# The Meaning of Life


## Paul Hague


### April 2011

In order to answer the question, "What is the meaning of life?" we clearly need to first answer the questions, "What is meaning?" and "What is life?" The second of these questions is one of many that have intrigued and haunted humanity for thousands of years, as Michael Mosley points out at the beginning of his six-part series *The Story of Science*, broadcast by the BBC in 2010. However, concluding the fifth episode titled 'What is the Secret of Life?', he said, "When it comes to understanding the complexities of life, we still have a long way to go."[1]

Two other episodes in this series are titled 'How Did We Get Here?' and 'Who Are We?', similar to those asked by Brian Cox at the start of his four-part series *Wonders of the Universe*, broadcast by the BBC in 2011: "Why Are We Here?" and "Where Do We Come From?" He says that these enduring questions can only be answered when we understand the story of the universe, which began 13.7 billion years ago, for, as our bodies are parts of the physical universe, this story is our story. It is thus an essential part of human nature to try and find the answers to these perplexing questions, which he sets out to do.[2]

But it is not only scientists, medical practitioners, and psychologists who are trying to answer the big questions of life and human existence. In a similar fashion, Miceal Ledwith, a former professor of systematic theology, asked these searching questions on the *What the Bleep Do We Know!?* DVDs, popular in the New Age movement: "Who are we?" "Where do we come from?" "What should we do?" and "Where are we going?"[3]

Now while answering the question "What is life?" continues to elude materialistic, mechanistic scientists, could we make better progress in discovering the meaning of life by first asking "What is meaning?" Well, in some ways, this is an even greater challenge, for as the Lithuanian linguist Algirdas Julien Greimas (1917–1992) wrote in the opening paragraph of an essay '*Du sens*' published in 1970:

> Il est extrêmement difficile de parler du sens et d'en dire quelque chose de sensé. Pour le faire convenablement, l'unique moyen serait de se construire un langage qui ne signifie rien : on établirait ainsi une distance objectivante permettant de tenir des discours dépourvus de sens sur des discours sensés.[4]

This essay was translated into English in 1990 with the title 'The Meaning of Meaning', the first paragraph becoming:

> It is extremely difficult to speak about meaning and to say something meaningful about it. The only way to do this adequately would be to construct a language that signified nothing. In this way an objective distance could be established that would allow holding meaningless discourses on meaningful ones.[5]

Now Greimas also pointed out in 1966 in *Structural Semantics* that semantics, as 'the study or science of meaning in language', is the poor relation of linguistics, its very name not being coined until the end of the nineteenth century,[6] the OED giving 1883 as the first use of the word, in French: *sémantique*, from Greek *sēmantikós* 'significant', from *sēmaínein* 'to show, signify, indicate by a sign', from *sêma* 'sign'.

In view of the great difficulty in answering such questions as "What is life?" and "What is meaning?", it is not surprising that the comedians make fun of the question, "What is the meaning of life?". For we like to laugh at that which we don't know as a relief from the fear of the unknown. Examples are Monty Python's movie *The Meaning of Life* and Douglas Adams' *The Hitchhiker's Guide to the Galaxy*—originally a radio series, then a book, and then a TV series and film.

In Adams' novel and film, "Many millions of years ago, a race of hyperintelligent, pandimensional beings got so fed up with the constant bickering about the meaning of life that they commissioned two of their brightest and best to design and build a stupendous supercomputer to calculate the answer to Life, the

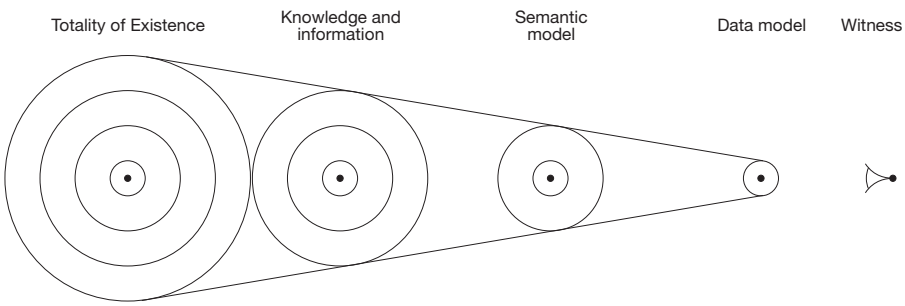
Universe, and Everything."[7] With infinite majesty and calm, after seven and half million years of computation, the computer, called Deep Thought, gave this simple answer: "forty-two". But the people did not understand the answer because they did not actually know what the question was. As Deep Thought said, "Once you know what the question actually is, you'll know what the answer means."[8]

