

## Abstract Rationality and Natural Inclusionality

### The De-contextualisation and Re-contextualisation of Science and Human Psychology

By Alan Rayner

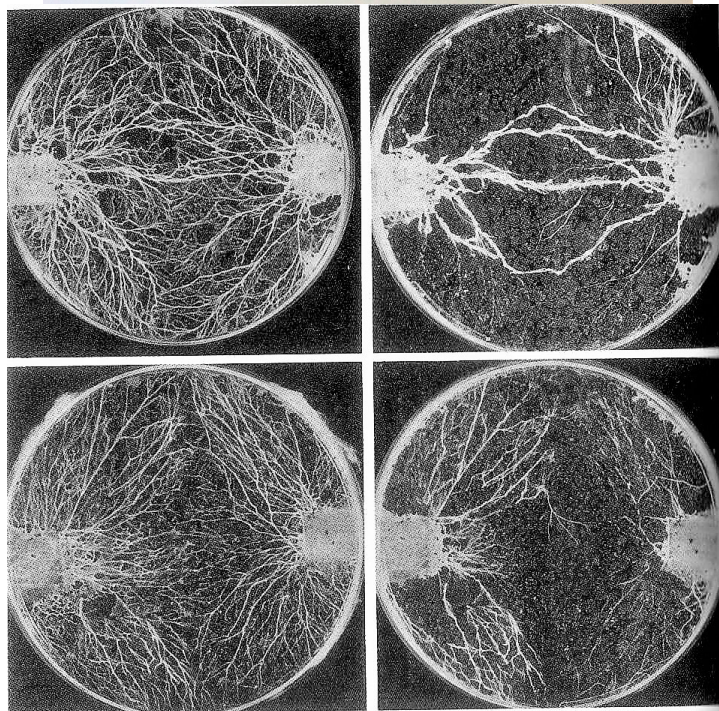
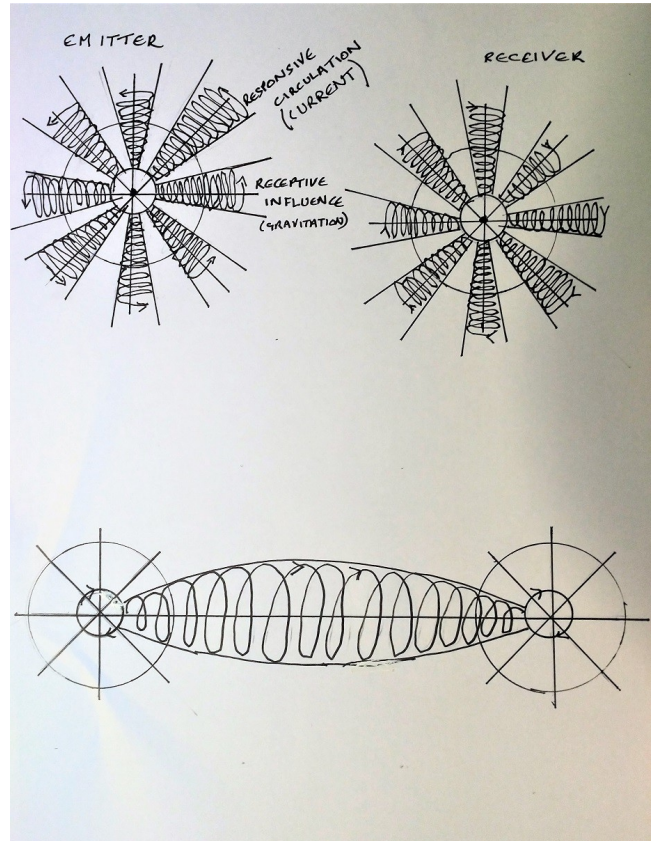


Figure 7.5. Consequences of anastomosis between mycelial cord systems of the basidiomycete fungus, *Phanerochaete velutina*, growing out from beechwood blocks inoculated into 14 cm diameter Petri dishes containing unsterilized soil. The top two photographs show early (left) and late stages of interaction leading to the reinforcement of a few cords connecting woodblocks occupied by genetically identical mycelia. The lower two photographs show the development of an unoccupied "no man's land" between persistent, mutually incompatible, genetically unidentical mycelia. (From Dowson et al., 1988b).

