

# Enumerations

**Philip Franses**

## Breaking



In the last fifty years, complexity theory and information theory have combined to give an alternative foundation to formative phenomena, based on potential and coherence. Information describes a redundancy in potential that in the mathematics of complexity theory is able to resolve coherently to a whole attractor bounding different possible local trajectories.

It is in the suspension of causality that information resides. Where there is only one causal path universally determined, there is no room in the phenomena for additional information. It is the redundancy of potential paths at the micro-level that allows for additional properties to characterise the whole nature at the macro-level. Thus it requires questioning of an existence to uncover its essential properties, whether this is going deeper into a person's true character or really observing a flower in its delicate composition. No information is apparent at the surface of causal-sufficiency.

Science continues to see information as pools of multiple-possibility residing within an essentially causal landscape of concepts and laws. Information in our view extending this analogy might be more akin to the sea, in primary formative relation to the land of causality.

Quantum theory successfully furnishes a theory where the sea of potential is incorporated implicitly in the description of journey between ports. It allows us to understand potential, as a dark crossing in which no measurement is possible, as an influence upon the arrival and departure of vessels on the land, the illuminations of objects in their knowable properties.

Bohm<sup>[1]</sup> re-formulates the classical quantum equation through the 'Quantum potential field', a global prescriptive influence upon the behaviour of particles. The particles are guided by a field that allows the freedom of their properties to converge upon a meaningful state with a composite answer to their individual questions of being. Basil Hiley has recently explained this:

*'We found that the potential was totally different from any classical potential that we know. It has no external source in the sense that the electric field has its source in a distribution of charges. It does not act mechanically on the system. In this sense it cannot be thought to act like an efficient cause. It is more like a formative cause that shapes the development of the process. Indeed as we explored its properties in many different physical systems it reminded me very much of the morphogenetic field generated in biological systems.'*

*The information field is shaped by the environment in a way that is very similar to the way the development of a plant is shaped by its environment. Thus we can think of the information as active from within giving shape to the whole process and this shape depends on the environment in key ways. In other words the meaning in the wave is expressed through the form that develops.'*[2]

Just as Bohr and Heisenberg succeed in entraining the possibility aspect of information into a causal (at least at statistical level) law of classical particles, so Bohm and Hiley suspend causality for the entrance of an informational field that steers free flowing potential.

## Material interpretation

- hides phenomena in an elusive world of statistical average;
- causality breaks multiply into infinite possibilities only recovered by a statistical averaging;
- aligns a global nature to permeate the weird world of local phenomena;
- alerts us to the stability of the atomic founded substance over all inducement to change;

**Potential interpretation**

- celebrates form in wholeness;
- causality breaks singularly and dramatically in the admission of a global information field that restores causality as after-influence;
- local relationships utilise to the maximum the symmetry and exchange of basic properties to allow the potential for a global phenomenon to resonate in its midst
- triumphs momentarily over causality to cohere potential into new form.

The dynamic between element and possibility may realise a dead-inert world of closed energy that has subdued the force of change into part of its own structure; or exhibit how radical creative invention takes breath from the cycle of form secured by its absolute original necessity.

Just as Schrödinger's cat seems to suspend life forever in the minute detail of its demise, so there is an equivalent tale of creation where potential is remixed to startle life into new inhabitancy defying the running down of the causal order. The fluidity for transformation between death and life is born in the same breath as the form in potential is safeguarded.

The two interpretations, when released from their competing rivalry, unite biological form with molecular foundation.

The crossing of the sea of potential can no longer be dismissed by statistical artefact, but holds the creativity of form that coheres in the informational field between the ports of order.

The arrival at causal destinations is filled with the optimum imprint of potential at the moment of encounter of individual with universal that is carried as bounty back into the port of causal law. Instead of a mathematical account holding the detail of a dark passage in the certainty of the sure, the intrinsic coherence and beauty of form is the admirable booty of the journey.

The stability of the atomic account is enriched by the wonder of the informational field that weaves potential into its most articulate forms. Where possibility was included in a shadowy allowance of its disturbance to causal law, now potential in the full light of its capacity, participates in equal measure as the harbinger of form.

