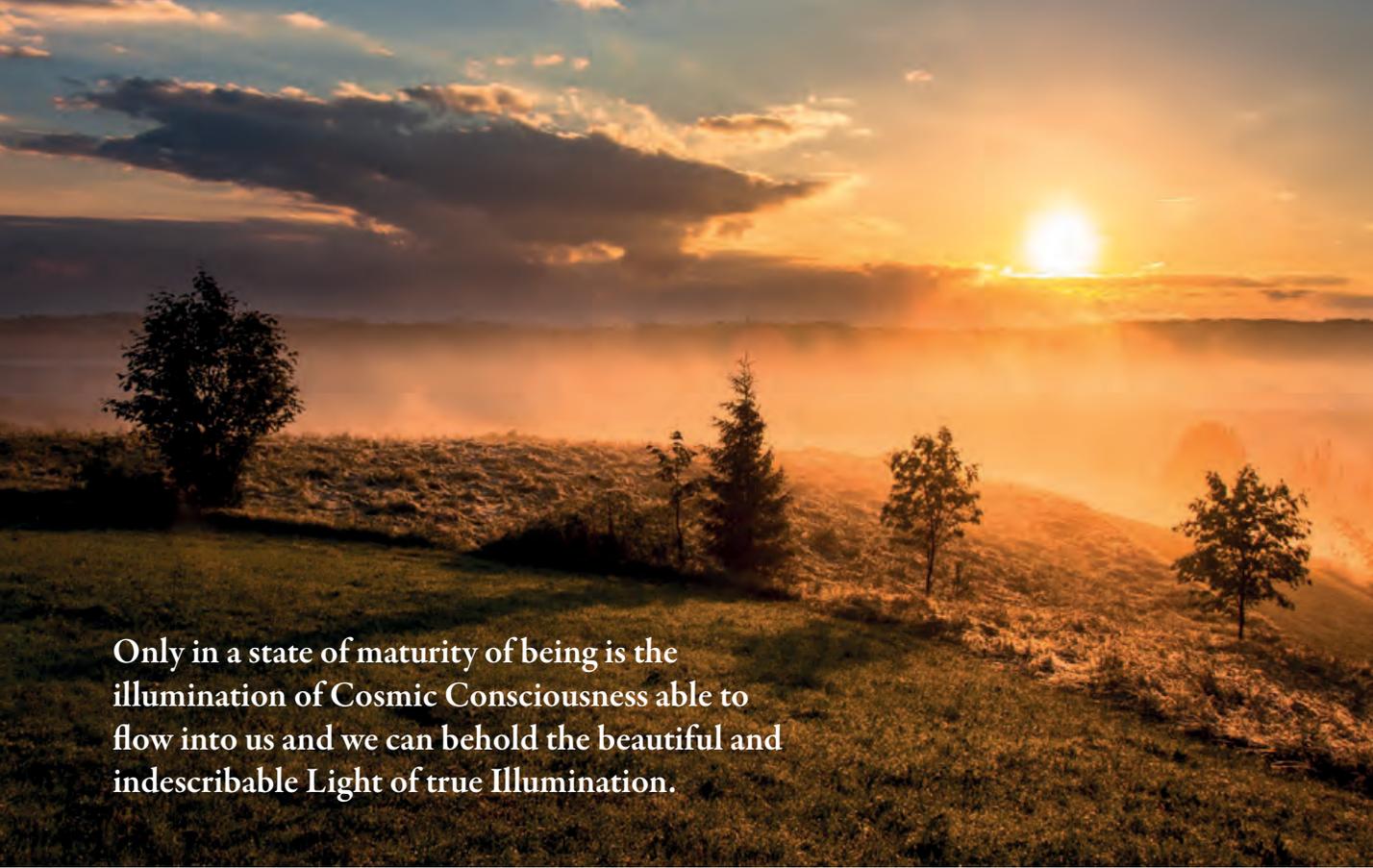
Mystics in times past taught the principle of renunciation of the world in favour of the Divine as the highest and most desirable value we can aspire to. When that source of all that I am is given the highest position and is established as the ideal of my life, mental and emotional inhibitions dissolve into nothing. The soul then, as the closest representative we can know of that ultimate Source of all things, is freed up to continue unfolding our outer being toward emulating ever greater 'portions' of the magnificence of our God.

The Reality of Renunciation

The principle of renouncing the world does not necessarily mean living in seclusion from the world or receding from pleasure and relaxation. Renunciation, in the truest mystical sense, is the refusal to be swayed by greed, selfishness, hate, jealousy, cruelty, dishonesty, deceit, conceit and vanity. Materially speaking, it is to use the great array of aids to better living for comfort and expediency of not only ourselves, but of as many others we can afford to assist, rather than using them as symbols of status and vainglory.

The principle also applies to the popular tendency toward hero worship or demagogism. How often do we come across a film star, sportsperson or politician who is idolised by thousands if not millions for the persona they display. There's a world of difference





Only in a state of maturity of being is the illumination of Cosmic Consciousness able to flow into us and we can behold the beautiful and indescribable Light of true Illumination.

between enjoying and giving credit to an artist for an excellent performance, and viewing that person as a perfect superbeing to be set on a pedestal. As aspirants on a very special path of spiritual development, we can't afford to allow these mental and emotional obsessions to dominate or even influence of our lives.

Falling prey to such practices disrupts the union of the soul with the intellect of its human ward by lowering the tone of the thoughts the person harbours, or in popular terminology, lowering the person's 'mental vibrations.' The soul is constantly attracting our outer attention to realms of the highest purity imaginable, even if we're unaware of it. And we cannot stymie the soul's work for us without experiencing very unpleasant repercussions.

Mental and Emotional Maturity

Renunciation of the world does not mean that we must ignore our responsibility to the rest of the world. We all have karmic obligations that have to be met and compensated for before we bid farewell to our brief sojourn of planet Earth. Through the degrees of enlightenment we attain through our personal life trails and experiences, we must willingly assume the task of responsibly pointing out what is right or wrong to those who come into contact with us and appear willing to learn. We're all on paths towards ever greater spiritual unfoldment and it's incumbent upon us to always lend

a helping hand to those who are seeking what we have already found.

The task of attaining self-maturity and helping others to start on the same process involves never-ending mental activity and intellectual alertness in the effort to analyse whether a given situation is in line with or in opposition to basic principles. Yet, the reward for such painstaking efforts is the gradual growth into mental, emotional and spiritual adulthood, something we would wish for all people.

Our mind is like a rose which shows all of its inherent form and beautiful colours at maturity. Only in this state of maturity of being is the illumination of Cosmic Consciousness able to flow into us and we can behold the beautiful and indescribable Light of true Illumination. Cosmic Consciousness or Illumination, as it's also referred to, is the summum bonum of human attainment on earth, and is the greatest reward we can receive in our personal achievement of mental and emotional maturity. The Roman emperor Marcus Aurelius (121-180 CE) summed this up rather neatly in his book *Meditations*:

Honour the highest thing in the universe; it is the power on which all things depend; it is the light by which all life is guided. Honour the highest within yourself; for it too is the power on which all things depend, and the light by which all life is guided.





Edward Bach Physician, Healer and Mystic

by Luciana Rapso



Rosicrucians have an innate respect for, if not a deep and abiding interest in, health and healing. This is the story of an individual who sought only to heal people in any way he could, dedicating his life to understanding the esoteric aspects illness and disease and helping people to overcome their life problems. His philosophy concurs with the Rosicrucian teachings which emphasise the importance of equilibrium and having the mind and body in harmony.



Edward Bach was born on 24th September 1886, in Moseley, a suburb of Birmingham in England. As a boy he is said to have shown a keen concern for human suffering. He worked in his father's brass foundry and observed the loneliness, alienation and apathy that appeared to affect the general health of many of his co-workers. With this very much in mind and with the financial support of his father, he decided to become a doctor.

He studied medicine at the University College Hospital in London, where he specialised in Bacteriology and Immunology, areas in which he was to concentrate later in life. According to his biographers he was a rather peculiar medical student, because he soon revealed more interest in his patients than for their illnesses. He sat at their bedside and let them talk, discovering that the real cause of illness was worry.

One woman who suffered from acute asthma for instance, was a very frightened person, as he learnt when she told him that her only son had moved away three months previously for work reasons, and since then had been out of touch. The woman feared he had had an accident or that he was dead. But when her son one day came to visit her and told her he had found a new job near home, she started to get better and in the space of a few days recovered completely. He found other patients where *anxiety* or *fear* also played a contributory part in their illness.

Emotional States

“Disease, though apparently so cruel, is in itself beneficent and for our good; and if rightly interpreted, it will guide us to our essential faults.”

Bach obtained a *Diploma of Public Health* at Cambridge University, and then in 1913 he took a post at *University College Hospital* in London as the casualty medical officer. In 1914, following the outbreak of World War I, he left the hospital and was put in charge of 400 war beds. It was here that he began to observe the effects of stress and trauma in relationship to the recovery potential of his patients. As many of the injured were in need of urgent medical treatment, he ordered his team to separate the patients according to their illnesses. They could therefore concentrate on specific ailments at a time. However, after a while he became aware that his strategy was not working for everyone; for while some patients got better, others, in similar conditions showed little sign of recovery.

Following an intuitive episode, he called his team together and told them he had decided to reconsider his initial idea of grouping the patients together by illness. This time he wanted them placed together according to their

emotional state. In this way he applied the medication according to the mental health of each individual patient. The results were excellent. Bach concluded that *the emotional state of a person affected his or her physical health* and accordingly, from then on decided to *treat the cause of the mental condition rather than the symptoms* that the physical body presented.

In 1917 he was working on the wards tending to injured soldiers who had returned from France. One day he collapsed and was rushed into an operating theatre suffering from a severe haemorrhage. His colleagues operated to remove a malignant tumour from his spleen, but the prognosis was poor. When he came round they told him he had only three months at best to live. As soon as he could get out of bed, he returned to his laboratory, intending to advance his work as far as he could in the short time that remained of his life.

He sat at their bedside and let them talk, discovering that the real cause of illness was worry.