Out of the blue, you receive a message from someone, signed, addressed and dated at source, but not specifically addressed to you. You wonder how it reached you and what was the intention of the sender that has brought you and them into a transmissive-receptive relationship. You imagine a straight line that directly connects the two of you. You measure its length and compare this with how long ago the message was sent out. From this you calculate what you believe is the speed of travel of the message from the point where it was emitted to the point where you received it as a package, as if, all along, you were its intended destination, which it reached directly. But what if you weren't and it didn't? What if the message was received by you as a package only when you accepted it as such? What possibilities have you overlooked in the process of retrospectively 'joining the dots'?

Between and within two different localities in space and time is a realm of infinite intangible possibility for movement, communication and relationship. Only once one of these possibilities has become a tangible reality can it be quantified as such. But that doesn't mean that it has no existence beforehand or that the message is predestined. Nor does it mean that it is only transmitted directly and instantaneously once received, or that acknowledgement of its receipt travels backwards through time to its source. All those latter scenarios arise from the discounting of intangible possibility. What is really travelling backwards through time is the receiver's back-projection or linear regression to source.

At this point you might be wondering why I am discussing this scenario? Well, without saying any more for now, I will just say that it happens to relate to what has been called 'The Transactional Interpretation' of quantum mechanics, based upon the 'Wheeler-Feynman Absorber Theory' of 'electromagnetic force'.

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Modern science has become almost entirely based on a process of objective rationalisation of Nature through exclusively 3<sup>rd</sup> person perception. This process dissociates what is being observed externally as an 'object' from the observer as 'subject'. It results in a progressive narrowing down of perspective that eliminates spatio-temporal 'context' from material 'content', ultimately to 'vanishing point'. Hence the latter is reduced either to 'many' dimensionless 'point masses' as definitive individual numerical 'wholes' or one collective 'whole' as a set of individual wholes. This atomistic reduction to 'singularity' or 'absolute independent numerical singleness' culminated in Newtonian mechanics as a fully de-contextualized materialistic science in which space, time and energy were excluded from inert particulate material bodies pushed and pulled around by external force situated nowhere in particular.

Paradoxical as it is (how can a material body have no volume?) this de-contextualized science can have practical application under certain circumstances as a means of calculating purely mechanical inter-actions within an imaginary cubical cage of Cartesian co-ordinates. But as a result of retrospection it confuses mechanical effect with primary causation. It therefore falls short of providing a comprehensive account of many natural phenomena, not least the occurrence of biological life and evolution, emotion, consciousness, chemical reactivity and electromagnetism. Indeed the accounts it offers of such phenomena are so deficient as to be profoundly misleading and psychologically, socially and environmentally harmful. Moreover, it renders its own most celebrated 'discoveries' of gravitational influence and mathematical calculus respectively inexplicable

as 'spooky action at a distance' and inconsistent with natural dynamical and spatial continuity.

Fifty years ago, I parodied this de-contextualisation and its detrimental consequences in a painting I called 'Arid Confrontation':-



*"A scientific man ought to have no wishes, no affections, - a mere heart of stone."*

*Charles Darwin*

*"The environment is everything that isn't me"*

*Albert Einstein*

As this de-contextualised and hence purely quantitative, emotionless and ethically 'value-free' science became the basis for trying to explain natural phenomena in which intangible contextual qualities of spatial receptivity and energetic responsiveness cannot entirely be externalised, so its inherent inconsistencies have prompted some 'new thinking'. As a result a variety of partially re-contextualised scientific theories of 'quantum mechanics', 'relativity', 'non-linearity', 'complexity' and 'emergence' have begun to regain 'lost ground' (see below). But unfortunately, all of these continue to adhere to definitive preconceptions, logic and mathematics. Each is in some way self-contradictory and at odds with the others.

Ultimately, there is only one way in which comprehensively to re-contextualize science, and this has roots in ancient and indigenous wisdom. It is to be aware that natural material form is a product of intangible space and energetic flux in receptive-responsive relationship. In another word, 'electromagnetism'.



This awareness is possible via simple inference from everyday experience of what tangibly resists (i.e. material occurrence) and does not resist (i.e. intangible spacious presence) bodily movement, and how the natural dynamic inclusion of each in the other results in variable degrees of fluidity or relative 'freedom' within dynamical 'boundariesd' (Rayner, 1997).

