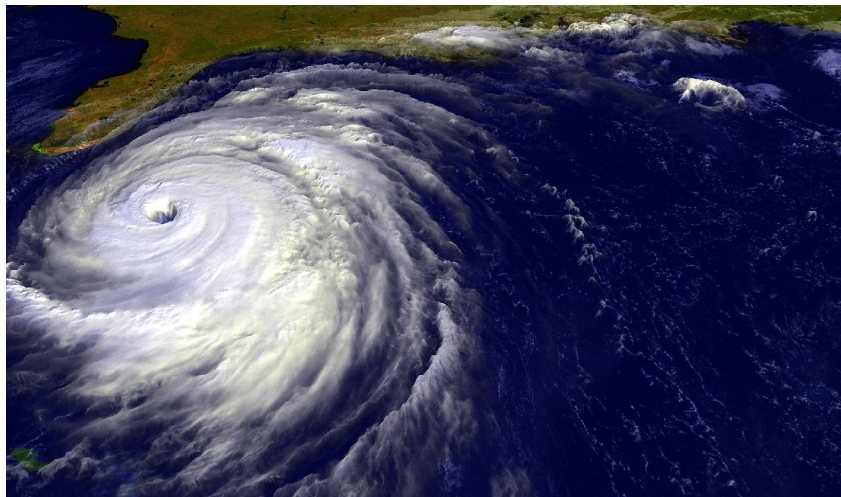


A Fluid-Dynamical Worldview:

The Fall and Rise of the 'Sailboating Psyche'

by **Ted Lumley**

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Dedication and Disclaimer

Dedication:

This book is dedicated to Alan Rayner and to other inclusion-inclined brothers and sisters whom I have not actually met whose meaningful participation in the dynamics of our common living-space I value and respect.

Disclaimer:

I alert the reader to the fact that because I have never actually ‘met’ Alan and several of the other internet-correspondents with whom I have become good friends, there is a possibility that Alan and others I have mentioned may turn out not to be local, physically-existing object-beings, but may instead be, for example, beautiful stories of joyful and anguished experience told by some unknown-to-me budding novelists/screenplay writers in the course of their developing their story-telling mastery on the internet. In which case, I may be amongst those who are ‘dreaming reality into existence’ (as in the aboriginal tradition), by allowing my work and behaviour to be actualised and shaped by an inspiring pooling-of-consciousness that seems to include and connect all to all in unifying dynamical communion. If it turns out that there is no local, object-being based reality to ‘back up’ the stories that have been inspiring my work, there is still the reality attached to my own experience of participation in the dynamics of our living space, and it is up to the reader (we may never meet) to decide whether the concreteness’ of ‘local object being’, for ‘me’ or for ‘anyone’, is a necessary requirement for developing a meaning-giving architecture that allows us to understand the dynamics of the common living-space in which we are all ineluctably included participants.

Contents

Foreword	7
Author's Preface	15
Introduction	51
Glossary	62
Chapter I: From Universal Form to Particular Form	74
Chapter II: From Motivation to Encouragement	78
Chapter III: From Power to Energy Sharing	87
Chapter IV : From Peace to Harmony	94
Chapter V : From Good/Evil to their Spatial Inverse	99
Chapter VI : From Chrono-Logic to Morpho-Logic	104
Conclusion	120
Appendix	131

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Foreword

Our trust in science and scientific thinking and all the benefits we have received from science has become so great in our culture, that we are loathe to 'look the gift horse of science in the mouth'. But if and when we do, we may become aware of the fact that science (the technologies of applied science) has been helping us out in the realm of 'making things happen' the way we want them to happen, out of the context of how they influence the quality of the dynamics of the common living space that we all share inclusion in. For example, if we want 'peace' in the sense of 'the absence of war', we can use 'applied science' to 'launch just wars' against our brothers, to subdue or eliminate those of them who would wage 'unjust war'; i.e. to bring about a 'desired future state' in terms of 'what things do and do not do'.(i.e. in terms of what we perceive as the 'correct' dynamical behaviour of local objects/systems/organisms/nations and collectives thereof.).

But when 'making things happen' is made into our preferred approach for putting order into our affairs, we must acknowledge that it is also the way of dictators and despots. Thus, our use of 'making things happen' as a primary operative for 'ordering our affairs' forces us to distinguish between 'making good-and-just things happen' and 'making bad-and-unjust things happen'. Our application of science in a 'make things happen' sense thus comes with the burden of our having to pre-determine the 'goodness' or 'badness' of the 'result' even though Mach's Principle informs us that we cannot know in advance how our 'making it happen' dynamic conditions the dynamics of the common living space we share inclusion in.

So here we are talking about the ‘scientific way of understanding’ and what it is in this ‘way of understanding’ that makes ‘it’ (and ‘us’ when we employ it) insensitive to the quality of the dynamics in the living space we all share inclusion in. That is, we are talking about what it is in our scientific-thinking-driven social dynamic that, as David Bohm observes, is giving rise to escalating ‘incoherence’ in the world dynamic. The problem appears to be not with ‘scientific thinking’ per se, but with the manner in which we reduce our scientific inquiry so that it ‘fits’ into a ‘make-things-happen’ (causal) strategy. For example, science gives us the option of two levels of understanding; e.g. ‘continental drift’ is a theory based on the mathematical notion of local-independently-existing objects (continents) with local behaviour (continental drift). But science gives us the alternative option wherein the lithosphere, hydrosphere and atmosphere of the earth undergo continuous fluid-flow transformation under the influence of the dynamics of the solar system space the earth is situationally included in (participating in).

Science thus gives us a choice as to whether to understand the earth in the ‘sailboating’ sense of a participant in the self-renewing evolutionary dynamic of space, or in the self-centred ‘powerboating’ sense of a ‘local, independently-existing object’ that is locally animated by the internal dynamics of its parts (e.g. ‘its’ rotating on ‘its’ axis and the drifting of ‘its’ continents).

These respective ‘sailboating’ and ‘powerboating’ understandings, which can always be applied to the dynamical forms of nature, including human beings, are not ‘either/or’ options since the fluid-dynamical ‘sailboating’ understanding includes the local-object-dynamic ‘powerboating’ understanding as the special case where the fluid-dynamical-form is continually cyclically renewing,

giving rise to a ‘standing wave’ configuration that is amenable to ‘objectification’.

That is, matter (the equivalent of concentrated energy that comes in various inclusionally nesting whorls-within-whorls or inclusionally nested granularities-within-granularities) can continually flow through the ‘standing-wave form’ as lithic matter cyclically flows through the persisting dynamical forms of ‘continental plates’ and as water, carbon and mineral matter (i.e. ‘star-dust’) cyclically flow through the persisting dynamical forms we refer to as ‘the human organism’.

Thus, we can build entire ‘cosmologies’ based on (a) fluid-dynamical forms in an unbounded flow-continuum AND on (b) APPARENTLY-local standing-wave forms that are sustained by cyclic renewing within the energy flow. Corresponding to these two ‘cosmologies’ are (a) our ‘sailboating psyche’ wherein we acknowledge that we are participating as dynamical flow-forms within the cosmic evolutionary dynamic and (b) our ‘powerboating psyche’ wherein we associate our ‘self’ with our APPARENTLY-local ‘standing-wave form’, whereby we regard our ‘self’ as a ‘local, independently-existing object/ organism/ system with locally originating behaviour..

A Fluid-Dynamical Worldview explores how we have infused the equivalent of ‘secularized theological axioms’ (e.g. monotheist-God-like ‘local first cause’) into the foundations of applied science that operate on our minds to psychologically break us out of the nonlocal flow that we are naturally and inextricably included in, and have us instead see ourselves as ‘local objects with locally originating behaviour’. This is the reductive aspect of science which Kepler referred to in the terms that science-

in-society too often has us “choosing not that which is most true but that which is most easy”.

What becomes apparent, in such exploration, is that we continue to uphold the tenet of Parmenides, Plato and Aristotle that we ‘must not trust our senses’ since the ‘absolute’ way of the Gods, the realm of pure-and-absolute-ideals, is more certain and more true than the fuzzy logic of spatial-relationship-experiencing men; ‘mere mortals’ that are chronically predisposed to ambiguity in such matters. As Parmenides opined; we must decide on whether something ‘is’ or ‘is not’ and leave no room for anything ‘in between’ (the Gods would not be blurry about such things, the way ‘mere mortals’ tend to be.).

This ‘unnatural’; i.e. this natural-sentience-conflicting monotheist absolutism that we, of the Western culture have been self-imposing by our objectifying of flow-forms, has not served us well (it has been the source of rising ‘sustained incoherence’). Thus, we have to ask ourselves whether we are going to continue to follow Plato’s lead and put our faith in a certain absolute type of scientific reasoning that, for example, puts into an unnatural precedence over our sentient experiencing, the ‘mother of all roundish forms’, otherwise known as ‘the circle’? That is, should we continue to re-render nature and its dynamics in terms of ‘ideal universal forms’ (closed form solids)?

The findings of ‘modern science’ suggest that the voluminous unbounded spatial scattering and gathering of energy (e.g. the inner-outer energy-flow based resonances that constitute ‘matter’ in quantum wave theory) are more fundamental than ‘ideal forms’. That is, the flow of nature is imbued with the quest for dynamical balance that manifests in a continuing scattering-gathering wherein ‘forms’, rather than being static and foundational, are

inherently ‘dynamical’, the standing-wave manifestation of the continuing search for dynamical balance within a coevolving spatial continuum.

When we start with ‘ideal forms’ and then ‘demean’ the particularities as ‘imperfections’ or ‘variances’ from the ideal form, we are ‘throwing out’ the manifestation of the fluid communion of the dynamical form with the fluid-continuum of nature, that aspect of dynamical forms (such as our selves) that derives from our unique situational inclusion in the unbounded evolutionary flow-continuum (the ‘soul of the locally apprehensible material form’).

Like Plato, Darwin encouraged us to invest in purely implicit ‘ideal universal forms’ as foundational to our understanding of the world dynamic (to have the ‘eye’ of our inquiry orient to the locally apprehensible standing-wave form instead of to the unbounded evolutionary flow continuum that is the mother of local standing-wave forms.). That is, Darwin’s studies of Galapagos Finches is an ‘archetype’ of this scientific reductionism wherein we regard the many ‘small but important’ differences in form amongst dynamical forms of life that otherwise resemble one another (have much ‘in common’) as being ‘internally-generated’ from out of the centre of a local, independently-existing object-self. This sets up the notion that these variances are relative to an ‘ideal form’ that is ‘local’ and ‘independently-existing’. This is pure, absolutist abstraction that is unsupported by our sentient experience.

This combination of ‘commonality-based-on-ideal-form’ and ‘particularity-relative-to-an-ideal-local-centre-of-object-organism-self’ puts Darwin on the same path as Plato, though this time in the realm of ‘dynamical forms’, rather than ‘static forms’. That is, Darwin’s notion of ‘species’ implies that there is an IDEAL ‘life-form’ that

corresponds to the multiplicity of particular, ‘imperfectly-rendered’ VARIANTS. This is a tautological construct since the variants are assumed to derive from the notional centre-of-the-ideal-local-self, a logical flaw that is known as ‘petitio principis’. Thus, in the same manner that Plato implies that there is an idealised perfect circle that corresponds to the multiplicity of particular ‘imperfectly-rendered’ roundness VARIANTS, Darwin’s way of giving meaning to dynamical forms in nature, sets up the LINEAR notion of --- ‘lineage’ --- wherein the IMPLIED but never-actually-observed/experienced ‘ideal form’ becomes the notional source of ‘provenance’ or ultimate ‘antecedent’ of the sequential progression or ‘lineage’ of variant forms, which is situated at a time of ‘minus infinity’ that is tautologically/dialectically tied to an implied ultimate consequent at a time of ‘plus infinity’ by way of a linear temporal sequence of variant-manifesting ‘progeny’. By this ‘mathematics’ of linear temporal progression, one is able to avoid entirely, the immediate and continuing participation of the entity by way of its inclusion within a common dynamical living space.

What Plato’s and Darwin’s ‘ideal forms’ (ideal life-forms aka ‘species’) allow us to do is to re-render the world dynamic in terms of ‘local, independently-existing object-forms/life-forms with locally originating behaviour’. This is where, as Kepler says, we show off our habit in science for “choosing not that which is most true but that which is most easy”.

‘Species’ and other ‘King Philip Came Over For Good Spaghetti’ classifications of ‘idealized forms’ in biology, thus provide a discretized-by-idealisation (granularity-within-granularity) inclusionally nested representation that re-renders the evolutionary dynamic in inverted terms that psychologically converts and reduces nature (in our

mind's-eye) to a space-voiding local object based deterministic ('powerboating') dynamic.

What we discard in this 'idealisation' based process is the 'participation of space' (i.e. the understanding that, as Lao Tsu observed, 'the valley is the mother of the [local-object] mountain'. That is, once we install these ideal life-forms in a foundational role, we then occlude all possibility of understanding the evolutionary dynamic in terms a 'nonlocal fluid-dynamical spatial continuum' within which humans and animals, flora and fauna are 'locally apprehensible dynamical forms' ['standing-wave forms'], in the same manner as are hurricanes within the nonlocal fluid-dynamical spatial continuum of atmospheric space. This are no adjectives or modifiers that we can apply to the local space-voiding objects we have notionally created and made foundational to our (local object dynamics) worldview, that can restore the 'inclusional'ity'-based 'authenticity' ('a particularity' that is not 'particle'-based) of what were originally 'flow-forms' in the unbounded fluid-dynamical continuum of nature.

A Fluid-Dynamical Worldview explores what we continue to 'throw away' (i.e. fundamental understanding of our relationships with one another and with the dynamical space we share inclusion in) by our scientific culture's habit of re-rendering the world dynamic in the 'most easy though not must true' terms of 'ideal forms' and 'ideal life-forms' which we impute to be the source of all change, whether it be 'change in form' or 'change in the dynamical behaviour of collectives of notional 'local forms' by way of 'their' actions and interactions. The over-riding role of the dynamical space we share inclusion in (the 'valley' that continually gives birth to the mountains in Lao Tsu's worldview) is thus lost to our meaning-giving architecture and to our 'make-it-happen' practice.

In a fluid-dynamical worldview, ordering is not 'deterministic' and 'deliberate' by way of 'local object dynamics' as comes to us in our 'powerboating psyche' but is instead spatial-relational and dynamical-balance seeking as in our 'sailboating psyche'. That is, 'science' gives us the choice of understanding ourselves and our dynamics in 'powerboating terms' where the dynamics appear to 'come forth from out of the centre of our local-independently-existing objects selves' (ditto in the case of our 'sovereign nation'), or in 'sailboating terms' that acknowledge our inclusional participation within a common living-space dynamic that is greater than us (i.e. that we derive the power for our dynamics from). In this latter understanding of ourselves that draws meaning from the flow-beneath-our-standing-wave-forms, 'WE ARE' the dynamical-balance-sustaining between the accommodating backpressure of our dynamical living-space and the unfolding actualizing of our creative and productive potentials.

Author's Preface:

To the innocent student, the lessons to be learned in science have been validated by thousands of years of intense scrutiny and refinement. Luminaries such as Copernicus, Kepler, Galileo, Newton and Einstein have pored over the accepted theories so that to question these findings is to raise questions about ourselves as to ... 'who do we think we are?'.

The questioning of the most basic assumptions of science, is usually the exclusive stomping grounds of rational savants and is prohibited ground for artists, poets or the man on the street. Yet this is the central focus of this book and why not since science claims to bring to us a fundamental understanding of the world we live in and this is 'everybody's business'.

The intent of this inquiry is not to cast science aside because of its shortfalls and insensitivities but to examine more closely Johannes Kepler's charge in *Harmonies of the World* that, in science, "We choose not that which is most true but that which is most easy".

What did Kepler mean by this?

Kepler suffered as did Galileo and others, who picked up on the heliocentric cosmology of Copernicus, that sought departure from the established Ptolemaic geocentric cosmology. What could be more 'easy' than an earth-centric model in which we posit that we are at the centre of the universe and that the movements we see 'out there' are due to the movements of 'those others' rather than to us. It is the ultimate in 'self-centred' views, and the resistance to moving away from it, involves 'eating some humble pie'

and clouding our self-appointed 'chosen ones' status. Our world is more complex and less easy to understand with the shift to the Copernican worldview, but the Copernican worldview is closer to the truth, closer to reality. As Galileo pointed out, we could keep the geocentric model but at the price of assuming that all of the stars in the heavens move in little circles with exactly the same 365 day cycle (What a coincidence!). This would satisfy the need for common understanding but not truthfulness. The 'coincidence' would not be needed if we assumed that it was us that is bound up in this 365 day cyclic movement.

That is, if we were one of a fleet of ten sailboats out in turbulent waters on a dark, overcast night and saw from the masthead lights that the other nine vessels were all circling us with exactly the same 15 minute cycle, such a notion would 'satisfy' our observations but would leave unexplained the remarkable coordination of the others. We might even get 'paranoid' and begin to believe the others were conspiring against us. The alternative theory that our vessel was rotating in a local vortex current would be a richer theory in that it left fewer things unexplained in the same set of observations (i.e. we would no longer need a purely speculative 'conspiracy theory')

The acceptance of views on the basis of the greater ease with which we are able to grasp them in no way affirms their greater truth. Would the laziest thinkers arrive at the most truthful worldview?

This sort of "most easy though not most true" reduction of theory can elicit 'psychological projection' where we judge the behaviour of others, on the basis of what we believe to be 'their actions' but which are really the 'back-reflecting' of our own actions. This 'worldview' distortion has been famously captured in the folklore of those who have been

‘victimized’ by such ‘projection’; i.e. in the story of brere rabbit and ‘tar-baby’.

"'Mawnin'!' sez Brer Rabbit, sezee—'nice wedder dis mawnin',' sezee.

"Tar-Baby ain't sayin' nothin', en Brer Fox, he lay low.

"'How duz yo' sym'tums seem ter segashuate?' sez Brer Rabbit, sezee.

"Brer Fox, he wink his eye slow, en lay low, en de Tar-Baby, she ain't sayin' nothin'.

"'How you come on, den? Is you deaf? sez Brer Rabbit, sezee. 'Kaze if you is, I kin holler louder,' sezee.

"Tar-Baby stay still, en Brer Fox, he lay low.

"'Youer stuck up, dat's w'at you is, Says Brer Rabbit, sezee, 'en I'm gwineter kyore you, dat's what I'm a gwinter do,' sezee

The story illustrates how there does not need to be any subject-directed response at all for the subject to believe that the behaviour of other objects is ‘directed to him’; i.e. that he is ‘the centre of the universe.’ One can imagine the rich plantation owner coming away from a great breakfast-in-bed prepared by his servants and on his morning walk when he encounters a poor worker, totally emotionally drained from being up all night with one of his malnourished children that has taken ill, on his way to work. Were the plantation owner to meet several people with such ‘stuck up’ insolent behaviours on his morning walk, he might begin to believe that he is the central target of a concerted program of derision. Such ‘conspiracy theory’ can be the product of opting for a self-centred view

that is 'most easy' rather than 'most true'; i.e. it is easier for the plantation owner to find an explanation that does not require him to change his own behaviour.

The next 'example' of our scientific-thinking penchant of opting for 'more easy rather than more true' is a 'biggie' in our western culture..

For over two thousand years, we have given exclusive reign to the tactics of Plato, to search out the 'perfect form' or 'universal form' for all manner of things, in order to 'ease the burden' of every thing being 'particular'. That is, there are things that are close to being 'round' like an apple but they are not quite round. The notion emerges that they are poor copies of a 'roundness' that is 'perfectly round'. So one way to look at something that is 'kind of round' is that it is an imperfect copy of a 'perfect original'. Then, by examining the commonalities across a multiplicity of 'flawed' 'particular instances of 'roundness', we may 'grasp the essence of perfect roundness' and come up with the 'perfect form', the 'universal form' (the 'circle') that is the source of all those imperfect 'particular' forms..

In this manner, a particular woman may be considered as an imperfect rendering of a notional 'universal woman'.

This strategy of Plato's demeans the particular and elevates the general/universal. It does even more than this. It encourages us to 'rebuild the particularity' of the form starting from the new base of the universal form; i.e. the universal woman has two legs, two arms, two breasts, a vagina and so on. We can go on from there in rebuilding her particularity from this general or universal form starting point, by describing her hair colour, eye colour, skin colour, height, weight, etc. etc.

After we have added a lot of detailed description on top of her ‘universal form’, and do likewise with her movements and behaviours, she will have sufficient ‘particularity’ for us to ‘identify’ her.

This new, re-built ‘particularity’ that is relative to ‘perfect forms’ treats her natural particularity as ‘imperfection’, as a kind of ‘original sin’; i.e. as damage during the positivist delivery of ideal forms emanating from heaven, rather than from the inductive shaping influence of being uniquely situationally included in a common dynamical living space.

That is, the new ‘particularising’ (which perhaps should be spelled ‘particle – arising’) references everything to ‘the centre of itself’ or ‘divine point of issuance’ rather than to its unique situational inclusion in the common living space. The weathered appearance of an old sea salt, the frazzled-but-fulfilled look of a mother of a dozen happy children or even the gnarled look of a Monterrey Cypress that has grown up on a windswept seacoast CAN be particularized in terms of their ‘imperfections’ relative to the positivism of ‘perfect forms’ but such pejorative description fails to capture the manner in which aging is simultaneously feeding birthing (scattering is simultaneously feeding gathering). That is, the centre-of-self based particularising of dynamical forms occludes from our view the influence of the dynamical form’s unique situational inclusion in the dynamics of the common living space. It is a lazy thinker’s way of understanding the world dynamic.

Instead of regarding women (or other dynamical forms) in the context of their participation in a dynamically unifying all-including living space, by this Platonic method, we first extract them from the flow of nature in which they are inextricably entangled participants. Now that we have isolated them as local, independently-existing objects, we

mentally re-build them from stand-alone ‘perfect forms’ and their deviations there from. Then we further notionally endow them with ‘locally originating behaviours’, all of this reconstruction being done relative to the notional ‘self-centres’ that we have endowed them with. We thus give them an entirely new centre-of-their-own-universe ‘identity’ that no longer references to their unique and particular situational inclusion in the fluid-dynamical space of nature (i.e. it removes their ‘sailboating’ identity wherein their form and behaviour is being shaped by the fluid-dynamics of the space they are included in and substitutes a ‘powerboating’ identity wherein the shape of their form and behaviour derives from local self-standing ‘ideals’ or ‘local standards’).

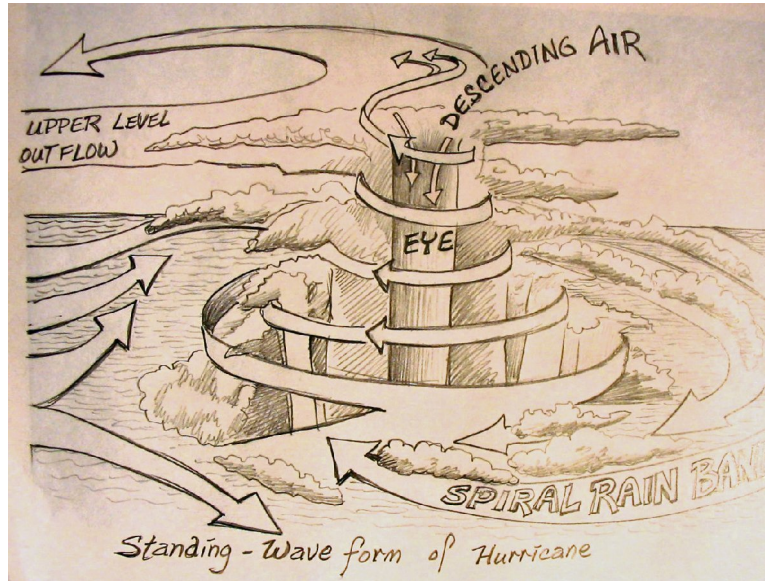
We can more readily see ‘what mental mischief we are doing’ in this Platonic de-particularizing and re-particle-aring when we use the example of a hurricane. That is, we are all participants in a common dynamical living space in the manner that weather convection cells are all included in the common dynamical space of the atmosphere. There is continual energy-sharing going on amongst and betwixt these convection cells. If we see humans as biological forms rather than as Platonic forms, we can envisage the spread of human communities over and around the dynamical space of the biosphere as being akin to the growth of fungus or crab-grass. In this case it is unrealistic to de-particularize ‘local’ communities whose particularity derives from their unique situational inclusion in the essentially nonlocal fluid-dynamical spatial continuum of nature., and re-particle-arise them as local, independently-existing objects/systems whose form and behaviour are locally originating.

By this idealistic Platonic process of de-particularizing (generalising or universalising) and re-particle-aring we

end up denying the continual energy exchanges and thus the innate interdependency that prevails, naturally, across the multiplicity of people and communities sharing inclusion in a common living space.

Returning to our example, when we gather together the commonalities to get the ‘essence’ of the perfect form of the hurricane, the result is a ‘stand-alone’ hurricane (i.e. an impossibility in nature). That is, the Platonic strategy of reducing everything to the general and rebuilding it on a simpler ‘ideal’ foundation notionally ‘disconnects it’ from its entanglement within the dynamical space it is included in. The entity we start with, like the hurricane, is a PARTICULAR ‘locally apprehensible dynamical form within the nonlocal fluid-dynamical spatial continuum of nature’. It is an iconic envoy of *everywhere*, boiling up into (gathering) and dispersing (scattering) into the continually transforming space.