But as the weeks went by, he began to get stronger. The three months came and went and found him in better health than ever, and he was convinced that his sense of purpose was what had saved him: he still had work to do, he still had a mission to complete. And work he did, day and night until he discovered a vaccine that would be a cure for a class of chronic illnesses. When fully recovered, he returned to the hospital to tell them of his discovery.

Internal War

“Disease is in essence the result of conflict between Soul and Mind and will never be eradicated except by spiritual and mental effort. No effort directed to the body alone can do more than superficially repair damage.”

Starting in 1919, he worked at the *London Homeopathic Hospital*, where he was heavily influenced by the work of Dr Samuel Hahnemann, the founder of homeopathy, who, some 130 years before had proposed looking to Nature as the font of all life and health and using Her bountiful gifts to cure all illnesses. It was at this hospital that he developed seven bacterial *nosodes*¹ known as the “*seven Bach nosodes*.” Their use has



been mostly confined to British homeopathy practitioners.

Up till then, Bach had been working with bacteria, but wanted to find remedies that would be purer and less reliant on the products of disease. He began collecting plants and in particular flowers, the most highly-developed part of a plant, in the hope of replacing the nosodes with a series of gentler remedies.

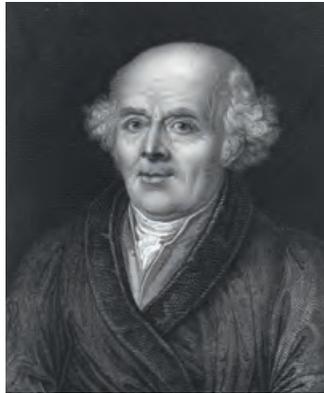
Rather than focusing on the unavoidable role of germs in many illnesses, defective organs and tissues, and other known and demonstrable sources of illness, Bach thought of illness as being fundamentally, and as its deepest cause, the result of a conflict between the will and purposes of the soul and the actual actions and mental outlooks of the person. This 'internal war', he believed, leads to negative moods and *'energy blocking'*, which causes a lack of *'harmony'*, thereby leading to physical diseases. He believed in the following statements which he believed to be self-evident truths:-

- We all possess a soul.
- We incarnate in this world in order to acquire knowledge and experiences in the furtherance of the perfection of our being.
- We are all immortal.
- When the inner expression of our soul and the outer expression of our character harmonise with each other, we find peace, joy, happiness and good health.
- There is a universal unity behind all things.

His Life's Work Begins

"They are able, like beautiful music, or any gloriously uplifting thing which gives us inspiration, to raise our very natures, and bring us nearer to our Souls: and by that very act bring us peace and relieve our sufferings."

Bach started his successful Harley Street practice in 1922, but gave it up in 1930, by which time he was so enthused by his work that he left London to work in the English countryside, determined to devote the rest of his life to the new system of medical care that he was sure could be found in



*Dr Samuel Hahnemann,
the founder of homeopathy.
Line engraving by L. B. Wellcome.*

nature. He took with him, as his assistant, a radiographer called *Nora Weeks*.

Just as he had abandoned his old home, office and work, he abandoned the scientific methods he had used up until then. Instead he chose to rely on his natural gifts as a healer and use his intuition to guide him. Over years of trial and error, which involved preparing and testing thousands of plants, one by one he found the remedies he sought, each aimed at a particular mental state or emotion. His life followed a seasonal pattern: the spring and summer spent looking for and preparing the remedies, the winter spent giving help and advice

to all who came looking for them. He found that when he treated the personalities and feelings of his patients, their unhappiness and physical distress would be alleviated as the natural healing potential in their bodies was released and allowed to work once more.

The winter months were usually spent treating patients who were charged no fees. By 1932 he had discovered the first of 12 remedies and these he used on the many patients who came to him for treatment. Bach decided to spread his knowledge and advertised his herbal

He would suffer the emotional state he needed to cure and then try various plants and flowers until he found a single plant that could help him.

remedies in two of the daily newspapers. This brought him numerous inquiries from the public and also a letter from the *General Medical Council* who disapproved strongly with his advertising.

In 1934, he and Nora Weeks moved to Mount Vernon in the village of Brightwell-cum-Sotwell in the Thames valley in the south of Oxfordshire. It was in the surrounding lanes and fields that he found a further 19 remedies that he needed to complete the series. He would suffer the emotional state he needed to cure and then try various plants and flowers until he found a single plant that could help him. In this way, through great personal suffering and sacrifice, he completed his life's work.

A year after announcing that his search for





remedies was complete, Dr Bach passed through away peacefully on the evening of the 27th November 1936. At 50 years of age, he had outlived his doctors' prognosis by nearly 20 years, but left behind him several lifetimes of experience and effort, and a system of healing that is now worldwide.

Bach Floral Applications

“The action of the flower essences raises the vibration of the being.... They cure by flooding the body with the beautiful vibrations of the highest nature, in whose presence there is the opportunity for disease to melt away like snow in sunshine.”

Bach remedies are dilutions of flowers. He believed that dew found on flower petals retains the healing properties of that plant. The remedies are intended primarily for emotional and spiritual conditions, including but not limited to depression, anxiety, insomnia and stress.

The remedies contain a very small amount of flower essence in a 50:50 solution of brandy and water. Because the remedies are extremely diluted they do not have the characteristic scent or taste of the plant. It is claimed that the remedies contain the ‘energetic’ or ‘vibrational’ nature of the flower and that this can be transmitted to the user. His flower remedies are considered ‘vibrational medicines’ and rely on a concept of water memory. They are often labelled as ‘homeopathic’ because they are extremely diluted in water, but are not true homeopathy as they don’t follow other homeopathic precepts such as the “*law of similars*” or the belief that curative powers are enhanced by shaking and repeated diluting.

“Life, to him, was continuous: an unbroken stream, uninterrupted by what we call death, which merely heralded a change of conditions; and he was convinced that some work could only be done under earthly conditions, while spiritual conditions were necessary for certain other work.” -- Nora Weeks from “The Medical Discoveries of Edward Bach, Physician.”

Endnotes

1. The word “*nosode*” is derived from the Greek term *Nosos* (illness) and is used for medicines made from the body’s own substances in accordance with homeopathic guidelines. *Nosodes* therefore, are medicines produced from illness-related or intermediate catabolic products (metabolites) in humans, animals, micro-organisms or viruses according to the regulations of the Homeopathic Pharmacopoeia [Homöopathischen Arzneibuches (HAB)].
2. The “*Law of Similars*” is a principle of homeopathic medicine stating that a drug capable of producing morbid symptoms in a healthy person will cure similar symptoms occurring as a manifestation of disease.

Bibliography

“Heal Thyself: Explanation of the Real Cause and Cure of Disease” by Edward Bach, ISBN: 0852073011. Also available as a Kindle download.





Dr Bach: A Small List of Remedies



Agrimony: mental torture behind a cheerful face; you hide your troubles behind a smile.

Aspen: fear of unknown things; you are anxious but can't say why.

Beech: intolerance; you feel critical of or intolerant towards others.

Centaury: the inability to say no; you are weak-willed and easily led.

Cerato: lack of trust in your own decisions; you know what you want to do but doubt your judgement.

Cherry Plum: fear of the mind giving way; you fear you might lose control.

Chestnut Bud: failure to learn from mistakes; you find yourself making the same mistakes.

Chicory: selfish, possessive love; your love for your family makes it hard to let them go.

Clematis: dreaming of the future without working in the present; you are in a dream.

Crab Apple: the cleansing remedy, also for self-hatred; you dislike something about yourself.

Elm: overwhelmed by responsibility; you feel overwhelmed by your many responsibilities.

Gentian: discouragement after a setback; you feel a bit let down after a setback.

Gorse: hopelessness and despair; you give up when things go wrong.

Heather: self-centredness and self-concern; your talkativeness leads to loneliness.

Holly: hatred, envy and jealousy; you feel wounded, jealous, spiteful or want revenge.

Honeysuckle: living in the past; your mind is on the past instead of the present.

Hornbeam: procrastination, tiredness at the thought of doing something; you put things off.

Impatiens: impatience; you feel impatient with the slow pace of people or things.

Larch: lack of confidence; you expect to fail and lack confidence in your skills.

Mimulus: fear of known things; you are shy or you feel anxious about something specific.

Mustard: deep gloom for no reason; you feel down in the dumps and don't know why.

Oak: keep going past the point of exhaustion; you are a strong person who struggles on past the limits.

Olive: exhaustion following mental or physical effort; you feel tired after making an effort.

Pine: guilt; you feel guilty or blame yourself.

Red Chestnut: over-concern for the welfare of loved ones; you are anxious about someone else's safety.

Rock Rose: terror and fright; you feel an extreme terror about something.

Rock Water: self-denial, rigidity and self-repression; you drive yourself hard trying to set an example.

Scleranthus: inability to choose between alternatives; you can't make your mind up.

Star of Bethlehem: shock; you are suffering from the effects of a shock or from grief.

Sweet Chestnut: extreme mental anguish, when there is no light left; you feel despair.

Vervain: over-enthusiasm; your enthusiasm leads you to burn yourself out.

Vine: dominance and inflexibility; sometimes you are a tyrant when you want to lead.

Walnut: protection from change and unwanted influences; you are unsettled at times of change.

Water Violet: pride and aloofness; you like your own company but sometimes feel lonely.

White Chestnut: unwanted thoughts and mental arguments; your mind is running over the same thing.

Wild Oat: uncertainty over your direction in life; you can't find your vocation.

Wild Rose: drifting, resignation, apathy; you can't really be bothered.

Willow: self-pity and resentment; you feel resentful and sorry for yourself.



Werner Heisenberg

Quantum Theory and the Ancient Roots of Atomic Science

by Douglas Lawson



Werner Heisenberg (1901-1976) was a German theoretical physicist and Nobel Prize winner who made foundational contributions to quantum mechanics and is best known for asserting the uncertainty principle of quantum theory. During the Nazi era in Germany, he came under the uncomfortable scrutiny of the S.S. and the enmity of a pro-Nazi group of physicists called the “Deutsche Physik.” His alleged (though never fully proven) collaboration with the German Reich in their efforts to build an atomic bomb left a cloud of suspicion over him for the rest of his life. After World War II, he became Director of the renowned Max Planck Institute in Munich. In this article, Heisenberg takes a look at the ancient Greek philosophers and their theories in the light of modern Physics; you may be surprised at what he says.

