

Winter 2020: Issue 4

# NASCENT STATE

Journal of Intuition

Magazine

Art & Science Issue

## Science & Scientism

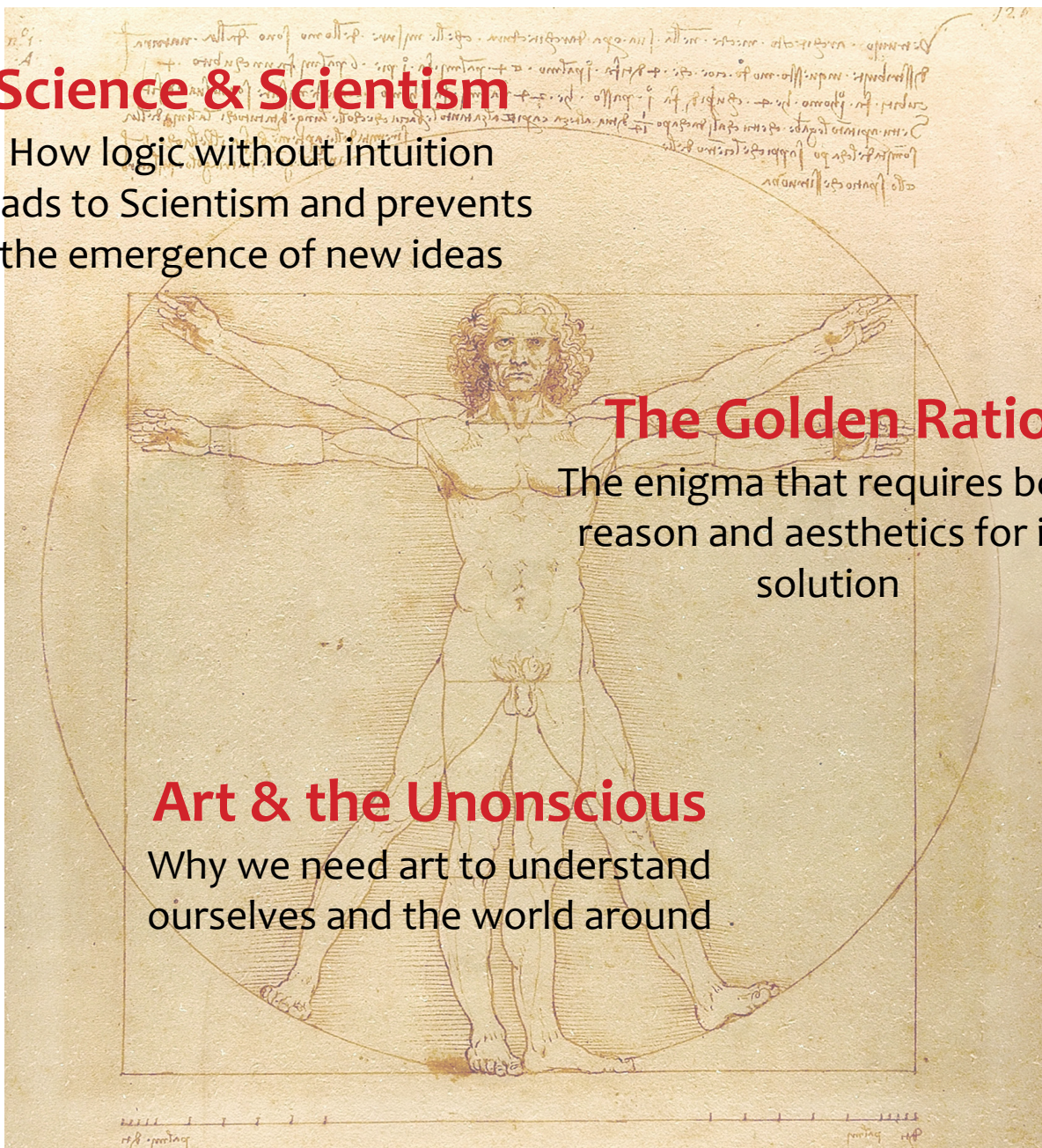
How logic without intuition leads to Scientism and prevents the emergence of new ideas