One difficulty in knowing what the question is is that the word *meaning* has a rich heritage. The basic meaning of *meaning* is 'intention, purpose', a verbal noun deriving from *mean*, from Old English *mānan* 'to tell of, to intend, signify', with various cognate Old Germanic words meaning 'mean, make known, have in mind, hold an opinion', from Proto-German **mainjain*. There is some disagreement between the etymological dictionaries about the Proto-Indo-European base of *mean*. Some say that the PIE base is **mei-no-* 'opinion, intention', also root of *moan* 'complain'. An alternative base is **men-* 'to think', also root of *mind*, *mental*, *memory*, *mention*, *mania*, *music*, and *money*. The association of *meaning* with *interpretation* came about from the sense that in communications, we intend to convey a certain sense when using some word, sentence, or significant action. Conversely, we interpret what is being communicated as meaning, not necessarily what the communicator intended.

So how can we unravel the mysteries of meaning and hence reveal the innermost secrets of the Universe: what it is, how it is designed, who we are, our origin and destiny as a species, and how we could live in love, peace, and harmony with each other, our environment, and the Divine, free of fear, conflict, and suffering.

Well, in the very same year that *Du sens* was published, a partial solution to Greimas' problem was published in an eleven-page epoch-making paper in a technical journal on the other side of the Atlantic. The paper, written by Ted Codd (1923–2003) when he was working at IBM's research laboratory in San Jose, California, was titled 'A Relational Model of Data for Large Shared Data Banks'.[9] The reason why this paper almost solved the fundamental problem of meaning is that it provided, for the first time, a mathematical model of the basic resource of the data-processing industry: data itself.

Codd developed his model to unify two rival database structures that emerged in the 1960s: hierarchical, represented by IBM's Information Management System, and nonhierarchical, initiated by Charles Bachman of General Electric and incorporated into the network approach of the Data Base Task Group (DBTG) of CODASYL (Conference On DAta SYstems Languages).[10] In this way, Codd showed that the underlying structure of business data, prior to interpretation by a knowing being, is a multidimensional network of hierarchical relationships. For as Sherman C. Blumenthal pointed out in 1969 in *Management Information Systems*, information is data with meaning.[11] There is thus a primary-secondary relationship between data and information. By interpreting the data patterns in our experience, we obtain information, which informs us and so provides meaning. The relational model of data thus provides a virtually meaningless, objective way of describing the meaningful world we live in, much as Greimas sought, as this diagram illustrates:




While the data model is almost meaningless, it does contain some meaning, which Greimas also said is unavoidable, and so can be considered a part of the semantic model created by using Codd's modelling

technique. In turn, this semantic model is a part of the knowledge and information about the business world and is, in turn, a part of that world. We'll come to what the Witness means in a moment.

It might seem that the reticulating, arborizing properties of the data model are so simple that they are hardly worth pointing out. Aren't they obvious for all to see? Well, we are not always willing to face the obvious. As Hans Christian Anderson's tale of *The Emperor's New Clothes* well illustrates, the child in the story saw the situation just as it was, and naturally exclaimed, "He's got nothing on!",[12] much to the consternation of the Emperor, courtiers, and adults in the crowd.

Such innocent statements are a clear sign of natural intelligence, which is often stultified by the education system and other cultural inflences, protecting the status quo, limiting our ability to consciously adapt to our rapidly changing our environment. Arthur Koestler was another who was fully aware of the scepticism that arises from stating the obvious in his own studies of the very abstract patterns that underlie the natural world. At the Alpbach symposium of 1968, called 'Beyond Reductionism', he said:

> This almost universal applicability of the hierarchic model may arouse the suspicion that it is logically empty; and this may be a further factor in the resistance against it. It usually takes the form of what many call the 'so what' reaction: 'all this is old hat, it is self-evident'—followed by the non sequitur 'and anyway, where is your evidence?' Well, hierarchy may be old hat, but I would suggest that if you handle it with some affection, it can produce quite a few lively rabbits.[13]