But science has developed a serious addiction to this method of Plato’s, extracting the commonalities across a multiplicity of hurricanes so as to come up with ‘the universal hurricane’, a self-centre referencing prototypic, independent object-system with locally (centre-of-self-) originating behaviour’. This scientific ‘hurricane’ is describable by three coupled differential equations that produce a dynamical form characterized by a ‘central eye’ forming from descending air, spiralling arms made of rain squalls, and upper level outflow.



This scientific de-particularising and re-particle-aring representation of ‘the essence of a hurricane’ is conceived in terms of the hurricane as a ‘self-centre based being’ and ‘what it does’, ... ‘what makes it tick’, ... ‘what gives it its form’, ... is understood to be ‘self-centre-based. The notion of the hurricane as the envoy of the nonlocal dynamical space it is uniquely situationally included in, the unique, situational inclusion derived ‘soul of everywhere’ persona, is trashed in this unnatural elevating of ‘idealism’ over ‘natural experience’..

Elsewhere in this book, the history of the idealized notion of ‘the sovereign nation’ is reviewed, which brings out this same Platonic strategy that keys to a ‘Declaration of Independence’ and the notion that it is;

“... self-evident, that all men are created equal.”
and that “it becomes necessary for one people ... to

assume among the powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's God entitle them.”

Only in terms of seeing them as the issue of a ‘divine centre-of-self’ could we say that ‘all hurricanes are created equal’ (i.e. that they are all born from a local divine centre of issuance as local independent objects equipped for locally originating behaviour), ... but neither hurricanes nor men ‘really’ exist as ‘local, independently-existing objects/system with locally originating behaviour’. Such a view comes from the idealised Platonic reduction of their dynamical forms. Hurricanes and men are particular dynamical forms by virtue of their unique situational inclusion in the nonlocal fluid-dynamical spatial continuum of nature. ‘Equality’ of dynamical forms is not a word that ‘works’ for a fluid-dynamical worldview, since the interpretation of dynamical forms as ‘local independent objects’ has no meaning.

We can nevertheless search for the ‘ethic’ that is implied by ‘equality’ and for its counterpart in a fluid-dynamical worldview. The ethic of ‘equal rights’ in the ‘local-object-dynamics’ worldview, which orients to ‘what things do’ includes ‘the right to own property’. Since the local-object-dynamics worldview focuses on ‘what we do’ and not on the ‘reciprocal disposition’ of a finite and unbounded natural living space, this right has historically clashed with the ethic of ‘equal opportunity’ which is not a ‘right’ since it implicitly involves access to the common living space, the source of all wealth and resources, which does not ‘fit’ into our ‘local object dynamics’ worldview (which fails to address the accommodating capacity of space).

In the fluid-dynamical worldview, the animating of dynamical forms derives from the natural pursuit of

dynamical balancing (e.g. as in energy-sharing amongst convection cells in a common fluid-dynamical medium), an ‘inbuilt-in-nature’ ethic.

The paradoxical conflict between men ‘born equal’ in the sense of being granted an ‘equal right to do’ and the non-right to ‘equal opportunity’ (which cannot be dealt with in terms of ‘what men do’ since it concerns the accommodating role of space) is resolved in the fluid-dynamical worldview. Thus the rejection of ‘all men are born equal’ in the eyes of God does not have to be interpreted in the contrary sense of the proposition that ‘men are not born equal’ in the eyes of God. What is being rejected instead is the notion that ‘men’ can realistically be understood as ‘local, independently-existing objects/organisms with locally originating behaviour’.

The kind of idealism build into the ‘local object dynamics worldview’ denies the biological reality of our experience wherein the clustering of people within the wrap-around space of the earth’s biosphere are, like convection cells, in a continuing energy-sharing interdependency. Instead, it Platonically de-particularises and re-particle-arises the local clustering, substituting notional (idealised) local, independently-existing object systems with locally originating behaviour, and sets them up as ‘competing equals’. Such unnatural elevating of idealism over natural experience is bound to create conflict and dysfunction.

As the title of the above illustration of a scientific (i.e. ‘Platonic’) stand-alone hurricane indicates, Plato’s method of deriving the ‘essence’ of an entity by extracting what is common across a multiplicity of particular instances of the entity corresponds to capturing its ‘standing wave form’.

That is, the continuously changing particulars of inflow and outflow which are unbounded in the dynamical space of the atmosphere are ‘averaged out’ and the only form that is sustained and visually persisting, is the ‘standing wave form’. This is ‘the essence’ of ‘what matter is’ in quantum wave theory. Erwin Schrödinger, the developer of quantum wave theory called the local-object-being aspect of matter ‘schaumkommen’ (‘appearances’).

While the ‘particular hurricane’ gets its particularity from its unique situational inclusion in the fluid-dynamical space of the atmosphere (its persona as the uniquely-situated envy-of-everywhere), where does its new particle-arity reference to?

After the Platonic perfect form ‘make-over’, it’s form and behaviour are seen as originating from nowhere else but its own local centre. Freed (notionally, ideally) from its participation in the dynamical space of the atmosphere, it now ‘stands alone’. When we envision it ‘on its own’ as in the above diagram, we are in effect envisioning its form and its behaviour relative to absolute fixed and empty (Euclidian) space (and time).

We have thus ‘objectified’ the hurricane, and we can particle-arise it by ‘ITS’ dynamical behaviour; i.e. ‘it is building strength’, ‘it is moving north’, ‘it is wreaking destruction on New Orleans’, ‘it is weakening’, ‘it has fizzled out.’

As humans, we understand that we are all participants-without-the-option-of-not-participating in the ongoing fluid-dynamic of nature. But after the Platonic make-over, we too see ourselves as ‘local, independently-existing objects/organisms with locally originating behaviour’.

Once again, when we draw an illustration of ourselves, it is unlike our experience of inevitable inclusion within the ongoing fluid-dynamic of nature and instead like the above diagram of the hurricane. That is, we re-present ourselves as stand-alone (independently-existing) objects which then obliges us to believe that our form and behaviour originate locally, from within us. We re-render ourselves as local self-centre driven object-organisms and our 'new particularity' draws heavily from 'what we do' as if it were our 'locally originating doing'. That is, as if we were 'powerboating' rather than 'sailboating'.

This whole Platonic re-rendering scheme is another example of our scientific approach of "choosing not that which is most true but that which is most easy."

It represents a 'dumbing down' of our understanding of ourselves and the world, by first removing natural particularity through generalisation and subsequently adding in idealised centre-of-self referenced particle-arity.

As William Blake put it (and as we shall see in a moment, he was indeed speaking of this Platonic manoeuvre);

["To generalise is to be an idiot; to particularise is the alone distinction of merit."](#)

To restate; the particular dynamical forms in nature (prior to our mentally disconnecting them by way of Plato's method) are involuntary participants in a dynamical flow that is 'greater than themselves'. The 'natural identity' or 'meaning-of-self' of the particular entangled-in-nature dynamical form is relative to the nonlocal fluid-dynamical space-continuum.

Whenever the tsunami comes (or if/when the solar irradiance manipulated climate we are inextricably included in takes us for a roller coaster ride), these forms we call humans which we say are local and independent and gifted with locally originating behaviour driven from out of their local 'self-centres', are effortlessly lifted up and rolled over like the pictures of characters on a comic book as the page is being turned. When the tsunami whips us around and dashes us on the rocks, making us into fish food in its continual-renewal agenda, we are then forced to suspend our Platonic model of ourselves as 'local, independently-existing object-organisms/systems with locally originating behaviour.' That is, we are then forced to concede, with Kepler, that our scientific/Platonic mode of thinking has had us 'choosing not that which is most true but that which is most easy.'

The above 'de-particularized' illustration of a hurricane as a 'local, independently-existing object-system with locally originating behaviour' (scientifically described by three coupled differential equations) gives us a 'most easy' kind of pseudo-understanding of the 'local physical essence' of the 'system' we have defined as 'the hurricane'. It will certainly not inform us, for example, how variations in solar irradiance can inductively actualize a proliferating emergence and rapid intensification of hurricanes that is analogous to a heat lamp inducing boiling in a body of fluid, the emerging 'boils' thus being participants in a fluid-dynamic greater than themselves. No, once we have 'localised' a dynamical form and extracted it from its unique situational inclusion in the fluid-dynamical space of nature, we have left behind the understanding that the form and behaviour of this now-local 'object/system' are inductively actualized and shaped by the dynamics of the space it is included in.

A detailed account of how our phonetic symbol based language contributes to the illusion of ‘reality’ associated with a world of dynamical-forms-re-rendered (idealised) as local objects/organisms acting and interacting in absolute Euclidian space and time, is not included in this book. However, the following ‘heads-up note’ flags the important contribution of the particular meaning-giving architecture of our language, in helping us to accept as natural reality, that which is in fact a world re-rendered in terms of idealised forms (‘local, independently-existing objects/systems with locally originating behaviour’)

[N.B. The architecture of our phonetic symbol based language has us start from purely abstract local object beings; i.e. Platonic ‘perfect forms’ or ‘universal exemplars’ with ‘local-object-being’ and with locally originating behaviours and re-construct the world dynamic by notionally animating these local object-beings. The Native North American ‘oral tradition’ and ideographic written languages such as Egyptian hieroglyphics, on the other hand, employ networks of relationships based on natural dynamics to preserve the particularity of dynamical forms. For example the name ‘John Smith III’ invokes the explicit notion of an abstract local object being that invites us to understand this dynamical form in the Platonic terms of a ‘local object being with locally originating behaviour’ (local-self-centre-referenced sourcing of form and behaviour) which has an absolute inside that is mutually exclusive of his outside and his own internal biogenetics, biophysics, biochemistry consistent with the notion of ‘locally originating behaviour’. On the other hand the name ‘Crazy Horse’ invokes the implicit notion of a dynamical form in nature and the stories that go with the name ‘Crazy Horse’ invite us to understand this dynamical form in the context of his particular spatial-relational dynamical engagement with(in) the greater-than-himself fluid-dynamics of nature that, like an ongoing tsunami, he has no-choice-NOT-to-participate in.(he can choose his ‘manner-of-participating’ however). It is because of the architecture of our abstract phonetic symbol based language that we are induced to personify notional local object-beings and attribute locally originating

behaviour to them as in 'Katrina is 'building strength', 'heading Northwest', 'wreaking destruction on New Orleans, 'weakening' and 'passed out of existence', giving us a portrait of 'who Katrina is' that orients to her notional 'local centre of self' that we have 're-constructed' from Platonic generalization or from her de-particularized 'standing-wave' form. As Wittgenstein suggests, the local-object-based word-pictures that are the foundation for meaning-giving in our language, that reduce particular dynamical forms to local object-beings with locally originating behaviour, 'bewitches our understanding';

"A 'picture' held us captive and we could not get outside it for it lay in our language and language seemed to repeat it to us inexorably."]

What this all boils down to is that our psyche can 'flip-flop' back and forth in understanding '*our self and the world*' in terms of (a) 'perfect forms' or 'universal exemplars' (local objects with locally originating behaviour) which is elsewhere in this book described as 'the powerboating psyche', and understanding '*our self in the world*' in terms of (b) 'particular forms' (locally apprehensible dynamical forms within the continually renewing nonlocal fluid-dynamical spatial continuum of nature) which is elsewhere in this book described as 'the sailboating psyche'.

Thus, if we, for a moment, supersede our 'most easy' scientific understanding in terms of disconnected 'local perfect forms' with our 'most true' scientific understanding in terms of locally apprehensible flow-features in a nonlocal flow-continuum, then it follows, from this 'most true scientific perspective', that our particular experience must inform us of our 'inclusion' in a flowing continuum. Thus, our acceptance of our particularity brings to our awareness a kind of 'anima mundi' ('world soul') connection with the ongoing, continually renewing flow of nature. What does this 'feel like?'. Well, as meteorologists say in the case of the hurricane;

“There is no other reason for a hurricane to exist than in the service of dynamical balancing, to transport thermal-energy from thermal-energy rich equatorial regions to thermal-energy poor polar regions.”

Dynamical balance-sustaining’ (harmony-nurturing) would seem to be a meaningful animating ethic for all dynamical forms included within a continually self-renewing flow. That is, dynamical-balance-seeking has been identified as an innate characteristic of nature’s dynamic by Johannes Kepler in *Harmonies of the World* while Isaac Newton apologized in his preface to *Principia* for being unable to incorporate it into his laws of motion. Newton could not find a way to formulate laws of motion for more than two bodies moving under one another’s simultaneous mutual influence, a well-known mathematical cul-de-sac that has been termed ‘the three-body problem’. At the same time, Newton declared that these harmony-and-dynamical balance-seeking characteristic of dynamical nature to be the most profound and beautiful aspect of our natural living space.

So it was not Newton that missed the point that our science tends to choose ‘what is most easy’ rather than ‘what is most true’. He says in his preface to *Principia* that he hopes that his ‘most easy’ formulations can give insight that could help someone else come up with ‘what is most true’;

"I wish we could derive the rest of the phaenomena of nature by the same kind of reasoning from physical principles; for I am induced by many reasons to suspect that they all

may depend upon certain forces by which the particles of bodies, by some causes hitherto unknown, are either mutually impelled towards each other, and cohere in regular figures, or are repelled and recede from each other; which forces being unknown, philosophers have hitherto attempted the search of nature in vain; but I hope the principles laid down will afford some light either to this or some truer method of philosophy."

And, to give Plato his due, while he came up with the 'perfect form' generalising technique, he did not 'miss' the sense of particularity that derives from our inclusion in the fluid dynamic of nature; i.e. the sense of our being animated by a 'world soul', the sense of connectedness as a local uniquely situated 'envoy-of-everywhere'. Plato says, in his latter work *Timaeus*;

"Therefore, we may consequently state that: this world is indeed a living being endowed with a soul and intelligence ... a single visible living entity containing all other living entities, which by their nature are all related."

What does it 'feel like'? ... this 'anima mundi' that seeks to animate us through our unique situational inclusion in a fluid-dynamic connectedness/continuum? We know that in our 'powerboating' mode, we seek to fulfill our 'promise' or 'potential' in the 'American Dream' sense of seeing ourselves as local, independently-existing object-organisms with locally originating behaviours, ... a self-image that gives us to understand that we are fully and solely responsible for our 'own' creative and productive accomplishments. So long as we are thinking in this powerboating mode, we are focused on 'what we are doing'

which 'occludes' our getting in touch with the world-soul aspect of ourselves.

Ralph Waldo Emerson describes how we tend to let our world-soul be occluded by our centre-of-self driven 'powerboating tool' in *The Method of Nature*;

“Whilst a necessity so great caused the man to exist, his health and erectness consist in the fidelity with which he transmits influences from the vast and universal to the point on which his genius can act. The ends are momentary: they are vents for the current of inward life which increases as it is spent. A man's wisdom is to know that all ends are momentary, that the best end must be superseded by a better. But there is a mischievous tendency in him to transfer his thought from the life to the ends, to quit his agency and rest in his acts: the tools run away with the workman, the human with the divine. I conceive a man as always spoken to from behind, and unable to turn his head and see the speaker. In all the millions who have heard the voice, none ever saw the face. As children in their play run behind each other, and seize one by the ears and make him walk before them, so is the spirit our unseen pilot. That well-known voice speaks in all languages, governs all men, and none ever caught a glimpse of its form. If the man will exactly obey it, it will adopt him, so that he shall not any longer separate it from himself in his thought, he shall seem to be it, he shall be it... His health and greatness consist in his being the channel through which heaven flows to earth, in short, in the fullness in which an ecstatic state takes place in him. ... Are there not

moments in the history of heaven when the human race was not counted by individuals, but was only the Influenced, was God in distribution, God rushing into multiform benefit? It is sublime to receive, sublime to love, but this lust of imparting as from _us_, this desire to be loved, the wish to be recognized as individuals, — is finite, comes of a lower strain. “

There is no place for the ‘anima mundi’ in a science that ‘chooses that which is not most true but that which is most easy.’, though as we have seen, scientists that have crafted their formulations/tools on this ‘most easy’ basis in no way limit the world to re-renderings in such a constrained way. That is, who would want to live in a world where people have come to ‘really believe’ that they are ‘local, independently-existing objects/systems with locally originating behaviour’? Who would want to live in a world where individual nations come to ‘really believe’ that they are ‘local, independently-existing objects/states with locally originating behaviour’? Such beliefs would have them deny the connectedness of the dynamical space of nature in which they share inclusion, and their ‘convection cell’ like energy-exchanging inter-relationships. A collective of individuals that believe that their behaviour is locally originating, and thus that they are individually (as individual humans and/or individual nations) fully and solely responsible for their creative and productive accomplishments (rather than acknowledging that their productive powers derive from the dynamical space they are included in), will logically promote ‘competition’ amongst themselves so as to maximize the sum from their ‘independent’ centres of production and generate surplus that will ‘trickle down’ to the ‘less productive’.

In the ‘most true rather than most easy’ rendering of the world dynamic, however, in terms of energy-sharing convection cells within a common fluid-dynamical space (as in the hurricane or ‘storm-cell’ example), the more-performant will be ‘more performant’ by stealing energy from others, rendering them ‘less performant’ in the process. The ethic in this ‘natural’ rather than ‘idealised’ space will be one of dynamical balance-seeking rather than ‘competition’.

How do these different ‘psyche options’ (‘powerboating’ and ‘sailboating’) ‘play out’ in our social dynamic?

As particular individual humans, we may have found ourselves experiencing life that compares in an archetypal way, with living within a poor family (or Bourgeois family) in pre-revolution France, or in the south in pre-civil-war United States, or in a modern materialist epoch where the ‘haves’ and ‘have-not’ social sectors are diverging at never-before seen speeds.

One thing we know for sure; we are participants without the option of not participating in a (fluid-tsunami-like-) dynamic greater than ourselves. What we have choice in is our MANNER OF PARTICIPATION; e.g. if we are born into poverty in pre-revolution France we can commit our lives to feeding hungry children or to assassinating arrogant and un-empathic Bourgeois or etc. If we are born into Bourgeois affluence, we can commit our lives to cultivating dynamical balance by way of social reform or to the erecting of ever-higher and more impermeable defensive walls to protect ourselves and our cronies from the rising animosity of the increasingly impoverished.

But we can’t look to ‘mainstream science’ (the science wherein “we choose not that which is most true but that

which is most easy”) for the particularity that derives from our unique situational inclusion in a fluid-dynamic that is greater than us, that we have no choice but to participate in. That is, mainstream science informs us on the basis of notional ‘local objects with locally originating behaviours’ and what they do’; i.e. it equips us with a ‘local object dynamics’ worldview.

Such a view cannot possibly bring to us this ‘anima mundi’ sense of being included in a dynamically unifying space wherein it ‘makes sense’ to give ourselves up to the sustaining of dynamical balance (in energy-exchanging) and harmony in this common space we share inclusion in.

Scientific inquiry into the behaviour of notional ‘local, independently-existing objects/systems with locally originating form and behaviour, logically delves ‘down and in’ to the local, independently-existing system.

Science looks into the biogenetics, biophysics and biochemistry of the notional local object/system in seeking to understand the origins of form and behaviour as if these were driven from an internal ‘centre of self’.

In order to notionally (in our minds) ‘re-connect’ this local object that we have mentally ‘disconnected’ by ‘declaring’ it to be ‘independent’, we must now notionally equip it with input sensors, internal central processing, interpretation and decision-making (control) units, along with servo-mechanisms that deliver the ‘calculated’ responses to incoming stimuli from ‘the environment’.

It is our Western cultural habit, then, to assess the quality of an individual (ourselves and others) on the basis of this equipment and its manner/quality of deployment. This is only logical following our assumption that we are ‘local,

independently-existing objects/system with locally originating behaviours'. What could be a more logical approach to such assessment, in view of the notional 'independence' of these local object-systems, than to put them in a side-by-side race to assess the performance of their equipment and systems relative to one another?

But this 'local object dynamics' worldview (based on science "choosing not that which is most true but that which is most easy." and its 'competitive assessment' makes no sense at all in a 'fluid-dynamical world' wherein local dynamical forms can be understood as interdependent energy-sharing convection cells (as in the hurricane or 'storm-cell' example). In this case, the 'ethic' of the individual dynamical forms is to seek to sustain dynamical balance and harmony.

It is from this ethic that bees co-construct their highly space-and-materials efficient hexagonal cells without ever having to have internal knowledge of 'what a hexagon is'. (as with soap bubbles, the accommodating backpressure of the developing cell cluster becomes more resistive and the spherical form of the asserting cells is transformed into hexagonal form by rising outside-inward 'backpush' originating from their collective inside-outwards asserting growth). A natural dynamics embodiment of Mach's Principle; "The dynamics of the participants condition the dynamics of the space they are included in at the same time as the dynamics of space condition the dynamics of the included participants".

Regardless of the elaborateness with which we build our sense-of-self upon our notional local-centre-of-self, we may still feel the need to visit places that nurture our need to get in touch with our spiritual or soulful aspect and there we may sing hymns that say things like; 'I wander in a

fragile barque in life's tempestuous sea', and no wonder that we take ownership of such feelings, if one finds oneself uniquely and particularly situated in Paris in pre-revolution France, either as an impoverished urban ghetto dweller or as an affluent Bourgeois. As 'big-shots' with 'powerboating psyches' who sit at the apex of command-and-control social hierarchies (such notional local absolute centres/apices as don't exist in the interdependent fluid-dynamics of nature), we may tend to believe that we 'really are' local, independently-existing objects/systems with locally originating behaviour, but our wake-up call can come when natural disaster comes and we are reminded that we always have been participants-without-the-option-of-not-participating in a dynamic that is greater than ourselves (i.e. that we are 'sailboating' rather than 'powerboating').

Our mainstream-science-minded society would have us detach ourselves from such particularity that comes with inclusional participation in the evolutionary flow, and re-render ourselves in the detached terms of local, independently-existing object-systems with locally originating behaviour (where we impute ourselves to be 'acting out of our free-will' and being 'fully and solely responsible for our 'own' behaviour'). This constitutes a re-generating of a 'pseudo-particularity' or 'local-object-being-identity' in terms of genetic determinism (centre-of-self determined form) and destination-oriented purposeful actions and interactions (centre-of-self-determined behaviour).

Our society has come to spontaneously accept and embrace this 're-generated-from-scratch' animation of things including ourselves, as local objects detached from the evolutionary flow. Such idealised re-construction, based

on ‘standing wave forms’ fails to address our ‘soulful’ aspect as inclusions within the flow of nature.

We need to get a better grip on ourselves as we flip back and forth between these two different worlds that we alternatively accept as ‘reality’. We can get a better sense of our flip-flopping if we imagine we are like the hurricane that has been reduced to a local object as in the above diagram and imagine two different ways of feeling about our ‘self-and-the-world’ or our ‘self-in-the-world’;

1. Powerboating psyche: We understand ourselves to be local, independently-existing objects/organisms/systems with locally originating behaviour, thus, our ‘identity’ will be determined by our centre-of-self-driven biogenetics (locally originating form) and by our centre-of-self-driven behaviour (locally originating behaviour), ... no mention here of being a participant-without-choice-not-to-participate in a fluid-dynamic greater than oneself.
2. Sailboating psyche. We understand ourselves to be locally apprehensible dynamical forms in the nonlocal fluid-dynamical spatial continuum of nature. There is no ‘split’ in the sourcing/originating of our form and our behaviour; i.e. all dynamics and dynamical forms originate in the nonlocal fluid-dynamical spatial continuum of nature. There is no longer any notion of a ‘local centre of self’ from which form and behaviour originate as in the ‘powerboating psyche’. Our sense of self is instead that of a uniquely situated envoy of everywhere (As Emerson puts it, one who “transmits influences from the vast and universal to the point on which his genius can act.”)

Ok, when we are in powerboating psyche mode, we think of establishing a pseudo-particularity/identity for ourselves by way of ‘what we do’ (our notional local-self driven productive accomplishments), ... but which of our feelings relates to our understanding of ourselves NOT as Platonic ‘local objects with locally originating behaviour’ but as particular dynamical flow-forms included in the nonlocal fluid-dynamical spatial continuum? In some sense, thinking in terms of the above hurricane system illustration, do we not have to re-gather the cloak of the atmosphere around our shoulders and somehow let it help us to fly on in resonance with it? This is difficult to describe though Emerson does a creditable job in his *The Method of Nature* cited earlier.

We are thus challenged to get back in touch with such feelings of inclusion; i.e. to re-cultivate a worldview that puts our ‘selves’ back in the evolutionary flow and thus puts ourselves back in touch with our ‘world-soul’.

This being said, ... practically speaking, what are the impediments to our doing this?

Such impediments are alluded to by Henri Laborit in his introduction to *La Nouvelle Grille*. The more comprehensive nature of a ‘synthesizing’ paradigm that restores our understanding of being included in the flow of nature and which is waiting in the wings, cannot compete as dinner-table conversation because its continuously interweaving nature stops us from using the crisp and certain ‘one-liners’ based on ‘what absolutely is’ that are given to us by the rationalist ‘experts’.