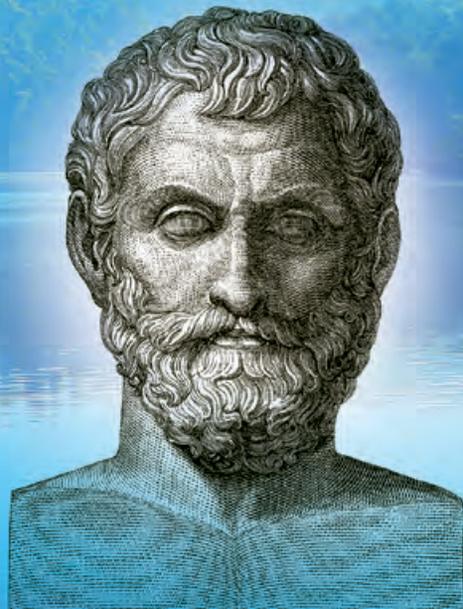
Portrait image: Wikipedia / Bundesarchiv

The concept of the atom goes back much further than the beginning of modern science in the 17th Century. It has its origins in ancient Greek philosophy and it was in the last few centuries BCE that the central concept of materialism was taught by Leucippus (5th Century BCE) and Democritus (c. 460-370 BCE). In his book *Physics and Philosophy*¹ (first published in 1958), extracts from which you will find in this article, Werner Heisenberg wrote:

On the other hand, the modern interpretation of atomic events has very little resemblance to genuine materialistic philosophy. In fact, we may say that atomic physics has turned science away from the materialistic trend it had during the 19th Century. It is therefore interesting to compare the development of Greek philosophy toward the concept of the atom with the present position [1955] of this concept in modern physics.



“Water is the material cause of all things.”



Thales, the founder of the Milesian school, to whom Aristotle ascribes the statement: “Water is the material cause of all things.”

The Milesians

Miletos was a celebrated ancient Greek coastal city in Ionia on the Aegean coast of present-day Turkey. It is not far south of the city of Ephesus. For reasons that are far from clear, there was an explosion of original thought among the inhabitants of this city, which led to the earliest foundations of modern philosophy and science.

The idea of the smallest, indivisible ultimate building blocks of matter first came up in connection with the elaboration of the concepts of Matter, Being and Becoming, which characterised the first epoch of Greek philosophy.

This period Heisenberg referred to started in the 6th Century BCE with Thales, the founder of the Milesian school, to whom Aristotle ascribes the statement: “*Water is the material cause of all things.*” This statement, strange as it may seem to us, expresses, as Nietzsche pointed out, three fundamental ideas of philosophy:

- First, the question of the material cause of all things.
- Second, the demand that this question be answered in conformity with reason, without resort to myths.
- Third, the idea that ultimately it must be possible to reduce everything to one principle.

Thales’ statement was the first expression of the idea of *one fundamental substance*, of which all other

things were transient forms. Life was connected with this substance and Aristotle (384-322 BCE) also ascribes to Thales the statement: “*All things are full of gods.*” Still the question was asked: what is the material cause of all things? It is not difficult to imagine that Thales took his view primarily from observing Nature. Of all things we know, water can take the most varied shapes; in the winter it can take the form of ice and snow; it can change into steam; and it can form clouds. It seems to turn into earth, mixed with sand and rock where the rivers form deltas, and it can spring from the earth. Water is the requisite for life. Therefore, if there was such a thing as a fundamental substance, it was natural to think of water first.

The idea of the fundamental substance was then carried further by Anaximander (610-564 BCE), who was a pupil of Thales and lived in the same city. Anaximander denied that the fundamental substance was water or any other known substances. He taught that the primary substance was infinite, eternal and ageless and that it encompassed the world. This primary substance is transformed into the various substances with which we are familiar. Theophrastus (c. 371-287 BCE), a Greek philosopher of the Peripatetic School, quotes from Anaximander:

Into that from which things take their rise they pass away once more, as is ordained, for they make reparation and satisfaction to one another for their injustice according to the ordering of time. The primary substance, infinite and ageless, the undifferentiated Being, degenerates into the various forms which lead to endless struggles.



Interestingly, we find this concept later in Gnostic and Cathar thought. The process of “*becoming*” is considered as a sort of debasement of the infinite Being; a disintegration into the struggle ultimately expiated by a return into that which is without shape or character, the search for Nirvana. The struggle which is meant here is the opposition between hot and cold, fire and water, wet and dry, etc. According to Anaximander, there is “*eternal motion*”, the creation and passing away of worlds from infinity to infinity.

Anaximander taught that the primary substance was infinite, eternal and ageless and that it encompassed the world.

Heisenberg noted that the problem of whether the primary substance can be one of the known substances or must be something essentially different occurs in a somewhat dissimilar form in the most modern part of atomic physics.

Physicists today are seeking a fundamental law of motion for matter from which all elementary particles can be derived mathematically. This may refer either to waves of a known type, or to waves of an essentially different character which have nothing to do with any of the known waves or elementary particles. In the first case it would

mean that all other elementary particles can be reduced in some way to a few sorts of fundamental elementary particles. In the second case all different elementary particles could be reduced to some universal substance which we may call energy or matter, but none of the different particles could be preferred to the others as being more fundamental.

The latter view corresponds to the doctrine of Anaximander, and Heisenberg was convinced that in modern physics this view is the correct one.

The third of the Milesian philosophers, Anaximenes (585-528 BCE), an associate of Anaximander, taught that *air* was the primary substance: “*Just as the soul, being air, holds us together, so do breath and air encompass the whole world.*” Anaximenes introduced into Milesian philosophy the idea that the process of condensation or rarefaction causes the change of the primary substance into the other substances. The condensation of water vapour into clouds was an obvious example, but of course the difference between water vapour and air was not known at that time.

The Concept of Becoming

In the philosophy of Heraclitus of Ephesus (c. 540-480 BCE), the concept of “*Becoming*” occupies centre stage. He regarded that which moves, namely *fire*, as the basic element. The difficulty of reconciling the idea of one fundamental principle with the infinite variety of phenomena is solved for him by recognising that the strife of the opposites is really a kind of harmony.

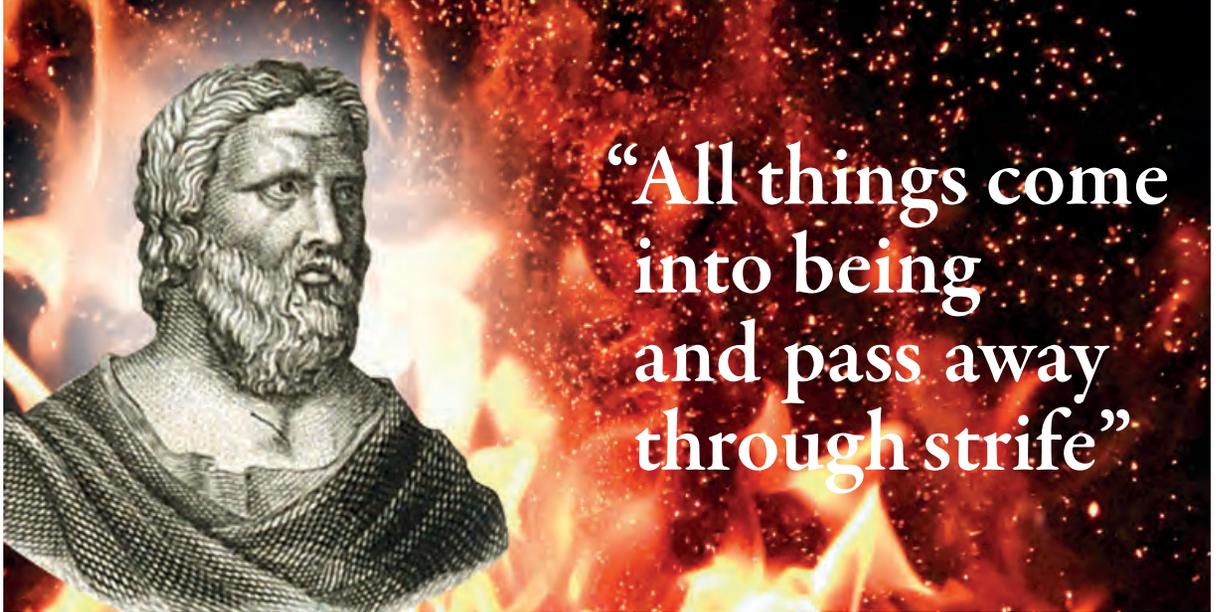
Rosicrucians will recognise here what we refer to as “*The Law of the Triangle*”, where the coming together of

“Just as the soul, being air, holds us together, so do breath and air encompass the whole world.”



The third of the Milesian philosophers, Anaximenes (585-528 BCE), taught that air was the primary substance.





In the philosophy of Heraclitus of Ephesus (c. 540-480 'BCE), the concept of "Becoming" occupies centre stage. He regarded that which moves, namely fire, as the basic element.

two different things creates a new entity which results in harmony and stability. For Heraclitus the world is at once, one and many; it is just the opposite tension of the opposites that constitutes the unity of the One. He says: *"We must know that war is common to all and strife is justice, and that all things come into being and pass away through strife."* Heisenberg reflected on Heraclitus' philosophy:

Looking back to the development of Greek philosophy up to this point we realise that it has been borne from the beginning to this stage by the tension between the One and the Many. For our senses the world consists of an infinite variety of things and events, colours and sounds. But in order to understand it we have to introduce some kind of order, and order means to recognise what is equal and implies some sort of unity. From this springs the belief that there is one fundamental principle. That there should be a material cause for all things was a natural starting point since the world consists of matter. But when you carry the idea of fundamental unity to the extreme you realise that it cannot explain the infinite variety of things.

This leads to the antithesis of *"Being"* and *"Becoming"* and finally to the solution of Heraclitus, that *the change itself is the fundamental principle*; again, an important feature of Rosicrucian ontology and modern Physics. But the change in itself is not a material cause and therefore is represented in the philosophy of Heraclitus by Fire as the basic element, which is both matter and a moving force.