One of the rabbits that emerged from the relational model of data in the 1970s was a multibillion-dollar industry, for today you cannot order a book or airline ticket on the Internet without invoking the relational model of data behind the scenes. This is possible because the relational model is of such a high level of abstraction and generality that it is applicable in any industry whatsoever, whether this be manufacturing or retail, governmental or financial, medical or educational, or whatever. Larry Ellison was one of the first people to see the immense potential of this unifying approach to database management, founding Oracle, today a Fortune-500 company, on the basis of Ted Codd's rather impenetrable paper, becoming one of the richest people in the world, in financial terms.[14]

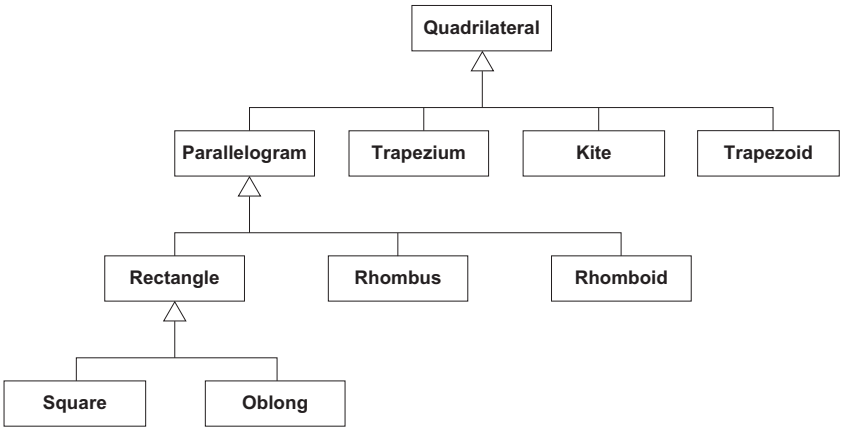
Another lively rabbit that popped out from the conjurer's hat in the 1980s was Integral Relational Logic (IRL), the much sought-for science of thought and consciousness that describes how we all form concepts and organize our ideas. Originally, Codd showed that all data could be organized in tables, called relations in the theory, which evolved from the mathematical theory of relations and first-order predicate logic. The table of a telephone directory on the next page is a familiar example in the notation of IRL, each row representing an entity with its attributes, corresponding to Aristotle's notions of subject and predicate.[15] These entities are instances of classes or entity types, corresponding to Plato's particulars and universals, regarded as immortal Forms or Ideas.[16]

| **Class name** | *Telephone subscriber* | | |
|---|---|---|---|
| **Attribute name** | *Name* | *Address* | *Telephone no.* |
| **Attribute values** | Fred Wheeler | 4 Meadow Walk | 624 4582 |
| | Anne Potter | 72 Grove Road | 982 3356 |
| | Richard Cooper | 31 Beech Boulevard | 104 3911 |
| | Elizabeth Tanner | 7 Chestnut Avenue | 310 4574 |
| | Jackie Butler | 25 Orchard Way | 955 4395 |
| | David Butcher | 67 Willow Crescent | 109 2661 |
| | Jenny Cutler | 22 Heather Drive | 893 2748 |
| | Andrew Fisher | 60 Oak Hillside | 227 5369 |

The elements in italics in this table form the semantic model in the diagram on page 2, gathered together in two tables with Class names 'Class' and 'Attribute', which correspond to the system catalogue in relational database management systems, neatly avoiding the problem of infinite regress, which generally arises in self-referencing systems. The information itself is in plain text in the table.

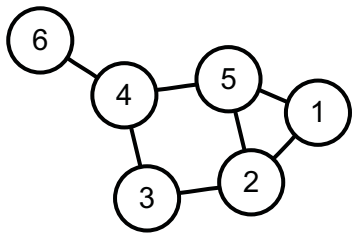
Then in 1975, Peter Pin-Shan Chen published a paper called 'Entity-Relational Model—Toward a Unified View of Data', which showed how the relationships between relations in the relational model could be depicted in graphical form.[17] This gave rise to many entity-relationship modelling techniques, such as Oracle's CASE*METHOD, *CASE* meaning 'Computer-Aided Systems Engineering'.[18] However, the relational model did not depict all the meaningful relationships between entity types, omitting in particular generalization relationships such as animal, primate, and human, called broader and narrower terms in library management systems, such as UNESCO's Science and Technology Policies Information Exchange System (SPINES).