Such awareness is available to anyone with an open mind, and is probably understood in principle by many of us as children until we are taught to believe and think otherwise. It provides the foundation for a comprehensively contextual philosophy and science of 'natural inclusionality', based on the fundamental evolutionary process of 'natural inclusion' as:-

*the mutually inclusive, co-creative, receptive-responsive relationship between intangible spatial stillness and energetic motion in the being, becoming and evolutionary diversification of all material bodies, including our own, as 'flow-forms*

Or, more succinctly, 'the dynamic inclusion of intangible space in material form and vice versa'.

At the heart of natural inclusionality is the imaginative ability to shift from focusing attention solely on material bodies and their inter-actions and relationships to the limitless spatio-temporal context in which these bodies are immersed and to which they give temporary local expression. In this way 1<sup>st</sup>-person (subjective), 3<sup>rd</sup>-person (objective) and 2<sup>nd</sup>-person (relational) perceptions are combined within an all-encompassing '4<sup>th</sup>-person' perception. In one of my books, featuring my painting 'Holding Openness', I called this all-inclusive 4<sup>th</sup>-person perception 'NaturesScope' (Rayner, 2011).



*"In nature, everything is distinct, yet nothing defined into absolute, independent singleness"*

*William Wordsworth*

In some artistic and spiritual circles, material content is referred to as 'figure' and spatio-temporal context is referred to as 'ground'. Given the dominant role that our binocular eyesight tends to have in our perceptions of reality, many people are prone to focus all attention on figure alone as a singular whole, whether this be an individual whole or a collective whole. Alternatively they may conflate or erase figure from contextual ground. Such partialities resides at the root of dualism, monism and nihilism.

Personally I have, since childhood, always been contextually aware, so it surprises and bewilders me when I discover that so many people aren't, and that such unawareness has been incorporated into the foundations of philosophical, scientific, mathematical, religious and governmental orthodoxy. For this reason I found it difficult to relate to much of what I was taught, and expected to learn at school and university to do with physics, mathematics, religion and their applicability to real life.

An especial difficulty arose when it came to understanding 'light', as 'electromagnetic radiation', and its relation to 'matter', 'energy', 'time' and 'space'. Why is 'light' associated so commonly with 'good', and 'darkness' with 'evil'? What is light made from? In what form is it emitted by a material 'source' and absorbed, reflected, refracted and diffracted by a material 'receiver'? In what form does it travel in the space between the two and why is it invisible in transit (as per why is the night sky dark except where locally illuminated by material bodies?). What is really meant by 'the speed of light' and how is this measured if light is not a tangible material travelling through a tangible medium? For that matter, what is matter made from if it is to be more than one or many dimensionless point-masses? What is meant by such words as 'soul', 'spirit', 'love', 'hate', 'God'?

And how can a de-contextualised mathematical science concerned only with material figures and their inter-actions and relationships hope to provide answers to these questions that make consistent natural sense of our living and loving experience? Clearly, it can't. But a re-contextualised mathematical science could. What would this look like? Perhaps some ancient cultures can offer us some clues. In fact I'm sure they could, but that is another story, for someone else to tell.

Natural inclusionality recognises quite simply that local material content both dynamically includes and is included within spatial and temporal context everywhere and always as our natural neighbourhood.

So the primary receptive responsive relationship is between dynamical figure and spatio-temporal ground, where the latter constitutes a 'fourth' and infinite 'person', (Nature/God/Goddess)'Godhead', which includes and transcends first, second and third person perceptions of reality.

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### **The Decontextualised Self**

Is a One without neighbourhood

Whether as individual or group  
A figure alone  
A pitiful, paradoxical state  
To be in  
A singularity enshrined  
In definitive logic  
That pinnacle of human abstraction  
Ascended in the desire to be free  
From natural company  
That is in reality  
Being stuck up a gum tree  
With nowhere to go  
No where to be found  
A figure devoid of ground  
Motionless  
Emotionless  
Breathless  
Lifeless  
.  
But there it is  
As a foundation stone  
More like a dead weight  
In mathematical, scientific, religious  
Governmental, educational, linguistic, economic  
Objectivity as orthodoxy  
That source of needless conflict and distress  
Which cuts one as a whole apart  
As material content  
From immaterial context  
Or treats these as one and the same  
A terrible shame  
With no place for one to be free to be  
Its self  
In wonderful variety

Image: 'Stranded' (photo by myself 2023) a prickly cockleshell uncoupled from partner and mutually inclusive middle lies desolate as a shadow of its former self. Human destiny?