That is, the ‘certainty’ that comes with ‘experts’ opinions’ that does make good rapid-fire sound-bite banter around the dinner table owes its apparent conciseness and finality to breaking down the world dynamic into many different ‘fields of study’, each of which has developed its own internal jargon based on local ‘universal exemplars’ (Platonic reduction to local-object-systems). Thus the expert-chemist can say that he IS CERTAIN that ‘two atoms of hydrogen unite with one atom of oxygen to produce one molecule of water.’ (In Plato’s ‘perfect form’ way of thinking, the notion of ‘six’ is more perfect than ‘six eggs’; i.e. ‘six eggs’ alludes to a ‘sixness’ that lies beyond the imperfectness of rough material existence. To the extent that our unitary concepts become less attached to the macro-roughness of reality, they become more perfect and more final, as in ‘six atoms’.)

That is, this type of certainty in the expert’s statement comes from his inventing his own jargon based on ‘ideal stand-fors’; i.e. ‘molecule’, ‘unite’, ‘produce’, ‘hydrogen’, ‘oxygen’, and using them in his propositional constructs as if they were fully known entities which of course they are not (e.g. physicists are still trying to work out what these things and their dynamical relations ‘really are’ in the light of quantum wave theory and matter-energy equivalence), so the ‘certainty’ in the certainty-rich statements of experts is underlain by unmitigated UNCERTAINTY concealed beneath the polish of ostensibly ball-bearing-simple word-concepts. As John Stuart Mill said; ‘Every definition implies an axiom, that in which we affirm the existence of the object defined.’ and it is by this axiomatic affirmation of ‘what is’ that we sweep unresolved uncertainty ‘under the rug’..

So, who amongst us who blithely regurgitates the absolutely certain “one plus one equals two” genre of

statements of the experts in dinner-table conversation, has ever seen an ‘atom’ or a ‘gene’ and is satisfied that ‘he knows what it is and what it does’? (the experts in chemistry and genetic theory seem not to be bothered by the fact that they are running down the field towards the goal line with these footballs and using them in constructions that purport absolute certainty while the physicists struggle in parallel, trying to discover, for certain, ‘what the hell are they?’ and ‘how do they relate to the rest?’). .

While popular clinging to a false sense of security is one of Laborit’s complaints about blockages to ‘bringing in the new paradigm’, his second complaint resonates even more with my own experience;

“When this synthesis-oriented paradigm doesn’t easily fit into popular cultural themes, when it fails to favoritise an already-existing current of opinion, political ideology or in-vogue socio-economic belief, it has little chance to elicit an immediate echo. It is unable to be taken seriously. This person who is expressing it does not demonstrate a humanity of real worth, the accepted strain of humanism that doesn’t disturb the popular beliefs, which calls to mind the iconic founders of the “culture” in place, that is to say, to the ensemble of prejudices and common associations of a society and of an epoch.”

The uncertainty that is covertly hidden beneath the superficial glint and polish and seemingly ultimate simplicity (the ‘what is’ versus ‘what is not’ finality) of ball-bearing word-concepts is lost when an able spokesperson strings these ‘Platonic-perfect-form’ terms together and delivers them with a smooth and confident

eloquence. This is what those who try to share ‘synthetical’ worldviews run up against, the regression by others to ‘truths’ that are regarded as ‘certain’.

“This man here, this negligent cigarette-smoker who flicked his un-extinguished butt out of his car window CAUSED this massively destructive forest fire”. What gets lost in the ‘certain truth’ of local object-word based causal constructions such as this, is the relationship between the action and the accommodating condition of the space it intrudes into. A long summer’s drought, versus continuing deluge can either amplify or attenuate the consequences of the same action. The same amplification/attenuation applies to political as to pyromaniacal ‘mischief’. That is, if Hitler is on trial for causing massive death and destruction in WWII and someone in the gallery says;

“The real cause of WWII is the long drought in loving one’s neighbour perpetuated by the Treaty of Versailles, during which time potentials for conflict continued to accrue as they do in earthquake and avalanche phenomena, thus amplifying the consequences of mischief TRIGGERED by people like Hitler”

Such a person is likely to be derisively dismissed with cries of ‘don’t make excuses for war criminals’ and ‘soft liberalism leads to social chaos’. This is because the popular trend is to rally to ‘100% certain truths’ (‘perfect truths’ based on perfect forms and perfect understanding of ‘what is’ versus ‘what is not’). This is what is popularly valued in the local object dynamics ‘causal’ worldview and in the defining of ‘cause’ as an action that explains the difference between an ‘antecedent’ and ‘consequent’ perfect state (the state of ‘what is’ versus ‘what is not’). In

this way of understanding dynamics, all of the causal animation is invested in the 'causal agent' while the two (antecedent and consequent) perfect states are understood in the passive sense of 'what is'.

We thus 'conceal' the role of the 'condition' of our common living space (its accruing and dissipating potentialities) in 'dynamical phenomena', the condition that we all contribute to through our included-in-space behaviour (as 'we' conditioned the dynamical living space of Europe in the post Treaty of Versailles epoch). That is, we acknowledge the antecedent state of Europe (e.g. 1939) and we acknowledge the consequent state of Europe (1945) and our local-object-dynamics worldview is called on to fill in the blank and explain what it was that made over the antecedent state into the consequent state. Once we fill in the blank with, for example, Hitler and his National Socialists (or whatever), the question is answered and what is left to be done, is to punish those responsible so that 'this will never happen again'..

What we are missing by formulating the question in this way, with one animating agent sandwiched between two passive states (so that the animating agent will appear to be fully responsible for the transition from the antecedent state to the consequent state) is that our common living space is not at all 'passive'. Sure, the snow-covered mountain slope and the green forest in summer 'look passive' but they can also, depending on their conditioning, be 'bombs waiting to go off', and the same applies to the dynamical living space of Europe in 1920's and 1930's; i.e. the same sort of mischief by a skier, cigarette smoker, politician can fizzle or be hugely amplified, depending on the condition of the space that it transpires in.

Our own 'bystander' involvement by way of our conditioning the dynamics of the space we are included in is occluded by our manner of formulating the question, in terms of two passive states, the antecedent and consequent, the latter of which is brought into being by a causal agent operating on the former; e.g. skier jiggles tranquil mountain slope, village destroyed, smoker tosses butt from car window (as in winter but it is now high summer), village destroyed, politician preaches hate, millions of lives destroyed and cities in ruins.

Of course, if society accepted Mach's Principle, that the dynamics of the included participants condition the dynamics of space at the same time as the dynamics of space condition the dynamics of we who are included participants, ... then rather than waiting for the pyromaniac to toss the cigarette butt, we can be wetting down the forest. This will lower the ambient tensions in our living space that will otherwise massively amplify the triggering signal of the political pyromaniac. But instead, we typically do nothing as tensions build. We await the triggering event and ensuing disaster and only then focus our energy, but in this case, on vilifying the 'causal agent'. It is easier to "choose that which is not most true but that which is most easy" which means that we choose a worldview in which we are not complicit and therefore there is no need to change our behaviour, behaviour that most of us would admit is sourcing social dysfunction.

So, in agreeing with Laborit on the impediments to bringing in a synthesizing worldview, I would have to add this one more point to his list, and that is that a synthesizing worldview (e.g. a fluid-dynamical worldview) regards the accommodating quality of the dynamical habitat and the intruding action of the inhabitant as being inherently inseparable so that we can never measure, explicitly, the

goodness and badness of the action of a local object/organism/nation in-its-own-right (out of the context of the accommodating quality of the dynamical space it is intruding into). What this means is that the synthetical view RIGHTLY fails to give full credit to ‘those that are popularly thought of as ‘doers of good’ and fails to apply full blame to ‘those that are popularly thought of as ‘evil-doers’.

This does not mean that the result of the action is any less beneficent or less malevolent as the case may be, it is instead that we “choose that which is not most true but that which is most simple” when we set up this sandwich of the passive antecedent state and the passive consequent state with the active-ingredient-filling of the ‘causal agent’. As Mach’s Principle suggests; “our dynamical behaviours condition the dynamics of the space we are included in at the same time as the dynamics of space condition we who are included in it.” We CO-CREATE THE CONDITIONS for political mischief to be amplified to forest fire magnitude (the converse also applies in the case of good behaviour; i.e. the productive salesmanship of a surgical face-mask vendor is amplified by the manner in which we condition our living space e.g. during a SARS epidemic).

There is more to be said here with respect to the resistance of our current scientific-thinking culture to a ‘synthetical worldview’.

The ‘causal’ model that would have us understand dynamics by way of the active ingredient that fills in between the passive-state antecedent-consequent ‘differential’ is equivalent to deriving the differential equation for our participation in life’s flow. We take ourselves out of the flow in the manner that we convert a hurricane to ‘local object status’. That is, by ‘lifting

dynamical forms out of the flow' and making them over into local stand-alone objects, we are re-rendering our view of the world in terms of local object dynamics and thus 'lifting out' the dynamical form we know as 'ourselves' out of the flow and re-casting it as a local, independently-existing object with locally originating behaviour'.

In other words, in reducing our understanding from a 'sailboating psyche' wherein we understand ourselves to be participants in our living space transformation a la Mach's Principle, to the understanding as associates with a destination-orienting 'powerboater psyche', we invoke the notion of 'time' as the dummy variable of integration. 'Time' is a measure of the interval between perfect antecedent-consequent 'what is' states. It is the measure by which a hurricane-as-local-causal-agent ratchets forward through antecedent-consequent steps along its life-cycle trajectory. The antecedent-consequent 'perfect states' of 'what is' are orthogonal to the causal agent trajectories, so that if we remove the notion of causal agents, we remove the notion of 'perfect states' of 'what is' (i.e. causal agencies and the changed states they produce are a tautology that collapses if one or the other are withdrawn).

As Emmanuel Kant (1724 - 1804) opined; "Euclidean geometry is the inevitable necessity of thought", ... Time is "a category allowing one to order events [antecedent-consequent perfect state pairs] in a before-after-relationship".

When we 'integrate' using 'time' as a dummy variable, what we get is the sum-up of the hurricane's life in out-of-context terms of 'what it caused'. What is lost in this 'time-based' understanding, is what corresponds to the 'world soul' (dynamical balance-seeking *raison d'être*) of the hurricane, the ongoing transformative (dynamical

balancing) influence of the hurricane that permeates the nonlocal dynamical spatial continuum the hurricane is included in. In this regard, we continue to watch classic films such as 'It's a Wonderful Life' that discriminate between having our behaviour, sailboating style, serve the sustaining of dynamical balance and harmony in the timeless living space continuum we share inclusion in, versus an anxious focus on causal achievement, powerboating style, along our 'particular' (in the Platonic sense) time-based life-cycle trajectory. The latter 'powerboating mode' continues to dominate since it is bundled into our scientific worldview which we have forgotten, is based on our "choosing that which is not most true but that which is most easy."

The story gets curiouiser and curiouiser, as Alice says.

This re-defining of the self as the local, independent active (causal) ingredient sandwiched between antecedent-consequent perfect state pairs imputes to us God-like powers of locally originating behaviour. When others are accused of being the causal agents of 'bad' behaviour', we, having been relieved of all involvement by the causal model, tend to feel a certain pride in thinking that 'I would never do that'. This implies an exclusion-of-self from the common living-space dynamic that is commensurate with the degree of certainty and exclusivity that is in one's causal attribution of blame and guilt to others (e.g. laying blame for 'cause' on war criminals, terrorists). This self-excluding is threatened with compromise or erosion by the synthesizing (inclusional) worldview which brings to surface awareness how everyone is involved in conditioning the common living space. That is, everyone contributes to the tensions that accrue that can amplify in explosive release what might otherwise have been slowly

but continuously dissipated through innocuous (sub-threshold or sub-critical mass) minor mischief.

There is also a corresponding feeling of pride in thinking that; ‘I have done this all by myself’ implying causal responsibility that is commensurate with the degree of certainty and exclusivity in the attributing of credit to self and to individual others (successful businessmen, politicians, scientists and military leaders). This exclusion-of-others from the attribution is similarly threatened with compromise or ‘erosion’ by the synthesizing worldview. This is because the synthesizing worldview brings to surface awareness the role of the accommodating quality of the dynamical space the ‘doer’ is situationally included in.

That is, in the synthesizing worldview, the power of a celebrity is not locally originating in the centre-of-self of the celebrity seen as a ‘local-independently-existing-object/organism-with-locally-originating-behaviour’. The power of a celebrity derives at the same time from the accommodating dynamic of the living space the celebrity is included in. Once the public is ‘conditioned’, the celebrity can trigger the same effect as the cigarette butt tosser in a hot dry summer forest. That is, we cannot assume that the celebrity is the active ingredient that is causally responsible for the shift from the antecedent (pre-celebrating) to consequent (celebrating) state.

Thus my own experience parallels Laborit’s in that sharing A Fluid-Dynamical Worldview (that synthesizes rather than fragments), while it seeks to bring about a needed shift away from our tradition of ‘choosing that which is not most true but that which is most easy’ is not without a sizeable ‘shoot the messenger’ exposure.

In the face of derision (uttered, muttered or unuttered), for being seen as an apologist for criminals and a denigrator of the creative/productive celebrities of our society (which goes hand-in-hand with the crime of dissolving the ‘with us or agin us’ dividing wall that keeps us from being tarred with the darkness of evil-doing and reserves for ourselves the whiteness and brightness of superior achievers of good), I am all the more appreciative of the persisting support I have received over the years in the continuing development of the ‘inclusional’ worldview, from friends and family.

Since March of 1996, I have been putting as many or more committed hours into exploring these ideas than I was previously putting into my intensive professional work as a petroleum industry geophysicist. During this time, I have met and developed ongoing dialogue with others who are on parallel paths of discovery in the sense that they too are searching for ways to ‘explicitly articulate’ the alternative worldview that we feel is waiting-in-the-wings to liberate us from our addiction to choosing “not that which is most true but that which is most easy” as the basis for our meaning-giving architecture. These fellow explorers of a ‘synthesizing’ or ‘inclusional’ worldview include Nicholas French, the late Martine Dodds-Taljaard, Jacques Rainville, Alan Rayner[†], Lere Shakunle[†], Jack Whitehead[†], Dirk Schmid, Doug Caldwell, Yvonne Aburrow, Sidney Mirsky, Karen Tesson, Carol Massey and those in the evolving ‘inclusionality circle’ and ‘inclusionality-research forum’ www.inclusional-research.org. There are a number of others, many of whom are mentioned in context in essays on my website at www.goodshare.org and whose open mindedness often combined with ‘devil’s advocacy’ has been a valuable influence in shaping the articulation of the ideas herein.

The writings of Henri Poincaré, *Science and Hypothesis*, *Science and Method*, *The Value of Science* , which ‘speak to me’ in a clear and deep manner, have also shaped this text.

As a final observation on what has led me to develop and publish the understandings in this book, and to let my ‘supporters’ off the hook lest someone takes me to be an ‘anarchist’ in the destructive rather than the creative jam-session-musician and/or surfer-in-a-storm sense of the term, ... I do not believe that we have to destroy what we have developed (sovereign nations, technological systems etc.) in order to make the shift back from the ‘powerboating psyche’ to the ‘sailboating psyche’. Just as the sailboater must accept that he is a participant in a spatial dynamic more powerful than himself, he can still take on the journey with him, his idealised plans, destinations and ETAs and continue to update them and use them in a support role as he goes along. While he innately lacks the power to drive the system of nature backwards, his shift from the powerboating to sailboating psyche will enable huge uplift in his ‘spirits’ as the tides, winds, currents and breaking waves re-present themselves to him as his source of power, rather than as the hostile obstacles that they appeared to be to his centre-of-self-driven powerboating psyche.

† Co-authors of a book-in-progress (I am also a participant) on ‘inclusionality’, founder members of the ‘inclusionality learning circle’ and my ‘primary collaborators’ in our co-developing of ‘inclusionality’. Related works can be found on their respective websites.

* * * * *

Introduction:

Modern physics (relativity, quantum wave theory) is encouraging us to re-conceive the dynamical world we live in, as a fluid-dynamical space wherein 'local objects' are subsumed by 'nonlocal dynamical forms' or 'convection cells'.

What is a 'chair' in the eyes of Zircon, a five-thousand year old man who has been observing the activities on the earth from elsewhere in the celestial dynamic? What is a 'horse'? What is an acorn? What is a 'man'? Can we know what they are out of the context of 'where they are' in the dynamical space of nature?

The earth's atmosphere, hydrosphere and lithosphere all seem to be in continual flux as do the humans and horses and acorns that are continually boiling up, persisting for a bit and dispersing again within it in a continuing cycle of renewal. Humans, meanwhile have a habit of objectifying (mentally re-presenting as discrete local objects) the transient dynamical formings of nature (all forms are transient in nature, hence all forms are 'formings' just as all 'being' is 'becoming').

For example man defines and labels continents as if they were discrete local objects, though they are nothing other than those outer extremities of the lithosphere that stick out beyond the outer extremity of the hydrosphere. The number and form of continents changes continually with the rise and fall of ocean levels, and the very rock they are made of is continually 'plastically' flowing down into the earth's interior and rising up and splattering back out in a continuing convection cycle. But (western) man is generally comfortable with defining and labelling transient dynamical forms and synthetically imposing 'local

independent objecthood' on them, as in the case of 'continents'.

The dynamics of celestial space all the way down and in and through and including the dynamics of terrestrial space and horses and acorns and men bound up in it all hang together in a continually unifying dynamic or 'natural communion'. So what, really is a 'continent', or for that matter; a 'horse', an 'acorn', a 'man' or 'local object being' in general?

In order to have our object 'just sit still and show off its local independent existence', we have to take it out of the flow somehow and 'generalize it' since each particular object is uniquely situationally included (rooted) in 'the flow' of nature (think of how a hurricane is a locally apprehensible dynamical form in the nonlocal fluid-dynamical continuum of the atmosphere; i.e. a 'particular' hurricane cannot be described 'locally' since it is a flow-feature in a nonlocal flow (it is relative to the flow)).

Plato's method of extracting 'perfect forms' is the standard approach of our western culture and the approach is to examine a multiplicity of particular instances of a common object and to regard the 'commonalities' as implying 'the perfect form'. Because our acculturated habit of doing this has become so 'automatic' and because the architecture of our phonetic symbol based language is so well-adapted to it, we are less and less likely to even be aware of our doing it.

So we put a wall around the local object (the wall now takes care of the infinity of Euclidian space thus creating 'absolute place' where there remains, in reality, relative place where infinity associates with the continuing spatial-relational renewal in nature.). We do this in the manner that

we put up a wall to make a 'garden' in the middle of a jungle. Now, we can say that 'we made the garden' (we made this place what it is) though we would be thought mad if we claimed that 'we made the jungle'. We use this same sleight-of-mind in using the edges of the 'form' of a continent as such a wall, so that we can say that certain horses, acorns and men are found 'in the continent of Asia'. So, the transient form in the celestial-terrestrial fluid-dynamic that we call Asia provides us with a notional rigid 'absolute, local space' that *by definition* 'walls out' the continuing flow of nature and provides a notional static reference ground or static 'containing space'.

Our mind will not be troubled when we objectify the transient dynamical forms of horses acorn and men, because we now say and imagine that these discretized forms are contained in a non-flowing space, the space defined by the 'edges' of a continent. That is, we replace the 'where' of the flow of nature within which horses, acorns and men are evanescent 'boils in the flow' [dynamical flow-forms] with the static 'where' of the notional local, independent, object-continent. This replacing of the containing-flow with a garden-wall-like artificial space-bounding frame establishes the 'continent' as a static containing space that is fit for containing notional local, independent objects.

Ok, there are spoilsports like geophysicist and 'continental drift' theory pioneer Tuzo Wilson who points out that the term 'continental drift' is silly because it animates purely notional local objects (continents are those subjectively objectified bits of the lithosphere determined by ocean depth, that poke up through the oceans or at least come within 600 feet of the ocean surface) when the dynamic that is being spoken of originates from the continuing opening and closing of intercommunicating (unbounded, non-

discrete) ocean basins. However our acculturated habit of thinking of dynamics by way of mentally animating (notional) local, independent objects within a (notional) static containing space continues to resist spoilsport comments like Wilson's that invite us to return to a more realistic understanding of dynamics in terms of unbounded flow..

In our still dominant classic science, based on 'local objects' (or local organisms) and their locally originating dynamics, structure is conceived of in terms of the nested inclusion of smaller local objects within larger local objects, or of smaller within larger local organs/organelles/cells. The viable equivalent in the fluid-dynamical worldview is in terms of nonlocal convection cells nesting inclusionally within nonlocal convection subcells as with whirls within whirls in the nonlocal continuum of fluid flow.

It is possible to develop a 'fluid-dynamical worldview' that deepens our cultural default 'local object dynamics worldview' through insightfully transformed understandings and behaviours that resolve many of the paradoxes and 'incoherencies' in our modern social dynamics. Central amongst these insights is what I call the 'sailboating psyche' wherein we acknowledge that we are included in a world dynamic that is 'greater than ourselves'. This psyche understands 'the self' as nothing other than locally apprehensible dynamical form within the nonlocal fluid-dynamical spatial continuum of nature. All power, and more particularly 'our personal power' is understood to derive from the fluid-dynamics in which we are included, so that our natural quest, like that of the sailboater, is to exchange energy with the fluid-dynamical space we find ourselves uniquely situationally included in.

Hence we can sustain dynamical balance within the flow in the same way as convection cells.

Our western cultural evolution, meanwhile, has elevated so-called ‘reason’ associated with the local object dynamics worldview to an unnatural precedence, to the point that René Descartes claimed (and successfully persuaded us) that “la raison peut nous rendre comme maîtres et possesseurs de la nature” (Rationality [object dynamics based reasoning] can make us masters and possessors of nature).

In contrast to the ‘sailboating psyche’ wherein we see ourselves as locally apprehensible dynamical forms within the nonlocal fluid-dynamically unifying ‘all’ of nature like the hurricane within the nonlocal fluid-dynamically unifying space of the atmosphere, the Cartesian worldview gives us a ‘powerboating psyche’. The latter makes us believe that our power to act originates solely within us, reducing us into a notional ‘local, independently-existing object/organism with locally originating behaviour’. This enables our local independent object-selves to strike out directly for any destination/objective we so desire. Hence, our ‘powerboating psyche’ transforms our understanding of the fluid-dynamical space we are included in (i.e. the continually renewing energy-flow that we and all things are made of) into a mutually exclusive, alien landscape. This landscape comprises local objects that we regard either as resources to be possessed, consumed and/or exploited, or as obstacles that we must struggle against and overcome in order to achieve a notional ‘purpose’.

These are the foundational notions in Darwinian evolution theory; i.e. the notion that ‘organisms’ are local-independently-existing object-entities with locally originating behaviour, and that they are split off from the

dynamical space they are included in. The notional split-off part is labelled 'the environment', which is deemed to be filled either resources or obstacles, helps or hindrances relative to our notional local internal directing and driving 'purpose' [Once we impose 'local independent being' on our notion of ourselves, we must implant something local and internal ('local' and 'internal' have no meaning in a fluid-dynamical world) to explain what animates it, and the name we give to that patch in our absolutist independent object model is 'purpose'].

Our natural 'purpose', we say, is 'survival', and this completes the trio that makes possible the tautological Darwinian notion of 'the struggle for survival in an environment that is innately hostile to us but whose resources we must have in order to survive' [Talk about putting us in a love/hate relationship with the living space we are included in! ... 'darling, thank you for letting me tap into your resource base but stop getting in the way of my sacred ego driven self-actualization']

This culturally sculpted architecture that gives rise to the notional inevitability of competition by mutually exclusive local independently-existing purposeful objects/ organisms/ races/nations/corporations, gives way, in a fluid-dynamical world, to energy exchanges amongst and betwixt locally boiling up convection-cells. These cells do not compete for energy because they are nonlocally induced, not driven from their centres. Their behaviours serve to restore dynamical balance within the energy flow, as is also the *raison d'être* of hurricanes, tornados and other dynamical forms that can become violent and destructive, dark and stormy.

Similar evolutionary understandings are possible, of human political social and political history. For example,

the dynamical living space of Europe, many commentators on the WWI Treaty of Versailles said at the time, would cultivate rising tensions as a result of the 'Carthaginian Peace' terms of the treaty that would brew up storms as the currently emerging generation reached adulthood (20 years). Their models were out by just one year (WWII started in 1939, 21 years following the end of WWI). Be that as it may, the local object dynamics model can only deal with causally determined results, and thus affirms the notion that Hitler and his National Socialists were 'the cause' of WWII.

Using the fluid-dynamical worldview, one could therefore say that the conditions of the dynamical space that people are included in can inductively shape the unfolding of actualizing creative potentials in a dark, stormy, violent and destructive manner. In opting for this fluid-dynamical understanding we would NOT be taking the low road of the local object dynamics worldview; i.e. we would not, as Johannes Kepler described, be 'choosing that which is not most true but that which is most easy'..

Correspondingly, it is easier to forget about the tension-breeding influence of the treaty of Versailles and to work our way back, local object dynamics-style, from the outbreak of violence to the first 'smoking guns' we can find, and thus identify Adolf Hitler and his National Socialists as the 'evil' causal agents. This ambiguity in our inquiry into the origins of the violence is often expressed by the question; 'Did the man make the times or did the times make the man?' and by 'times' is intended 'the currently prevailing conditions in the dynamical living space we share inclusion in.' One could ask this question in the following equivalent meaning-giving words; "Should we understand the war by way of a fluid-dynamical (spatial-relational energy gathering-and-scattering)

worldview or by way of a local object dynamics (whodunnit) worldview?'.