**Shaping**

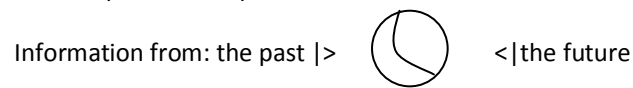
The medium for this journey is process, which as well as being a template for the categorisation of the world is transparent to the illumination of whole inquiry.

Process is conceived mathematically as a two-fold distinction made in wholeness. An example used by Basil Hiley is how thought is a process rather than a linear causal relationship. A new thought arises from an old thought as a development of the old in the continuity of the new. The new develops from the old without thereby making the starting point redundant: one needs the foundation of an idea to arrive at the completion of a thought. Basil Hiley following on the work of David Bohm has created a mathematics of process, where the present instead of developing by overwriting the past, is inclusive of its future state in its past origin. One can manipulate these processes to show that in their interrelationship one arrives at a structure, called a pre-algebra, from which space and time can be realised as a derived phenomenon (so importantly process is shown as primary).

Basil has played back the development of all categorisations that have together shaped the foundation of the modern mindset of separation/analysis and has reached back to a single cut or division that is as it were the primary process. This original distinction he characterises as breaking the symmetry of wholeness into information from the past and information from the future. Once Basil has made this incision, this distinction of wholeness, then he is able to expand this self-statement about wholeness into all areas of modern physics, space-time relativity, quantum formulations as a necessary corollary.

The information from the past, information from the future is a transparency that allows the whole to be encapsulated mathematically. Once this categorisation has been made, it can be expanded and formalised into

space time, while keeping the window of process on something dynamic, without fixing phenomena into occupying an exclusive present. The interrelationship future: present: past is available as a total area of influence, not made abstract into a point of the present.



*Fig. 1 breaking the symmetry of wholeness by distinction*

A methodological problem arises when the fluid window given on wholeness is concretised into a formal separation of <past> <future>. The distinction past: future, used to open up wholeness, is also a categorisation by which the resulting space time framework is then explored.

The fact that the world made transparent by the cut past: future has then been analysed through the same tool hides from view the role wholeness plays. This means that in much analytical work, the origin of the wholeness which past: future brought into distinction is lost.

One example of this is light. Light is seen as an absolute existence which can be described by Maxwell's equations as wave or by Feynman as particle. One can look up what light is for there is nothing more to light than its abstract knowledge.

Goethe on the other hand demonstrated that when one goes into the phenomena of looking at the world of colour through a prism, then dark and light are experienced as a distinction within wholeness.

*'For Goethe darkness is not the completely powerless absence of light. It is something active. It confronts the light and enters with it into a mutual interaction. Modern natural science sees darkness as a complete nothingness. According to this view, the light which streams into a dark space has no resistance from the darkness to overcome. Goethe pictures to himself that light and darkness relate to each other like the north and south pole of a magnet.'* [3]

Dark and light in polarity are available as an alternative distinction by which the world can be explored while keeping intact the window past: future of process.

As the cut into wholeness has become fixed by its resulting use as a tool of exploration, it is the endeavor of a medium for inquiry called Process and Pilgrimage, to introduce a lighter way of working with process. The reason for joining Process and Pilgrimage is that in both one sets out on a journey with no idea of the destination and that it is the meeting of wholeness en route that gives the journey its identity. A pilgrimage starts at a point of transition, beginning in darkness seeking reconnection, to end in the light of a new self-knowledge and association to Oneness. So the past and the future lightly touch upon the wholeness that redirects the pilgrim how to live forward from his foundations of origin.

Once one uses a different lens, in this case the active polarity of dark-light then a different filter of distinction brings the world into focus. In particular the polarity dark-light, instead of separating wholeness as past: future, articulates wholeness through the journey between the two poles. The world opens up to a transparency, in which categorisation of past: future is fluid to the wholeness from which it originates.