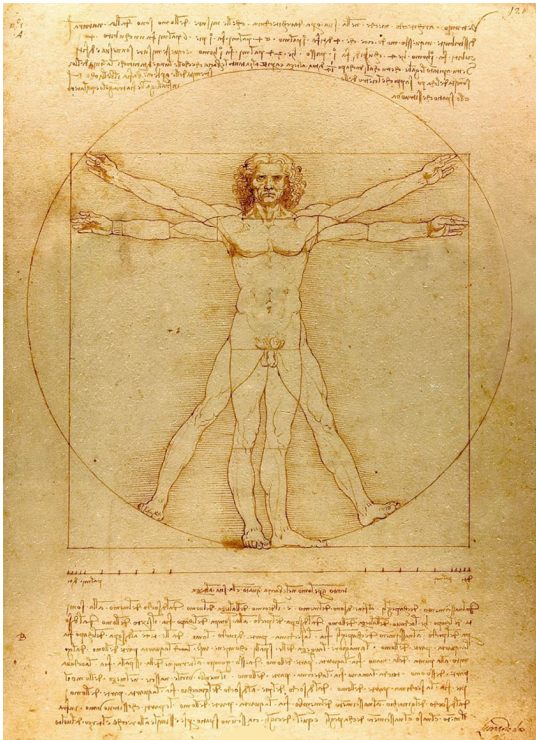
## The Golden Ratio

The enigma that requires both reason and aesthetics for its solution

## Art & the Unconscious

Why we need art to understand ourselves and the world around





Cover: Vitruvian Man by Leonardo da Vinci (c. 1490)

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## From the Editor

The fourth issue of Nascent State magazine is dedicated to Art and Science from an intuitive perspective.

The present division between Art and Science has its origin in the division between logical and intuitive thinking. This issue will attempt to remedy that division.

To that end there are articles on Science & Scientism, or the effect of dogma on science; on the Golden Ratio, an enigma that requires both logic and intuition for its solution, and finally an article on the Unconscious Mind and the Arts.

**‘Logic will get you from A to B.  
Imagination will take you everywhere.’**

Albert Einstein

While logic and intuition have both had an influence on the development of present-day science, owing to the dominance of logic, the intuitive element has been ignored. Francis Bacon, the father of empirical science, thought little of logic. He wrote: ‘Just as the sciences that we now have are useless for devising new inventions, the logic that we now have is useless for discovering new sciences.’

Intuitive thinking is slower than the logic. Intuition demands that we silence the logical mind, observe without prejudice, and then prepare the ground for insight. Logic demands a correct solution, whereas intuition demands a continual search. That is why intuition is emotional; anyone who does not long for a better understanding of themselves and the world around is not looking for knowledge but simply an argument.

**Nascent State** magazine is presented in a PDF, free-to-download format; download it and read it at your leisure. For enquiries, contributions and comments:

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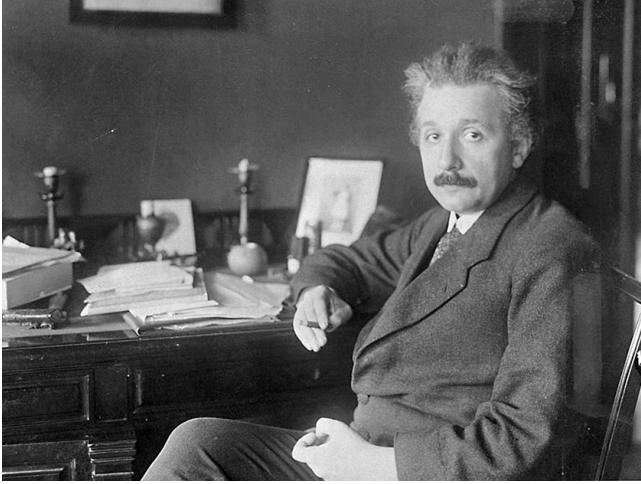
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# Science & Scientism

*the dangers of Dogma in Science*



Albert Einstein at his desk in 1929

In his book *The God Delusion* (2006), Richard Dawkins makes the extraordinary claim that one of the leading physicists of the twentieth century, Albert Einstein, was an atheist:

‘Einstein sometimes invoked the name of God (and he is not the only atheistic scientist to do so), inviting misunderstanding by supernaturalists eager to misunderstand and claim so illustrious a thinker as their own.’ [1]

This statement is extraordinary because it flatly contradicts Einstein’s own statement on the subject. The writer and journalist George Sylvester Viereck, in his book *Glimpses of the Great* (1930), asked Einstein directly whether he regarded himself as a ‘pantheist’, or a person who believes in an impersonal God. Einstein replied:

‘Your question is the most difficult in the world. It is not a question I can answer simply with yes or no. I am not an Atheist. I do not know if I can define myself as a Pantheist. The problem involved is too vast for our limited minds.’ [2]

Besides holding the chair for the Public Understanding of Science at Oxford University (1995 – 2008), Dawkins is also a leading member of the New Atheist movement. The New Atheist movement is so-called because it seeks to attack spirituality in all forms. It is for such statements that Dawkins has been accused - and rightly so - of promoting not science, but Scientism.

The word ‘Scientism’ was coined by the economist Friedrich Hayek in his book *The Counter-Revolution of Science* (1952). He subtitled the book *Studies in the Abuse of Reason*, and it was his aim to show that a decidedly unscientific spirit - what he called the ‘slavish imitation of the method and language of Science’ - was being passed off as genuine science.