Modern physics is in some ways extremely close to the doctrines of Heraclitus. If we replace the word

"All things come into being and pass away through strife"

fire' by the word *'energy'* we can almost repeat his statements word for word from our modern point of view. Energy is in fact the substance from which all elementary particles, all atoms and therefore all things are made, and energy is that which moves. Energy can be changed into motion, into heat, into light and into tension. Energy may be called the fundamental cause for all change in the world.

But this comparison of Greek philosophy with the ideas of modern science will be discussed later.

Energy may be called the fundamental cause for all change in the world.

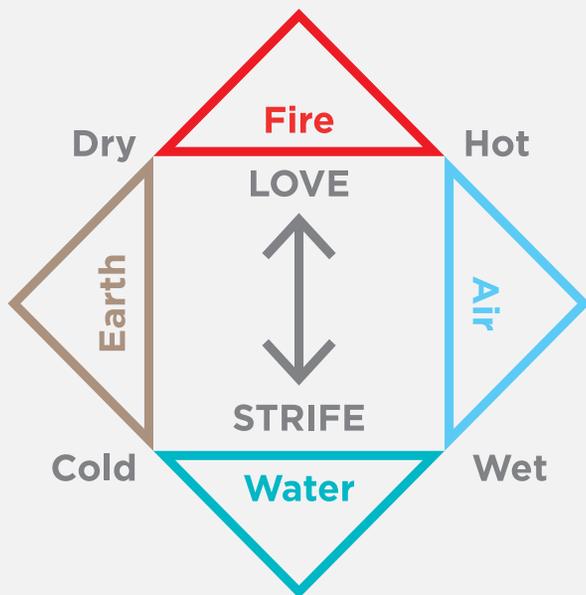
The Eleatics

Greek philosophy returned for some time to the concept of the One as found in the teachings of Parmenides (early 5th Century BCE), who lived in the Greek city of Elea, near Salerno, in the south of Italy. His most important contribution to Greek thinking was perhaps that he introduced a purely logical argument into metaphysics:

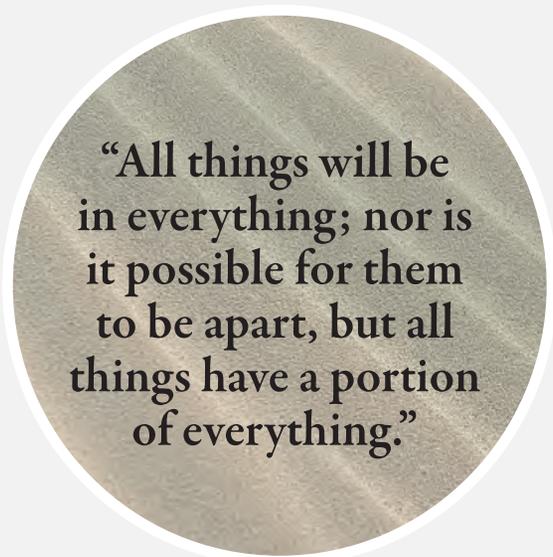
One cannot know what is not, that is impossible, nor utter it; for it is the same thing that can be thought and that can be.

Therefore, only the One exists, and there is no becoming or passing away. Parmenides denied the





Empedocles assumed four basic elements: Earth, Water, Air and Fire. In his view the elements are mixed together and separated by the action of Love and Strife (positive and negative).



“All things will be in everything; nor is it possible for them to be apart, but all things have a portion of everything.”

Anaxagoras stressed the idea of the mixture, the assumption that all change is caused by mixture and separation. He assumes an infinite variety of infinitely small “seeds” of which all things are composed. Their mixture can be pictured as the mixture between two kinds of sand of different colours.

existence of empty space for logical reasons. Since all change requires empty space, as he assumed, he dismissed change as an illusion.

But philosophy couldn't rest for long on this paradox. Empedocles (c. 495-435 BCE), from Agrigento (Agrigentum) on the south coast of Sicily, one of the leading cities of Magna Graecia during the golden age of Ancient Greece, changed for the first time from monism to a kind of pluralism. To avoid the difficulty that one primary substance cannot explain the variety of things and events, he assumed four basic elements, Earth, Water, Air and Fire. The elements are mixed together and separated by the action of Love and Strife (positive and negative.) Therefore, these latter two, which are in many ways treated as corporeal like the other four elements, are responsible for the imperishable change. Empedocles describes the formation of the world in the following picture: First, there is the infinite Sphere of the One, as in the philosophy of Parmenides.

But in the primary substance, all the four roots are mixed together by Love. Then, when Love is passing out and Strife coming in, the elements are partially separated and partially combined. After that, the elements are completely separated, and Love is outside the World. Finally, Love is bringing the elements together again and Strife is passing out, so we return to the original Sphere. This doctrine of Empedocles represents a very definite turning toward a more materialistic view in Greek philosophy. The four elements are not so much fundamental *principles* as real *material substances*. Here for the first time the idea is expressed that the

mixture and separation of a few substances, which are fundamentally different, explains the infinite variety of things and events.

To avoid the difficulty that one primary substance cannot explain the variety of things and events, he assumed four basic elements, Earth, Water, Air and Fire.

The next step toward the concept of the atom was made by Anaxagoras (born c. 500-480 BCE), who was a contemporary of Empedocles. He lived in Athens for about 30 years. Anaxagoras stressed the idea of the mixture, the assumption that all change is caused by *mixture* and *separation*. He assumes an infinite variety of infinitely small “seeds” of which all things are composed. These seeds do not refer to the four elements of Empedocles, for there are innumerable many different seeds. But the seeds are mixed together and separated again and in this way all change is brought about.

The doctrine of Anaxagoras allows for the first time a geometrical interpretation of the word *mixture*. As he speaks of the infinitely small seeds, their mixture can be pictured as the mixture between two kinds of sand of different colours. The seeds may change in number and



in relative position. Anaxagoras assumes that all seeds are in everything, only the proportions differ from one substance to another. He says: *“All things will be in everything; nor is it possible for them to be apart, but all things have a portion of everything.”*

The universe of Anaxagoras is set in motion not by Love and Strife like that of Empedocles, but by *“Nous”* which we may translate as *“Mind.”*

The Atomists

From this philosophy it was only one more step to arrive at the concept of the atom, and this step occurred with Leucippus and Democritus of Abdera, a city-state in the modern-day north-eastern Greek province of Thrace.

The antithesis of Being and Not-being in the philosophy of Parmenides is here secularised into the antithesis of the ‘Full’ and the ‘Void.’ Being is not only One, it can be repeated an infinite number of times. This is the atom, the indivisible smallest unit of matter. The atom is eternal and indestructible, but it has a finite size, it is not infinitely small. Motion is made possible through the empty space between the atoms. For the first time in history therefore, there was voiced the idea of the existence of a smallest of all particles, we would say of elementary particles, as the fundamental building blocks of matter.

According to this new concept of the atom, matter did not consist only of the *“Full”*, but also of the *“Void”*, of the empty space in which the atoms move. The logical objection of Parmenides against the Void, that *not-being* cannot exist, was simply ignored to comply with experience.

From our modern point of view, we would say that the empty space between the atoms in the philosophy of Democritus was not nothing; it made possible the various arrangements and movements of atoms. In the theory of general relativity, the answer is given that geometry is produced by matter, or matter by geometry. This answer corresponds more closely to the view held by many philosophers that space is defined by the extension of matter.

Although the atoms of Democritus were all of the same substance, which had the property of being, they had different sizes, different shapes, and could move and could occupy different positions in space. Other than

that, they had no other physical properties. The atoms in the philosophy of Leucippus do not move merely by chance. Leucippus seems to have believed in complete determinism, since he is known to have said: *“Nothing happens for nothing, but everything from a ground and of necessity.”* The atomists did not give any reason for the original motion of the atoms. Causality can only explain later events by earlier events, but it can never explain the beginning, namely what caused the first event.

Platonists and Pythagoreans

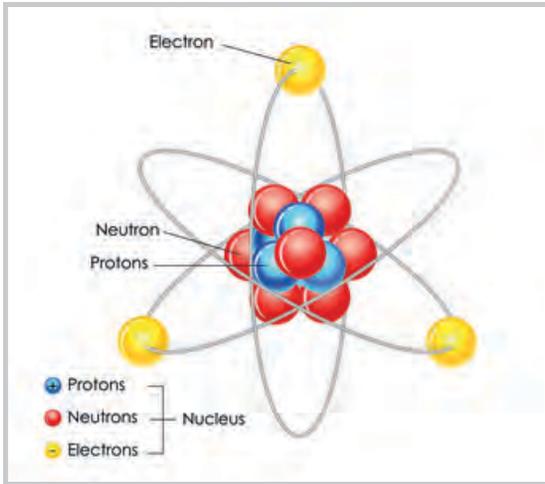
The basic ideas of atomic theory were taken over and modified in part by later Greek philosophers. For the sake of comparison with modern atomic physics [1955] it is important to mention the explanation of matter given by Plato in his dialogue *Timaeus*. Plato was not an atomist; on the contrary, Diogenes Laertius reported that Plato disliked Democritus so much that he wished all his books to be burned. But Plato combined ideas that were near to atomism with the doctrines of the Pythagorean School and the teachings of Empedocles.

The Pythagoreans seem to have been the first to realise the creative force inherent in mathematical formulations.

The Pythagorean School was an offshoot of Orphism, which goes back to the worship of Dionysus. Here has been established the connection between religion and mathematics which ever since has exerted the strongest influence on human thought.

The Pythagoreans seem to have been the first to realise the creative force inherent in mathematical formulations. Their discovery that two strings sound in harmony if their lengths are in a simple ratio demonstrated how much mathematics can mean for the understanding of natural phenomena. For the Pythagoreans it was not so much a question of understanding; for them the simple mathematical ratio between the length of the strings created the harmony in sound. There was also much mysticism in the doctrines of the Pythagorean School.





A depiction of the early 20th Century Rutherford/Bohr planetary model of the atom's structure. Nowadays, this has been largely superseded by the Quantum model of the atom in which nuclear 'particles' are depicted as energy waves rather than energy particles.

But by making mathematics a part of their religion, they touched an essential point in the development of human thought. The philosopher Bertrand Russell made the following statement about Pythagoras:

I do not know of any other man who has been as influential as he was in the sphere of thought. Plato knew of the discovery of the regular solids made by the Pythagoreans and of the possibility of combining them with the elements of Empedocles.