To accommodate such hierarchical relationships, another modelling method emerged from the programming language SIMULA (SIMUlation LAnguage)—intended to describe complex dynamic systems—developed in the mid-1960s at the Norwegian Computer Center by Kristen Nygaard and Ole-Johan Dahl, together with Bjørn Myhrhaug.[19] The key concepts in SIMULA are class and object, where objects are instances of classes. Such relationships were then incorporated into Apple's desktop metaphor, object-oriented programming languages, such as Smalltalk, Java, and C++, and many object-oriented modelling techniques, which James R. Rumbaugh, Grady Booch, and Ivar Jacobson of Rational Software unified in the Unified Modeling Language (UML) in the 1990s.[20] Here is an example of a semantic model of generalization relationships in IRL, which can also be represented in tabular form.




Such class models can, of course, get very complex, impossible to represent in either printed form or even in computer systems in their entirety. Nevertheless, we can see that such semantic models are just special cases of mathematical graphs, consisting of nodes and arcs or relationships between them, such as this example from Wikipedia. Such graphs evolved from Leonhard Euler's mapmaking techniques developed after this eminent Swiss mathematician was asked in 1736 if it were possible to take a walk in

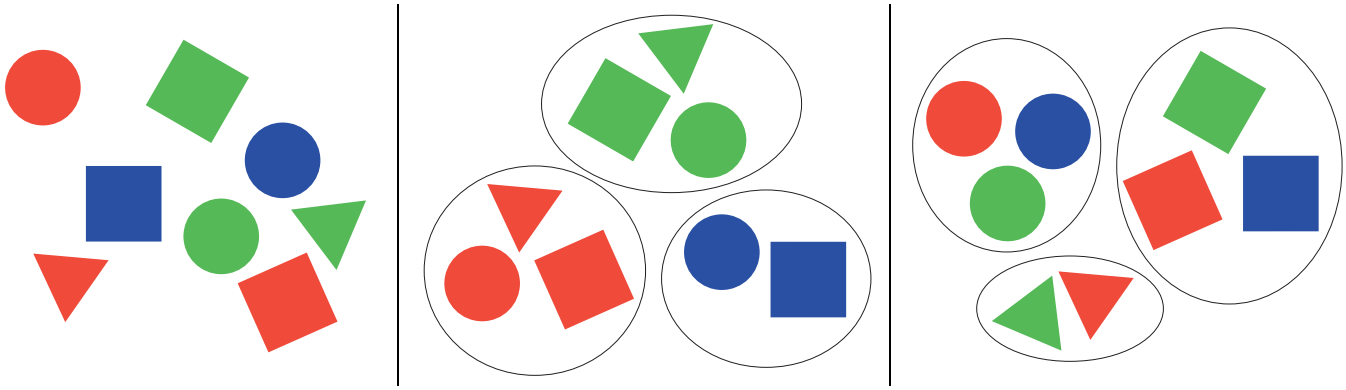
Königsberg, the capital of East Prussia, in such a way as to cross every bridge in it once and only once and return to the starting point.[21]




So the underlying structure of the complex world we live in is incredibly simple, represented in tabular and graphical form in IRL. When used in physics, the relationships in these graphs represent fields, such as gravitational and electromagnetic, and the binding energy within atoms. In *A New Science of Life*, Rupert Sheldrake approached a generic concept of field with his principles of morphogenetic fields, morphic resonance, and formative causation.[22] In social systems, the nodes are you, I, and everyone else, the arcs representing all the relationships that we all have with each other, sometimes called information fields.

So IRL enables us to look at the Universe as an information system, whose basic components are form, structure, relationships, and meaning, rather than the fire, earth, air, and water of the ancients and the matter, space, time, and energy of the physicists. Each node is just a structure containing meaningful relationships between forms. Now when we close the eyes in meditation, something magical happens. All these nodes dissolve until nothing remains but relationships, a virtually formless field of Consciousness, not unlike what Lynne McTaggart calls 'The Field' in a book with this title, corresponding to the zero-point field in physics.[23] To see how this virtually formless field can become Absolutely Formless, we need to look at the commonsensical way that IRL explicitly explains how we all form concepts.