One thing is clear, however. This is that in accordance with Ernst Mach's Principle, our dynamical behaviour conditions the dynamics of the space we are included in at the same time as the dynamics of space conditions our dynamical behaviour (Mach's Principle). "Space is a participant in physical phenomena" (Einstein, who was a 'validator' of Ernst Mach's 'Principle') Thus, we cannot realistically model the dynamical phenomena of nature in the one-sided space-excluding terms of 'local object dynamics'. By the same token, in a NATURAL male-female relationship, the individual does not regard the other in the (space-excluding) local object dynamics Darwinian love/hate context of (a) a needed resource that they can exploit, and (b) a hindrance to their locally originating self-actualization. Space is instead an included participant (as indicated by words like 'home-maker') and both individuals intuitively (naturally) put their behaviours in the service of cultivating balance and harmony in the dynamics of the living space they share inclusion in. In other words, they co-cultivate a nurturing space that will accommodate and encourage the actualizing of their and their children's creative/productive potentials.

As in the example of post WWI Europe, unbalanced conditioning of the common living space dynamic breeds imbalance in the dynamics of those that share inclusion in it. The 'common living space': i.e. the nonlocal fluid-dynamical spatial continuum within which resides the locally apprehensible dynamical form things (convection cell things), naturally takes precedence in the fluid-dynamical meaning-giving architecture, over notional local object dynamics. Without putting their behaviours in the service of co-conditioning the dynamics of the common

space they share inclusion in, so that it is nurturing to the actualizing of their and their childrens' and fellows' creative/productive potentials, men and women may fall into the trap of regarding one another, local object dynamics (Darwinian) style, as, at the same time, a needed resource and as an obstacle to their local object centre-driven self-actualization.

David Bohm observes, using the terminology of *A Fluid-Dynamical Worldview*, that our human society has been experiencing the decline of the 'sailboating psyche' and a corresponding rise of the 'powerboating psyche' (i.e. the decline of the fluid-dynamical worldview and the rise of the local-object-dynamics worldview) that is accompanied by increasing 'sustained incoherence' in the social dynamic. Currently, in this author's view, there are signs of a restoring of the 'sailboating psyche' to its natural precedence in that there is a rising global awareness of the need to 'tread lightly on the earth' as we begin again to acknowledge that our human vitality and powers derive from the dynamical space of nature that we are included in.

The ideas expressed in *A Fluid Dynamical Worldview* have been shaped and influenced through ongoing dialogue, since the year 2000, with a small group of others who have been working on the same intuition. We applied the term 'inclusionality' to this shift from the 'local object dynamics worldview' to the 'fluid-dynamical worldview' to try to convey that the shift is from using the logic of mutual exclusion to using the logic of mutual inclusion as the respective foundations for the alternative meaning-giving architectures. That is, 'inclusionality' involves a shift in one's foundations for reasoning; from 'detached visual observation of what things are doing out there', to 'inclusional sensing/feeling experience of what is going on in our shared common living space'. The latter

incorporates visual observation but is in no way constrained to detached understanding in terms of local object dynamics.

As discussed in The Author's Preface, if we are a bee, we may 'see' a hexagonal shape without 'knowing what it is' and without having deliberately used it in our construction. It is one of those 'perfect forms' whose 'essence' we (humans who are impressed with rationality and logic) get to by examining the commonalities in multiple instances of particular renderings of what seem be attempts to replicate the same form. Of course the bees were not trying to replicate hexagons, they were trying to construct protective cells for their larvae and if one starts off by building separate 'houses', in cramped quarters and hard times (when resources are in short supply), it is natural to share walls rather than duplicating them, in which case, multiple separate 'houses' pack into contiguous apartments, and where those 'houses' were spherical (as they were in the earliest evolutionary record of the bee family), the apartment blocks become hexagonal cells because of the shaping influence of inertial backpressure from the inside-outward growth of cells in a cluster that acts on and shapes the cells (into hexagons) from the outside in. That is, the individual bees need not 'know' what a hexagonal cells nor can we assume that the bees 'deliberately' construct hexagonal cells. There is no 'intelligent designer' that 'determines' this highly optimized cell architecture, there is only the innate dynamical balance-seeking tendency in nature that characterizes 'convection cell' energy exchange.

This 'introductory guide' to *A Fluid Dynamical Worldview*, approaches the subtle awareness-raising of how our meaning-giving architecture can shift and is in the process of shifting. The subtleness comes from the fact that the reader has to use his currently available meaning-giving

architecture to read this text and to go on this tour of an alternative meaning-giving architecture. This is what is implied by descriptions of our current predicament as ‘having to change our tires even as we are riding dependently upon them whilst speeding down the freeway of life’.

The approach taken, in the face of this complication, has been to profile the shift in six chapters relating to the refashioning of six principal architectural ‘supports’ of a meaning-giving architecture.. That is, I will be describing transformations in our notions of Form, Motivation, Peace, Power, Goodness and Time, as we shift from exclusional reasoning based on a local object dynamics worldview to inclusional reasoning based on a fluid-dynamical worldview.

Before embarking, I want to help the reader to navigate these six chapters by providing the following glossary of inclusionally oriented terms. The narrative defining of these terms makes reference to examples of how philosophers of science have been indirectly and directly pointing to the need for a shift in our meaning-giving architecture from a local-object-dynamics orientation to a nonlocal fluid-dynamical orientation.

Glossary to Aid the Reader of *A Fluid-Dynamical Worldview*

The following glossary includes six concepts/terms (including ‘inclusional’) that are important ‘supports’ for the shift from understanding the world dynamic in terms of the dynamics of local, independently-existing objects in empty Euclidian space to a revised/deepened inclusional understanding of the world dynamic. The latter entails fluid-energy-flow wherein local objects are understood as ‘boils in the flow’ (i.e. where ‘material bodies’, instead of being seen as local, independently-existing objects, are instead understood as local concentrations of energy akin to ‘convection cells’ arising from turbulence in the flow, consistent with the matter-energy equivalence of relativity). One might say that these revised concepts/terms seek to ‘undo’ our historical tack in science to ‘Choose not that which is most true but that which is most easy’.

The six concepts/terms seek to re-present, in a fluid-dynamical as contrasted with local object-dynamics context; (1) balance-seeking (2) form (3) space, (4) time, (5) self-environment relationship, (6) self-environment comportment.

.....

Dynamical-balance-seeking (contrasts with the cultural norm of ***stasis-seeking balance***): --- ‘Balance’ is commonly thought of in the dipolar opposition terms of Newton’s third law of motion; ‘for every action there is an equal and opposite reaction’ so that when the two ‘tug-of-war’ teams are in balance there is stasis, and when, in our cultural icon for justice, a blindfolded (impartial) woman holding a two pan balance scale, the scales come to rest

(stasis) in the horizontal plane. Such notions of balance (stasis) versus 'out of balance' ('the evidence weighs heavily in favour of the plaintiff') are 'linear' in the tug-of-war pull of opposites sense, whether we are speaking of opposing forces, opposing weights, or opposing propositions (which is 'more true'). This 'tug-of-war' between excess and deficiency is not only used in our western concept of justice, but is also foundational in our western notions of 'virtue' and 'good' and 'evil'. As Aristotle states in his *Doctrine of the Mean* Nicomachean Ethics II. 6-7;

"Virtue, then, is a kind of moderation inasmuch as it aims at the mean or moderate amount. Again, there are many ways of going wrong (for evil is infinite in nature, to use a Pythagorean figure, while good is finite), but only one way of going right; so that the one is easy and the other hard—easy to miss the mark and hard to hit it. On this account also, then, excess and deficiency are characteristic of vice, hitting the mean is characteristic of virtue: "Goodness is simple, evil takes any shape."

Virtue, then, is a habit or trained faculty of choice, the characteristic of which lies in moderation or observance of the mean relative to the persons concerned, as determined by reason, i.e. by the reason by which the prudent man would determine it. And it is a moderation, firstly, inasmuch as it comes in the middle or mean between two vices, one on the side of excess, the other on the side of defect; and, secondly, inasmuch as, while these vices fall short of or exceed the due measure in feeling and in action, it finds and chooses the mean, middling, or moderate amount.

Regarded in its essence, therefore, or according to the definition of its nature, virtue is a moderation or middle state, but viewed in its relation to what is best and right it is the extreme of perfection. ...”

Our concept of ‘balance’ thus plays a foundational role in our western systems of justice and ethics. In his continuing text, Aristotle follows with a ‘table’ of qualities of humans, name-labelling the extremes of excess and deficiency and proposing how ‘perfection’ may be found in the ‘balance’ between the extremes. Thus Aristotle’s (and the western world’s) ‘ethics’ keys to the BALANCE in behaviour of an individual; i.e. a notional ‘local, independently-existing local object-being with locally (internally) originating behaviour’. The quality of the common space we share inclusion in, as is co-conditioned by the collective that shares inclusion in it, is not addressed in such a system, that keys to the ‘locally, internally originating’ actions of the individual. Thus, if an individual is ‘starved out’ by the collaboration of others by the manner in which they co-condition the quality of the common space we share inclusion in (i.e. who control access to the land, access to common-space based resources), then while he is obliged to continue to conform to the ethics of moderation in his behaviour, there is nothing in these ethics based on ‘balance in individual behaviour’ to prevent imbalance in ‘opportunity’ from arising. The ‘loophole’ arises since the local object dynamics paradigm of Aristotelian ethics, orients to the behaviour of a local ‘independent’ individual (or nation) as if in an absolute (Euclidian) empty space of infinite holding capacity while our real-life experience informs us that our behaviour is relative to the dynamics of the space we share inclusion in. As our ‘finite and unbounded’ neighbourhood becomes crowded, we experience the effects of what Einstein (in describing the

curved space of relativity) refers to as ‘reciprocal disposition’, where ‘space’ is a dynamical participant that ‘pushes back’ and disaccommodates our individual assertive behaviour. As we know from freeway driving and from ‘driving on the freeway of life’, crony collectives can selectively gate, stifle and disaccommodate the actualizing/unfolding of the creative potentials of their fellows. Their individual actions are ‘laundered’ by the dynamics of the space they share inclusion in and the ‘three-body problem’ that applies therein, which makes it impossible to solve for the causal contribution of individuals (since these are laundered by the mediating role of the dynamical space we share inclusion in).

Thus, there is some ‘more comprehensive sort of balance’ that must go beyond the balance that associates with individual behaviour, that associates with the sustaining of harmonious flow which implies the sustaining of balance in the accommodating quality of space that opens up the actualizing/unfolding of creative/productive potentials of the diverse multiplicity of individuals that share inclusion in the common dynamical space. This ‘more comprehensive sort of balance’ that comes into play in ‘the real world of our experience’ is ‘dynamical balance’. This ‘dynamical balance’ takes us beyond ‘balance in individual behaviour’ to ‘balance in access to the accommodating space we share inclusion in’ or in simpler words, ‘balance in opportunity to act’. The latter is assured by the manner in which we condition the common space we share inclusion in, and cannot be assured by the ethical quality of the actions of individuals and collectives, ‘local object dynamics style’; i.e. as if we were acting and interacting within an absolute empty Euclidian space of infinite extent.

That is, understanding in the fluid-dynamical worldview is not constrained to balancing in the ‘horizontal plane’ as

with the two balance pans, but opens the door to understanding ‘balancing’ in the fluid dynamical sense. For example, the convection cells (circulating currents) in the ocean and atmospheric circulation systems such as hurricanes, emerge in the service of transporting thermal energy from thermal energy rich equatorial regions to thermal energy poor polar regions.

This ‘*dynamical balance-seeking*’ is inductively actualized and shaped by the dynamics of the flow-space it is included in (and gives rise to persisting ‘*flow-forms*’). The tree-boughs splay as they engage the wind and the wind-flow is simultaneously transformed in a dynamical balance-seeking ‘dance’. The rotation of a windmill (and/or hurricane or convection cell current) or even a stop sign oscillating in turbulent wind-flow (rather than simply being bent/deformed by laminar wind-flow) are particular examples of the *dynamical balance-seeking* that permeates and characterizes the nonlocal fluid-dynamical spatial continuum that is nature. Our simplistic cultural norm of *stasis-seeking balance* overlooks the fact that we are included in a fluid dynamical space; i.e. we have no choice but to participate in the continuing fluid-dynamical unfolding of the universe (we are inclusions within it). If we seek to understand the flock-flying behaviour of wild geese (their ‘V’ formation), it is futile to base our inquiry on their individual behaviours and how they balance their actions relative to one another as if they really were acting and interacting in empty euclidian space. In order to understand the balance and symmetry, it is necessary to acknowledge that they are participants, like a sailboat in a storm, in a fluid dynamic that is ‘bigger than their own dynamics or any combination of their individual dynamics. The fact is that they participate inclusionally within this greater fluid-dynamic, stirring it up and seeking to tune in to resonances (dynamical balancings) with(in) the flow and

to nurturing and sustaining ‘sweet spots’ in the co-creatively stirred slipstream. In the dynamics of a collective, allowing this *dynamical-balance-seeking* to actualize and shape individual and collective behaviour feels more naturally harmonious and satisfying than imposing a *stasis-seeking balance* by mechanically taking away from where there is too much and re-allocating it to where there is too little. For example, if an out-of-balance rich/poor polarization is inducing conflict in the neighbourhood due to ‘wealth hoarding/monopolizing’, *stasis-seeking balance* by mechanical reallocation of wealth is not nature’s way of seeking balance (it is man’s simplistic abstraction); i.e. the *dynamical-balance-seeking* approach would be to recognize, sailboating fashion [see ‘*sailboating*’ entry in glossary, below], that all wealth derives, ultimately, from the fluid-dynamical space we share inclusion in, and thus ‘hoarding’ is like a ‘blocked artery’ or ‘an embolism’ in the flow-channel’ and the resuscitating of circulatory flow by dissolving the blockage is what is needed (if the wealthy landlord upstream from the village dams up its primary water-source and sells water to the villagers at prices beyond their means so that their gardens die and their children cry of thirst, the natural way to restore balance is not to negotiate a better price that will improve the material allocation, it is to dissolve the blockage in the flow)..

Similarly, the massive agricorp that monopolizes agricultural land and hoards the harvest is blocking the natural flow from the land through the human organisms, which will invite polarization and conflict. However, the pursuit of *stasis-seeking balance* by mechanically reallocating the fruits of the harvest is not the same as restoring the natural flow in a *dynamical-balance-seeking* approach. People are naturally like wildgeese and sailboaters, they/we seek participation in the flow of things,

not to be treated like pawns in the mechanics of a giant chess game.

* * *

Flow-form (contrasts with the cultural norm of ***fixed-form***): --- When we ‘back off’ the imposing of local objecthood on dynamical forms in the unbounded continuing flow of nature (the ‘holodynamic’) the standard description of dynamics in terms of ‘what things do’ are no longer available to our narratives. The ‘local object’ loses its absolute ‘being’ and, being reclaimed by the continuing flow of nature, is understood in the manner of a convection cell or ‘boil’ in the flow (e.g. the hurricane in the flow of the dynamical space of the atmosphere). In order to avoid using narrative based on ‘local beings’ which is the stuff our subject-verb (what-things-do) language is designed for, the full verbage that restores ‘local object beings’ to their natural ‘beinglessness’ would be *‘locally apprehensible dynamical forms in the nonlocal fluid-dynamical spatial continuum’* or in short form ***‘flow-forms’***.

‘Flow-form’ would be the more realistic term for describing a hurricane (convection cell) since a hurricane is easily recognizable as nothing other than a ‘more visible’ (eye-catching) region of the unbounded dynamical space (atmosphere) it is included in (which is itself unbounded relative to the overall dynamical space of nature).

* * *

Flow-space (contrasts with the cultural norm of ***fixed-space***): --- Our convention is to conceive of space as ‘Euclidian’; i.e. as an absolute vacuum of unbounded rectangular extent that serves, notionally, as the fixed container for notional ‘local, independently-existing objects

and organisms' and the 'theatre of operations' for the dynamics of these local objects. In relativity and in quantum wave theory, wherein motion is relative and matter is understood as a relative concentration of energy, space is no longer 'empty' and 'material bodies' are no longer 'local' and 'independent'. With this quantum/relativity melding of the notional 'absolute void' (euclidian space) and 'absolute being' (local, independently-existing objects/organisms), the 'on/off' or true/false difference between matter (being) and space (void) gives way and in its place a new understanding of the duo comes in terms of 'locally apprehensible dynamical forms (*flow-forms*) in a nonlocal fluid-dynamical spatial continuum (*flow-space*). A familiar example of this fluid-dynamical understanding of the relationship between a dynamical entity and the dynamical space it is included in is the 'hurricane' in the dynamical space of the atmosphere.

* * *

Flow-time (contrasts with cultural norm of *fixed-time*);: --- Unlike our conventional 'linear-sequence' based notion of 'time' (time that is anchored to a notional beginning at the time of minus-infinity, and which advances linearly in positive increments in the direction of plus-infinity, serving as a measuring rod for the aging/evolving of the universe and/or anything that is 'in the universe'), *'flow-time'* derives from our inclusional spatial-relational experience. The comparison can be seen in Heraclitus' and Aristotle's differing interpretations of the unity and plurality of the cosmos; e.g;

"Plato clearly distinguished between Heraclitus' SIMULTANEOUS unity and plurality of the cosmos and Empedocles' SEPARATE PERIODS of Love and Strife. At the same time, they are

mentioned together as both alike in believing in the unity and plurality of the cosmos; and Aristotle's coupling of the two might conceivably have been motivated by the Platonic comparison, the important distinction between them being overlooked.” – Kirk, Raven et al, *The Prosocratic Philosophers*

These two different but related understandings of ‘time’ can be ‘visualized’ relative to one another by a ‘weather’ example (the world dynamic as a ‘fluid-dynamic’ lends itself to comparisons with the weather, and so it should since weather is a fluid-dynamic that is included in the world (fluid-)dynamic.).

We say that ‘a storm is brewing’ which gives us a sense of ‘time’ in that we anticipate ‘the arrival and passing’ of the storm. Our inclusion-in-the-world-dynamic life experience informs us of the ubiquity of archetypes of ‘calm’ (love) and ‘storm’ (strife) and that our participation in the world dynamic is experienced as a continuing cycling of these archetypes in all manner of different circumstances and situations. If we understand ourselves to be ‘local independent object beings’ at ‘fixed locations’ we pound a self-centred stake-in-the-ground and regard these periods as ‘separate periods’ since that is how we, seeing ourselves as local object-organisms, understand them (they appear to ‘come to us separately, one after the other). On the other hand, if we consider ourselves *as flow-forms* in the common *flow-space* (nature) it is natural for us to suspend our self-centre-based stake-in-the-ground and acknowledge that others are experiencing the calm-before-the-storm and the ‘calm-after-the-storm’ at the same time as we are experiencing the storm (this might be one definition of ‘empathy’), and also, that the notion of linear sequence is artificial (ly dependent on our local object self-image)

since, given that; ‘calm’, ‘storm’, ‘calm’, ‘storm’ etc. etc. (though understood as an unending linear sequence of separate periods by our notional LOCAL OBJECT SELF) are at any time ubiquitous formings in the fluid-dynamical continuum, the ‘calm-before-the-storm’ is also, at the same time the ‘calm-after-the-storm’. It would be natural for us as *flow-forms* that are included in ‘other’ as ‘other’ is included in us, to think in terms of ‘our’ experiencing of ‘calm’ and ‘storm’ AT THE SAME TIME IN DIFFERENT SPATIAL NEIGHBOURHOODS IN OUR COMMON LIVING SPACE rather than in the local self-centre based terms of ‘I’, who experience SEPARATE (as in a one-after-the-other linear sequence) PERIODS of ‘calm’ and ‘storm’, this latter way of understanding that gives rise to our conventional ‘linear-sequential’ notion of ‘time’. That is, if we understand ourselves as a plurality of ‘*flow-forms*’ within a dynamically unifying *flow-space* world, then we will celebrate the fact that as the storm engulfs us, it is putting others into the calm. Our ego that corresponds to seeing ourselves as a local, independently-existing object-organism dissolves and is taken over by ‘love of other as ourselves’ with this shift from ‘conventional’ (linear-sequential) ‘time’ to ‘*flow-time*’.

Together with this understanding of *flow-time* as it contrasts with our cultural norm of *fixed time*, comes the notion of a *nonlocal-unity* or *communion* that is relative to a mutually-inclusive plurality (as lesser whirls are to a greater whirl) that contrasts with our cultural norm of a *local unity* that is relative to a mutually exclusive plurality (as the number ‘one’ is to the set of whole numbers). For a discussion on ‘fluid logic numbers’ see Lere Shakunle’s *Breathing Point: The Transfigural Mathematics of Loving Influence*.

* * *

Inclusionality (contrasts with cultural norm of ***exclusionality***);: --- Our understanding of nature and of ourselves and our relationship with(in) nature in a fluid-dynamical context. In this manner of understanding, space and matter dissolve into one other and are subsumed by an endless and everywhere-present energy '***flow-space***' wherein fluid-energy-accommodating relative to fluid-energy-intruding is giving rise continually to dynamical 'forming' within which locally apprehensible '***flow-forms***' (akin to convection cells) are the deeper-meaning nonlocal fluid-dynamical counterparts of 'local objects' and 'local organisms'. ***Flow-space***, being a relational continuum of mutually and dynamically-inclusive ***flow-forms***, becomes the new 'dynamical world' that we now, as included sentient ***flow-forms***, seek to understand, this new understanding being called 'inclusionality'.

* * *

Sailboating (contrasts with the cultural norm of ***powerboating***);: --- Understanding how one's behavioural dynamic relates to the dynamics of the space one is included in undergoes major transformation as our notion of dynamics shifts from 'local object dynamics' to 'nonlocal fluid dynamics' and as our notion of 'self' shifts from 'local, independent being' to 'nonlocal, interdependent becoming'. We have a pair of familiar metaphors that parallel one of the salient aspects of this difference in how we understand our engagement with the dynamical space we are included in; i.e. sailboating and powerboating. In our 'standard' ***powerboating*** mode of understanding our dynamics, since we see ourselves as local, independently-existing organisms with internally originating behaviour, we sit down and think about a desired destination and plan our voyage so that our dynamics will take us there swiftly and efficiently. In this

powerboating mode, we see the dynamical space we are in as being mutually exclusive to us, as a physically extended obstacle course that we must overcome in order to get to our desired destination. *Sailboating* is the understanding of our dynamical engagement that comes to us when we understand ourselves to be *flow-forms* in *flow-space*. All of our power derives from energy exchanges with the fluid-dynamical space we are included in, as is ‘the way’ with convection cells. *Sailboating* informs us that participation in the dynamical space we are included in is not a choice (it is the ‘base case’ we are included in) and that while we may ‘carry our destination-driven powerboat planning with us’, we must first and foremost put our behaviour in the service of sustaining dynamical balance and harmony with the fluid-dynamical space we are included in. Thus the shift from *powerboating* to *sailboating* represents a shift from first ... ‘thinking about our manner of participating’... and then participating, ... to the reverse priority where we participate first and think about our manner of participating second. In understanding the world by way of ‘*inclusionality*’, since we are continually participating in a fluid-dynamical space ‘greater than us’ (we are a dynamical inclusion within it), our understanding of our engagement with the world only elicits the notion of ‘time’ in the ‘*powerboating*’ mode where the notion of ‘executing a temporal-sequential plan for participation that will take us to our desired destination’ prevails.. In the *sailboating* mode, participation is something we have no choice in but ‘are just included in’ and the dynamics of engagement are spatial-relational in the continuing present.

Chapter I

From Universal Form to Particular Form:

What could present more of a vision of universal connectedness than the collective of mutually turning storm cells gyres (convection cells) that makes up the dynamical space of the earth's atmosphere, which are orchestrated by variations in thermal flow. The variations in thermal flow may have their origins in matter-energy conversions (e.g. 'nuclear fusion and fission') in the stars and sun and in the rocks of the earth's lithosphere, and are being distributed, with various cyclic (harmonic) latencies, by ocean currents and even by the continuously reforming rocks of the earth's lithosphere.

Within this circulating energy-matter complex the human collective 'blooms' on the warm soupy surface of the earth like the bacterial mould on a ball of cheese. The 'particularity' of any form that we might focus on in this continuing spatial metamorphosis, since no form is 'locally standing', 'locally originating' or 'locally (internally) animated' (these 'forms' are locally apprehensible dynamical features in this nonlocal fluid-dynamical spatial continuum), derives from its 'dynamical spatial relationships' with the 'universe it is included in'.

This particularity of form is thus of a 'universal' origin which is infinite in its space-time scope. This infinite particularity is there for us to appreciate in each and every 'dynamical form' from a quark to a jaguar, from a human to a hurricane.

The question of ‘who are we?’ has no finite answer when we acknowledge that our particularity is an expression of the universal space-time continuum.

But while every dynamical form is given an infinite ‘particularity’ by the manner in which it is uniquely, situationally included in the world dynamic, our experience is that ‘dynamical forms’ seem to emerge in ‘classes’ or ‘species’ wherein there is a multiplicity of instances of look-alike forms. This suggested to Plato that each form was an imperfect rendering of a ‘perfect form’ or ‘universal form’ and that the ‘ideal form’ was something we could use as the foundation for our meaning-giving architecture.