The New Atheists

Christopher Hitchens, Daniel Dennet, Richard Dawkins and Sam Harris

The problem with Scientism is that it turns science into an ideology. This demands not just a belief in science, but an unquestioning acceptance of the scientific orthodoxy of the day. Genuine science is a process of discovery, and this includes the freedom to question and challenge existing assumptions, without which new discoveries are impossible. Indeed, many of the major advances in science have come from those who have challenged the prevailing orthodoxy of the day, and often at personal cost.

Nicolaus Copernicus (1473 - 1543), who gave us the heliocentric theory and began the scientific revolution, delayed the publication of his book *On the Revolutions of the Celestial Spheres* until after his death because he feared persecution by the Inquisition, which was the very product of logic. Galileo, more combative, was forced to recant his support for Copernicus before the Inquisition. Giordano Bruno, another champion of Copernicus, was unwilling to recant his views and was burnt at the stake by the Inquisition in the Field of Flowers in Rome in 1600.

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Statue of Giordano Bruno, Campo de Fiori, Rome

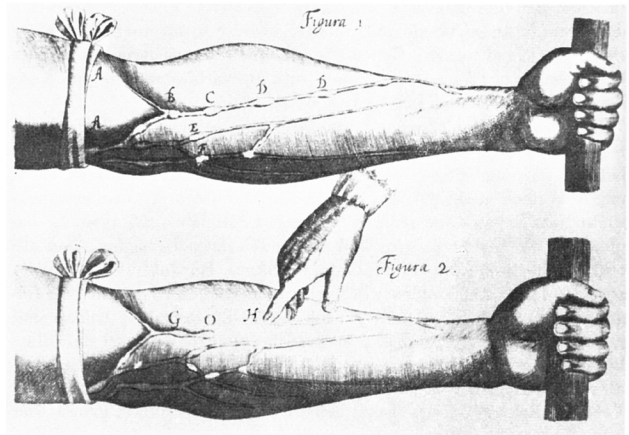
While this may be seen as an attack on science by dogmatic religion, the same intolerance towards dissent can also be found in secular culture. William Harvey (1578 - 1657), who proposed the circulation of the blood, feared personal injury for challenging the medical authorities of the day. Gregor Mendel, whose paper, *Experiments on Plant Hybridization* (1865), which is now regarded as the foundation work for genetic theory, was mocked and dismissed as an amateur gardener in his day. Immanuel Velikovsky (1895 - 1979), who suggested that the recurrent descriptions of catastrophes in ancient texts could be explained by a comet-like object passing close to the earth, faced such hostility by the scientific community that it gave rise to what is known as 'The Velikovsky Affair'. And in more recent times, the biologist Rupert Sheldrake, who proposed that morphic fields could be studied empirically, prompted the science journal *Nature* to suggest that his book *A New Science of Life* (1981) should be burnt.

The effect of turning science into an ideology is that it limits - and even prevents - the emergence of new ideas. This was noted by the scientific historian Thomas Kuhn, in his book *The Structure of Scientific Revolutions* (1962). Kuhn remarked that:

'No part of the aim of normal science is to call forth new sorts of phenomena; indeed those that will not fit the box are often not seen at all. Nor do scientists normally aim to invent new theories, and they are often intolerant of those invented by others.' [3]

Quite apart from the intolerance towards new ideas, Scientism creates an unnecessary division between science and spirituality. The claim, made

by Dawkins and others, that scientists are by nature atheistic is not supported by the facts.



From William Harvey's *de Motu Cordis* (1628)

Sir Francis Bacon, who wrote *Novum Organum* (1620), which is regarded as the foundation work for modern day science, had a low opinion of atheists. He wrote an essay on the subject, *Of Atheism*, in which he stated that atheism was more 'of the lip than in the heart'.

Sir Isaac Newton, who wrote *The Mathematical Principles of Natural Philosophy* (1687), which laid the foundation for classical mechanics, was also decidedly not an atheist. Indeed, he had a keen interest in astrology and alchemy, something which - given his stature - is an embarrassment for the scientific community. After examining a box of Newton's writings, the economist John Maynard Keynes stated in his 1946 essay *Newton the Man*:

'A large section, judging by the handwriting amongst the earliest, relates to alchemy - transmutation, the philosopher's stone, the elixir of life. The scope and character of these papers have been hushed up, or at least minimized, by nearly all those who have inspected them.' [4]



Faraday being offered presidency of the Royal Society (1857)

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Bacon and Newton were not unique. Michael Faraday (1791 – 1867), widely recognized for his pioneering work in electromagnetism, was also highly religious, and even served as a Church deacon. His contemporary James Clerk Maxwell (1831 – 1879), whose theory of electromagnetic fields unified electricity, magnetism and light, also served as an elder in the Church of Scotland. William James (1842 – 1910), who wrote the first textbook on modern psychology, was a member of the Theosophical Society. Carl Jung, who co-founded analytical psychology, was asked in a 1959 BBC interview whether he believed in God; he answered ‘I do not need to believe. I know.’ And another giant of 20th century physics, Werner Heisenberg (1901 – 1976), who gave us quantum mechanics, was also a devout Christian. The list is by no means exhaustive.