It is incredibly simple, for we all learn this skill in the nursery: by observing and interpreting the similarities and differences in the data patterns of our experience. David Bohm used just this approach when showing how we can heal our fragmented minds by bringing all our thoughts into universal order. As he said, drawing on an idea that the artist Charles Biederman gave him, "a very general way of perceiving order … [is] *to give attention to similar differences and different similarities*."[24] For instance, the left-hand diagram below shows a random collection of differently shaped and coloured blocks, which an infant might play and learn with.



To bring some sense of order to this chaos, we can put all the blocks with similar colours or shapes into groups called sets in mathematics, as the other two diagrams illustrate. As Georg Cantor, who developed the mathematical theory of sets in the 1870s, indicated, the concept of set is essentially intuitive. He defined it as follows: "By a set we mean the joining into a single whole of objects which are clearly distinguishable by our intuition or thought."[25] In an IRL table, other attributes that blocks could have are size and position, which would allow further ordering, if we wished it.

Now as this ordering process is of the utmost generality, we could also notice that in the middle diagram, for instance, two sets contain three blocks, while the other contains two. So we could put all these sets into other sets that have the attribute three or two, including such members as three apples or two dogs. We can thus see that as sets enable us to bring order and meaning to our lives, these mathematical entities are central to semantics. Indeed, there is a primary-secondary relationship between the concepts of

set and number and hence between semantics and mathematics. It is not possible to form the concept of number until we have formed the concept of set.

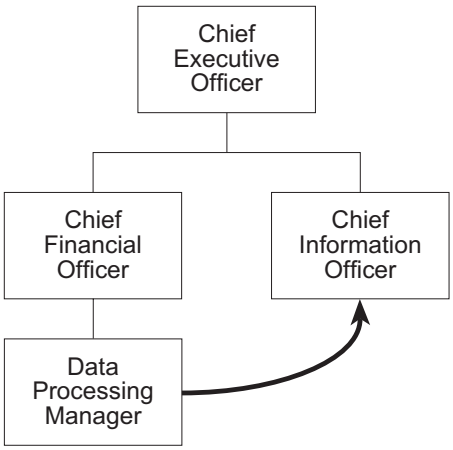
In the 1960s, there was some attempt to put first things first with the introduction of the new maths based on the abstract notion of set. But it seems that this vitally important approach to conscious, intelligent pattern recognition was abandoned because children were not developing the numeracy skills required by science and business.[26]

This is a great pity, for we cannot really apply the quantification techniques of mathematics until we have a sound conceptual model on which to base our calculations. David Bohm recognized this relationship when he set out on his career as a physicist in 1939 at the California Institute of Technology. There he found a tremendous emphasis on competition and mathematical techniques, with little interest in common inquiry into natural philosophy, which truly enables us to understand ourselves and hence the world we live in.[27]

What was true in 1939 is as true today in science, still following Lord Kelvin's assertions, "To measure is to know," and "When you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind," notions we have inherited from Pythagoras and Plato. And in business, it is said, "If you cannot measure, you cannot manage."

But such slogans don't make any sense. In business management systems, columns in tables of telephone subscribers draw on a domain of values, which defines the set of values that are relevant in a particular context. Examples are ages of people from 0 to 125, let us say, and {'red', 'green', 'blue', 'yellow'} for possible colours of blouses in a product range. These domains of values are thus dimensions or means of measure in IRL, as they are in business, for *dimension* derives from the Latin *dīmēnsiō* 'a measuring', from *dīmētīrī* 'to measure out'.

Recognizing that we can measure qualitatively as well as quantitatively brought about a major change in the way businesses are organized around 1980, at the dawn of what the sociologist Daniel Bell called the 'Information Society'. At about this time, IBM (UK) had a marketing slogan 'Manage data as a corporate resource,' which led me to investigate the meaning of data to discover exactly what IBM's customers were supposed to manage. One effect of these changes is illustrated in this diagram, showing how the data-processing manager transmuted into a chief information officer (CIO) reporting to the Chief Executive Officer (CEO) alongside the Chief Financial Officer (CFO).