Plato described how the ‘universal form’ could be inferred by bringing together the commonalities across a multiplicity of particular dynamical forms ‘of the same type’ (with the presumed same ‘perfect form’ provenance) so as to extract the particular form from its inclusion in the dynamical ‘All’ (dynamical spacetime continuum) of the universe and to ‘re-represent it’ in terms of a ‘local, independently-existing object/system with locally originating behaviour’ (which we mentally reference to an absolute rigid and empty Euclidian containing space).

What we mentally substitute here, in place of the particular space-time inclusional situation of the dynamical form, is the notion of ‘lineage’ or ‘ancestry’ which, together with the notion of ‘progeny’ reduces the continuously renewing ‘gathering’ and ‘scattering’ of nature’s fluid-dynamic to a linearized tautology that satisfies the ‘idealist’ notion of ‘birth’ and ‘death’. It is through this ‘sleight-of-mind’ that we arrange for the God-like powers of ‘locally-originating-behaviour’ to be implanted in the ‘local, independently-existing object-system’.

When an asserting cold front engages with an accommodating warm front, under the right conditions, we get the ‘birth of tornadoes’; i.e. the conjugation of greater whorls can result in the birth of lesser whorls, but there is to perform our Platonic reduction-to-universal-(local)-form on these lesser whorls, just as there is no need to perform our Platonic reduction-to-universal-(local)-form on human babies. The nonlocal fluid-dynamic of nature continues to unfold-into-itself in its continually renewing process and it includes all dynamical forms and excludes none.

Thus, the shift from ‘universal form’ to ‘particular form’ also involves a shift from ‘birth-and-death’ with its provenance-progeny lineage in the local object dynamics worldview to ‘gathering-and-scattering’.as in the fluid-dynamical unfolding-infolding of nature in the fluid-dynamical worldview.

Since this Platonic-ideal conversion process can be applied to any dynamical form at any scale (to whorls within whorls), we can similarly impute to organs and cells this same in-situ linearizing tautology of a provenance-progeny lineage to ‘keep the local object dynamics model’ ‘hanging together’. Thus we impute to ‘cells’ their being ‘born’, ‘dying’ and ‘being reborn’ although they seem to be ‘doing this on the fly’ as in the birth, death and rebirth of storm-cells in the atmosphere; i.e. Schrödinger’s observation that material objects are ‘schaumkommen’ (‘appearances’) as in standing wave forms within a fluid-dynamical continuum appear to be a more nature and less idealised (Platonic) way of understanding the continuing birth, death and rebirth of cells, not to mention all other dynamical forms in nature.

As Poincaré observed, the idealised notion of a ‘local object’ (as in geometry/mathematics) has no meaning in a world that is fluid, and all of our experience points to

nature being a fluid-(energy-flow)-dynamic that we are included participants in.

The increasing complexification and diversity of dynamical forms seems to relate to the increasing movement, in the dynamics of place-time, towards dynamical balance. While the notion of ‘entropy’ (based on local object-systems) would have us interpret the action of the local system we know as a ‘hurricane’ as ‘destructive’ and thus entropy-increasing, the hurricane has no other reason to exist than to serve dynamical balancing in the dynamical space in which it is included; i.e. it has no reason to exist other than to transport thermal energy from thermal-energy-rich equatorial regions to ‘thermal-energy-poor’ polar regions. Thus the notion of ‘entropy’ is the artefact of our imposing of the idealized ‘local object-system’ model into our meaning-giving architecture.

The shift (back) from ‘universal form’ to ‘particular form’ is foundational to the ‘meaning-giving’ that associates with our respective meaning-giving architectures; i.e. our ‘local-object-dynamics worldview’ and our ‘fluid-dynamical worldview’.

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Chapter II

From Motivation to Encouragement:

Dans ce pay-ci, il est bon de tuer de temps en temps un amiral pour encourager les autres. [In this country [Britain] it is good to kill an admiral from time to time to encourage the others.] --- Voltaire, Candide, commenting on the execution in 1757 in Britain of Admiral Byng for failing to adhere to 'the rules of naval engagement'

In the 'local object dynamics' worldview, each of us 'exists' as a separate, independent 'organism' and as such, our behaviour is seen to originate from within us. This 'internal cause' is, if one reflects on it, a 'secularized theological concept' wherein we compare ourselves to a monotheist God who had nothing beyond or around him telling him that he should create the world. This 'local (internal within us) first cause' is an absolute notion that associates with our self-declared 'independence' and which we declare and affirm when we say that we have 'free will' and that we, as local, independent objects/organisms 'are fully and solely responsible for our own behaviour'. In this local-object-dynamics meaning-giving architecture, because we have founded it on local, independently-existing object-being, we must explain how the behaviour of the local object originates, without placing any dependency on the dynamics of the space he is included in, hence the notion that his behaviour is 'locally (internally) originating'.

In order for him to modify his behaviour, since it is understood that he is fully and solely responsible for his

own behaviour and that his behaviour is locally, internally originating (from out of his self-centre), this must be done by way of 'inputs' that influence his local internal self-centre, the source-point of his internally originating behaviour. The notion of one's behaviour coming fully and solely from out of one's local internal self-centre invites us to speak in terms of 'his motivation'. What he does is seen as emanating from 'his motivation' which can be actualized and shaped by external influences that operate through this local, internal self-centre. We might say that he is 'inspired by God' or by the 'Devil' or by his family, friends, enemies, culture or whatever, ... but in all cases, the external influences are seen as acting upon his local internal self-centre, as is the constraint that comes bundled in with the assumption of his local, independently-existing object-being. This sets up the popular notion of an individual human as having a 'central processing unit' (the brain) as is the 'cybernetic system' or 'organism' model of a man.

In this view of a man, 'motivation', coming from his local internal centre-of-self is the determinant of his behaviour and thus, in this architecture, we must explain his behaviour in terms of changes in his motivation that may come from his 'own rational programs' or from external influences that operate more subtly on his motivation (evil temptations, divine inspiration, fear of external menaces etc.). Given that he is fully and solely responsible for his own behaviour (as our justice system would have it) his 'motivation' however shaped, is the source of his dynamical behaviour.

Compare the foregoing where 'motivation' is on the critical path to understanding the behaviour of the individual ('individual' understood as a local, independently-existing

object/organism with internally originating behaviour) to the following suggestion in a popular hymn;

[“I wander in a fragile barque in life’s tempestuous sea”](#).

The imagery here is that of ‘sailboating’ where we are participants in a world dynamic ‘bigger than us’ and that we have no choice but to participate and that we are participating and always have been and always will be in the course of our ‘life-cycle’. From this sailboating understanding of our personal behavioural dynamic, we put our behaviour, first and foremost, in the service of sustaining dynamical balance, staying afloat, staying in one piece, and our plans and strategies for arriving at some desired destination, we can ‘take with us’ but they can only play a support role. Our participation involves spontaneous engagement that is intuition based.

In fact, our plans and strategies for attaining some desired destination/objective represent a ‘powerboating’ view of ourselves (the western cultural norm for viewing ourselves) that is unrealistic when we acknowledge that we are included in ‘life’s tempestuous sea’ (in a turbulent fluid-dynamical living-space). Whether infants or adults, we participate relative to the dynamics of the space we are in before we stop to think and reflect and our participation is intuitive and it inductively actualizes and shapes our body movements (imagine the movements of a sailor on a small sailboat engulfed in the fluid-dynamical turbulence of a storm; i.e. his movements are inductively actualized, orchestrated and shaped by the dynamics of the space he is an included participant within).

The ‘cybernetic system’ model described above associates not with our spontaneous ‘participation’ (we are given no option not-to-participate) in the fluid-dynamics of the

living space, but about the ‘thinking’ aspect that we may carry with us; i.e. ‘we participate first and we think second’.

So, it is not true that all modifications to our behaviour must come through our local motivation-centre. We are participants in the dynamics of our living space that are greater than us. The movements of the limbs of an individual that is engulfed by a tsunami are not driven by his local internal centre of motivation that drives his notional locally originating behaviour on the basis of attaining some desired future destination, these movements are an intuition based spontaneous engagement with the fluid-dynamics of the space he is included in that seeks to sustain inner-outer dynamical balance, as is the intrinsic orchestrator of behaviour in a fluid dynamic.

If our behaviour is not ‘deterministically driven’ from out of our local internal self-centre, by way of our variously influenced ‘motivation’, how is it sourced?

What we have been ‘leaving out’ in discussing the behaviour of the individual in terms of his internal workings, is the inductive influence of ‘life’s tempestuous sea’ that he is included in, sailboating style’. Why do the wildgeese fly in ‘V’ formation? They are induced or **‘encouraged’** to do so by the ‘sweet spots’ (resonant zones/cells) in the fluid-dynamical slipstream that they stir up by their collective (simultaneous mutually influencing) dynamics. The recipe is; (1) stir up the space we are included in (we can’t help but participate in this ‘stirring up’ in any case), (2) tune in to any resonances that develop, (3) let the sustaining of these resonances orchestrate individual and collective behaviour (i.e. put one’s behaviour in the service of cultivating, nurturing and sustaining the resonant sweetspots that come into being in

the common slipstream ('life's tempestuous sea') that we share inclusion in.

So long as we 'work with' a meaning-giving architecture that limits itself to 'local object dynamics' and ignore that we are all participants in a (fluid-)dynamical space ('life's tempestuous sea') that is greater than us, we will be forced to, in the case of humans (seen as local, independently-existing object-organisms), explain individual and collective behaviour in terms of local, self-centre driven 'motivation'. This constrained mode of (local object based) understanding does not have the capacity to entertain the notion that IT IS NOT MOTIVATION THAT SHAPES OUR BEHAVIOUR but the dynamics of the space we are included in 'encouraging' certain behaviours 'on our part' such as those that cultivate, nurture and sustain sweetspots in the slipstream that we are included participants in, that allow us, like the wildgeese, to, for example, go farther and faster for less expenditure of effort than in 'solo mode'.

But there is no such thing in the real world of our participatory experience as 'solo mode' (it is an artefact of our mental modeling in terms of local, independent objects/organisms with locally-internally originating behaviours that act and interact in empty Euclidian space). That is, if we acknowledge that we are participants in a flow-space that is 'bigger than us' as in the sailboating understanding of ourselves and our world, then this equips us with a 'sailboating psyche' which reduces to nonsense the notion of 'solo behaviour' ('locally originating behaviour'). What 'crumbles' with it is the notion that we are fully and solely responsible for our 'own' behaviour and that our behaviour is driven by our internal motivation that resides in the interior of our 'local, independent self'. We can envisage ourselves, instead, as a collective of

‘convection cells’ engaging in simultaneously, mutually influencing energy-sharing, orchestrated by an ethic of dynamical balance-seeking (energy-rich, energy-poor imbalances are bound to develop in a continuously evolving energy-flow-space, but there is no need to interpret the imbalances as the result of competition, just as there is no sound basis for attributing the ‘energy rich’ situation of some cells to be the product of ‘locally originating behaviours; i.e. as being due to their ‘superior performer’ status.)

Before the reader’s emotions are picked up and carried off by the implication here; that ‘we are not responsible for our own behaviour’, ... it is worth noting that what has been said is instead that ‘there is no such thing as ‘our own behaviour’, so, not to worry about not being responsible for that which does not even exist but is an artefact of a deficient meaning-giving architecture (the local object dynamics worldview).

What WE ARE RESPONSIBLE FOR is THE MANNER AND QUALITY OF OUR PARTICIPATION in ‘life’s tempestuous sea’ (the flow-space that includes us). No, our actions are not locally originating and deterministic and something our ‘local independent object-self’ is ‘fully and solely responsible for’ as in the local-object-dynamics architecture, but as participants in the flow-space we share inclusion in, we co-condition the dynamics of this flow-space at the same time as the dynamics of flow-space condition our individual and collective dynamics.

In this ‘fluid-dynamical space’ oriented view, we help to shape the spatial-accommodating relative to spatial-intruding quality that animates us by way of spatial-relational encouragement and/or discouragement rather

than by local, purely internally sourced ‘motivation’ that associates with the notion of locally originating behaviour’.

We have always alluded to ‘doors that open for us’ and encouraged the actualizing of our creative and productive potentials and ‘doors that close for us’ and discourage such actualization. Not only other people but nature overall (as in the ‘sailboating’ model) has the power to influence this opening and closing that amplifies, attenuates and shapes the actualizing of our creative/productive potentials.

How unwise of us to attribute such actualizing purely to local, independently existing objects/organisms and their local, internally resident ‘motivation’ as if they resided, acted and interacted in an empty Euclidian space, rather than acknowledging that we are, without choice in the matter, participating in the fluid-dynamical space we all share inclusion in; i.e. that we ‘wander in a fragile barque in life’s tempestuous sea’.

Without making the shift from attributing the actualizing of our creative/productive potentials to ‘internal motivation’ to instead attributing such actualizing to spatial-relational encouragement, we shall continue to ‘judge’ individuals as if the unfolding/blossoming (or stunting/stifling) of their creative and productive potentials is fully and solely the product of what is local and inside of them (‘motivation’).

It is common in our culture to judge and label people whose creative and productive potentials remain un-actualized as ‘lacking in motivation’. This is a form of ‘finger-pointing’ that depends for its ‘sense-making’ upon our use of the ‘local object dynamics worldview’. In the fluid-dynamical worldview it makes no sense to speak of ‘an individual’s behaviour’ as if it were locally originating

from his internal self-centre, wherein we purport his ‘motivation’, ‘purpose’ etc. resides.

In a fluid-dynamical worldview where we revise our view of ourselves from local objects to flow-forms in a common (dynamically unifying) flow-space (i.e. an energy-sharing convection cell collective in a common flowspace), we can only talk about the quality of our participation that helps to condition the common space we share inclusion in (as a gyrating convection cell conditions the flow-space it is included in), so that it encourages or discourages and thereby shapes the unfolding actualization of creative and productive potentials of ourselves and our fellows (including the four-leggeds, two-leggeds, rooted ones, finned ones, winged ones etc.).

We might insist that ‘motivation’ is an essential descriptor of individual human behaviour; e.g. “Geronimo’s people, who had previously roamed far and wide, hunting and gathering to sustain themselves, lost their motivation after being placed on a reserve.” Does the stifling of the actualization of their creative and productive potentials really stem from the local internal motivation-driven behaviour of the individual? Or does the closing down of access to off-reservation space, underscored by putting a bullet through the heads of those who violate the forced accord, DISCOURAGE such actualization? The use of the concept/term ‘motivation’ depends only on the notional ‘local, independently existing object-organism with internally originating behaviour’ and requires no reference at all to ‘space’; i.e. to the ‘conditioned quality’ of the common living space that the individual shares inclusion in.

Without a shift in understanding from ‘motivation’ to ‘encouragement’ we obscure from our view and from our

inquiry the 'quality of space' based source of actualization of creative/productive behaviours in the individual and collective, and thus promote sustained incoherence in our social dynamic.

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Chapter III

From Power (to ‘make happen’) to Energy Sharing

In the ‘local object dynamics’ meaning-giving architecture, everything that happens, is seen as happening through ‘things’ and in a human social collective, through ‘local, independently-existing object-organisms with locally (internally) originating behaviour.

‘Space’ is not seen as playing a role here. The ‘powerful emperor’ rarely sings “I wander in a fragile barque in life’s tempestuous sea”. But of course, if he is on the beach with his full entourage of courtiers and guards, the tsunami will engulf him and play with him regardless, dashing his head upon the rocks and making fish-food out of him and so accelerate his subducting into nature’s continuing fluid-dynamical cycles of renewal without his permission and without bothering to negotiate with him.

A man alone in the forest is not going to be made the slave of bears or other ‘powerful creatures’, even if the bear has the power ‘to do violence’ to the man. The bear does not channel his power so that it demands certain behaviours from the man, that make the man dance like a puppet whose strings are pulled by the powerful one. This use of power is characteristic of the human social dynamic and it attaches to the ‘powerboating psyche’ wherein ‘power’ is applied to the bringing about of a future desired state, by obeisance to rules, plans strategies commanded by a powerful central authority, out of the context of the individual’s participation in a common nonlocal fluid-dynamical spatial continuum.

An example of this understanding of ‘power’, which ignores the individual’s uniquely situated inclusional participation in the fluid-dynamics of his living space, is where a powerful man or powerful central authority decrees the existence of a sovereign nation by notionally specifying its imaginary-boundary lines and ensuring that the ‘supreme central authority over internal affairs’ ‘makes believers’ out of all who would ignore them, by using the power to do violence. Bears and birds, not to mention winds and running waters, insects, thermal flows etc. etc., pay no heed to such artefacts of the intellect, and neither do many naturalist humans, unless they are apprehended in the act of ignoring the notional ‘local, independently-existing nation’ whereupon they will be beaten about the head and/or incarcerated to convert them to these beliefs (‘sovereignty’ is a secularized theological concept. See Peter D’Errico (law professor emeritus at the University of Massachusetts) - *Native American Sovereignty: Now You See It, Now You Don’t* at <http://www.umass.edu/legal/derrico/nowyouseeit.html>)

This popular notion of ‘power’, then, commonly stems from an intellectual (rational) fear associated with the threat of violence that is locally originating (from within a supreme central authority, from the apex of a hierarchical control structure, from the local, internal centre-of-self of a powerful individual. As North American native traditionalists point out, European colonizers of North America put this synthetic notion of power to ‘good use’ in their colonizing programs. As the natives say, ‘Canada and the United States do not really exist. They are the artefacts of how Europeans fought over how to divide up what they stole.

The ‘local, independent existence’ of ‘Canada’ and ‘The United States’ and any such nation-state, is not ‘real’ as in

‘natural’ but is instead a ‘belief’ secured by promises to ‘desperate people’ (as is historically recorded in Emma Lazarus poem *The New Colossus* and inscribed on the Statue of Liberty;

"Give me your tired, your poor, Your huddled masses yearning to breathe free, The wretched refuse of your teeming shore."

What was promised was co-ownership in an imaginary-line-bounded, taken-and-kept-by-force tract of land in exchange for their swearing an oath to defend belief in the existence of this imaginary-line-bounded tract and to bear arms and if necessary, give their lives to defend belief in its existence.

Power, as derives from the threat of being done violence, is the ultimate underpinning of the common belief in the ‘existence’ of the sovereign nation. In the ‘democratic system of government’ (as applies to the sovereign nation though not to the stateless form of government developed by, for example, the Iroquois six nation confederacy) the collaborating landowner collective uses their own power to do violence on themselves (ourselves) to sustain belief in the ‘existence’ of the imaginary-boundary-line based sovereign nation.. Such violence includes the suspending of the ‘privilege’ to freely reside within the imaginary-boundary lines and/or to participate in the collective plans to define and bring about a desired future within the sovereign nation.

As Alvin Toffler (*Power Shift*) and others have noted, the power to do violence can be acquired by the power of affluence, and affluence can be acquired by the power of knowledge, and thus those who can stay ahead in the

acquisition of knowledge can dominate over others in the 'power game'.

Less than a century ago, in the heyday of the British Empire, the overt admission that power-to-do-violence was an appropriate means to 'rule' a nation and to operate in the world community of nations (in some cases 'nations-as-people-collectives' with blurry geographical boundaries rather than imaginary-line-bounded and policed sovereign nation-states). Colonization was first through 'protectorates' and gradually through 'bringing democracy to the world' by one political bloc or another, creating democratic nation states backed by their major military powers. In all cases, there was a territorial claim specified by imaginary-boundary-lines and declarations of independence and sovereignty (ownership of land and supreme authority over 'internal affairs'). In the era of 'nations' as 'people collectives', there was no notion of an 'inside' and 'outside' of a nation, nor was there any corresponding notion of 'supreme authority over internal affairs'. As protectorates or 'new democratic sovereign states' were established in concert with and with backing from foreign military powers and the new 'supreme central authorities' over 'internal affairs' set up, the traditional authority of local tribal leaders, sheiks and elders (which had functioned without the theological concept of sovereignty with its absolute 'inside' and 'supreme authority over internal affairs') was pulled out like a carpet from beneath their feet.

This discussion of 'sovereignty' and its foundations in 'threat of doing violence' leveraged in turn by the acquisition of superior levels of wealth that can be used to procure the means of doing violence and thence again by the acquisition of knowledge that has wealth-generating power is not intended as a 'political statement'. It is the

reiterating of a historical development in which a non-natural, intellectual notion of 'power' has become embedded in the social dynamic.

We are well aware of the synthetic nature of the power of the leader of a corporation or sovereign nation, in that such 'power' would accrue to anyone, however worthy or unworthy, who gets to 'sit at the apex' of a hierarchical control structure, and the frequent corrupting of the leader who gains accession 'to the throne' gives credence to Lord Alton's "Power corrupts, absolute power corrupts absolutely".

Hierarchical control structures are 'powerboating' structures which 'fit' the 'local object dynamics' model; i.e. they are conceived of as 'local, independently-existing objects/organisms/organisations with internally originating behaviour'. Their behaviours are understood as being locally internally motivated by the purpose of attaining some desired future destination/objective.

Like the 'powerboating individual', the powerboating organisation DOES NOT SEE ITSELF in the sailboating context of sharing inclusion within a common, fluid-dynamical living space, though it is periodically overtaken and engulfed by tsunamis in the social/environmental dynamic and may suffer breaching, broaching, breakup and ultimately 'going under', in spite of the 'genius' of their 'positivist' deterministic plans.

While far less common in our culture, there is also the 'sailboating' leadership style, as exemplified by the traditional native 'leaders' who believe that all power derives from nature (from the dynamical space he is included in). They derive personal power not by rallying powerful cronies to their support, but in the manner of the

captain of a sailing vessel and crew; i.e. through their manner of participating in the fluid-dynamics of the space they are situationally included in; i.e. by sustaining the health and vitality of their crew and their charges.

In the fluid-dynamical worldview, the powerboating notion of locally originating power (e.g. from the apex of a hierarchical organisation or from the 'supreme central authority' of a 'sovereign nation' gives way to the sailboating notion that all power derives from nature (the nonlocal fluid-dynamical spatial continuum) and as in sailboating, our power must come by way of energy-exchange, as is the case with 'convection cells'. We may measure the power of a horse by measuring the amount of work it can do per unit time (e.g. by raising weights from the bottom of a dry well), but by the principle of conservation of energy, we know that the horse will consume the energy equivalent of that work so that the power does not really come from the local interior of the horse, but through an energy exchange that re-renders the horse in the context of a convection cell that is 'sailboating' in the fluid-dynamical space of nature, rather than as a local, independently-existing object/organism with internally-originating behaviour trotting around in empty Euclidian space.

Of course, not everyone embraces this notion that we or a horse 'wander in a fragile barque in life's tempestuous sea'. Technology has encouraged us to think of ourselves as Captain of the Titanic, dissolving our 'sailboating psyche' and substituting a 'powerboating psyche'. This technology-assisted fall of the sailboating psyche has made way for the modern era's rise of the powerboating psyche which is in turn sourcing rising levels of sustained incoherence (Bohm) in the (fluid-)dynamics of the space we share inclusion in. Meanwhile, there appears to be a

global rise in awareness of the warning given by sailboating natives to the powerboating European colonizers;

“Teach your children that we have taught our children that the earth is our mother. Whatever befalls the earth befalls the sons of the earth. If men spit upon the ground, they spit upon themselves. This we know: the earth does not belong to man; man belongs to the earth. All things are connected.”

The phrase ‘man belongs to the earth’, and similar formulations by those who are not living in technological shells and sitting at the apex of organisational hierarchies, reinforces the appropriateness of the fluid-dynamical worldview and the ‘sailboating psyche’ that goes with it. The rise of NGOs such as ‘Doctors without borders’, Fair Trade and Fair Travel initiatives and organisations underscore a rising awareness that we share inclusion in a common dynamical space, ... and an implicit if not explicit acknowledgement of Mach’s Principle, ... that our dynamics condition the dynamics of the space we share inclusion in at the same time as the dynamics of space condition the dynamics of we who are included participants.

Against this backdrop of a resurrecting sailboating psyche, the persisting of the powerboating psyche in powerful individuals, powerful sovereign nations and powerful corporations looks strangely incongruous and starkly unnatural.

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Chapter IV

From Peace (stasis-seeking) to Harmony

As discussed in the glossary of terms (see *dynamical-balance*), our conception of ‘peace’ relates to our conception of ‘balance’. That is, when we are ‘not at peace’ we are ‘out of balance’, but what does it mean to be ‘out of balance’?

When we conceive of the world dynamic in terms of the dynamics of local, independently-existing objects with locally originating behaviours, acting and interacting in empty Euclidian space, ‘out of balance’ translates into ‘out of balance behaviours’ and invites a judgement as to whose behaviours are ‘causing’ the social dynamic to become ‘unbalanced’. ‘Excesses’ and ‘deficiencies’ in an individual’s behaviour might be identified as the ‘cause’. The response is then to attenuate or eliminate those individual behaviours that are seen as responsible for the overall social dynamic ‘falling out of balance’.

But when we conceive of the world dynamic in terms of a nonlocal fluid-dynamical spatial continuum in which we are included flow-forms (locally apprehensible dynamical forms), then we accept that we are participants in a dynamical flow greater than ourselves and the notion that we have a behaviour of our own no longer makes any sense. We certainly have ‘our own manner’ of participating in the fluid-dynamical space that we share inclusion in, but as in the ‘three body problem’ in physics (where three or more bodies move under one another’s simultaneous mutual influence) there is no way to ‘solve

the overall dynamic' in terms of the explicit behaviour of individual participants.