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### **The Recontextualised Self**

#### ***The Humility of the Valley as a Source of Hope for Humanity***

Once lost in space  
As One alone  
Abandoned in the quest for supremacy  
Now found at home  
As one in place in time  
In grace

Everybody alive  
Has deep within  
A receptive centre of attraction  
A zero point core  
A heart of darkness  
Which is not evil -  
Quite the contrary -  
Within a swirl of passion  
Whose natural expression -  
Whether evasive, protective or nurturing  
Depends on circumstances

Whether beneficial, adverse  
Consonant, dissonant  
Or somewhere in between -  
Enables it to find and make itself  
Somewhere comfortable  
In which to thrive  
And stay alive  
Attuned  
Receiving from  
Abiding within  
Contributing to  
The flow of life  
From there to here to there  
In everywhere  
For the time being

,  
And when we realise this  
Feelingly  
We know how to live  
Love  
Be loved  
Forgive  
And when to pass on  
Compassionately  
In caring, creative community

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And there still remains  
Hope  
For humanity  
To flourish  
In natural neighbourhood  
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Image: 'Getting into the Groove' (photo by myself, 2023) The brown and red algae, *Pelvetia canaliculata* and *Catenella caespitosa* find and make their selves a home near spring high tide mark.





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### **Possibility Realising**

I am  
As we all are  
Possibility realising  
Continuously  
From responsive occurrence  
Around and between  
Receptive centres of presence  
Somewhere  
In everywhere ~  
Intangible flux  
And intangible space  
In co-creative relationship  
Making temporarily tangible  
In material flow-form,  
Not a full stop

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As a singular point-mass  
Dimensionless

Intention-less  
With no where to go  
Except round the bend  
Tying itself up  
In paradoxical knots



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### **Laughing Matter**

Making light  
From painful situation  
Releasing an infectious ripple of mirth  
Into the receptive stillness  
Beyond measure  
Where possibility resides  
For all to come and go  
In responsive flow  
Around and between  
Inviting centres of being  
In becoming

Why do I laugh?  
When I might as well cry  
Why do I cry?  
When I might as well laugh

Since both have their source  
In emotional overload



And under-load  
Beyond and beneath  
Carrying capacity

Arising and falling  
From what every body is made from  
In particular and oscillatory form  
From subatomic to galactic  
Organisational scale  
As a dynamically bounded  
Natural inclusion of immaterial space  
In material form  
And material form  
In immaterial space

An electromagnetic attractor  
And repeller  
Depending on spin  
And what kind of company  
It finds itself in  
Welcoming  
And forbidding  
Consonant  
And Dissonant

Co-creating enigmatic variations  
Upon a central musical theme  
In heartfelt rhythm  
Fluctuating

Image: 'The Attraction of Being a Host'(oil painting on canvas by myself, 2004) The implications of being open to all possibilities, both joyful and painful



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### **Ultimate Simplicity**

## ***How Contextual Awareness of Natural Inclusion Helps Us to See the Wood for the Trees***

A thicket of dense entanglement  
Grows like a House of Cards  
From false premise  
Piling one misconception on another  
Or tying them all up in knots  
By placing material content  
Before spacy-o-temporal context  
Like a fish before water  
A crop before field  
A bird before air  
A star before sky  
A smoke before fire  
A painting before canvas  
A figure before ground  
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Until a breath of fresh air  
Blows the whole dam complicated facade  
Away  
Like a cobwebby drift on the wind  
Dispersing into nothingness  
Allowing a new lease of life  
To commence  
Grounded in common sense  
That puts context before content  
Flowing into and out from place  
In infinite natural grace

Image:- 'Fountains of the Forest' (Oil painting on board, by myself, presented to the British Mycological Society in December 1998)

<https://youtu.be/D23pNYWbQYQ>





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## References

Rayner, A.D.M. (1997) *Degrees of Freedom – Living in Dynamic Boundaries*. London: Imperial College Press

Rayner, A. (2011) *NaturesScope – Unlocking Our Natural Empathy and Creativity*. Alresford, Hants, UK: O Books