Carl Jung being interviewed by John Freeman, BBC, 1959

The introduction of ideology into science can be traced back to the Enlightenment, through the work of the Encyclopédistes, Denis Diderot (1713 – 1784) and Jean le Rond d’Alembert (1717 – 1783). Diderot and d’Alembert were both avowed atheists, and their intention in writing their *Encyclopédie* (1751) was to do more than simply to provide a comprehensive book of knowledge, but to use it to challenge the religious view of the world. The introduction makes this clear:

‘All things must be examined, debated, investigated without exception and without regard for anyone’s feelings. We must ride roughshod over all these ancient puerilities, overturn the barriers that reason never erected...’  
[5]

By the time of the Enlightenment, the many of the dogmas of the Church - from the movement of the earth to the origins of life - had been successfully challenged. It was clear that a new

foundation was needed for our understanding of the world. But where the Bible had once been the source of authority regarding matters of truth, the *Encyclopédie* was now to be that new authority; in effect, the new Bible of secular atheism, and with that, dogmatism was introduced into science.

The problem, of course, is not with science itself, but dogma. Dogma is the assertion of a single, unquestionable truth laid down by an authority. Once an authority decides what is true, then anyone who questions that authority is also seen to question truth itself. The introduction of dogma into science gave rise to the division between orthodox, or ‘normal’ science and unorthodox, or ‘fringe’ science. It is the same dogmatism which has led to the assertion that scientists speak with one voice, particularly on matters of health and medicine and the safety of new technologies.

The dissenting voice, that of the lone maverick and the original thinker, is not just a part of the history of science, it is essential to science itself. The claim, increasingly heard since the start of the pandemic, that we should ‘believe in science’ is starkly at odds with the motto of the Royal Society - founded for the very purpose of promoting science - which is ‘*Nullius in Verba*’, or Latin for ‘take nobody’s word for it’. We are not obliged to ‘believe in science’ any more than we are obliged to ‘believe in religion’; if we have any obligation in life, it is to think for ourselves.



### References

- [1] Richard Dawkins, *The God Delusion* (London: Bantam, 2006) p.34
- [2] George Sylvester Viereck, *Glimpses of the Great* (New York: The Macaulay Company, 1930) p. 372-373
- [3] Thomas Kuhn, *The Structure of Scientific Revolutions*, (University of Chicago Press, 1970) volume II, p. 24.
- [4] John Maynard Keynes, *Newton the Man*, *Collected Writings* (Cambridge: Royal Economic Society) pp. 363-374
- [5] Marvin Perry, *Sources of the Western Tradition*, vol. II (Boston: Houghton Mifflin, 1987), pp. 43-6.

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# The Golden Ratio

where Art meets Science



Portrait of Luca Pacioli, 1495

The Golden Ratio is an enigma. It can be found expressed in the organic geometry of nature; in the head of a dandelion, the array of spikes on a cactus, the cross-section of a cabbage, the spiral of a conch shell, and in the proportions of the human hand. Its expression is too recurrent to be dismissed as mere chance, and it is too precise to be accounted for by blind mechanics. Not only does it exist in nature, but it can be observed empirically, by anyone willing to study it.

The proportions of the Golden Ratio can be expressed mathematically, algebraically and geometrically.

Mathematically, it can be arrived by adding  $1 + 1$ , and then by adding that sum to the last number in the sequence:

$$1 + 1 = 2$$

$$1 + 2 = 3$$

$$2 + 3 = 5$$

$$3 + 5 = 8$$

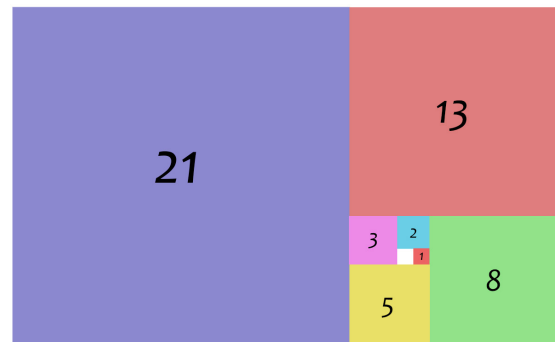
$$5 + 8 = 13$$

$$8 + 13 = 21$$

Algebraically, it can be expressed as:

$$\frac{a}{b} = \frac{a + b}{a}$$

Geometrically, it is expressed as:

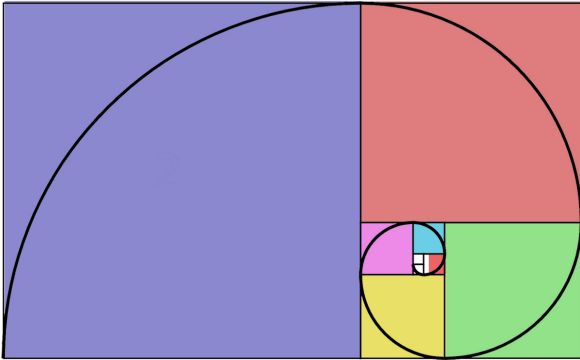


For those accustomed to thinking mathematically, such definitions are sufficient. But what mathematical definitions don't explain is why the Golden Ratio should be so widely expressed in nature. The dominant view of science, materialism, insists that all observable phenomena can be explained purely in terms of blind mechanics. The Golden Ratio presents a problem for materialism, because it points to aesthetics in nature, and aesthetics is unnecessary from a purely mechanistic point of view. The Golden Ratio presents us with an enigma, and one which requires more than a mathematical description, but one which deals with the function of aesthetics and proportion in nature.