The strife between opposites in the philosophy of Heraclitus can be found in the strife between two different forms of energy.

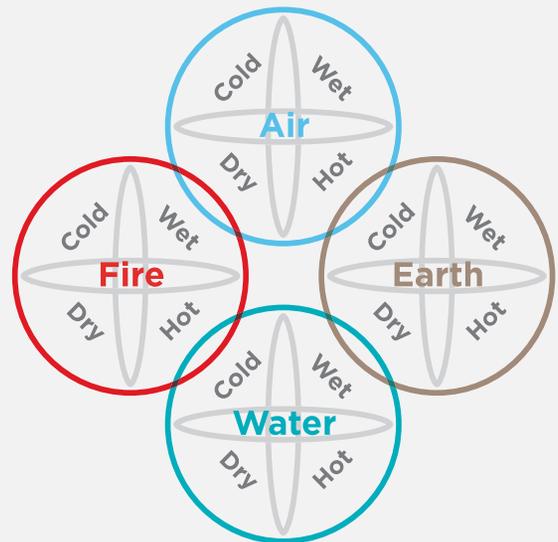
Following this short survey of Greek philosophy up to the formation of the concept of the atom, we may come back to modern physics and ask how our modern views on the atom and quantum theory compares with this ancient development. Historically the word *"atom"* in physics and chemistry referred to the wrong object, during the formative period of science in the 17th Century, since the smallest particles belonging to what is called a chemical element are still rather complicated systems of units even smaller than atoms. These smaller units are nowadays called *"elementary particles"*, and it is obvious that if anything in modern physics should be

compared with the atoms of Democritus it should be the elementary particles like a proton, neutron, electron or meson.

Finally

The modern view of the elementary particle seems more consistent and more radical. In the philosophy of Democritus all atoms consist of the same substance if the word "substance" is to be applied here at all. The elementary particles in modern physics carry a mass in the same limited sense in which they have other properties. Since mass and energy are, according to the theory of relativity, essentially the same concepts, we may say that all elementary particles consist of energy.

This could be interpreted as defining *energy* as the primary substance of the world. It has been mentioned before that the views of modern physics are in this respect very close to those of Heraclitus if we interpret his element *fire* as meaning energy. Energy is in fact that which moves; it may be called the primary cause of all change, and energy can be transformed into matter or heat or light. The strife between opposites in the philosophy of Heraclitus can be found in the strife between two different forms of energy.



The essential structural concept of the Greek atom: the atoms in Democritus theory themselves remain unchanged, but move about in space to combine in various ways to form all macroscopic objects. Early atomic theory stated that the characteristics of an object are determined by the shape of its atoms. So, for example, sweet things are made of smooth atoms, bitter things are made of sharp atoms.

(Adapted from image source at: <http://whs.wsd.wednet.edu>)



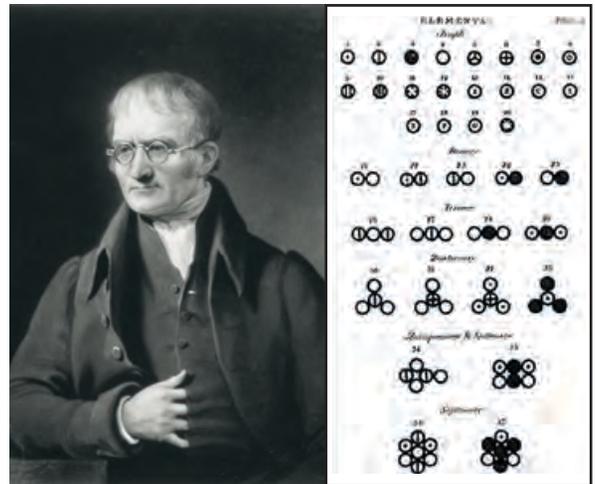
In the philosophy of Democritus, the atoms are eternal and indestructible units of matter, they can never be transformed into each other. With regard to this question, modern physics takes a definite stand against the materialism of Democritus and for Plato and the Pythagoreans. The elementary particles are certainly not eternal and indestructible units of matter, and they can actually be transformed into each other.

If we follow the Pythagorean line of thought, we may hope that the fundamental law of motion will turn out as a mathematically simple law.

As a matter of fact, if two such particles moving through space with a very high kinetic energy collide, many new elementary particles are created from the available energy and the old particles may have disappeared in the collision. Such events have been frequently observed and offer the best proof that all particles are made of the same substance: energy. But the resemblance of the modern views to those of Plato and the Pythagoreans can be carried somewhat further. The elementary particles in Plato's *Timaeus* are finally not substance but mathematical forms.

If we follow the Pythagorean line of thought, we may hope that the fundamental law of motion will turn out as a mathematically simple law. It is difficult to give any good argument for this hope for simplicity, except the fact that it has hitherto always been possible to write the fundamental equations in physics in simple mathematical forms. This fact fits in with the Pythagorean religion, and many physicists share their belief in this respect.

After this comparison of Heisenberg's views on atomic physics [1955] with Greek philosophy [c. 400 BCE], it may seem at first sight that the Greek philosophers have, by some kind of ingenious intuition, come to the same or very similar conclusions as we have in modern times, though in our case only after several centuries of hard labour with experiments and mathematics. This interpretation would however be a complete misunderstanding.



John Dalton (1776-1884) pioneered early modern ideas on the nature of the atomic particle.

There is an enormous difference between modern science and Greek philosophy, and that is just the empirical attitude of modern science. Since the time of Galileo and Newton, modern science has been based on a detailed study of nature and upon the postulate that only such statements should be made as have been verified or at least can be verified by experiment.

The idea that you could single out some events from

Since the time of Galileo, modern science has been based on a detailed study of nature.

nature by an experiment, in order to study the details and to find out what the constant law is in the continuous 'change' did not occur to the ancient Greek philosophers. Modern science has therefore from its beginning stood upon a much more modest, but at the same time much firmer, basis than ancient philosophy.

All the same, some statements of ancient philosophy are rather close to those of modern science. This simply shows how far you can get by combining the ordinary experience of nature that we have without doing experiments with the untiring effort to get some logical order into this experience to understand it from general principles.

1 *Physics and Philosophy: The Revolution in Modern Science* (1958). ISBN: 0141182156.





Numbers & their Symbolism

by Peter Bindon

HISTORICALLY, the symbolism derived from numbers and which is now common to Pythagoreans, Kabalists and Gnostics, and descending through all these to the Rosicrucians is the oldest and the most generally diffused set of symbols still believed to have some relevance in the modern world.

Among the Greeks and the Romans there seems to have been veneration for certain numbers. A similar idea is found among Eastern nations. This notion, in one form or another, entered most ancient systems of philosophy. Many of the old religions arranged their

festivals and celebrations around numerical formulae and used numbers as symbols for gods and spirits. A theory of numbers constituted an important part of the Kabala and was adopted by Gnostics, Rosicrucians and mediaeval mystical societies. And the early Christian Fathers weren't averse to using numbers either to help them explain creation.

The doctrine of numbers and their symbolism contributed to many of the fundamental ideas in the philosophy of Pythagoras. However, it probably did not originate with him, since his theories had their origins in Egypt and the East, where numerical symbolism





The doctrine of numbers as symbols contributed to many of the fundamental ideas in the philosophy of Pythagoras who apparently admitted that he had received the doctrine of numbers from Orpheus. (Image: Orpheus surrounded by animals - Ancient Roman floor mosaic. Picture by Giovanni Dall'Orto/Wikipedia.)

had long been known. Apparently Pythagoras himself admitted that he had received the doctrine of numbers from Orpheus, who taught that numbers were the most prophetic matters in heaven, earth and the intermediate space, and were the source of the perpetuity of divinity, of the gods and of demons. All these and more could be understood by those with knowledge of mathematical relationships, and by extension, of numerical symbols. The disciples of Pythagoras tell us (he adhered to an oral tradition of teaching and left no writings himself) that his theory was that numbers contained the essence of all extant things.

There are some who feel that numbers can be used to define the primary causes upon which the whole system of the universe rests. They believe that anyone who knows and understands how these numbers combine, knows the very laws through which nature exists. Aristotle claimed that the Pythagoreans derived all things from numbers, although other writers say that this was not what Pythagoras

meant, and that this interpretation is a corruption introduced by some of his pupils. Nevertheless, we do know that the symbolism of numbers was the basis of what is called the “*Pythagorean philosophy*.”

However, it is wrong to think that the Rosicrucian application of significance to certain numbers and combinations of numbers is derived from the theories of

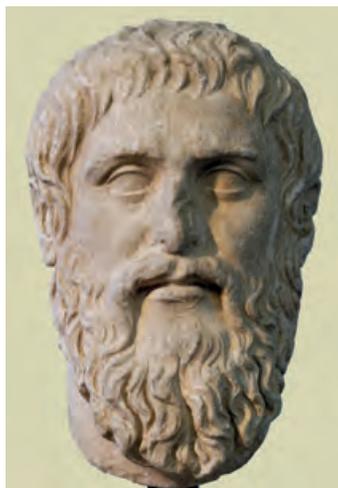
There are those who feel that numbers can be used to define the primary causes upon which the whole system of the universe rests.

Pythagoras. Rosicrucians consider the number *Nine* as being of special significance and worthy of contemplation, but the Pythagoreans thought it detestable. In the Pythagorean system the number *Ten* was considered the most perfect of all numbers for it symbolised the completion of things. But Rosicrucians see that the number *Three* as of greater relevance in this field.

Plato also established a theory of number symbolism that sought to explain their influence on worldly occurrences. The idea of a ‘*cosmic keyboard*’ representing all possible vibratory frequencies and their relevant material manifestations used by Rosicrucians, originates with Plato. According to him, numerical relationships are the cause of the manifestation of all things and of universal harmonies and disharmonies. The Neoplatonists extended this idea. It passed into Gnostic teaching and was ultimately adopted by Rosicrucians and Hermetic philosophers.

