

## *Opening the Whole*

**Wendy Ellyatt**



*'What I have found to be the problem is not 'holes' but 'wholes' – the notion that a complete, fully definable, space-excluding boundary can exist anywhere at any scale in an evolving biosphere and cosmos. There is no evidence, and can be no evidence [i.e. we could not be aware of it even if it existed] of a discrete limit anywhere and it does not make sound sense to assume that there is one. And yet the whole of definitive - and thereby oppositional and discriminatory - logic depends on it.'* **Alan Rayner** (above drawing courtesy Wendy Ellyatt)

We all talk about the importance of 'wholeness' and 'connectivity' now, and yet do we really understand what we mean by this? Language imposes strong, subtle pressures that persuade us to see the world in particular ways. The moment we say the word 'whole' we imagine something definable and 'complete in itself', i.e. a 'singularity'. And yet it is becoming increasingly clear that all manifest objects are undergoing continual flux and change. So there is really no such thing as a definite thing; everything that we call an object is really variably fluid rather than a static form.

I have recently discovered the theory of 'Inclusionality', which has been developed by a small group of pioneers including the English biologist and ecological thinker Alan Rayner. It has been fundamentally informed by the work of the African mathematician Lere Shakunle and his own theory of Transfigural Mathematics. Both suggest a new way of looking at natural systems that resonates with many of the wisdom teachings that I encounter in my own work on Ancient and Indigenous cultures. Inclusionality, as I understand it, is the awareness that we are in the world and the world is in us. There is no absolute separation between what includes us and what is included within us. The way we understand nature and human nature depends very fundamentally on the way that we perceive space, boundaries and centres, that is, the kind of geometry that we think gives shape to the cosmos, the world, ourselves and how we live. The logic of orthodox mathematics, science, language and theology, assumes a closed geometry in which space is either localized within or excluded from a fixed structural framework. What inclusionality suggests, however, is that this logic is fundamentally flawed with the receptive space within, between, around and throughout natural form not an uninvolved absence, but instead a vital pooling omnipresence, without any necessary or knowable inner or outer completely definitive limit. This then provides the basis for a fluid dynamic, open space geometry that is more true to how ancient and indigenous peoples understand nature.

Space, as continuous openness in this inclusional geometry, would pervade everywhere, without any necessary definitive, localizing limit. As such, it would be infinite – indivisible into finite quantities – at all scales. It would, however, be distinguishable into four regions, that is, within ('intra'), between ('inter'), across ('trans') and everywhere ('omni'). Omnipresent space would constitute the 'primordial womb' or 'Mother' of Nature, the darkness that is a dynamic inclusion of light. Centres in this geometry, instead of being fixed, dimensionless points of mass or force would instead be *'dynamic relational centres of flow.'*

*'Instead of envisaging ourselves as exceptions from or even as parts of Nature as a whole, there is a need for us to open up the imaginary boundary limits that we have been so prone to impose on existence, which deny our dynamic relationship with one another and Nature as all. Most fundamentally, we have to include the meaning of infinity and zero in our comprehension of the dynamic relational nature of 'self as neighbourhood'.* Alan Rayner

What excites me about this is that it ties in so well with so many of the ancient teachings. Many ancient religious texts suggest that all physical appearance in the Universe has a common origin in an omni-pervasive field of infinite energy. Ancient sages professed to have knowledge about the world construction, from the

micro cosmos to the universe. The Satkaaryavaada doctrine of the Saamkhya school talks about the manifestation of what was *'potentially present'* and that this potential becomes actual at every moment. Generation and destruction do not actually occur, instead there is only modification and transformation.