Instead of prescribing a strict interpretation of past and future, we associate the start of the process with darkness, without prescription of wholeness, and the end point of process with light, or the complete integration of wholeness. The process is then a provisional journey, without guarantee that it will complete, and with no fixity in its definition. It has the quality of an informational potential, in that the description contains a great redundancy in it as to if and how it might happen. It belongs in our earlier metaphor with the sea, where everything is in flux.

It has the advantage of associating wholeness with a journey of process itself so that instead of seeing order being born out of some abstract unity, wholeness of being is given birth to in the journey from dark to light, an act of experience. Thus every living thing has its dark-light journey which asks the question of its being to the world with no surety of an answer.

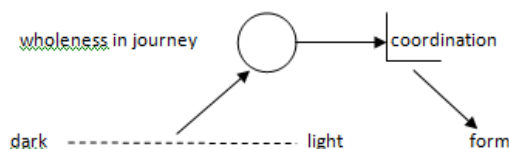


Fig. 2 The dotted line of the sea gives birth to wholeness in its journey

### Remaking

There is a dual focus to the world’s existence, one the material defined through what has been, and the other the enduring, defined through the potential of what will be. Alongside the material focus driving life, the centre of potential is a justice or beauty at its core. The scales of life, piled as haphazardly and untypically as one wants with matter, hold order in the universal balance of unity remaking.

When individuals experience the universal story of time independently and integrally, they give dimension to the capacity of potential. The world discloses its nature in the dimensions of its experiencing. The fall from historical alignment and renewal into the potential of the possible, freely explored, establishes independent dimensions of experience characterizing the world at a fulfilling of its essential unity. The rebirth into the spirit of what is possible reseeds the world at the unity of its own remaking.

The universality of time is dimensioned into the trilogy of spirit: Re-origination; Fall and Return; Redemption (renewal from unity). The world is judged by the content of experience in the dimensions of the universe’s singular renewal. The world offers the capacity for renewal in the weighing of experience’s worth.

Light seals experience at the singular point where the universal is remade from its unity. Re-origination challenges the world of experience to differentiate the enduring of participation from that which is passing and transient. At each level, experience reassembles unity through the journeys that are transparent to its enduring quality.

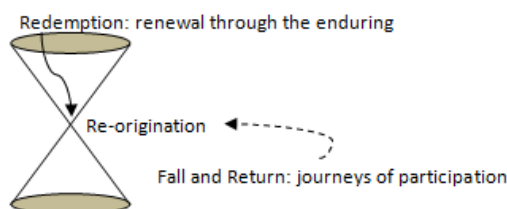


Fig. 3 The light cone remaking the universal in its unity

One meets the universe as if returning from a far mission. The far future comes forward to counteract collapse with blessing.

It is rather like meeting a stranger, a disciple from a foreign land, upon the way and inviting him with all one’s heart into the house. He leaves behind a quest. So he passes through the land, visiting others, leaving in the air that suggestion of change working quietly unseen. Until all the threads find each other and weave into a path upon which the future, the white horseman enters. There is a challenge in potential, a demand; in unlocking the gate of the security of our self-walled world, the steps are now of the transforming future arriving in light.

### References

- 1 Bohm D. (1980) **Wholeness and the Implicate Order**; Hidden Variables in the Quantum Theory; Routledge and Keegan Paul
- 2 Hiley, B. J. (2004). **Information, quantum theory and the brain**. In G. Vitiello (Ed.), **Brain and Being** (Vol. 58, pp. 197-214). Philadelphia: John Benjamins Publishing Company
- 3 Steiner R. (1897), **Goethe’s World View; The Contemplation of the World of Colours**; online at [http://wn.rsarchive.org/Books/GA006/English/MP1985/GA006\\_c03.html](http://wn.rsarchive.org/Books/GA006/English/MP1985/GA006_c03.html)

**Philip Franses** is faculty lecturer in Holistic Science at Schumacher College. From his search to the source of science and spirit, there has flowed a series of presentations, workshops, papers. *The Process and Pilgrimage* forum, which he began in 2009 using elements of Basil Hiley’s mathematics of process and Satish Kumar’s philosophy of pilgrimage, has broadened into a widely engaged enquiry. [philip@schumachercollege.org.uk](mailto:philip@schumachercollege.org.uk)