This situation is no way alien to our everyday experience. When we participate in freeway traffic flow, as in the 'sailboating' metaphor, we put our movements in the service of sustaining dynamical balance with(in) the fluid-dynamical space we share inclusion in. In terms of sustaining harmonious traffic flow, what counts is the quality of our participation in the fluid-dynamical space we share inclusion in. Together, our dynamics condition the flow-dynamics of the space we share inclusion in at the same time as the flow-dynamics of space condition our dynamics. Such an approach leads to resilience in the flow and the subsuming of tendency towards collision and conflict prior to its actualizing. It is the quality of our participation, as a group, that will sustain a harmonious traffic flow.

In this 'sailboating' mode of behaving, our movement is not relative to some fixed coordinate system (of course an outside observer is always able to describe our movement relative to a fixed euclidian frame) but in the actuality of our experience, we move relative to the dynamically transforming spatial relationships we are included in. And so it is with our fellow participants that this relaxing of absoluteness (local self-centre-driven-ness) of our movement opens the way for us to 'move under one another's simultaneous mutual influence'. Here, the notion of 'one's own behaviour' is meaningless, whereas the 'sailboating' notion of the 'quality of participation in the fluid-dynamical space we share inclusion in' is meaningful.

If we make the analogy between the flow of traffic on the freeway and the world dynamic in general, we can probe the nature of 'war' and 'peace' in this context.

As a first consideration, the freeways (and the world) are populated by people who are employing two different meaning-giving architectures. There will be those who invoke their 'sailboating psyche' and accept that they are participants in a fluid-dynamical spatial continuum that is greater than themselves. For them, intuition based participation comes first and 'thinking' (powerboating destination oriented plans) is something 'second' that they can nevertheless 'carry with them as they participate. There will likely be a correlation between 'sailboating psyches' and those who feel 'vulnerable' (e.g. small car and motorcycle drivers) and thus that they 'wander in a fragile barque in life's tempestuous sea'. Mixed into the group will be 'powerboaters' who are unwilling to accept deviations in their destination-oriented plans and strategies. There will likely be a correlation between those that invoke their 'powerboating psyches' and those who feel relatively 'invulnerable' (e.g. semi-trailer drivers).

The official 'rules of the road' say nothing about 'sailboating mode' and so if one switches lanes rapidly and without signalling to avoid colliding with someone who is coming into one's lane in the same manner (and who may be doing so to avoid collision as well), then one is opening oneself up to being blamed for a collision should one ensue, even though one's actions were shaped by an attempt to avoid a collision. Such sailboating dynamics often go on in the freeway flow and very often there is a whole raft of rule-breaking veering, swerving, accelerating and braking without a collision resulting. The drivers could be congratulated for the quality of their participation in the flow-dynamic; i.e. their co-contributing to the sustaining of dynamical balance and harmony in the traffic flow (their avoidance of threatened collision). But if one of the drivers had 'stuck to his guns' and refused, though he had space, to

veer out of his lane to avoid collision with another driver veering into his lane, then there would be no all-round congratulations for conflict avoidance, but instead, the rule-breaking veerer would be identified as the cause of the conflict/collision and the driver who stuck to the rules and refused to take collision-avoiding action would be identified as the victim.

What could we take away from this freeway analogy as to the nature of 'war' and 'peace'?

1. Both 'sailboaters' and 'powerboaters' share inclusion in the common flow-space.
2. The least vulnerable tend to employ a powerboater psyche, the most vulnerable a sailboater psyche.
3. The prevailing system of judgement/justice holds each individual to be fully and solely responsible for their own behaviour and associates 'cause' with excesses and deficiencies in individual behaviour.
4. The mix of sailboaters and powerboaters leads to conflict since the sailboaters put 'participation in a dynamic bigger than themselves' first and 'deterministically attaining a desired destination' second, while powerboaters invert this priority.
5. 'War' to the powerboater is caused by excesses and/or deficiencies in individual behaviour while 'war' to the sailboater comes from denial that we share inclusion in a common fluid-dynamical space.
6. 'Peace' to the powerboater is the eliminating of excesses and deficiencies in individual behaviour while 'peace' to the sailboater is sustaining dynamical balance and harmony in the fluid-dynamical space we share inclusion

It is not hard to see that the powerboating mode seeks to bring about peace by eliminating both deficiencies and

excesses in individual behaviour; i.e. it tends towards the homogenizing of the participants, while the sailboating mode seeks to bring about peace by putting one's behaviour in the service of sustaining dynamical balance and harmony. Thus, in the fluid-dynamical world which invokes the sailboating psyche, 'peace' must shift from the two pan balance mode where each individual (or nation) is compared to an ideal (normal) individual (or nation) and his excesses or deficiencies corrected to 'bring him into balance', ... to the 'dynamical balance' mode wherein the individual (or nation) comprehends that he/it is a participant in a fluid-dynamic greater than himself, putting his behaviour into the service of cultivating, nurturing and sustaining dynamical balance in the fluid-dynamical space he shares inclusion in.

Instead of understanding 'peace' as a 'moderating of individual behaviour' which is meaningless in a fluid-dynamical worldview ('individual behaviour is undefined'), such a notion of peace must give way to the co-sustaining of 'resonance' or 'harmony' which bypasses the balance pan assessment of particular individual or national behaviours relative to 'normal individual or national behaviours' and the correcting of deficiencies and/or excesses as may arise from such balance pan (stasis seeking) assessment/correction. Since the most widespread 'norm' for behaviour in individuals and nations will follow what has been impressed upon them by the most powerful, this reasoning follows the principle of LaFontaine; 'La raison du plus fort est toujours la meilleure'.

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Chapter V

From Good-and-Evil to Their Invisible Spatial Inverse (Induced Nurturance-and-Destruction)

The local-object-dynamics worldview understands dynamics in terms of 'what things do' and 'Good' and 'Evil' are understood in these local-object-dynamics terms. The implication is that such behaviours are the work of 'local, independently-existing objects/organisms with internally originating behaviour. The motivation that resides locally, internally in the organism and drives the behaviour is where the source of 'Good' and/or 'Evil' (are seen to) emanate from.

In the fluid-dynamical worldview, there are no 'local independent objects' with 'locally (internally) originating behaviour and thus there is no 'motivation' that is the driver and shaper of the purported locally originating behaviour. That is, in the fluid-dynamical worldview, 'motivation' is subsumed by 'encouragement' as discussed in the earlier section From Motivation to Encouragement.

That is, in the local object dynamics model, we deal with the visible actions and interactions of people and it is on this basis that 'good' and 'evil' take on meaning. What is invisible is their implicit counterparts, 'encouragement' and 'discouragement' which are spatially accommodating/disaccommodating in nature.

There is also meaning in 'what is not done' which is therefore 'invisible'. For example, Geronimo's people were 'not doing something'; i.e. 'they were not eating', ... but why did they 'not eat'? Well, they had consumed all of the game in the area of the reservation. As Marie Antoinette

might have said; 'well, let them eat cake' or something else, ... but they didn't have anything else and they had no money to buy it from the white man and would have had to become the white man's slave to earn the money to buy it because they were denied access to the space that they used to have access to that accommodated their need to eat something.

Geronimo's violent actions, which were seen to have local internal point-source origination in the local independent object that was Geronimo, were judged to be 'evil'. The control over space, the source of all power and possibility and accommodating, was given by the Church to the secular political leaders in the fifteenth century during the heyday of the colonizing of the Americas. It was understood in the context of splitting apart authority over the temporal and spiritual realms, delegating authority over the temporal material realm (land) to the secular political leaders with the Church and its priests retaining authority over the spiritual realm, ... a splitting which led to the birth of the notion of 'sovereignty', God-given authority over land (space) delegated to man.

Again, 'good' and 'evil' are concepts that we associate with 'actions' and when we see (i.e. when it registers in us) that certain actions are missing, as when 'people are not eating', we do not see any point-source cause of this non-action and if and when a rich landowner 'descends' into the starving masses and 'feeds the people', we do recognize this as 'good' since it is a visible action. But, insofar as the rich landowner is monopolizing space, the source of all power and possibility-giving and accommodating, he is contributing, by the denying of access to space, to the stifling of essential actions such as 'eating', the result of which is a growth in 'non-actions' and non-actions cannot be labelled either 'evil' or 'good' because non-actions are

non-visible (invisible). So the control of land/space manifests in non-action (people not eating) and 'evil' and 'good' apply to 'what things do' as if from local point-source origination.

The notions of 'good' and 'evil' are thus dependent on the local object dynamics model with its notional locally originating behaviour. In the fluid-dynamical world view, 'good' and 'evil' would be subsumed by dynamical spatial relationships. This does not make light of what we call 'evil behaviour' which derives from the causal model where we work back from the 'evil outcome' to find the 'smoking gun'. In the case mentioned in the introduction where we identify Adolph Hitler as the 'evil-doer', it is easy to forget and to keep out of context, the tension-breeding influence of the treaty of Versailles (1919) and to work our way back, local object dynamics-style, from the outbreak of violence to the first 'smoking guns' we can find, and thus identify Adolf Hitler and his National Socialists as the 'evil' causal agents. This ambiguity in our inquiry into the origins of the violence is often expressed by the question; 'Did the man make the times or did the times make the man?' and by 'times' is intended 'the currently prevailing conditions in the dynamical living space we share inclusion in.' One could ask this question in the following equivalent meaning-giving words; "Should we understand the war by way of a fluid-dynamical (spatial-relational energy flow) worldview or by way of a local object dynamics (whodunnit) worldview?".

What is tied up in the shift from 'good' and 'evil' to their spatial inverse/complement is the western mainstay, the causal model itself. Our negligent action in tossing away an un-extinguished cigarette butt may be mildly 'bad' but not what one would call 'evil'. Similarly, Hitler could rail away in a bar about Jews and Slavs and if that were all

there were to it, he would likely be dismissed as an eccentric nuisance. But the tossing of the cigarette butt would be seen in a different light if it ignited a forest fire that burned an entire village to the ground with great loss of life. Because our meaning-giving architecture is the local object dynamic model (the 'causal', 'deterministic' model) we would still say that the person tossing the butt is fully and solely responsible for his own behaviour and thus is the fully responsible cause of the damage done. But just as a long summer's drought rendered the forest tinder-dry, a disaster waiting to be set off by some triggering agent, so did the twenty years of intra-European tensions from WWI to WWII condition the space of Europe in such a manner that the butt-flicking of an Adolph Hitler that might otherwise have been an easily endured nuisance was instead capable of igniting a fire-storm of violence and destruction

The problem here is that the 'initial conditions' in our scientifically-minded mental modeling, we specify to ourselves in terms of the initial behaviours and locations of all of the local objects that are participating in the dynamic, but the condition of space is not encompassed in such a specification. In the words of Poincaré;

"A very small cause which escapes our notice determines a considerable effect that we cannot fail to see, and then we say that the effect is due to chance. If we knew exactly the laws of nature and the situation of the universe at the initial moment, we could predict exactly the situation of that same universe at a succeeding moment. but even if it were the case that the natural laws had no longer any secret for us, we could still only know the initial situation *approximately*. If that enabled us to predict the succeeding situation with *the same*

approximation, that is all we require, and we should say that the phenomenon had been predicted, that it is governed by laws. But it is not always so; it may happen that small differences in the initial conditions produce very great ones in the final phenomena. A small error in the former will produce an enormous error in the latter. Prediction becomes impossible, and we have the fortuitous phenomenon." --- Henri Poincaré, Science and Method

When the tensions have been accruing; e.g. in a pile of sand building (at the critical angle of repose) from the addition of grains of sand at its crest, a single grain may trigger an avalanche of huge relative proportions even though the effect of that same grain at some other time (relative to some other spatial relational circumstance) would have been minimal. This is the character of nature's dynamics and just as we would not give fully credit to a particular sand grain for the massive avalanche, it would be illogical to credit Hitler with the 'power' to cause the massive death and destruction he appeared to have caused, just as it would be illogical to credit the cigarette butt tosser with the 'power' to cause the massive death and destruction he appeared to have caused.

Similar understandings apply to the nature of 'good' as to 'evil'; i.e. as Mach's Principle informs us, there is no such thing as the behaviour of a local object/organism and/or his creative/productive achievement, out of the context of the condition of the fluid-dynamical space he shares inclusion in.

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Chapter VI

From Chrono-logical to Morpho-logical

'Time' has always been a topic of philosophical controversy. Opinion amongst scientists as to whether 'time' is even needed in a scientific worldview, has been split. While Einstein felt that it was needed, Poincaré felt that it was not. Today, physicists working on the reconciling of relativity and quantum theory such as Lee Smolin and Carlo Rovelli, see the need to 'take time out of the unified theory'.

David Bohm, who also felt that 'time' was not foundational to nature but rather a 'representation' (associated with our self-centred sense of 'going forward' and 'leaving a wake') observed;

"You say the clock tells time, but it doesn't. What you actually see is the position of the hands of the clock, not the time. It means time; it's been set up in such a way that it should measure time. But we never actually see, perceive, or experience 'time' -- - its inferred. ... if you thought that time was a basic reality then you would have a paradox. The past is gone --- it doesn't exist. The future doesn't exist either --- it's not yet. And the present, if it were thought of as the point dividing past and future, also could not exist, because it would be dividing what doesn't exist from what doesn't exist. That's the paradox of this view. However, it is no paradox if you just say that 'time is a

representation'. A representation can be all kinds of things."

Removing 'time' from our meaning-giving architectures, whether it be in the case of our everyday discourse or in the case of the physical sciences, is problematic in that we have built so many dependencies upon it.

Meanwhile, it is not hard to see why we have done so. In the worldview of Heraclitus, Lao Tsu, Buddha, reality was 'flow'.

What is flow?

'Flow' is 'continuing transformation' in 'spatial relationships'. When material entities are involved, it is called 'metamorphosis' (as from a tadpole to a frog and/or a larvae to a butterfly).

In geology, it is understood that the Earth is continually transforming by its participation in the ongoing dynamics of the universe. While this is often referred to by way of such 'labels' as 'plate tectonics', or 'ocean basin geomorphology', there is a recognized problem here in building a technical, scientific taxonomy on the basis of 'forms' that are intrinsically transient. That is, 'geomorphosis', the metamorphosing of the earth, is essentially, OVER THE LONG TERM, a 'fluid-dynamic'. The building blocks we use for describing what is going on, such as 'the continent' do not 'really exist' in the sense that they do not have any persisting 'identity' of their own.

If they don't have a 'persisting identity of their own'; i.e. if we can't rightly say that they are 'local, independently-existing objects with locally originating behaviour' but are merely observable 'features' in what is essentially a 'fluid-

dynamic' then the idea of the 'life-cycle' of one of these features (a 'continent') is no longer viable.

What if the universe is a fluid-dynamic as is suggested by the matter-equivalence of relativity and by the wave-dynamical equivalence of all material particles? As Schrödinger has noted, everyTHING, every material body then becomes 'schaumkommen' ('appearances'); i.e. 'locally apprehensible forms in the nonlocal fluid-dynamics of nature'.

In this case, meaning-giving in terms of 'things that move' is no longer viable. We are stuck with the familiar situation that we have to deal with in the case of 'storm cells' in the fluid-dynamic of the earth's atmosphere (which is interdependent with solar irradiance and the celestial (fluid-) dynamics beyond our solar system. That is, these storm cells are in relative symbiosis and are neither 'local' in nature (the apparently local 'whirl' when one lets out the bathwater is not local but inferred by nonlocal gravity-induced convection). The whirl is thus like the apparent 'centre' in the hair on our heads given by all the hairs 'falling away from it'. It is not a 'local thing' but is instead a 'mental inference'. Such is also the case with a 'hurricane'.

One might argue for a moment, saying; "I know that a hurricane is a 'real thing' because I have seen one approaching and experienced its force as it passed over me". But the reality is that we are continually included in the fluid-dynamics of the atmosphere and as we can see from satellite photography, the atmosphere is a continually dynamically unifying flow and we have no solid support for isolating a feature within that flow, bestowing 'local object existence on it' and then personifying it as something that 'is building strength', 'is moving

northwards', 'is weakening' etc. etc. As has been mentioned thematically in this book, to do this is to "choose not that which is most true, but that which is most easy".

There is no philosophical problem (inconsistency) in interpreting our living experience in terms of our participation in a continuing fluid-dynamic (continuing metamorphosis) as matter-energy equivalence and quantum wave theory would suggest. Metamorphosis simply implies 'transformation' in a spatial-relational sense. As Heraclitus opined, the forms we see are not locally persisting but are 'appearances' within a continuing fluid 'scattering' and 'gathering'.

In such a 'fluid-dynamical world' there are no discrete temporal 'life-cycles' because there are no discrete 'local objects' with persisting identity. 'Objects' are 'perfect forms' that we can generalise by Plato's method of finding commonalities across a multiplicity of particular instances of dynamical forms in nature that appear to be imperfect renderings of a common 'universal form' but as has been illustrated with the example of the 'hurricane', this 'dislocated, local, independently-standing' version of the hurricane with notional 'locally originating behaviour' (described by a trio of coupled differential equations) is not the same as the particular hurricanes we started with which were all included within a fluid-dynamical space where 'each one' (we cannot even correctly say 'each one') is transforming under the simultaneous mutual influence of 'them all'. Note that my use of the plural of hurricanes comes only from my powers of visually distinguishing different locally apprehensible dynamical patterns on the surface of a single fluid-dynamic. I am doing that which John Stuart Mill spoke of; i.e. 'by naming something (the hurricane) axiomatically affirming its existence'. 'Objects'

are mathematical axioms that we impose on nature, they are not innate in nature. As Poincaré observes;

“Such axioms [the existence of local invariable objects (objects with fixed persisting identity)] would be utterly meaningless to a being living in a world in which there are only fluids.”

Still, we are so accustomed to accepting the existence of local objects that we regard the boundaries of our nation as defining the ‘inside’ of a sovereign object state so that speak of ‘entering the country’ or ‘leaving the country’ as if it were a local object with an ‘inside’ that is mutually exclusive of its outside, ... even as the wind, water, insects, animals, birds of nature would laugh at us for such confusing of ideas with natural reality. Any three points ‘define a triangle’. Do you believe that ‘triangles exist in nature’? If another person puts three rocks in the sand that define an equilateral triangle with ten foot long sides and you are in the middle of it and they tell you that you can’t go outside of it. Do you believe that this triangle exists in nature? If the person we directed your attention to it is a bully, he will ‘make a believer out of you’ by doing violence to you. This is the history of the formation of sovereign nations as discussed in the Appendix.

This discussion of the existence-or-not of ‘objects’ is relevant to the question of whether ‘time’ is ‘just something we make up’ or whether ‘time’ is a property of nature. While we commonly say that ‘the universe is ten billion years old’, ... how would we know? As Smolin and Rovelli point out, a theory of the universe cannot use anything ‘outside of the universe’ such as an outside observer in a supra-nature antechamber with a reference clock that he uses to mark ‘when the universe began’ and then to measure ITS aging in some or other units of ‘time’.

What-do-we-mean-by 'ITS'. Who is it that determines that 'the universe' is a 'local object with persisting identity'? We effectively take ourselves to be God by this act of objectifying the space that we are included in, presuming its birth and clocking its aging.

If the universe is a fluid dynamic and we are locally apprehensible dynamical forms within it, then however useful 'time' is (we use it to say when objects begin, end and age, and when objects act and interact; i.e. our 'local object dynamics worldview' depends not only on 'the existence of local objects' but also on the 'existence of time' since, otherwise, we could not address the life and death of objects, nor their motion (our convention for object motion is to suppose that the objects reside within an absolute fixed and empty (Euclidian) space where motion is constituted by the object's changing of location as a function of 'time'. This is the familiar x,y,z,t 'four dimensional space-time' of physics. If there are no objects, there is no changing of location of the object and no need for 'time'. The alternative view is that our living space is continually transforming; i.e. our living space is in flux, and we certainly have the sense that there are rhythms and periodicities to this continuing transformation ('We met, got married and had children several klongs ago').

Meanwhile, there is no need to interpret the latter statement in parentheses in terms of 'the passage of time'. If we are in fact 'convection cells' like 'hurricanes' in a common fluid-dynamical living space (i.e. if we are in fact innately interdependent through the common mediating fluid-dynamical 'substrate' of nature) then we would be understanding ourselves as locally emergent dynamical forms within the fluid-dynamical 'all' of nature. By being participants within the flow (without the option of not

participating), we will never be able to actually ‘get outside of the transforming fluid-dynamical space’ and thus our observations and experience will be ‘relative’ to the dynamics of the natural living space we are included in.

We can rightfully conclude then, that the concept of time is ‘not needed’ in order to understand our observations/experiencing of dynamics; i.e. ‘dynamics’ can be understood as spatial-relational transformation or ‘metamorphosis’. But how can we ‘get into trouble’ (introduce inconsistencies or incoherencies into our understanding) by assuming that ‘time’ is a property of nature?

Metamorphosis is a form of change that is ‘more powerful’ than local object dynamics based x,y,z,t change, hence it is often associated with ‘magic’, ‘sorcery’ or ‘alchemy’.

For example, no matter how finely we break down a larvae into local parts (or even ‘micro-particles’) and no matter how closely we monitor the changes in form in each part and the changes due to the interactions of combinations of the parts, we will not be able to understand how the ‘butterfly’ result emerges. It will be as if some mysterious sorcerer outside of the ‘object’ that is changing is in charge of what is going on.

The same is true when a collective of amoebates in ‘plasmodium’ form complex macro-organisms with behaviours that cannot be explained on the basis of the dynamics of the participating amoebates. The flock flying of birds and the school-swimming of fish are further examples where there is no way to explain the macro behaviours in terms of x,y,z,t local object dynamics terms (simulations are NOT the equivalent of giving understanding of the natural dynamic itself).

That is, our problems in assuming that ‘time’ is a property of nature begin when we try to explain the coordination of the multiple individuals in a collective. In the flock-flying of birds, we are amazed at how all the birds seem to turn ‘simultaneously’ as if ‘they were all of one mind’, and similarly for the fish, honey bees making hexagonal cells etc.

If we assume there is something called ‘time’ and that the world dynamic is constituted by local objects that move ‘in time’ (change location in temporal sequence), then this assumption is what clashes with our observations and experiencing of seemingly ‘simultaneous’ dynamical phenomena. Note that ‘metamorphosis’, depending only on changing spatial-relationships, is ‘atemporal’. That is, we do not need the combination of ‘time’ and ‘changes in location’ to describe this ‘fluid-dynamic’ since there is nothing to ‘change location’ (no ‘things’ with persisting identities that we can say was ‘over here at time = T and which moved to over there at time = $T+dt$). In energy-fluid-dynamics or ‘wave dynamics’, the movement of material objects is not foundational to the wave/fluid-energy dynamic but infers the fluid-dynamic, as can be visualised in the case of the whirl when we let the water out of the bath-tub; i.e. the form of the whirl and ‘its movement’ infers the fluid-dynamic that it is included in.

The collection of soap bubble cells forms a unique-looking hexagonal cluster. How do THEY do this? That is, if we consider the individual cells to be ‘local objects’ then how do we explain their collective coordination? For example, they all become hexagonal SIMULTANEOUSLY, and so it is with the bee cells.

If we understand ‘cells’ to be local objects with locally originating behaviour and if we understand behaviour (the growth of form and/or the locomotion of forms) to be the product of a temporal sequence of actions and interactions (the local object dynamics worldview) then we are going to have a problem with phenomena wherein a collective of individuals all change simultaneously as in the metamorphosis of body cells from embryo to infant.

How do all of these cells coordinate? They must all possess, as individuals, a common understanding of the desired form of the future they are co-constructing. This is the assumption of modern mainstream scientists however absurd it may seem to impute rational minds (time-based central processing units) and ‘intelligent design’ capabilities to cells and insects to explain their simultaneous collective dynamics.

The problem of ‘communications’ in any collective is described, in mainstream science, by the processes of (time-based) ‘feedback’ and time-based ‘adaptation’ (on the part of the ‘object/system’). Simultaneity on the part of multiple individuals in a collective is beyond the scope of this mainstream theory.

This is where ‘time’ gets us into a lot of trouble because we conclude that the coordination of a collective (of cells, of humans) can only be ‘time-based’ (and not space-based, as when we are all participants in a common living-space dynamic), which leads us to the architecture where there is one supreme central authority or ‘Central Processing Unit’ that ‘receives information’ from all of the participants in the collective, updates the archive, interprets the updated information, formulates alternative responses to the new conditions, decides on action and issues corresponding commands to the participants.

When the tide ebbs and the waters recede so that the intertidal flats, rich in clams, oysters, crabs are exposed, and the collective of local residents (clam-diggers and oyster pickers) seems almost to be part of these periodically receding and encroaching tidal flow, how do we explain the amazing coordination of the collective of people? If we interview them, they will likely insist that they are ‘individuals’ (local, independently-existing object-systems/organisms with locally originating behaviour) that act ‘out of their own free will’ and who are ‘fully and solely responsible for their own behaviours’ and are doing what they are doing because ‘it makes sense to them’. And if they are asked ‘why the coincidence’; i.e. that so many others are SIMULTANEOUSLY doing the same thing, they will likely reply ‘great minds think alike’. That is because there is no way, in the local object dynamics worldview which builds an understanding of motion starting from the local objects with locally originating behaviour that change their locations in temporal sequence, that one can get to that sort of understanding wherein the dynamics of a collective are inductively actualized and shaped by the dynamics of the common space they share inclusion in. For this we need a ‘fluid-dynamical worldview’ wherein we trade out our ‘powerboating psyche’ for our ‘sailboating psyche’ and accept that ‘we are all participants-without-the-option-of-not-participating in the ongoing fluid-dynamic of nature.