There has been an interest in the Golden Ratio since the beginning of recorded history. Hippasus, a 5th Century BC Pythagorean philosopher, wrote about it. Euclid (c. 300 BC), who wrote the foundation work of geometry, *The Elements*, also spoke of it. Acharya Pingala, the 3rd Century BC Indian mathematician, referred to it as the 'matrameru' or 'rhythmic sequence'. In the late Middle Ages, a renewed interest in knowledge led the Italian mathematician

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Leonardo Bonacci (c. 1170 – 1240) to introduce the present Arabic numeral system into Western culture. Bonacci is better known as ‘Fibonacci’, who is associated with what is now known as the ‘Fibonacci Spiral’, or the geometric expression of the Golden Ratio.



The Renaissance led to the emergence of present day art and science. The mathematician Luca Pacioli published *The Divina Proportione* (1498), which was illustrated by Leonardo da Vinci. This prompted Leonardo to create the illustration, *The Vitruvian Man*, which depicts the Golden Ratio expressed in the geometric proportions of the human body. The title was in turn inspired by the name of the Roman architect Marcus Vitruvius Pollio (c. 80 Bc – 15 BC), who advocated the use of Divine Proportion in the design of a temple in his *Ten Books on Architecture*:

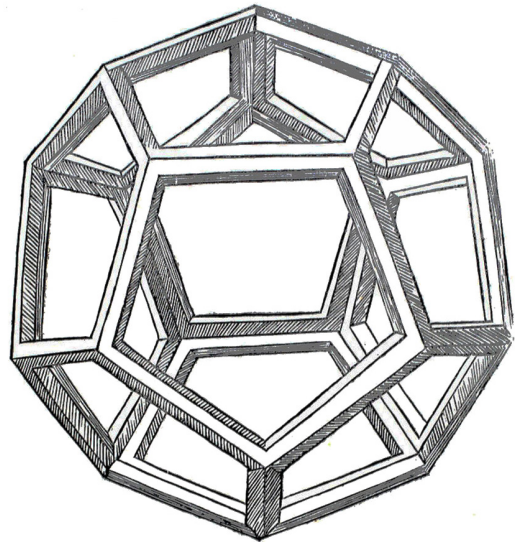
‘The design of a temple depends on symmetry, the principles of which must be most carefully observed by the architect. They are due to proportion. Proportion is a correspondence among the measures of the members of an entire work, and of the whole to a certain part selected as standard. From this result the principles of symmetry. Without symmetry and proportion there can be no principles in the design of any temple; that is, if there is no precise relation between its members, as in the case of those of a well-shaped man.’ [1]

Luca Pacioli’s use of the term ‘Divine Proportion’ was by no means careless. The idea that precision in geometry and proportion in nature is the expression of a Divine Mind and has accompanied the study of the Golden Ratio from the outset.

The idea is outlined in the dialogue *Timaeus* (360 BC), by Plato. *Timaeus* is quite unlike the other Platonic dialogues, insofar as it is an exposition of the order of the universe rather than any comment on morality or society. The third

Century historian Diogenes Laertius claimed that Plato paid a high price for three books by Philolaus, a follower of Pythagoras, and then incorporated their content into *Timaeus*. That would make the dialogue the clearest expression of Pythagorean thinking available. It is also the reason why the Golden Ratio itself is associated with Pythagoras.

*Timaeus* outlines a view of the world in which the Divine Mind is expressed through the four elements of nature - fire, air, water and earth - and through the fifth element, or the quintessence, which is portrayed as the very essence of the universe. The outline follows their expression through the musical scale, geometrical solids, proportion in nature, the qualities of the soul, moral behaviour, the use of medicines and even the properties of foods. The dialogue also attributes an elemental quality to each of the solids; the tetrahedron is fire, the octahedron is air, the icosahedron is water, the cube is earth, and the fifth element, or the quintessence, is the dodecahedron.