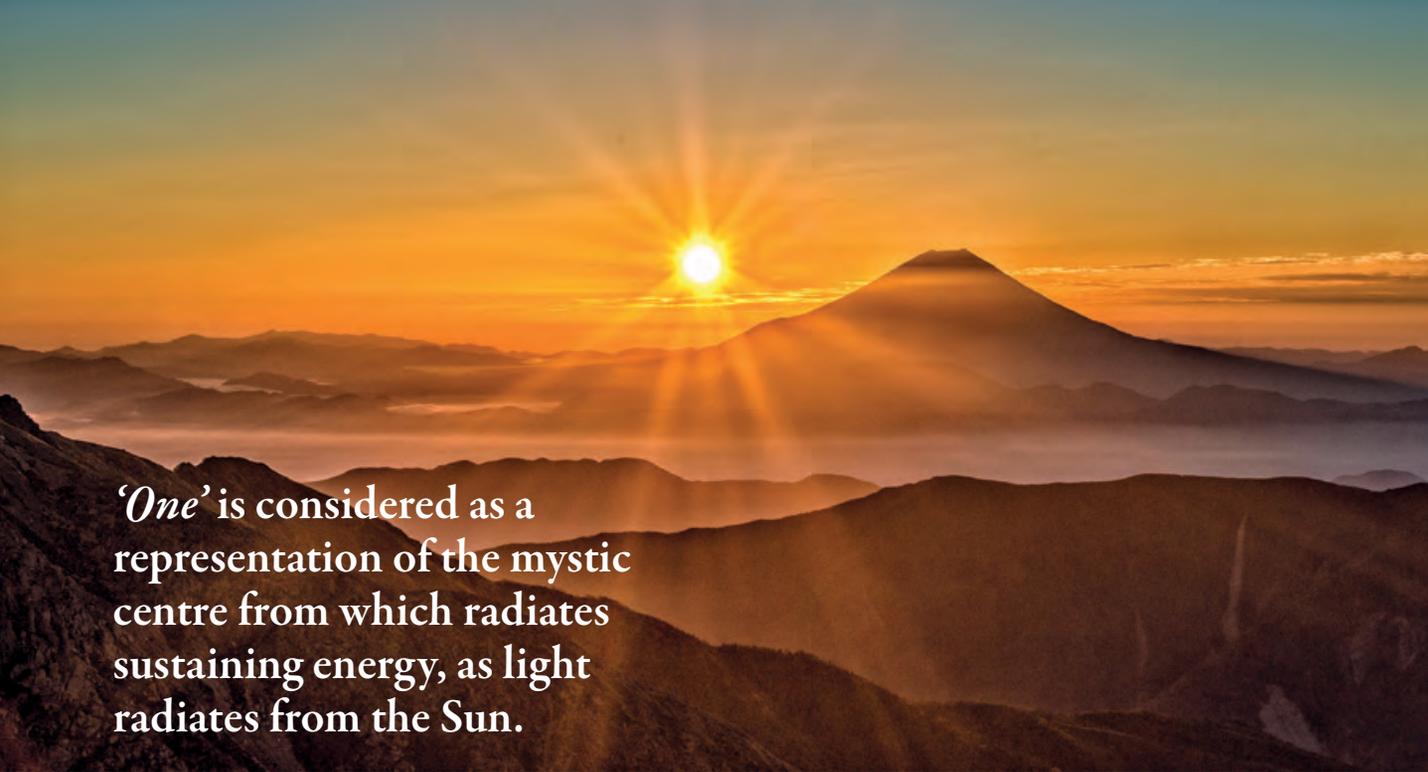
In his work, *De occulta philosophia* (On Occult Philosophy), Heinrich Cornelius Agrippa (1486-1535) discusses numbers at great length. “*There lies*”, he says, “*wonderful efficacy and virtue in numbers, as well for good as for evil. Not only the most eminent philosophers teach, but also the Catholic Doctors.*” Agrippa quotes St Hilary as saying that the 70 elders arranged the previously scattered and unconnected ideas in the Psalms into order by using numerical symbolism.

It is interesting to note that in



The idea of a ‘cosmic keyboard’ representing all possible vibratory frequencies and their relevant material manifestations used by Rosicrucians, originates with Plato.





'One' is considered as a representation of the mystic centre from which radiates sustaining energy, as light radiates from the Sun.

the Bible specific numbers are constantly associated with certain kinds of ideas so that we naturally associate one with the other. Certain trials, whether of humanity in general or of individuals, are associated with the number 40. The *Apocalypse of John* is filled with these kinds of associations and is worthy of studying for anyone interested in pursuing this.

The interest that Rosicrucians have in numbers has nothing to do with a superstitious attribution of any magical virtue to them, but arises from the concept that they might represent certain *ideas*. In other words, for Rosicrucians, a number is a *symbol* and nothing else. Unlike the Pythagoreans who thought they had an inherent supernatural efficacy, Rosicrucians study and contemplate numbers because of the allusions to spiritual ideas and principles that they exemplify and symbolise. A Rosicrucian understanding of numbers should not be confused with other ideas about them such as those expounded by numerology and other doctrines of numbers which give them inherent powers and characteristics.

One

The number *One* is the symbol of completeness and perfected existence as well as being a symbolic beginning and end of all things, the cosmic and ontological centre that is the foundation and point of departure for all existence. It is most often labelled the "*First Cause*" (but not necessarily an intentional Creator) and is that part of Cosmic expression from which all manifestation of originates.

It is also considered as a representation of the mystic centre from which radiates sustaining energy, as light radiates from the Sun. Some believe that once a fleeting earthly life is exhausted, the animating spirit of all living things returns to the First Cause. Rosicrucians consider that *One* is also symbolic of the alchemical expression and concept of the *Philosopher's Stone*, that understanding which, through knowledge or Gnosis, raises humanity to a higher plane of existence.

Although the first of the following concepts leads on to the second, Rosicrucians make a distinction between *one* and *oneness*. The latter is an expression usually reserved for a spiritual state of interconnectedness with an absolute, incalculable, transcendent and all-embracing First Cause that is separated from any influence by humanity. In contrast, the former expression being the first in a series of numbers, can be manipulated, reproduced and reduced in a myriad of patterns that usually follow humanly generated laws and expressions.

Two

The number *Two* is considered the symbol of cosmic balance and harmony. It is often interpreted as a symbol of confrontation and conflict, and opinion derived from its position in the regular series of whole numbers, where it is the first number that can be split. This division of one into two parts may create radically *opposed pairs* like that of creator and creature, good and evil, life and death, black and white, male and female, matter and spirit and so on.



Considered more broadly, these kinds of pairs often have *complementary attributes* rather than conflicting ones. Left and right, high and low, mother and father, day and night, positive and negative are examples of such complementary pairings. In Celtic mythology, the basic duality between warrior and Druid often comes together into one single divine entity. In fact, all of these sets of ideas can generally be considered as a reminder of the twofold nature of all creation.

manifestation which has come about solely as a result of, at its simplest, the union of *two* other manifestations. In antiquity the number *two* was associated with the great Mother or female principle because of its capacity to be the bearer of new life through its union with the number *one*, which was associated with the male principle. And so, even numbers came to be considered as feminine while odd numbers were thought of as masculine.

The division of One into Two parts create opposed and complementary attributes.

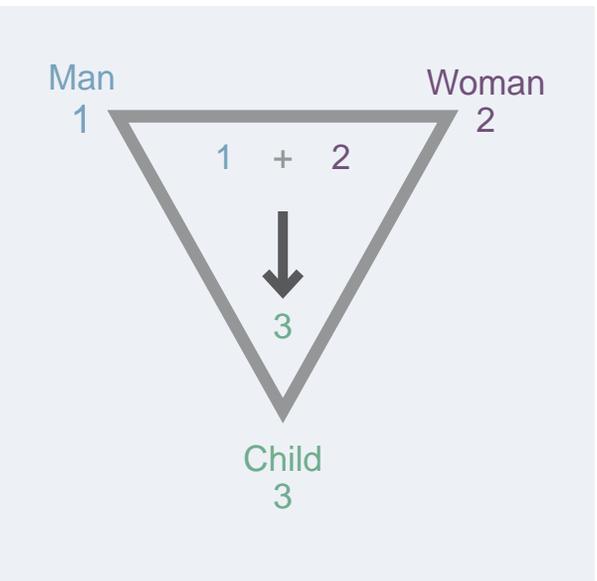
This ancient concept of duality has once more become fashionable. It is commonplace to hear discussions of the feminine aspect contained within the male and vice versa. This concept was and is of great interest to alchemists and many alchemical illustrations exhibit an understanding of this natural law of existence.

Mystically and metaphysically, the number *two* gives rise to all other possible existences through a mechanism that Rosicrucians label the *Law of the Triangle*. In this concept the addition of *one* and *two* creates *three*, which seems quite obvious of course. But *three* in this contexts alludes to *'completion'* and an entirely *new and unique*

Three

In ancient times, the number *Three* was universally deemed the most sacred of numbers. For example, a reverence for its mystical virtues is to be found among the ancient Chinese, who believed numbers begin at *one* and are made perfect at *three*. Hence they denote the multiplicity of any object by repeating the character which represents it *three* times. In the philosophy of Plato, *three* was the image of the Supreme Being, because it includes in itself the properties of the first *two* numbers, and because, as Aristotle said, it contains within itself a *beginning, middle* and *end*. The Druids must also have thought well of the number *three*, for their sacred poetry is composed in triads. The Pythagoreans called it *"perfect harmony."*

So sacred was this number deemed in ancient cultures that we find it intertwined with some of the attributes of many of the gods. The thunderbolt of Jove, for example, was *three-forked*; the sceptre of Neptune was a *trident*; Cerberus, the dog of Pluto, was *three-headed*; there were *three Fates* and *three Furies*; the Sun had *three*

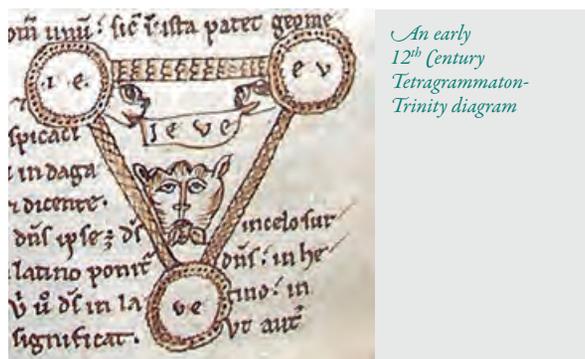


Numbers TWO and THREE: 'With the addition of the primal "one", the numeral "two" becomes "three." Two was given the attribute of the Mother or female principle in antiquity because of its capacity to reproduce itself in this way.



names: Apollo, Sol and Liber; as did the moon: Diana, Luna and Hecate. In all incantations, the number *three* was a favourite, for, as Virgil says, “*Numero Deus impari gaudet*” (“*God delights in an odd number*”). A small image of the subject of the charm was suspended on a cord composed of three different colours: white, red and black; and was carried *thrice* around the altar, as we see in Virgil’s Eighth Eclogue: “*First I bind thee with these three cords and I carry thy image three times round the altars.*”

Among Rosicrucians, the *ternary* is the most sacred of all mystical numbers. In all their rites, whatever may be the number of superimposed grades, there lie at the basis the three early degrees, which establish the foundation of further advancement into the realms of the allegorical tomb of Christian Rosenkreutz. However, the primary significance of the number *Three* lies in the Rosicrucian *Law of the Triangle* as previously mentioned.