The Indigenous scientific approach understands the Universe as continually in motion. Even the particles are "dancing," already moving towards being in flow. Since everything is in motion all the while, any location is in continual flux in relation to everything else. In the modern world we tend to think in a separatist, linear way, focusing on the specifics and often unaware of the flow, whereas ancient and indigenous cultures tend to look at the world in terms of unfolding cycles, presupposing that there is an essential unity to every action. We define things in terms of right and wrong, and present or absent, whereas ancient and indigenous cultures are far more likely to accept that there are diverse ways of being and knowing. Nature demonstrates a dynamic, unfolding beauty and continuity that integrates, differentiates, transforms and grows...a magical mathematical dance of life.

*'The Navajo term, alkee na'aashii, expresses dynamic unbroken movement. This is not necessarily the case with western concepts of complementarity. With full complementarity, as defined by Navajo, there is neither hierarchy nor polarity. The emphasis is on perpetual movement between the two (the "two" being what appear on the surface as polar extremes, for instance night and day, violence and non-violence). Both energies are needed for dynamic movement. In the unity of the dynamic movement, the polarities naturally disappear'. There is a 'self-organizing central process that provides unity, coherence and life. It is the spiritual matrix that binds the human with all cosmic forces and energy'.*

*Nancy Maryboy – Indigenous Education Institute*

### **Moving the Self-Centre: Human Implications of Open-Space Geometry**

An inclusional understanding of nature as a fluid geometry has profound implications for human psychology. With it we can no longer see ourselves as isolated individuals, but need to encompass the idea that we are all in dynamic relationship. Science, philosophy and psychology are linked through the understanding that the universe has a wonderful natural coherence within which all is enfolded and which manifests explicitly as matter and consciousness. Such a synthesis has been sought by many of the world's great thinkers and resonates with the *advaita-vedanta* philosophy of India, Sufism, Taoism, and with Christian mysticism. The Vedic *sastra* entitled *Brahma-samhita* gives a very clear description of a dynamic 'wholeness' that is expressed in each of its 'parts'. This unity consciousness sees everything in the universe as experienced in terms of the underlying reality of a field of pure consciousness. As this field is recognized as the field of one's own Self, everything that one thinks or does takes on a cosmic status.

*'This body, Arjuna, is called the field. He who knows this is called the knower of the field. Know that I am the knower of all the fields of my creation; and that the wisdom which sees the field and the knower of the field is true wisdom. (Krishna to Arjuna)'*

Bhagavad Gita 13,1-2

Natural systems *seem* to form totalities where the whole, as a dynamic open system, can be *more than* the sum of the separate parts. But this is where language and the thinking underlying the language may become confused. A 'dynamic open system' cannot be defined as a 'whole', a 'totality' with a finite boundary limit. The problem here may lie in the way our visual attention tends to focus on the immediately visible and tangible 'figure' that *appears* to be a finite, autonomous whole, whilst overlooking or taking for granted the infinite spatial 'ground' in which this figure is immersed. This is where, as I will describe later, the fluid logic and geometry of inclusionality comes to our aid, through acknowledging the dynamic inclusion of infinite space in and beyond all that we might call 'matter' as a fluid configuration of this space. We don't then run the risk of seeming to confuse 'infinity', which cannot be defined or divided, with a 'complete whole', which could be if it actually existed.

*'The whole gives form to the parts, it organises the parts so one can say there is a kind of organic process involved. Take life for example. Here we have another form of movement in which all the various functions of the life form are organised to work together to create and maintain the whole organism. We can think of life as an organising energy that is working from within through the movements of its organs, its cells and indeed every molecule and atom, ultimately merging with the universal field of movement, the holomovement.'*

*B.J. Hiley- Process and the Implicate Order: their relevance to Quantum Theory and Mind*

Above we can see evidence of the struggle to articulate the recognition of an underlying organizing influence in Nature in paradoxical terms that objectify whilst seeking to merge visible and tangible form into a continuous universal presence. This is similar to the Hindu concept of Maya - that the world as we experience it is an illusion – and also Indra’s net, a mythological web over the god Indra’s palace, with jewels at each intersection. Reflected in each jewel of Indra’s net is every other jewel - the whole is contained within the parts. The system itself is regarded as open and expanding, which is consistent with inclusionality, but the imagery of a web with intersections – which has also been incorporated into modern ‘network theory’ – implies a fixed structure from which space has been excluded into the spaces between the threads – like a spider’s trap, not a fluid organization. Truly fluid and dynamic networks comprise labyrinthine channels of included space – of the kind found naturally in leaf veins, blood systems and fungal colonies – not a set of solid lines and intersection points.