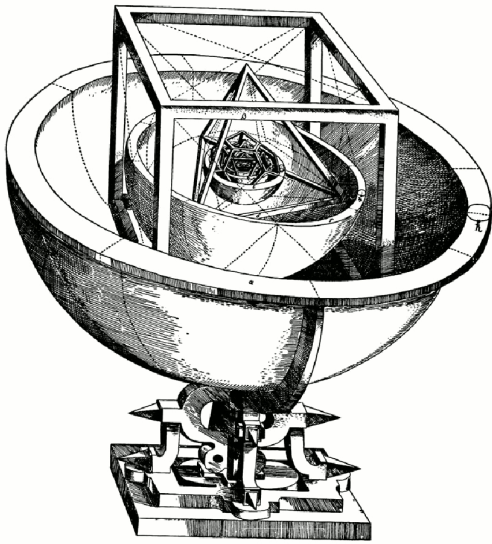
Dodecahedron by Leonardo da Vinci (c. 1509)

The view of the Golden Ratio as an expression of order in the universe, includes not just geometrical proportion but also aesthetics or beauty. It is perhaps for this reason that Leonardo, an artist rather than a mathematician, came closest to understanding its significance. Proportion is a branch of aesthetics or beauty, and aesthetics must be felt emotionally, and the same way a musical harmony can only be understood by the emotional response it produces.

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This was not just the view of Leonardo, but also the view of the German astronomer and mathematician Johannes Kepler, who is noted for his contribution to science by being the first to point out that the planets move in an elliptical orbit. His *Harmonices Mundi* or *Harmony of the World* (1619) outlined the view that the form of the universe is an expression of the laws governing musical harmony.

It is for this reason that the Golden Ratio presents a problem for materialism. It is an enigma for the simple reason that its explanation demands something more than can be accounted for by blind mechanics, and implies at least a pantheistic view of the world, if not the existence of a Divine Mind.



From Johannes Kepler's *Harmonices Mundi* (1619)

The question remains as to whether the expression of the Golden Ratio in nature is 'merely apparent' or whether it is the product of empirical observation. It is possible to observe not just organic proportion in nature, but also geometric solids. The latter can be found in the

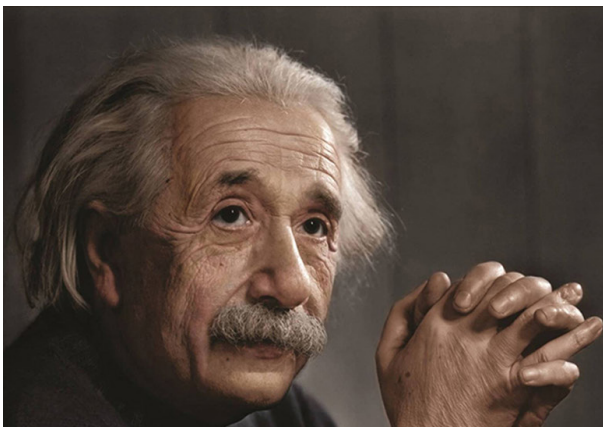
Pyrite crystal, which forms naturally into pyramid, cube, disc, dodecahedron and ammonite shapes. It is not possible to explain how this can happen by reference to blind mechanics, simply because natural selection plays no part in the formation of crystals.



Pyrite crystal dodecahedron

The reason why aesthetics is excluded from present-day science is owing to the dominance of logic in Western culture. Aesthetics, like art or music, can only be understood emotionally, whereas mechanics can be understood on a purely logical basis. The division between the intellect and the emotions is itself the product of the division between logical and intuitive thinking. The dominance of logic leads to a purely intellectual view of the world, and one which seeks to explain beauty, aesthetics and meaning in terms of mechanics alone. The problem is that this produces a half-picture of the world rather than insight.

The Golden Ratio is a constant reminder that there is much for which present-day science does not have an adequate explanation. An enigma is created by too limited a view of the world. What is needed, at least in terms of the Golden Ratio, is not better mathematics, but a fuller, more inclusive view of the world.



*'The most beautiful emotion we can experience is the mystical. It is the power of all true art and science. He to whom this emotion is a stranger, who can no longer wonder and stand rapt in awe, is as good as dead.'*

*Albert Einstein*



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# Art & the Unconscious

*'Perhaps the imagination is on the verge of recovering its rights'*

*Andre Breton*

*The Surrealist Manifesto*



A Eunuch's Dream, Jean Lecomte du Nouy 1721

Paul McCartney once stated that he woke from a dream with a melody in his head. The melody sounded unlike any of the other songs he was writing at the time, and he wondered if he had picked it up unconsciously.

'For about a month I went round to people in the music business and asked them whether they had ever heard it before. Eventually it became like handing something in to the police. I thought if no one claimed it after a few weeks then I could have it.' [1]

Deciding it was his, he worked on the lyrics, until eventually the song became 'Yesterday', a number one hit in America and one of the most covered Beatle songs of all time.

McCartney was not alone. Other musicians have testified to waking with the idea for a song from a dream. Those who have spoken about such experiences include Keith Richards with *Satisfaction*, Stevie Wonder with *Rocket Love*, Bob Dylan with *One More Cup of Coffee*, and Sting with *Every Move You Make*. And musicians are by no means unique in this respect. Writers who have testified to a novel being inspired by a dream include Mary Shelley with *Frankenstein* and Robert Louis Stevenson with *The Strange Case of Dr Jekyll and Mr Hyde*. For Shelley, the idea occurred to her in a kind of half-dream state.