But what is the relationship between the CFO and the CIO, managing money and information, respectively? Well, money is a type of information and so can be represented in the semantic models developed by information systems architects reporting to the CIO. However, the meaning of information, and hence its value, cannot satisfactorily be represented in financial models developed by accountants reporting to the CFO or more generally in such quantitative models developed by bankers and economists. There is thus a primary-secondary relationship between information and money and hence between the CIO and the CFO. However, as in science, few business executives or politicians recognize this relationship, putting second things first, quite illogical.

To see why this is so, we need to investigate the meaning of meaning further and thereby complete Grimas' search for a meaningless language in which to talk about meaning. We have seen that domains of

values provide a context for determining what values are valid for a particular class of entities. But what umbrella context can we use for all our learning? Well, this is normally determined by the cultures into which we are born, not the least by religious, scientific, and economic beliefs. But these are often heavily loaded with emotional overtones and can hardly serve as a meaningless overarching context for developing conceptual models of the world we live in. Furthermore, different cultures and academic disciplines have developed quite different contexts over the years, which lead to much conflict and suffering.

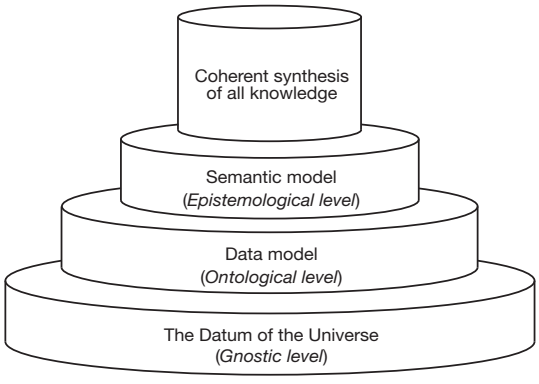
This was the situation I faced in 1950, as an eight-year-old, at about the time that Jean Piaget tells us that children begin to think and form concepts for themselves. Having been born in a war zone in south-east England in the middle of the Second World War, I wondered if it would ever be possible for human beings to live in love, peace, and harmony with each other. I could see that if I had been born in Germany or Japan, I would have been brought up in a quite different way. Furthermore, even the culture I had been born into was at war with itself, not the least the long-running war between science and religion. This is because the concepts of Universe and God, as they are understood in Western civilization, are incompatible with each other. And not until religion and science share a common context can Peace reign on Earth.

In the event, it took me nearly thirty-five years to discover the Absolutely Meaningless Context that I did not know that I was seeking and over a further twenty-five years to realize the full implications of this discovery in the utmost depth and breadth of my being, a process that is continuing, even as I write these words. The solution to the problem is incredibly simple. As information is data with meaning in the data-processing industry, we can call the Absolutely Meaningless Context for all our learning the Datum, from the Latin *datum* 'that which is given', from *dare* 'to give'. The Datum of the Universe thus exists prior to existence, expressed in the word *Presence* from the Latin *præsentia*, participle of *præesse* consisting of *præ* 'before' and *esse* 'to be'. The Latin root of *Presence* thus literally means 'before being' or 'prior to existence'.

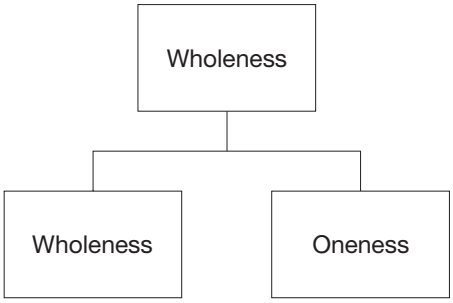
It might seem that the Datum is a concept that has been plucked out of thin air. However, as Chapter 4 'Transcending the Categories' in my book *Wholeness* describes, in IRL we form the concept of the Absolute in exactly the same way as we form concepts of any other beings in the relativistic world of form: by carefully examining the similarities and differences in the data patterns of our experience. We can then turn this rational, systemic concept of God into a scientific one by continuing the involutionary meditation practice described on page 5 until all relationships in the Cosmos dissolve into a Seamless, Borderless, Formless Continuum, which we can also call Consciousness.