The notion of ‘time’ ties to the mainstream notion of ‘communications’ between local entities (not ‘communications’ in the phase-locked spatial-relational [holodynamical] sense of Gabor, but ‘communications’ in the sequential-temporal transmitting and receiving mainstream sense of Shannon and Wiener). This is what forces mainstream scientists to impose ‘rational minds’

(central-processing-unit based direction) onto individual cells to explain their coordination in collectives that we understand as 'local object systems' and that we refer to as 'organisms'. All of this mental modeling is 'positivist', starting with 'locally originating behaviour' within the individual cells (or organisms in the case of human social collectives) and there is no room in this type of modeling to acknowledge that the behaviours of multiple individuals within a collective are simultaneously inductively actualized and shaped by the dynamics of the common space they share inclusion in, as is implied by Mach's Principle and as is affirmed by phenomena such as the hexagonal shaping of bee cells, convection cells and soap bubble cells.

But so long as we believe that communications are 'time based' and that the individuals within a collective are 'local, independently-existing object systems with locally originating behaviours', we will believe that the organising of collectives must be by temporal sequential 'feedback' and 'adaptation'. The preferred design for the coordination of such collectives then becomes the centralized 'hierarchical command and control' architecture. cursory examination will show that this type of organisation is nothing other than a replication of the basic archetype; i.e. a 'local, independently-existing object/system with locally originating behaviour'. This archetype is also found in 'the sovereign nation' (see Appendix) and is shown to be based on the secularized theological concept of monotheist 'internal first cause' (imputed local originating of form and behaviour).

Marshall McLuhan tried to point out that 'the medium is the message', as is indeed the case with the fluid-dynamical worldview. McLuhan's example made use of the archetype of local production (the 'machine' or 'factory'). Our

understanding cannot start from 'what a factory does' (as he put it, it makes little difference if it produces cornflakes or cadillacs). What is of over-riding importance is the continuing evolutionary flow that we 'interpose the factory into'. How that flow is inductively transformed by the interposing of the factory is, in McLuhan's view, the real meaning of 'what is going on'; i.e;

"In terms of the ways in which the machine altered our relations to one another and to ourselves, it mattered not in the least whether it turned out cornflakes or Cadillacs."

When the bough of the tree engages with the windflow, the engaging is simultaneously mutually transforming (Mach's Principle holds). When the factory operation engages with the social flow, the engaging is simultaneously mutually transforming.

If we are the CEO of the factory, we are more likely to be in our 'powerboating psyche' where we are destination-focused (focused on our production targets) and oblivious to the inductive transformation of the social flow we are included in. If we are the farmer of a nearby farm who is hoping his son will take over the farm and keep it going, we are more likely to be in our 'sailboating psyche' where we are focused on sustaining dynamical balance and harmony in our particular situational inclusion in the dynamical space of the community.

As in the example of the hurricane, the CEO is regarding the factory in the Platonic terms of a local, independently-existing object-system with locally originating behaviour while the farmer sees the emerging factory in the manner of the whirl when the bathtub water is draining; i.e. the activity that we associate with the factory, is in reality the

inference of transformation in the social flow (common living space dynamic) in which it is situationally included.

Our ERRONEOUS belief that 'time' is a 'real' aspect of nature thus makes a huge difference in how we proceed in organizing our collective social dynamic. The powerboating of corporations and sovereign nation-states exemplifies our belief in 'time' i.e. in 'local, independently-existing object systems whose dynamics we understand to be in terms of locally originating, temporal-sequential actions and interactions. This 'time' and 'local object' based worldview is also the underpinning of our notion that 'competition' is another aspect of nature, rather than being an abstract idea that we impose on nature.

People have not habitually had to live under the thumb of absolute supreme central authorities of sovereign nation-states or sovereign corporations that believe that 'the best local, independently-existing object/system with locally originating temporal sequential behaviour' DESERVES TO WIN. The alternative fluid-dynamical worldview of Heraclitus, Lao-Tsu, Buddha and others is one in which individuals in a collective can be likened to convection cells that engage in dynamical balance-seeking energy-sharing. Sure, imbalances arise in such a situation, but the ethic of nature is not to actively promote such imbalance as is the way of the 'powerboating psyche'. It is instead to acknowledge that we are all participants-without-the-option-of-not-participating in a common dynamical space, and to put our behaviour in the service of sustaining dynamical balance as is the way of the 'sailboating psyche'. We do this automatically when we 'drive friendly' on a busy freeway.

Sustaining harmony in the dynamics of a driver-collective in a busy freeway space is not something that follows from

‘time-based’ feedback and adaptation models (although it is always possible to model systems using this simple paradigm). When three or more participants in a common space move under one another’s simultaneous mutual influence, we can no longer break out ‘who is doing what’ in the sense of the dynamical behaviour locally originating from within the multiplicity of participants. Coordination of the collection in this case is ‘morphological’ (spatial-relational as where we let ourselves accommodate the coming of the future we are reaching out to produce) as in the ‘soap bubbles’ (Mach’s Principle applies) rather than the coordination being ‘temporal’ and ‘positivist’ wherein the rigid movements of purported ‘local, independently-existing object-systems with locally originating behaviours’ are coordinated on the basis of temporal-sequential changes in their location..

The ‘outside (excluded) observer cannot determine for certain whether the participants in a dynamic are in their ‘powerboating psyche’ mode or in their ‘sailboating psyche’ mode, though reflection would suggest that bees and soap bubbles (and convection cells) are participants in a collective dynamic that is actualized and shaped by the pursuit of sustaining (simultaneous mutual) dynamical balance; i.e. a dynamic that derives from moving under one another’s simultaneous mutual influence, in the manner of storm cells within a common fluid-dynamical space. ‘Time’ does not come into this natural ‘morphological’ mode of coordinated behaviour.

Violence in Africa and the Middle East increasingly associates with the rigid application of the secularized theological ‘sovereignist’ model (the general archetype wherein we believe in ‘local, independently-existing objects/organisms/states/systems with the God-like powers of locally originating behaviour [‘internal first cause’]).

In summary, the worldview that believes that ‘time’ is an aspect of nature (as in the local object dynamics worldview) will coordinate collective behaviour on the basis of temporal-sequential interactions (e.g. ‘feedback’ and ‘adaptation’). By contrast, the worldview that does not believe that ‘time is a real aspect of nature’ (as in the fluid-dynamical worldview) will allow the unfolding morphology of nature’s dynamic to inductively coordinate individual and collective behaviour.

Participants in busy flow-space of the freeway have the option to get into their ‘powerboating psyche mode’ (where ‘time’ rules) and/or into their ‘sailboating psyche mode’ (where the unfolding morphology rules). The mainstream scientific approach to interpreting ‘what is going on’, meanwhile, will use the ‘powerboating mode’ wherein it is assumed that the participants are local objects with locally originating behaviour (i.e. that they are fully and solely responsible for their own behaviours).

This is not generally true. When three or more entities move under one another’s simultaneous mutual influence the notion of ‘individual behaviour’ no longer makes sense (it is no longer mathematically solvable). Mach’s Principle applies in this case wherein ‘the participants condition the dynamics of space at the same time as the dynamics of space condition the dynamics of the included participants. In other words, the unfolding morphology (spatial-relational dynamical form) that the participants are included in, and are co-creatively shaping, they are allowing to inductively actualize and shape their individual and collective movements.

This is nature’s way of coordinating and it is not ‘time’-based. So long as we cling to the notion of ‘time’ as being

‘real’ (in nature) then we are likely to continue to condemn ourselves to the types of social conflict that we are seeing intensify today. We shall correspondingly fail to exploit the morphological (tide-in-the-affairs-of-man or ‘catch-the-wave’) coordination that associates with the ‘sailboating psyche’ and with the dynamical balance-seeking energy-sharing of a convection-cell collective in a common flow-space.

Conclusion:

This introduction to *A Fluid Dynamical Worldview* has aimed to share with the reader the viability of a flow based meaning-giving architecture, which is elsewhere referred to as 'inclusionality'.

In this view, our local, independent object/organism self-image based on Platonic form generalisation is retired and we see ourselves instead as a flow-form in the flow-space of nature; i.e. as locally apprehensible dynamical form in the nonlocal fluid-dynamical spatial continuum of nature.

This new (old but archeologically rescued) meaning-giving architecture deepens our view of almost all of our institutionalized management and organisational schemes and allows us look more deeply and knowingly into the issue of sustained incoherence in our social dynamic (i.e. the failure of the results of our actions to reproduce our intentions).

The fluid-dynamical worldview (elsewhere called 'inclusionality') overcomes innate shortfall in the deterministic paradigm (for dealing with current era complexity) that mainstream science has leaned on and which is the foundation of our 'powerboating psyche'. As François Lurçat suggests in his following statement, we need a new interpretation of the world, a new deepened-meaning-giving 'worldview';

"This dream of domination [implied by 'determinism'] has henceforth lost all legitimacy and persists for no other reason than our 'mental inertia'. An historical epoch has come to an end and we struggle to conjecture what is going to succeed it. Isn't the need truly well overdue for us

to draw on the lessons of the past and recognize where we now are? I would say that a problem is posed to us by allowing ourselves to remain within the framework fixed by this work: to understand the findings of 20th century science. By 'to understand' I intend this; not to constrain our understanding to the step-by-step reasoning of physics, but to be able to put these findings into the context of an interpretation of the world. From this point of view, it is necessary to recognize, in my opinion, that we have not understood (Not 'we', the specialists, but 'we' the educated public). 'Chaos' and also 'relativity' and 'quantum mechanics', for example, remain for all practical purposes impenetrable to the educated view. It is necessary, I believe, to acknowledge with Emmanuel Levinas that we are participating in the end of a certain way of understanding. Will we recognize this? Will we know how to discern the characteristics of a other way of understanding, more comprehensive, less petty? Therein lies another story that is in the process of unfolding." --- François Lurçat, physicist and professor emeritus in physics at the University of Paris, 'Le Chaos et L'Occident' (Chaos Theory and the West)

The fluid-dynamical worldview has been ‘waiting-in-the-wings’ for some millennia for fulfill this need.

As described in *A Fluid-Dynamical Worldview*, we have undergone the technology-assisted fall of our ‘sailboating psyche’, the ‘self’ that comprehends that we are participating, without the option to choose otherwise, in a dynamical space greater than ourselves. Technology has

helped us to erect protective shells around ourselves to isolate us from our engagement with the natural world and to convert our sense of self and equip us with a 'powerboater psyche'.

Like the captain of the Titanic, we have come to believe that we have the internally originating power to go directly to our destination, that our plans to construct a desired future are invincible, that we no longer 'wander in a fragile barque in life's tempestuous sea' but now plough through and over the 'obstacles' that, as our local object dynamics worldview insists, 'nature puts in our way'. But the era of the rise of the powerboating psyche and the decline of our sailboating psyche appears to be on the brink of inversion.

We could summarize this conclusion by saying that "Our taking ownership of our behaviour instead of taking ownership of our experience is the source of rising incoherence in the modern era." Taking ownership of our experience does not leave our behaviour 'flapping in the breeze' as in 'philosophical relativism' but brings it back into situational harmony with the dynamics of our living space that are unique to each of us; life's tides, currents and breaking waves invite us, personally, to engage with them.

However, when we take ownership of our behaviour and 'domesticate' or 'socialize' it on the basis of individual or collective 'will', 'purpose', 'plan' and 'rules of correct behaviour' and then claim that WE are 'fully and solely responsible' for 'what we do', we must 'let go' of our 'in-the-continuing-moment' engagement with the dynamical space that we are uniquely, situationally included in. In other words, we must then 'let go of our experience' and thus 'let go' of our aware participation in co-conditioning the dynamics of the common space we share inclusion in. The bee does not build his exquisite, highly-optimized

hexagonal cells by taking ownership of his behaviour and, as an individual or collective, deliberately construct such a result. Having ourselves become one of a multiplicity of 'local individuals/collectives' directed by 'common will' based on 'common belief' bypasses the natural inductive actualizing and shaping of the dynamics of the common space we share inclusion in, the source of beauty and harmony (and the optimization of bee-cells) in the dynamical forms of nature, giving rise instead, to 'sustained dissonance' as the condition of the living-space dynamic.

Nowhere else, has the behaviour-over-experience drive been more strongly implanted into our western social dynamic than in the notion of 'lineage' of biological organisms. Lineage is a tautological provenance-progeny succession/progression that psychologically anchors us to 'time', which in Kant's terms is; "a category allowing us to order things in a before-after-relationship".

This 'local-organism'-based antecedent-consequent progression as in 'genetic determinism' recapitulates (epitomizes) the 'local object dynamics' worldview. It lends false 'reality' to views of the world in the stark terms of 'critical path analysis' wherein a 'future' state is constructed from a 'past' state in steps (which can be made as small as we like) wherein the immediate future 'configuration of space' is constructed from the immediate past configuration. This is the view given by those ubiquitous differential equations in physics. As Poincaré reminds us, this imposing of 'time' is a convention which, while we may impose it on scientific mental modeling, is not imposed on nature.

Do the 'father' and 'mother' produce the child? Does this sort of thinking give foundation to a competent meaning-giving architecture? Does the farmer produce the crops?

Are we fully and solely responsible for our own behaviour? Was it really 'our decision' to produce children and/or to produce crops? (We tend to formulate questions that can be answered 'yes' or 'no' as if, in answering 'yes' we are affirming some natural truth or 'reality' while all we are affirming is our own incomplete logical constructs.).

While we scientific-thinking westerners put our behaviours in the service of our logical constructs, having faith that logic will ultimately 'deliver the ultimate truth' that will differ from today's logic-approximated truth, only down in the tiniest of details corresponding to the 'least significant decimal places' of our logic-based views and understandings, ... the reality is that the gap between intuition, the wellspring of logical constructs, and logic itself may never be bridged. Logic may give us 'representations' of the world dynamic we are included in, such as 'time', which falls neatly out of logical constructs such as the biological 'lineage' and 'genetic determinism' of the local object dynamics worldview. But we must always come back to acknowledging that such representations, founded on idealist axioms (local object existence) and idealist conventions (absolute rigid and empty Euclidian space) are based on us "choosing not that which is most true but that which is most easy".

Well, our children do 'look like us' and we do have a 'gene theory' that explains why this is, and more than this we have Darwin's theory of evolution that does 'critical path analysis' of 'life forms' (splitting these apart from the 'inanimate world'), ... but all of this sort of thinking founds itself on the notion of 'lineage' and thus on the basis of sequential-temporal antecedent-consequent constructions. That is, the observations foundational to genetic theory and Darwin's evolutionary theory are 'theory-laden' (the existence of 'lineage' is an a priori 'prejudice').

Only five hundred years ago (until 1491), the hunting and gathering of North American aboriginals dominated the social dynamic, and the aboriginals would have, to a man, accepted that they were 'sailboating', ... letting their movements be actualized and shaped by the seasonal and otherwise changing morphology of the dynamical living space they were included in. For them, recognizing that there were natural 'tides in their affairs, which, taken on the flood' lead on to fortune, and also the shorter term equivalent of 'the breaking opportunity' in nature that invited them to 'catch the wave' and 'surf it'. That man was a participant in a dynamic greater than himself was dead obvious in these days. Today, were we to return to 'hunting-gathering', we would likely create corporations to do so; i.e. we would 'take ownership of our behaviour'. We would study and obtain degrees in hunting-gathering and use planning techniques and hierarchical operating structure to set and realize 'production targets' to the point that we would be convinced that we were fully and solely responsible for the results we obtained.

But it would still be 'nature', the dynamical living space that we share inclusion in that was calling the shots, producing the goods, moving the production seasonally and in response to our harvesting efforts. That is, it would be no less true that we would be participants in a dynamic greater than ourselves. It would be no less true that our collective behaviour would be inductively actualized and shaped by the dynamics of the living space we were included in.

What would differ? Why would we start thinking that we were 'powerboating', that we were fully and solely responsible for our own behaviour; i.e. that we were 'local,

independently-existing objects/systems with locally originating behaviour?

A moment's reflection shows that in the hierarchical organisation, the individual must take ownership of his behaviour and let go of his experience. The technology used by the organisation (e.g. satellite photos, helicopter reconnaissance, remote sensing equipment) that directs specialized teams to where the fish game and berries are going to be, will be seen as part of a deliberately operated, deterministic system that will 'make things happen' and 'get the job done' by temporal-sequential 'ratcheting-forward-in-time' towards pre-specified goals/objectives.

The CEO, who sits at the imaginary apex of the imaginary operating pyramid (an idealised Platonic form), will be credited by the shareholders and Board with the 'productive accomplishments' of the Corporation. The whole operation will be seen as a 'powerboating' operation, in spite of the inevitable overprint, if ever one wanted to look for it, of the regional season- (and other local tides, currents and waves of influence-) shaped spatial morphology and its inductive shaping influence that renews the forest, game and soil, and the individual and collective dynamics of the corporate organisation

The corporate workforce (the worker-commodity) that continually flows through the idealized object-system of the corporation is like the wind that flows through the spiral of a hurricane or the flow of consumed matter that is continually replacing the substance of an organism. It reminds us that the LOCAL BEING of these forms is an 'ideal' that correspond to the 'standing wave form' within the continuing fluid-flow of the world dynamic.

So, five hundred years ago, every (aboriginal) individual involved would understand the metaphorical notion of taking the tides at their flood and catching a wave and otherwise putting their behaviours in the service of sustaining dynamical balance (engaging resonantly) with the tides, currents and waves of the dynamical spatial morphology of the living space they are included in.

Five hundred years later, having built ourselves inside of a diverse array of idealised insulating technologies (e.g. air conditioning) and idealised insulating social structures (sovereign states and corporate organisations) that ‘proxy’ our engagement with the world dynamic, few are able to sustain that awareness. On the contrary, with the falling-away of the humility of acknowledging that one is a “participant-without-the-option-of-not-participating” in the ongoing fluid-dynamic of nature (the ‘sailboating psyche’), we have now become proud of OUR ‘powerboating’ achievements which range from producing children to producing fields of wheat; achievements that we, as individuals, claim to be ‘fully and solely responsible for’.

What happened? Where did the originating role of nature in all of this ‘disappear to’? How can any man claim to be responsible for ‘the growth of plants’ or for the growth of ‘humans’? Is this not his ego running away with him? Surely, man is himself the offspring of nature which would make ‘plants’ his brothers, rather than his creation through the simple act of planting seeds. As the joke goes; “One day, man became so proud of his genetic engineering technology that he told God that He was no longer needed for the creating of men since man’s technology could itself achieve this creative act. God asked him if he might demonstrate how this technology worked, and scientific man started off by saying, first we take some dirt “Wait, said God, ... use your own dirt.”.

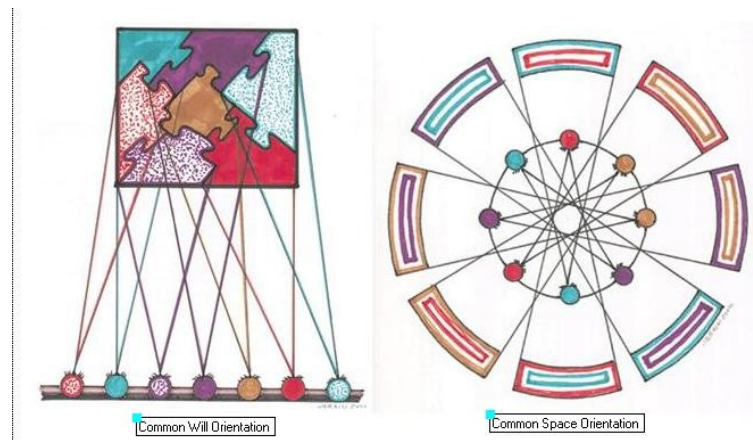
The fact that what is essentially ‘star-dust’ is so ‘taken-for-granted’ and demeaned as a lowly substance signals the degree to which we have lost the wonder of our inclusional participation in dynamical space that is ‘phenomenal beyond words.’ Our scientific reduction of phenomenal nature to idealised Platonic local-object forms clearly trivializes the nonlocal fluid-dynamical spatial continuum.

It is fairly obvious that the origination of productive behaviour that resides within the ongoing dynamical space of nature is USURPED by the notional local centres-of-self of the notional ‘local, independently-existing objects/organisms/organisations with locally originating behaviour. We fabricate these ‘idealised’ ‘universal forms’ from the particular dynamical forms of our experience that we refer to as ‘humans’ or as ‘collectives’ (communities) by bringing together commonalities of multiple particular instances of the dynamical forms. But the ‘particularity’ of the individual dynamical forms derives from its unique situational inclusion in a common dynamical living space.

It is the particularity of individual experience that carries with it the essential ‘information’ that allows us to synthesize the dynamical spatial morphology that we are situationally included in and which is inductively shaping our individual and collective behaviour. This is the reason for the ‘learning circle’ format of sharing experiences in the native tradition.

The following illustrations depict ‘community meetings’ in plan view where the little circles are the tops of the heads of those attending. In the meeting arrangement on the left, which aims to depict our Western default, the individuals see the community dynamic as forming from the locally-originating productive behaviours of individuals unified by

a 'common will'. In the meeting arrangement on the right (the 'learning circle'), the individuals co-visualize a holodynamic in which they see themselves as participants in a common living space whose behaviours are oriented/unified by the dynamics of the common space they share inclusion in.



It is only by way of 'common will' and 'common belief' that idealised forms such as the imaginary-line-bounded 'sovereign nation-state' or the imaginary pyramid of hierarchical organisation take on their reality. There are no such entities as 'local, independently-existing objects/organisms/states/systems with locally originating behaviours' in our real-life natural experience. Such a worldview comes from 'choosing not that which is most true but that which is most easy'.

If we suspend our penchant for confusing the reality of our experience with a 'powerboating' scientific representation that is 'most easy though not most true', the rigidity and absoluteness will melt and we will understand these same experiences and observations in the 'sailboating' terms of

locally apprehensible dynamical forms in a nonlocal fluid-dynamical spatial continuum (nature). .

‘Inclusionality’, shared herein in the context of *A Fluid-Dynamical Worldview*, is a meaning-giving architecture needed for restoring our ‘sailboating psyche’ to its natural precedence.

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Appendix: Historical Rivalling of Object and Fluid Worldviews

Over the course of history, there has been rivalry between the fluid-dynamical worldview and the local-object-dynamics worldview, which has never ceased although the local-object dynamics worldview has enjoyed over two millennia of dominance in the Western world's use of meaning-giving architectures. This dominance of a mode of thinking in terms of 'local, independently-existing objects/organisms with locally originating behaviour [whether by external cause in the case of so-called 'inanimate objects' or by internal cause in the case of so-called 'organisms'] has induced us to think of 'evolution' as some kind of 'TEMPORAL progress' due to the 'activities' of 'local objects/organisms/organisations'.

In the fluid-dynamical understanding, no matter how much 'technology' we have (from canoes and spears to jets and lasers) nor how much 'progress' we contend to have made, we continue to 'wander in a fragile barque in life's tempestuous sea'. That is, we continue to have no choice but to participate in a spatial dynamic that is 'bigger than us' a dynamic that transcends 'what we do') and everything is included in that dynamical space, including our infusions of technology; i.e. we cannot constrain our understanding of our dynamics to 'what we do'.

When the cod and salmon runs give out or shift from here to there, our spatial-relational patterns of living and our individual and collective behaviours are inductively transformed, and when the thermal flow patterns of the climate shift, we are, without choice, included participants in these living-space dynamics in the same sort of manner the ocean and atmospheric currents are. Our use of

technological shells that seek to perpetuate a preferred status quo (e.g. living space in which ‘air is conditioned’ so as to sustain the appearances/feel of a moderate ‘climate’) has almost no effect on the varying solar irradiance we are included in that may be the natural source of the change; i.e. we are participants in the dynamics of nature without having any choice about it (except in terms of the quality/manner of our participation).

Have we evolved our way out of this participation-that-we-cannot-refuse? No, evolution is not something ‘we are in charge of’. It is instead something that we are ‘included in’ as a ‘sailboater’ is included in a ‘tempestuous sea’ or as a ‘hurricane’ is included in a ‘turbulent atmosphere’ or as a ‘convection cell’ (‘boil’) is included in a ‘boiling fluid-flow’. Our real-life experience informs us that this ‘inclusional participative relationship’ applies not only to humans but to all of those notional ‘local, independently-existing organisms with locally originating behaviour’ that we refer to as ‘species’ (DNA is not responsible for evolution, evolution is responsible for DNA).

Where did DNA come from? (‘hint’, DNA is a needed concept in the local object dynamics worldview, since once we decree the local, independent existence of objects/organisms, we are then forced to ‘come up with’ a local generating source for both their ‘form’ (‘gene’) and for their ‘behaviour’ (‘purpose’). That is, the local object dynamics worldview rests dependently on the notion of ‘local, independently-existing objects/organisms with locally originating behaviour. And if they are regarded as local independently existing object beings, the genesis of their form and their behaviour must also be local.