Four

Four, is the *tetrad* or *quaternary* of the Pythagoreans, and is often considered a sacred number, an interpretation derived from Jewish mysticism in which the *four* letters denoting *Yahweh* (YHVH or יהוה) were given

Four, is the tetrad or quaternary of the Pythagoreans, and is often considered a sacred number.

a sacredness that precluded their use except in special circumstances. Perhaps it is just coincidence, but in many languages, the name of God can be rendered with just four letters of the Roman alphabet; *Adad* of the Syrians, *Amun* of Egypt, *Dios* of the Greeks, *Deus* of the Romans, but pre-eminently the *Tetragrammaton* or



Number FOUR: The Pythagoras square with the four classical elements assigned to each side. The four-lettered Tetragrammaton is also depicted.

four lettered name used by the ancient Hebrews which we render in modern English as *Yahweh*.

Pythagoras derived the importance of *four* from observing the perfection of a regular square, each of its four sides of exactly the same length and with one pair erected perpendicularly to two others. Attached to this idea of perfection were the four alchemical elements, *Air, Earth, Fire* and *Water*, each element being assigned to a specific side of a square.

Five

For centuries the power to protect against evil has been attributed to the *pentagram* or *five-pointed star*. This notion of inherent protection is reflected, for example, in the mediaeval tale of Sir Gawain and the Green Knight. In this mystical poem, the pentagram on Gawain’s shield represented the *five* wounds inflicted on Christ, signifying triumph over evil. In an extension of this religious symbolism, *five* grains of incense are inserted into the Paschal Candle during Christian Easter rituals to symbolise those fleshly wounds.

The number *Five* derives its symbolism first from the fact that it is the sum of the first even and odd numbers (i.e. 2+3) appearing after *unity*, and secondly because it is at the centre of the spread of the first *nine* numbers (i.e. four numerals either side of *five*). Thus it is symbolic of the centre and of harmony, balance and of the marriage of pairs of opposites.

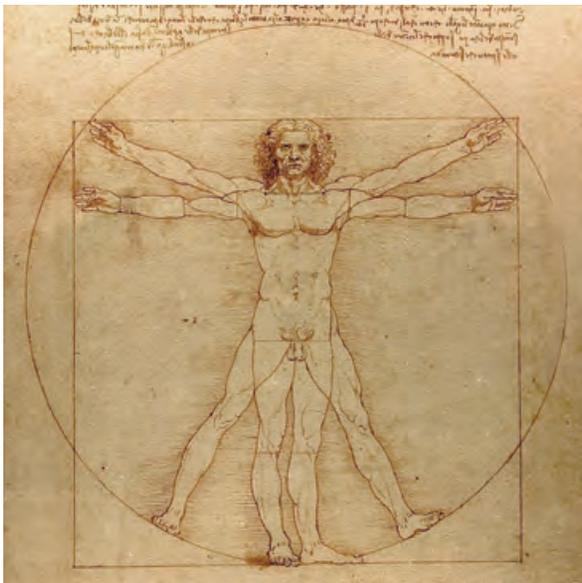
The notion of five successive races of human beings, our own being the fifth, recurs in the works of Hesiod





In the mystical poem "Sir Gawain and the Green Knight", the pentagram on Gawain's shield represented the five wounds inflicted on Christ, signifying triumph over evil. (Image from the original manuscript).

(c. 700 BCE). This cosmological poet separated human history into the *Five Ages of Man*: the *Golden Age*, the *Silver Age*; the *Bronze Age*; the *Heroic Age*, followed by the *Iron Age*. In the Golden Age, Hesiod tells the reader that "people lived among the Gods and freely mingled with them." Unfortunately, in this Age, humans didn't receive the same transcendent qualities of their neighbours. Finally, erring in beliefs and succumbing to temptations far too human for their gods to countenance, they were inundated by a flood that consumed them such as happened in Plato's account of Atlantis. Hesiod lived in the early Iron Age, an epoch of moral decline where the



Number FIVE: In mediaeval miniatures microcosmic man is often depicted with legs and arms outstretched the better to display the five points of the pentagram. Five therefore controls human bodily structure and is symbolic of humanity in its full maturity of spiritual and physical development.

Gods seemed to have forsaken humanity.

Although she was not alone in this quest, *Hildegard of Bingen* (1098-1179) evolved a complex theory of the number *five* as the symbol of man. "Man's height from the crown of his head to the soles of his feet may be divided into five equal parts", she writes. Again, "his breadth from the fingertips of each hand when they are outstretched may also be divided into five equal parts." Reckoning five equal measurements both of length and breadth, man can be depicted within a perfect square, most famously depicted perhaps by artists like Leonardo da Vinci and William Blake. With arms outstretched in the form of a cross, the human person does consist of five parts, two arms, two legs, a head and trunk, the latter sheltering the heart; the rose hidden in the five squares of the cross. It was Hermetic symbolism that first set a five-petalled rose on the intersecting arms of a cross. The flower represented the quintessence or ether manifesting at the point of conjunction of the four alchemical elements.

In mediaeval miniatures microcosmic man is often depicted with legs and arms outstretched to display the five points of the pentagram. *Five* therefore controls the human bodily structure, and is symbolical of humanity in its full maturity of spiritual and physical development. It also stands for the five senses and the forms of matter discernible by sense perception and by extension, the entire phenomenal world.

Six

The number *Six* is symbolised either by the *hexagon*, or more obviously the *six-pointed star* formed by a pair of overlapping triangles, one inverted, usually known as a symmetrical hexagram. The triangle with its apex upwards is regarded as an expression of the Cosmic nature in humans, the macrocosm. The inverted triangle represents the baser human nature, the microcosm. And the hexagram as a whole symbolises the union of the two natures in one existence.

This marriage of two opposites, alchemical fire and water, or in terms of gender, male and female, can be referred back to the brief discussion of duality given under the number *two*. The aphorism "as above so below" paraphrased from the *Emerald Tablet* attributed to *Hermes Trismegistus*, gives Rosicrucians another insight into the symbolism of *six*. The expression of opposites, namely, of a Cosmic principle and its reversed image mirrored in Earthly waters, can be interpreted as an illustration of this aphorism.

Mystics believe that after some time dwelling in the Light, their soul crosses into the dark side of existence, where, having departed from the body, it lives in a



Number SIX: This is symbolised either by the hexagon, or more obviously the six-pointed star formed by a pair of overlapping triangles, one inverted, usually known as the hexagram.



constant state of darkness (night.) This condition may be what we normally call *death*, though most often understood as being metaphorical, not physical. The so-called *Dark Night of the Soul* is one such metaphor of a time of trial and testing. Although there are also other moral and physical boundaries better left uncrossed, the ultimate boundary, the boundary between life and corporeal death, and a subsequent journey through the underworld is symbolised by the number *Six*, and is commonly represented as an owl in alchemical illustrations. These ideas derive from Biblical symbolism where *six* is symbolical of completion, for God in Genesis created the universe in *six* days.

The triangle with its apex upwards symbolises the Cosmic nature in humanity while the inverted triangle represents a baser human nature.

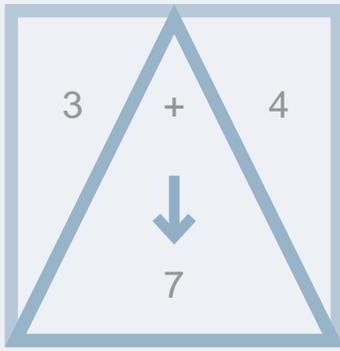
Despite the fact that *six* embraces a network of actions embodied in *two* groups of *three*, a seemingly very positive grouping, and the symbols of perfection resulting from geometrically manipulating a circle using its radius, the number *Six* seems to be aligned as much with evil as it is with good. The opposing equilateral triangles, drawn

by connecting every second point on the circumference of a circle divided up into six parts by using the radius, forms the so-called *Star of David* or hexagram referred to earlier. This symbol is seen in religious terms as symbolical of the counterpoise between the earthly human being and a heavenly deity. Some interpret this symbol as indicating a confrontation between these two existences, but others see it simply as a difference and not as a conflict.

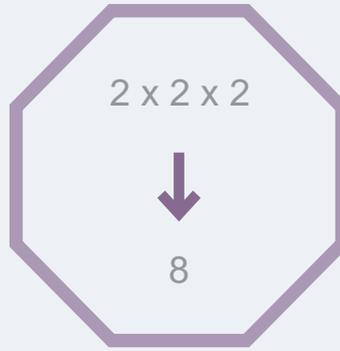
However, these interpretations give rise to the possibility that rebellion against the deity may be just as likely as a desire for union with the godhead. When the circumference of a circle is divided by its radius, six equilateral triangles can be constructed in its interior. Through inaccuracy in this operation (metaphorically speaking), this potential symbol of perfection may come to grief, and this danger makes *six* the number of trial between good and evil, symbolising the *Dark Night of the Soul*.

According to the creation story in Genesis, the world was created in *six* days. And as *Clement of Alexandria* (c. 150–215) observes, it was created in the *six* orientations of space, namely, the *four points of the compass*, the *zenith* (above), and the *nadir* (below). Creation and its existence therefore correspond with, and fundamentally rely upon, both space and time, with the time required for creation to come to full fruition taking 6,000 years according to Jewish tradition, though represented in Genesis as the *Hexameron* (the *six days of Creation*). Some Islamic writers consider *six* to be the '*perfect number*' because it was the interval of time chosen by God in which to manifest his creation.