'When I placed my head upon my pillow, I did not sleep, nor could I be said to think. My imagination, unbidden, possessed and guided

me, gifting the successive images that arose in my mind with a vividness far beyond the usual bounds of reverie.' [2]



Mary Shelley, by Richard Rothwell, 1840

The relationship between dreams and the arts can be accounted for by the visual nature of dreams; dreams are a mixture of dramatic scenery, strange characters and odd plots with surreal twists, and so it is not difficult to see how such an image can inspire a novel or a song. But dreams have also been responsible for practical inventions and scientific theories, such as Elias Howe's sewing machine, Dimitry Mendeleev's Periodic Table, Niels Bohr's structure of the atom, and James Watson's concept of the double-helix structure of DNA.

William James, in his *Principles of Psychology* (1890), pointed to the connection between dreams, the unconscious mind and new ideas. At that time the case for the unconscious mind still had to be made in the emergent science of psychology. James provided a series of proofs for its existence, including:

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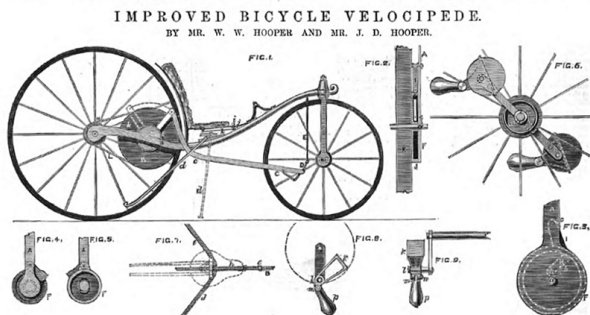
'Problems unsolved when we go to bed are found solved in the morning when we wake.' [3]

While it is not surprising that dreams can inspire new ideas, this does not account for inspired ideas which emerge during the waking state. New ideas can emerge apparently from nowhere, often suddenly and without warning. The phenomenon known as 'insight' is a product of this highly visual form of thinking. It is also why most patents for new inventions are accompanied by technical illustrations.

Oct. 22, 1869.

THE MECHANICS' MAGAZINE.

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The dominance of logic in Western culture means we put a high value on clear definitions and reasoned arguments. And yet neither leads to new ideas. To have new ideas, we have to think visually. Creative thinking is not bound by convention or reason, and in many respects a new idea must defy convention. If the influence of the unconscious mind on invention and insight is not more widely acknowledged, it is because conventional thinking finds it difficult to admit that an unconscious mind exists, much less that it has an important influence in the cultural and scientific life of society. Carl Jung, in his introduction to Richard Wilhelm's translation of the *I-Ching*, had the following to say about rationalism and the unconscious mind:

'In the exploration of the unconscious we come upon very strange things, from which a rationalist turns away with horror, claiming afterward that he did not see anything.' [4]

Perhaps it is for this reason that creative types tend to be seen as eccentrics, dreamers or rebels. To challenge existing assumptions, it is necessary - at least to a degree - to be at odds with conventional thinking and to be willing to challenge existing assumptions.

While the present prides itself on rationalism, it can be said that the unconscious mind has been

equally influential. The two defining features of the modern age, the emergence of technology and the growth of individualism in society, have been as much influenced by the unconscious mind as they have been by reason.



The Burial of the Sardine, Francisco Goya, 1810

Any civilisation or culture has its technology - the scythe, for example, predates recorded history - but what makes our own age unique is that never before has technology had such a profound impact on day-to-day life. In the same way that previous ages lived with the weather, the seasons and crop harvests, we now live with artificial foods, microwave ovens, smartphones and motor-cars on a daily basis. We are now so embedded in technology that the widespread loss of electricity would immobilize whole cities.

Alongside the emergence of technology has been the growth of individualism. The freedom of the individual, as an ideal at least, began to emerge about the time of the eighteenth century. It can be seen in the Romantic Movement, through Jean-Jacques Rousseau, and his novel *Julie; or The New Heloise* (1761), which was about an unconventional love affair between a young nun and her tutor. The Romantics of the eighteenth century wanted the individual to decide on matters of truth, belief and morality. The same

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century also saw the emergence of the Bohemian lifestyle, political Anarchism, the Suffragette Movement, and in Existentialism in philosophy.

The same individualism has continued to develop into the Modern Era. Increasingly the Arts have lost their Classical form and become innovative, giving rise to impressionism and surrealism in art, free verse and beat poetry in writing, jazz and pop music, contemporary dance and experimental theatre. At the heart of what is called 'avant garde' culture is the determined refusal to conform to any existing norm.