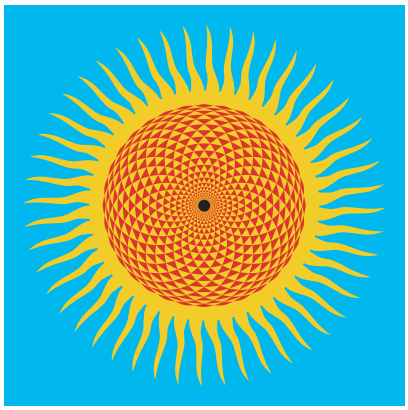
Consciousness is Ultimate Reality, as scientists and medical practitioners such as Amit Goswami, Peter Russell, and Deepak Chopra are promoting, the beginning of the greatest scientific revolution since Isaac Newton's *Mathematical Principles of Natural Philosophy* was published in 1687. For as Ramesh S. Balsekar, an Advaita sage and former President of the Bank of India, said in *Consciousness Speaks*, 'All there is, is Consciousness'.

In summary, we can see that all the knowledge and information that human beings have developed and acquired about the world we live in over the millennia is actually based on three levels of foundations, the upper three layers in this diagram corresponding to the three right-hand circles in the diagram on page 2. The lowest level is well familiar to Eastern mystics, in particular, being called *Satchidananda* in Sanskrit, a compound of *Sat* 'absolute, eternal, unchanging Being, Truth', *Chit* 'absolute Consciousness', and *Ananda* 'bliss, absolute joy'.



We can give the meaningless Datum some meaning through two metaphors for Consciousness. The first is an ocean, a generalization of David Bohm's notion of holomovement in the implicate order, with which he resolved the incompatibilities between quantum and relativity theories. Like the holomovement, all the waves and ripples on the physical surface of the vast Ocean of Consciousness and the currents beneath the surface, which represent the Cosmic Psyche, have no separate existence from the entire ocean, which we can simply call Wholeness. The still centre of the Ocean, corresponding to *Shunyata* 'Emptiness' in Buddhism, is the Essence of the Universe that we all share, simply called Love. The central core of the Cosmos is also Oneness, which we can experience when we come into union with the Immanent Divine, contained within Transcendent Wholeness, as this diagram illustrates.



The second metaphor for Consciousness we can use is that of Light, also well familiar to mystics once the clouds of unknowing are dispersed, in the words of an anonymous, fourteenth-century English Christian monk. But this Universal Light is not like the diffuse light of the Sun or a light bulb. Rather it is coherent light, like that of a laser, enabling us to view the Cosmos holographically, in which every part contains the Whole, as David Bohm suggested. To mix metaphors, each of us is the entire Ocean of Consciousness as well as individual waves and currents on and beneath the surface.

This all-embracing view of the Cosmos then shows us that life is not a property of the DNA molecule, as Watson claimed in *DNA: The Secret of Life*. Rather, Life arises directed from our Divine Source at the centre of the Ocean of Consciousness, like a fountain. We can call the organizing power of life the Logos, signifying the immanent and rational divine intelligence that governs the Cosmos, as Richard Tarnas interpreted the fragments of Heraclitus, the mystical philosopher of change. In Eastern cultures, the Logos is analogous to *Dharma*, *Tao*, and *Rita*.

Moving up through the foundations of all knowledge, the data model mainly consists of the Principle of Duality: "A complete conceptual model of the Universe consists entirely of dual sets," which gives rise to the circle, triangle, and cross of duality, generalizing and clarifying Greimas' semantic square because they are true in all domains of discourse, prior to interpretation by a knowing being. In the mezzanine level between the gnostic and ontological levels lies the Principle of Unity: *Wholeness is the Union of All Opposites*, a universal truth, but not the Nondual Absolute Truth, which lies squarely in the Gnostic level itself. The semantic model is the class model, defined on page 4. It is on this semantic foundation that a coherent synthesis of all knowledge can be built, assisted, where appropriate by mathematical formulae.

The Absolute is illustrated in this diagram in the vertical dimension of time as 'All-inclusive Cosmic Context' and 'Secure Gnostic Foundation', concepts that are formed in the horizontal dimension of time by the 'Metaphysical coordinating framework', consisting of the data and semantic model in IRL. The Principle of Unity, the fundamental design principle of the Universe, then shows that the ultimate meaning and purpose of life on Earth is that we are all conceived and born to die. But before the physical death of our bodies and our species, we can learn to die psychologically, which we shall investigate in a later version of this introductory essay.