### The Unity of Psyche and Matter?

*‘Since psyche and matter are contained in one and the same world, and moreover are in continuous contact with one another and ultimately rest on irrepresentable, transcendental factors, it is not only possible but fairly probable, even, that psyche and matter are two different aspects of one and the same thing’ Carl Jung*

With the rapid advance and integration of physics and psychology, our theoretical understanding of the universe beyond the range of our present consciousness is expanding to the point where we see hints of the identity of psyche and matter at profound levels. In recent years the question of the relationship between the human psyche and matter has been increasingly debated. Jung’s exploration of the ‘collective unconscious’ – that part of the unconscious mind that is common to all humans – convinced him that the seemingly divergent sciences of psychology and modern physics might be approaching a unified world model:

*‘The unexpected parallelisms of ideas in psychology and physics suggest, as Jung pointed out, a possible **ultimate oneness** of both fields of reality that physics and psychology study. . . . The concept of a unitarian idea of reality (which has been followed up by Pauli and Erich Neumann) was called by Jung the ‘**unus mundus**’ (the one world, within which matter and psyche are not yet discriminated or separately actualized).’ Marie-Louise von Franz, 1979*

David Bohm emphasized that thought tends to create fixed structures in the mind, which can make dynamic entities seem to be static. For example the paper on which this text is printed appears to have a stable existence, but we know that it is, at a finer level, continually changing and evolving. *‘Hence paper would more accurately be called papering--to emphasize that it is always and inevitably a dynamic process undergoing perpetual change’ (Sarfatti,J).*

The very process of thinking, when based on drawing an absolute line between ‘matter’ and ‘space’ as ‘something’ and ‘nothing’, itself persuades us to create a fragmented view in which knowledge and reality are separate. Bohm talks about an ‘undivided whole’ and yet the moment we visualise this we see something that implies a boundary. It is challenging for us to conceive this whole as openness in perpetual dynamic flux.

*‘This undivided whole is not static but rather in a constant state of flow and change, a kind of invisible ether from which all things arise and into which all things eventually dissolve. Indeed, even mind and matter are united: "In this flow, mind and matter are not separate substances. Rather they are different aspects of one whole and unbroken movement" Hayward 1987, 25*

Much media attention is currently being paid to something known as ‘Zero Point Energy’. This suggests that *a single cubic centimetre of empty space contains more energy than all of the matter in the known universe!* This sea of energy pervades all of space. *‘It just happens to be the biggest sea of energy that is known to exist and we’re floating inside it’ (1999 Thomas Valone).* Bohm, through his own studies, (1980, 191) concluded that "space, which has so much energy, is *full* rather than empty." But maybe this is a conclusion based on starting out with the assumption that matter can be excluded from space in the first place. If it is true that we all belong in a vast sea, where matter cannot be separated from space, there can be no such things as wholes and parts in splendid isolation: in an inclusional world we are genuinely all pooled together in a dynamic union – or, rather, *communion*, distinct but never definable, as William Wordsworth put it, into absolute, independent singleness.