Skull of Zurbaran, Salvador Dali, 1956

Individualism is the heart of creativity. Perhaps this is why so many artists are highly individualistic and unconventional. Leonardo's sexuality, Goya's black paintings, Van Gogh's death, Mozart's impetuosity, Schubert's temper, Wagner's egotism, Blake's open marriage and Byron's addiction are all expressions of a highly individualistic nature. The troubled lives of Mary Shelley, Sarah Bernhardt, Sylvia Plath, Frida Kahlo and Doris Lessing all testify to the same condition. Indeed, there are so many examples of artists who displayed troubled natures that any list is likely to be incomplete, from Terry Gilliam who feared he would become a bomb-throwing terrorist, to the explosive temper of Nina Simone, to the rebellious John Lennon, who once said:

'Part of me would like to be accepted by all facets of society and not be this loudmouthed lunatic poet/musician. But I cannot be what I am not ... I was the one who all the other boys' parents — including Paul's father — would say, 'Keep away from him!'



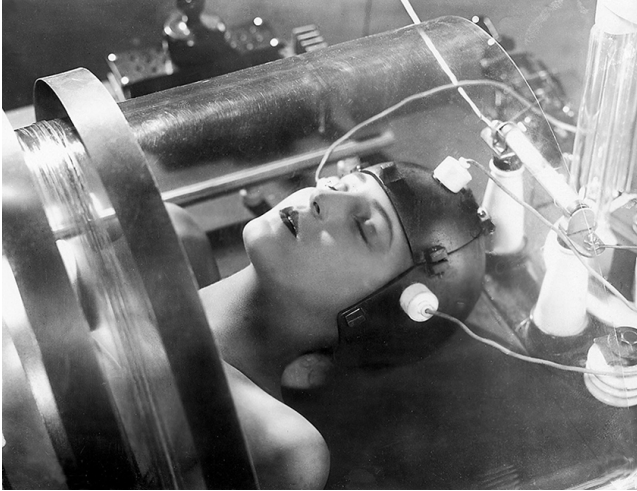
Paul McCartney and John Lennon, c. 1964

Perhaps the 'troubled soul' of an artist is simply an expression of the unconscious mind. The very nature of the unconscious mind, as is clearly expressed in dreams, is that it does not conform to convention. Our desires, fears, hopes and anxieties are not rational, but image-driven. In this respect, art is an expression of the unconscious mind. Whereas all other forms of activity - from politics to economics to religion and science - seek to rationalise human nature, the arts seek to express it fully and without reservation.

It could be said that the division between science and art is an expression of the division between the rational mind and the unconscious. Underlying the growth of technology and individualism is a belief in progress, or the assumption that we can change the world for the better. And yet progress in the Modern Era has been very much a mixed bag. The two world wars of the last century were made possible by tanks, engines, electronics, munitions, chemicals and explosives, and are ample testament to the darker elements in human nature. If progress is a mixed bag, it is because human nature is also a mixed bag. It is not possible to change the world for the better unless we know what kind

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of change we want. Norbert Wiener, the founder of the science of Cybernetics, wrote; 'I have said that the modern man...however much 'know-how' he may have, has very little 'know-what.' [5]



From Fritz Lang's *Metropolis*, 1927

If human beings are to develop 'know-what', this must come from a fuller understanding of human nature. If technology serves to improve material wealth, the purpose of the arts to improve our understanding of human nature. Too limited a view of human nature has allowed us to create wealth and weapons of mass destruction in equal measure. The problems of the Modern Era will not be solved by more material wealth, but by a better understanding of human nature.

It is for this reason that the arts are a great deal more than mere entertainment. Art is very means by which we can gain a fuller understanding of what it is to be human. Materialism will only allow what can be defined, calculated and valued in material terms; and there is much to human nature which cannot be reduced to a formula. So for all its chaotic mess, amateurishness, bumbling ineptitude, hit and miss imprecision - and

occasional brilliance - the arts are perhaps the only vehicle that can remind the modern world of what it is to be human. Indeed, other than the arts, it is difficult to see where else this can come from.

### References

- [1] Steve Turner, *A Hard Day's Write: The Stories Behind Every Beatles Song*, 3rd ed (New York: Harper Paperbacks, 2005), p83.
- [2] Mary Shelley, *Frankenstein*, 1818 (London: Penguin Books, 1985), pp. 8-9.
- [3] William James, *Principles of Psychology* (New York: Henry Holt & Co, 1890) Vol 1, 1931 edn, p. 166
- [4] Richard Wilhelm, *I-Ching* (London: Penguin Books 2003), foreword by C. G. Jung, xxxiv
- [5] Norbert Wiener, *The Human Use of Human Beings* (Boston: Houghton Mifflin, 1954) p. 184



### *Intuition in the West*

*A history of intuitive thinking*

*Jim Blackmann*

The book *Intuition in the West* is available through [NascentStatePublishing.com](http://NascentStatePublishing.com)



*'The absolute rationalism which remains in fashion allows for the consideration of only those facts narrowly relevant to our experience.'*

*Andre Breton*