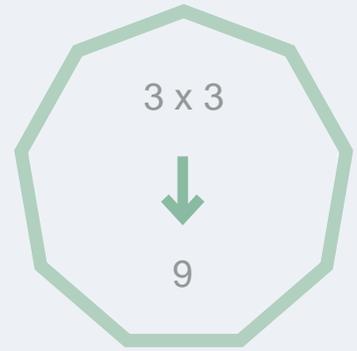




Number SEVEN: The Pythagoreans called it a perfect number, because it was made up of three and four, the triangle and the square, which are the two perfect figures.



Number EIGHT: Esteemed as the first cubic number, being formed by the tripled multiplication of two, and as the cube of the first even number, it was considered to indicate a primitive law of nature, which supposes all people to be equal.



Number NINE: The first square of uneven numbers leading to it becoming the symbol of all formations of living things.

Seven

In every numerical system of antiquity there is frequent reference to the number *Seven*, showing that its veneration likely proceeded from an ancient common cause. It is a sacred number in many religions in which it includes the somewhat contested *seventh day of rest*, the Sabbath. Did this sanctity derive from the number of days in the week? Undoubtedly, though the number of days in a week may on the other hand have derived from a much older principle associated with the number *seven*.

The number Seven occupied an important place in many ancient systems.

Seven is considered a special number even by those whose calendars differ from that of Pope Gregory XIII who created our Gregorian calendar as a successor to the former Julian calendar of Julius Caesar. The Pythagoreans called it a *perfect number*, for it was made up of *three* and *four*, the *triangle* and the *square*, which are the two prime figures representing perfection in antiquity. Ancients also called *seven* a virgin number, one without a mother, comparing it to Minerva, the Roman goddess of wisdom who was a motherless virgin. *Seven* is motherless because it cannot be produced by the multiplication of any two whole numbers; namely, it is a prime number, as indeed are *five*, *three* and *two* as well.

The number *Seven* occupied an important place in many ancient systems. There were *seven planets* of the

ancient world, emblematic of the *seven spheres of existence*, the *seven Pleiades* and the *seven Hyades*. *Seven altars* burned continually before the god Mithras. The Arabians had *seven holy temples*. The Hindus supposed the world to be enclosed within the compass of *seven peninsulas*. The Goths had *seven deities*: the *Sun*, *Moon*, *Tuisco (Tyr)*, *Woden (Oden)*, *Thor*, *Priga (Freyr)* and *Seatur (Saturn)*, from whose names are derived the English days of the week; and in their mysteries the candidate for initiation met with *seven obstructions* as he travelled the "*road of the seven stages*."

In the Persian mysteries were *seven spacious caverns* through which the aspirant had to pass. And finally, even in ancient Canaanite and later Biblical accounts, sacrifices were deemed the most efficacious when the victims were *seven* in number. Many other references to *seven* can be found in any Biblical concordance, probably deriving from Egypt, Canaan and Assyria where the movements of the *seven* known planets were continuously studied.

Seven has always been a special number in Rosicrucian symbolism too, where *seven officers* conduct the ceremonial occasions within a Rosicrucian Temple and the *seven walls* composing the tomb of the allegorical founder Christian Rosenkreutz gave rise to *seven ceremonials*.

Eight

Among the Pythagoreans the number *Eight* was esteemed as the first cubic number, being formed by the tripled multiplication of two, and as the cube of the first even number it was considered to indicate a primitive law of nature, which supposes all people to be equal in essence.

Christians have called it the *Symbol of the Resurrection* because Jesus rose on the eighth day, which is the day after



1	2	3	4	5	6	7	8	9	10
9	18	27	36	45	54	63	72	81	90

The first line of figures gives the regular series from 1 to 10, each of which when multiplied by nine produces the number in the box below it. The second line presents the result of the calculation above and also presents us with

a new series of nines, ascending from the single numeral and proceeding through 18, composed of 1 and 8 which added together produce nine and so on.

the seventh day of the week. In terms of the Resurrection, the name of Jesus, when written in Greek characters (Ἰησοῦς), have a numerical correspondence of 10, 8, 200, 70, 400, and 200, which added together produce 888. As eight humans were saved in the Biblical ark, *eight* denotes perfection and completion. An octagonal shape was considered especially appropriate for a church baptistery or for the font, on the grounds that this initiation into the supernatural order of religious grace completed the work of creation of an individual.

Nine

The number *Nine* is the first square of uneven numbers. According to the ancient sages, each of the three elements which constitute our bodies is *ternary*, each embodying the three items: *water* containing earth and fire; *earth* containing igneous and aqueous particles; and *fire* being tempered by water globules and terrestrial corpuscles which serve to feed it. Into this material form the *breath of life* entered at creation, thereby bringing all *four* elements into a manifested whole. Still, the visible *three* elements could never be entirely separated from the others without destroying the whole. So, *nine* or *three times three*, has become a symbol for all formations of living things.

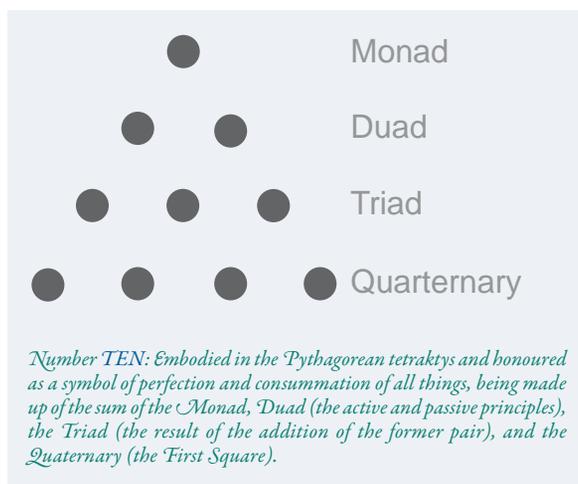
The Pythagoreans, who observed the property this number possesses of reproducing itself incessantly and entirely in every multiplication, considered it a very striking emblem of matter, which is incessantly composed before our eyes, having undergone a thousand decompositions. Readers are probably aware of the singular properties of the number *nine*, which, multiplied by itself or any other number whatever, gives a result whose final sum of its digits is always either *nine* itself, or always divisible by *nine*. When multiplied by each of the ordinary numbers, *nine* produces an arithmetical progression of the first ten Natural numbers, in which each resulting number is composed of two digits when, when added to each other, give *nine* (see illustrated table above).

Ten

This numeral cannot be considered a sacred number, though the Pythagoreans honoured it as a symbol of perfection and the consummation of all things. Being made up of the sum of the monad and duality, the active and passive principles, the triad the result of the addition of the former pair, and the quaternary or First Square, *ten* was said to contain all the relationships of numbers and harmony.

The Pythagoreans set out this idea in a symbol composed of ten dots arranged in a triangular form of four rows that they called the *tetraktys*. This figure was itself emblematic of the Tetragrammaton or sacred name of God composed of four letters, undoubtedly encountered by Pythagoras during his visit to Babylon.

However, the parts of which it is composed were also considered to be meaningful symbols as pointed out earlier. Thus the one point was a symbol of the active principle or creator, the two points of the passive principle or matter, the three of the world proceeding from their union, and the four of perfection of a union of the four alchemical elements making up that world.



Oh Gracious One

by Amelia

IT WAS A bitterly cold winter's night on the high plains of Iberia. The old man's beard was glazed by frost as he waited for a ride across the freezing river. The wait seemed endless and his body became numb and stiff from the searingly cold wind.

Eventually there was the faint sound and steady rhythm of galloping horses approaching the river-crossing along a frozen path. The old man watched as several horsemen rounded the bend but looked down as the first horseman approached and passed by without a word. Then another, and another, and many more galloped by, until finally, as the last rider neared the spot where the old man sat, covered in snow, the old man raised his arm slightly as he caught the rider's eye.

Reigning in his horse, the rider said in exasperation: *"Old man, you'll freeze to death here; why do you sit here?"* In a quavering voice he replied: *"My Lord, I wish to cross the river, but have no strength to do it alone, without your help."* Seeing the old man was unable to lift his half-frozen body from the ground, the rider dismounted and said *"I will gladly help you old man"*, helped him onto his horse and led the horse across the freezing river. Overwhelmed with sympathy for the plight of the old man, he mounted his horse again, embraced him in his saddle, and took him to his destination two leagues further from the river.

As they neared the small peasant cottage, the horseman asked:

Old man, I noticed that you let all the riders except me pass by without so much as raising your head to acknowledge our passing. When I came however, you looked up and told me of your plight. Why, on such a cold night, would you risk waiting until the very last rider before asking for help. What if I had ignored you as the others did?

With aching bones, the old man slowly lowered himself from the horse, looked up kindly at the rider and said:

I have lived long and learned much of the hearts of men. As each rider approached, and without raising my head, I felt the harsh chill of an icy heart and knew that this rider too would have no concern for my plight. It would have been useless to ask for his help. But when you approached I felt the warm hand of your guiding spirit and raised my head and saw in your eyes a kindness the others lacked. I knew that your gentle spirit would welcome the opportunity to give of yourself to any person in need.

Deeply touched, the horseman looked away from the old man in embarrassment as his eyes welled up with tears and said in a fading voice:

I am grateful for what you have said *Oh Gracious One*, and pray to *Allah the all Merciful* that I shall ever be eager to reply to the needs of others with a kind and compassionate heart.

Hearing these words, the old man touched the rider's hand; and it was warm as the heart of the rider who had saved his life. As the old man let go, the rider slowly looked up through misty eyes and was astonished to see before him a full moon rising over the distant horizon of empty snow covered fields with neither house nor human in sight. His life had changed in that moment of human warmth as *Mustafa the Wise of Córdoba* slipped silently away from his side through the doorway of eternity, never again to be seen.





Grand Masters and visiting Administrators attending the Supreme Grand Lodge annual meeting in LaChute, Quebec, Canada - October 2019.





In silent winter slumber,
no sound but quiet
icy flow of life-giving
water, where life
continues in bottom
dwelling creatures
oblivious of all but
somnolent survival.