Why is it, if I am solely part of a whole, that I experience myself as 'I'? Why do I not experience myself much more like a Borg unit in Star Trek - organized as an inter-connected collective with a hive mind and operating towards one single-minded purpose – the pursuit of perfection? Is my sense that each one of us is unique in our experiences and sense of purpose just an illusion? Is there some unseen benefit to this illusion, or is this question itself an irrelevance? Modern science investigates the field of the known, but it does not touch at all the field of the knower and the spontaneous process of knowing. In inclusional thinking boundaries are not non-existent but are key to understanding dynamic relationship. Inclusional boundaries are primarily considered to be 'dynamic interfacing' – manifestations of information that both distinguish and allow communion between inner and outer regions of space. Like the God Janus, they face both ways – outlining inner and in-lining outer – whilst being, to varying degrees, both permeable and dynamic and nested over scales ranging from microcosmic to macrocosmic. Inclusionality allows us to both acknowledge our unique boundaries and to own that they only exist within a vast dynamic communion. By shifting consciousness I can move from the illusion of self as separate to self as dynamic movement in relation to other.

This has profound implications for the way in which we communicate. With an inclusional logic, opposites are transformed into dynamic relational complementarities. Together we co-create our reality. There is no definable right or wrong, but rather a mutual exploration of the field of possibility that we continually create together. Our mutual awareness tunes into those fine creative impulses that are engaged in transforming the field of intelligence into the field of material manifestation. In the change from envisaging absolutely closed to variably open structures, we invite in the possibility of transformation and innovation. When we comprehend our inner and outer worlds, and hence our Selves as relational *places*, expressions of the energy-including space of *everywhere* rather than isolated *objects*, our scientific, artistic and spiritual world views transform and complement one another rather than conflict. This is a dynamic dancing communion rather than a self-contained 'whole'.

*"Inclusionality is an awareness that space, far from passively surrounding and isolating discrete massy objects, is a vital, dynamic inclusion within, around and permeating natural form across all scales of organization, allowing diverse possibilities for movement and communication. Correspondingly, boundaries are not fixed limits - smooth, space-excluding, Euclidean lines or planes - but rather are pivotal places comprising complex, dynamic arrays of voids and relief that both emerge from and pattern the co-creative togetherness of inner and outer domains, as in the banks of a river" (Rayner).*

*"We are all quantum fluctuations. That's the origin of all of us and of everything in the universe."*  
Dr. John Bahcall – *The Inst. for Adv. Study at Princeton*

*'Science has missed something essential; it has seen and scrutinised what has happened and in a way how it has happened, but it has shut its eyes to something that made this impossible possible, something it is there to express. There is no fundamental significance in things if you miss the Divine Reality; for you remain embedded in a huge surface crust of manageable and utilisable appearance. It is the magic of the Magician you are trying to analyze but only when you enter into the consciousness of the Magician himself can you begin to experience the true organisation, significance and circles of the Lila.'*  
Sri Aurobindo *The Valley of the False Glimmer*

### **Inclusionality Principles**

- There are no such things as independent masses or forces, only dynamic relational influences
- There are neither discrete particles nor waves, only flow-forms
- Space is not distance; space pools all together
- There are no real discrete numbers or groups of numbers, there are only dynamic relational numerical neighbourhoods
- Positive is not opposed to negative as materially additive and subtractive qualities; they are mutually inclusive as responsive and receptive qualities in natural energy flow
- Space, Time, Matter and Energy are not isolable from one another; they are dynamically distinct and mutually inclusive in the natural energy flow of 'place-time'
- Nature has no discrete beginning or ending; it is dynamically continuous
- Nature is not certain and predictable; the only absolute certainty is that there is no complete certainty
- Organisms are not competitive, acting and reacting purely in their individual self interest against others; they are instead dynamic relational flow-forms, receptive and responsive to fluctuations in energy flow.

*'A Human Being is part of the whole called by us universe, a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest, a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our own personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty.'* Albert Einstein

*'Wendy Ellyatt is a writer, researcher and innovator who has a particular interest in the dynamics of natural systems. She is also known for her work in early years education. She was co-founder of the Ouroboros Research and Education Trust, which itself was a founder member of the World Wisdom Alliance, and is currently developing the website [www.sophos.uk.com](http://www.sophos.uk.com) and the educational network.*



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