In a fluid-dynamical space, an apparently ‘local’ (locally-apprehensible-dynamical-) form may expand or contract as

the nonlocal pressure in the fluid-dynamic shifts. As well, a multiplicity of local dynamical forms may be coherently drawn together or coherently dispersed by the nonlocal fluid-dynamical flow (currents); i.e. the form and behaviour of individual and collective dynamical forms in a nonlocal fluid-dynamical spatial continuum cannot be understood in terms of a local object based genesis of form and behaviour.

This ‘intuition’ may be coming through as modern evolutionary biologists, critical of currently popular deterministic/mechanistic ‘genetic theory’, such as Barry Commoner complain “DNA did not create life, ... life created DNA”.

We can reflect on the origins of ‘absolute’ (atomic) concepts such as DNA starting from the fluid-dynamical worldview. In a world that is energy-flow the concept of ‘local being’ of objects/organisms with internally originating behaviour has no meaning. Everything is in a state of simultaneously mutually influencing coevolution as in the evolution of storm systems in the fluid-dynamical space of the atmosphere.

This is not a denial of **LOCALLY APPREHENSIBLE DYNAMICAL FORMS** that we choose to call ‘DNA’, but it is a denial of their purported ‘local, independently existing object-being’ and it is a denial of the ‘locally originating behaviour’ that is purported to spring forth from the local ‘interior’ of DNA .

There is no ‘inside’ to the dynamical forms in a fluid-dynamic; i.e. they are like ‘convection cells’. Convection cells may be circular or hexagonal in plan view (or whatever) but their shape is not ‘their own’ (is not ‘local’). Their shape derives from the currents in the dynamical

flow-space they ‘boil up’ within. Thus, the genesis of the locally apprehensible dynamical form known as ‘hurricane Katrina’ and the genesis of the behaviour of Katrina are not ‘local’ but nonlocal; i.e. the genesis of form and behaviour are not ‘onboard’ Katrina, they originate in the nonlocal fluid-dynamics of the space Katrina is included in.

The phonetic, subject-verb-result architecture of our language, meanwhile, encourages us to personify what is nothing other than a locally apprehensible dynamical form in a nonlocal fluid-dynamical spatial continuum, ... and to say; ‘Katrina is building strength’, ... ‘Katrina is heading northwest’, ... ‘Katrina is wreaking destruction on the Gulf Coast’, ... and Katrina is weakening and dying’.

This exemplifies a popular approach in scientific thinking, noted by Johannes Kepler, and also by Henri Poincaré; i.e. where “We choose not that which is most true but that which is most easy”.

In order to get some historical perspective on why we do this, we have to go back to 500 B.C. to Heraclitus who advocated a fluid-dynamical worldview where every ‘thing’ was in a state of ‘continual becoming’ (where there were no ‘local beings’) while Parmenides argued that there are only two choices; EITHER some thing exists, OR it does not exist, and there is no point in talking further about ‘what does not exist’ thus we must concern ourselves with ‘what exists’, ‘what is’ (local being). Plato, coming along a century later, argued that ‘ideas’ provided a better foundation for our worldview than ‘sentient experience’; e.g. the idea of ‘circle’ and/or the idea of ‘six’ was more perfect than any rendering of a circle (e.g. a drawing in the sand) or rendering of ‘six’ (e.g. six eggs) that could ever be available to our natural sentient experience.

As historians of philosophy note;

“ Parmenides' considerable influence on the thinking of Plato is undeniable, and in this respect Parmenides has influenced the whole history of Western philosophy, and is often seen as its grandfather. Even Plato himself, in the *Sophist*, refers to the work of "our Father Parmenides" as something to be taken very seriously and treated with respect. In the *Parmenides* the Eleatic philosopher, which may well be Parmenides himself, and Socrates argue about dialectic. In the *Theaetetus*, Socrates says that Parmenides alone among the wise (Protagoras, Heraclitus, Empedocles, Epicharmus, and Homer) denied that everything is change and motion.” --- Wikipedia

As Frankfort et al say in *'The Intellectual Adventure of Ancient Man'*;

"Heraclitus had declared 'being' a perpetual 'becoming' and had correlated the two concepts with his 'hidden attunement.' Now Parmenides declared the two to be mutually exclusive, and only 'being' to be real."

As Frankfort et al further observe in discussing Parmenides arguments in his hexameter poem, Parmenides argument and his manner of arguing had an influence on popular thought, perhaps through Plato, comparable to that of Descartes;

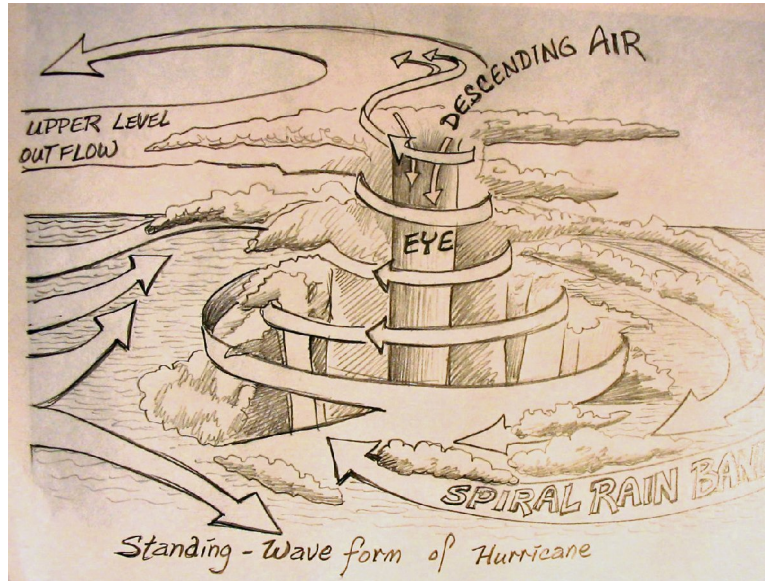
"After the proem, the poem falls into two parts. The first expounds 'tremorless heart of well-rounded Truth' Its argument is radical and powerful. Parmenides claims that in any enquiry

there are two and only two logically coherent possibilities, which are exclusive --- that the subject of the enquiry exists or that it does not exist. On epistemological grounds he rules out the second alternative as unintelligible. He then turns to abuse of ordinary mortals for showing by their beliefs that they never make the choice between the two ways 'is' and 'is not', but follow 'both' without discrimination. In the final section of this first part he explores the one secure path 'is' and proves in an astonishing deductive 'tour de force' that if something exists, it cannot come to be or perish, change or move, nor be subject to any imperfection. Parmenides' arguments and his paradoxical conclusions had an enormous influence on later Greek philosophy; his method and his impact alike have rightly been compared to those of Descartes 'cogito'."

[As a footnote to this focus on the views of the ancient Greeks, both Buddha and Lao Tsu lived in the same era as Heraclitus and all three espoused a 'flow' ('Tao') worldview.]

What Plato proposed as a means of homing in on the 'essential form' of an object, because of the imperfect form of particular objects subject to their space-time inclusion in the flow, was to look for commonality amongst multiple particular (imperfect) renderings that implied they were coming from the same perfect form (a form that was 'universal' rather than 'particular'). That is, to get to the essential form of a man, one would look at many particular men, the form of each suffering from 'imperfections' which, when taken all together, would suggest the 'perfect form' or 'universal form' that lay behind the multiplicity of imperfect particular renderings.

This 'ideal' 'perfect form', the 'universal' from which the 'particular' is a poor and imperfect rendering, thus imputed and extracted from a multitude of imperfect particular experience-sensed renderings, then becomes a 'local, independently-existing object-being', complete in itself. Were we to examine 'hurricanes' by this process, looking for commonalities across a multiplicity of particular hurricanes, we would capture the 'idea' or 'universal form' of a hurricane in terms of a 'local, independently-existing object-system with locally originating behaviour'. As Poincaré suggests, by extracting the 'system' thus, from the nonlocal fluid-dynamical spatial continuum, we capture its 'differential equation'. Pictorially, this 'local, independently-existing object-system with locally originating behaviour'; i.e. this 'universal ideal' we have extracted that we hold to be more perfect than the multiplicity of particular renderings by nature that are available to our experience, will look as follows;



The personification of this ‘local ideal object’ is implicit when we picture it in this way and we can talk about ‘ITS FORMING’ and ‘ITS STRENGTHENING’ and ‘ITS MOVEMENT’ as if the genetic sourcing of its form and behaviour also ‘comes with it’.

What we have just gone through here is the objectification of an inherently NONLOCAL, locally apprehensible dynamical form in the nonlocal fluid-dynamical spatial continuum of nature, extracting it from the continuum and bestowing it with stand-alone (independent) ‘objecthood’ and with the God-like powers of locally originating behaviour.

In doing this, we are ‘choosing not that which is most true but that which is most easy’ and this ‘reduction to local object dynamics worldview’ is ‘standard practice’ in the

modern western scientific thinking-man's worldview. This is not to say that science, in the context of relativity, quantum wave dynamics, nonlinear dynamics etc. has not conceded that the local object dynamics view is 'not that which is most true but that which is most easy'. It has! But as Poincaré notes, we impose conventions (e.g. absolute space, absolute local object-being) BECAUSE IT IS CONVENIENT TO DO SO, and not because it is 'most true'. As Vladimir Tasic writes in regard to the axiomatic nature of 'objects', quoting Poincaré;

“So “objects” are *implicitly* assumed to be invariable bodies. Therefore the axioms of geometry already contain an irreducible assumption which does not follow from the axioms themselves. Axiomatic systems provide us with “faulty definitions” of objects, definitions that are grounded not in formal logic but in a hypothesis — a “prejudice” as Hans-Georg Gadamer might say — that is *prior* to logic. As a corollary, our logic of identity cannot be said to be necessary and universally valid. “Such axioms,” says Poincaré, “would be utterly meaningless to a being living in a world in which there are only fluids.””

And as Poincaré writes, in speaking of 'science' as a 'language game' and how word definitions can be 'disguised axioms';

“John Stuart Mill used to say that every definition implies an axiom, that in which we affirm the existence of the object defined.”

Defining local objects is the mainstay of western popular science, whether we are talking quarks or species. In

mathematics, as Poincaré notes, objects do not need to exist ‘materially’ (as was the intention of Mill’s statement);

“In mathematics the word *exist* can only have one meaning; it signifies exemption from contradiction.”

But there are many mathematical theories in which ideal objects are affirmed to exist and do so without contradiction. That a theory ‘hangs together’ without contradicting itself does not mean that they are good theories, since we must test them by mapping them to our real-world experience where we run into further constraints;

"It is not enough for a theory not to affirm false relations ; it must not conceal true relations" ---
Henri Poincaré

Ask yourself if the theory of hurricanes as local systems does not ‘conceal true relations’, or for that matter, whether such theorizing in general, that (Platonically) reduces inherently interconnected dynamical forms in a nonlocal fluid dynamical continuum (extracting the common form and behavioural ‘essences’ from a multiplicity of particular instances of such) to ‘local, independently-existing object-systems with locally originating behaviour’ does not ‘conceal true relations.’.

* * *

The above discussion provides an example of how dynamical forms in a fluid-dynamical flowspace are synthetically reduced to local objects so that their form and behaviour appears to be locally ‘generated’ within them. That is, the above discussion shows how we reduce-to-

local-object-being and personify what is inherently nonlocal (fluid-)dynamical phenomena, ‘making it over’ into a locally existing dynamical agent with its own locally originating behaviour; i.e. we ‘say’ that hurricane Katrina ‘forms’, ‘strengthens’, ‘moves northwest’, ‘wreaks destruction’, ‘weakens’, ‘dies’). But ‘hurricane Katrina’, like all hurricanes, is not a local object, it is a locally apprehensible dynamical form in the nonlocal fluid-dynamical space of the atmosphere.

Like a human, the hurricane is a participant-without-choice-not-to-participate in a dynamic that is greater than itself (a dynamic that is intrinsically greater than ‘what those included in it do’). If a hurricane had a psyche, it would be a ‘sailboating psyche’ rather than a ‘powerboating psyche’. The hurricane is a convection cell within a fluid-dynamical space, it derives and shares energy with the flow it is included in and it is this energy-sharing that inductively shapes its form and behaviour.

We (Western humans) apply this reduction-to-local-object-with-locally-originating-behaviour to ourselves. We do not seem to appreciate our particularity, arising out of our unique situational (place-time) inclusion in the fluid-dynamical spatial continuum of nature that we have no choice but to participate in (we can choose our manner of participation but not ‘whether or not’ we participate). We seek instead to define the ‘ideal’ ‘universal man’, the ‘perfect form’, so that the men of our sentient experience, shaped by our situational (place-time) inclusion, are regarded as poor renderings of the former, some better than others. In the process, we lose our attunement to our unique situational inclusion in the nonlocal fluid-dynamical spatial continuum of nature.

This Platonic reduction gives us a picture of ourselves like the picture of the hurricane above, a detached local object-system with locally originating behaviour interacting with other local object-systems in absolute fixed and empty Euclidian space (in denial of our participation in a dynamic greater than ourselves). This self-image gives us, in turn, a 'powerboating psyche' wherein we believe our power to 'make things happen' resides locally, internally within us.

If we suspend this Platonic objectification that puts idealism ahead of real-life experience in our meaning-giving architecture, we continue to acknowledge that we are participants-without-the-option-of-not-participating in a dynamic that is greater than ourselves. This self-image gives us, in turn, a 'sailboating psyche' wherein we recognize (as a convection cell would) that all power derives from the nonlocal fluid-dynamical space we are included in, and that our survival is served by sustaining dynamical balance with the dynamics of the space we are included in, this which serves a harmonious coevolution of the greater dynamic that we are included in.

* * *

The reduction to local, independently-existing object-systems with locally originating behaviour sets up a familiar apparent antagonism that is found in the 'nature' or 'nurture' paradox. What we call 'nature' is none other than the local object based genesis (DNA-driven powerboating construction) while what we call 'nurture' is the place-time conditions in which the positivist DNA construction is situationally included in.

This paradox disappears in the 'evolutionary fluidity' of a fluid-dynamical worldview, since there is no need to resort to 'universal forms' for 'local independently-existing

objects with locally originating behaviour' based on our imposed definitions and categories.

Reflecting on the nature of 'forms' and our apparent 'a priori' knowledge of them, we can conclude that our sentient experience puts us intuitively in touch with them. The 'circle' can be sensed/experienced and intuited as an implied ultimate everywhere in fluid-dynamics, in the manner oil forms droplets in water, in the manner that horses and people spontaneously huddle together to keep warm and in which a solitary individual draws his knees up to his chest in fetal position to conserve heat. In nature, everything seeks dynamical balance in a spatial manner and we intuitively understand, without the need to 'know mathematics and geometry', nor the jargon that I am about to utter, that by reducing the ratio of surface area to included volume, we help to sustain thermal dynamical balance in those situations where our convection-cell-body is thermal-energy-rich relative to the thermal energy condition of the flow we are included in and in a continual energy-exchanging engaging with.

In the case of the perfection of the number 'six' relative to 'six eggs', and in fact, in the case of any number, we are intuitively aware of the fact that the notion of six crests in the fluid-dynamics of waves is more perfect than the (innately interconnected) wave 'forms' themselves, which take on a particularity due to the conditions of place and time they are situationally included in. That is, if an otter pops his head up in a still pond, there is first 'one' bump in the water, and as is nature's way of seeking to restore dynamical balance, this first big bump will spawn lesser bumps (wave crests) as it tries to fill in the relative deficiency (trough) that the fluid has been borrowed from to support the rising up of the bump/crest. Nature that is available to our sentient experience is thus a 'number-

generator' by way of its fluid-dynamical balance-seeking; i.e. nature is the mother source of the raw material for those perfect/universal forms we impose on her by the reductive process of gathering together in our minds what is common amongst a diversity of particular things.

Only when we forget about the fluid-dynamics of space wherein all things are connected (as Heraclitus observed) do we come up with a discrete and perfect number of 'wave crests' though now what we have is 'number' on its own, more perfect and universal without the idea of waves or natural cycles. And only when we forget that a 'circle' is our own flatspace projection of a 'sphere' that in nature connotes inner-outer dynamical balance-seeking (the very essence of fluid-dynamics/wave-dynamics) do we come up with a circle as a 'perfect, universal form' that takes precedence over those imperfect particular renderings of a circle, distorted by the conditions of place and time that the particular rendering is situationally included in.

What we notionally 'invest' in the interior of a 'gene' is the power to locally source some universal form (e.g. the colour 'red' as in hair, the closed form solid known as an 'oblate spheroid' as in skull, the number 'five' as in toes etc.) The gene is a God-like factory for 'universals' and as they are doing these renderings, their work is subject to imperfections arising from the conditions of place and time they are situationally included in, the result being a 'particular' rendering that is 'imperfect' relative to the 'universals' (red, oblate spheroid, five). This invention of the gene, drives the notion of the generation of 'universals' down deep enough (beyond our everyday sentient experience) so as to hide/obscure its purely IDEAL origins. Our sentient experience, meanwhile, is constrained to working with the imperfect particulars. Here we have an example of 'scientific thinking' as exposed by Poincaré.

First, we use our real-life experience to formulate a theory that is ‘more perfect than our observations/experience’ in the manner that we fit a smooth curve to our observations, and henceforth, use the curve to correct, by interpolation, our real-life experience, the gap being referred to as ‘noise’ in our particular observations.

For example, Galileo came up with the idea that we should consider the motion of a body falling to earth, as if it were falling in a vacuum to get rid of the ‘bothersome’ particulars of the conditions of place and time and to make our laws of motion more perfect and universal. Therefore our laws of motion predict that a cannon ball and a feather will fall to earth at the same rate, a view of motion that gives precedence to a perfection that is unattainable in our real-life experience.

It is not hard to see that this whole system of building an understanding based on local, independently-existing objects with locally originating behaviour (the latter imputed to be caused by external forces or by internal purpose [in the case of object-organisms, object-nations, object-organisations]) forces us into the mode of ‘putting universals or ‘perfect forms’ first’ and regarding ‘particulars’ as ‘imperfections’ due to the conditions of place and time in which the rendering is situationally included.

The ‘gene’ is thus a notional ‘local, independently-existing object-factory with local, internal God-like power of producing ‘universals’’. This is what we currently call ‘nature’ in the ‘nature’ versus ‘nurture’ paradox. ‘Nurture’ (the ‘nature’ that is available to our sentient experiencing), we regard as the source of imperfections in the positivist universals-based rendering of object form and object

dynamics, arising from the conditions of place-time the rendering is situationally included in.

Meanwhile, in the fluid-dynamical worldview, particularity rules; i.e. the conditions of place-time inductively actualize and shape the unfolding of creative/productive potentials that are inclusionally situated therein. William Blake's following remark is interesting in this regard since it argues for an inversion in our relative values for universal and particular as would associate with the shift from local object dynamics worldview to the fluid-dynamical worldview (more to come from Blake on this, momentarily);

"to generalise is to be an idiot; to particularise is the alone distinction of merit."

The sailboater admits that he has no choice but to participate in the dynamics of space that he finds himself particularly, situationally included in (he can nevertheless choose his manner of participation or 'quality' of participation). He realizes that he can 'bring along with him on the journey his ideal plans and objectives describing the manner in which he wants to participate'. That is, he recognizes that his participation-which-gives-him-no-choice-not-to-participate takes precedence, and that this idealized manner in which he wants to participate is something secondary, that he can keep in mind as he engages with the dynamics of space that are greater than, and which include him.

Only after we imagine ourselves as 'powerboaters', putting our desired manner of how we want to participate first, confusing this with reality, do we move on from imposing this confusion on ourselves and start imputing to other 'powerboating agents', such as 'genes', the same God-like

powers (of locally originating behaviour out of the context of our participation-with-no-choice-not-to-participate in the place-time dynamics we are situationally included in.).

This usurping of the natural precedence of place-time-induced particularity by idealist generalization emanating from a local source of origination has previously been recognized in this historical rivalry between the fluid-dynamical and local-object-dynamics worldview. Two examples follow;

The Celtic warrior-leader Brennus laughed at the Greeks for localizing the inherently nonlocal;

"The Celts do not seem to have had a hierarchy of divinity in the sense of a coherent pantheon dwelling in some remote place. The human world and the Otherworld formed a unity in which the human and divine interact. Each location has numinous powers which are acknowledged by the people as we can see by their naming of mountains, rivers and other natural features many of which have associated deities. When the Celts invaded Greece in 278 BCE, Brennus entered the precinct of Delphi, saw no gold and silver dedications and only stone and wooden statues and he laughed at the Greeks for setting up deities in human shape." --- Rowan Fairgrove, *What We Don't Know About the Ancient Celts*

William Blake similarly accuses 'priests' of 'localizing' the inherently 'nonlocal';

*The ancient Poets animated all sensible
objects with Gods or Geniuses, calling them*

*by the names and adorning them with the
properties of woods, rivers, mountains,
lakes, cities, nations, and whatever their
enlarged & numerous senses could
perceive. And particularly they studied the
genius of each city & country. placing it
under its mental deity. Till a system was
formed, which some took advantage of &
enslav'd the vulgar by attempting to
realise or abstract the mental deities from
their objects; thus began Priesthood.
Choosing forms of worship from Poetic
tales. And at length they announced that
the Gods had ordered such things.
Thus men forgot that All deities reside in
the human breast.*

---Plate 14, from "The Marriage of Heaven and Hell" by William Blake (1757-1827)

* * *

The Platonic reduction from particular dynamical forms to idealized 'universal forms' has not only effected our individual sense of self (suspended our 'sailboater psyche' and installed at the helm our 'powerboater psyche'), but has

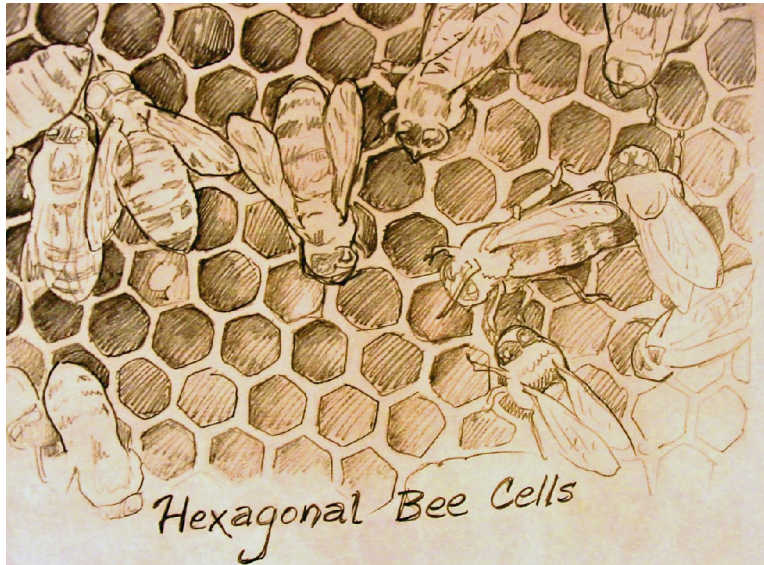
also effected the self-image and dynamical behaviour of social collectives.

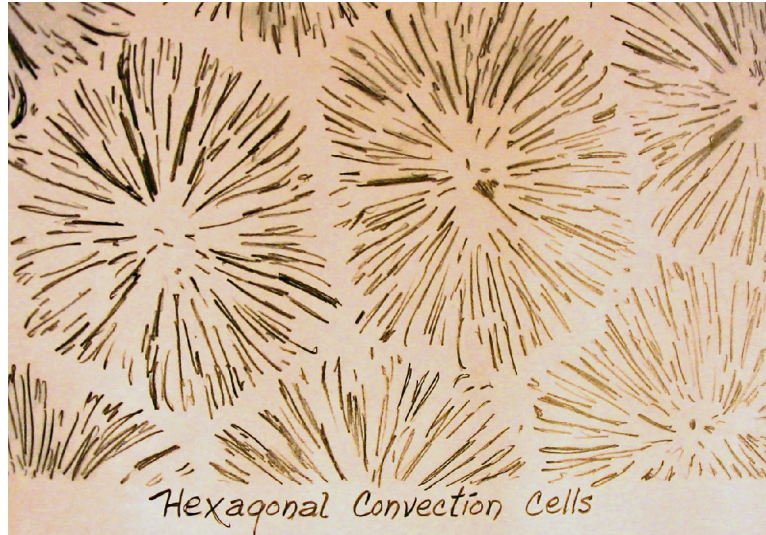
There is something about the difference between the 'universal form' and the 'particular form' that sheds light on the realm of social collectives.

That is, forms in nature are never 'out of place-time context' as idealized 'universal forms' are.

An understanding of a 'circle' comes to us through our natural experience; e.g. 'The horses move closer towards one another in the cold winter wind'. We should not expect to be able to explain the 'circular form' that evolves in the dynamic of a social collective in terms of the deliberate actions of local object-organisms with locally (internally originating) behaviours. That is, the horses were not taught that thermal energy inflow/outflow is proportional to the ratio of the surface area to the volume included within the surface, and that mathematically, that a mathematical optimum is attained coincident when the form of the surface relative to the included volume is 'a sphere'. (of which a circular cylinder [as with the huddled horses] is the approximation in the plane).

One would have to say that our intuition guides our behaviour in this respect and gives us a result for the social collective that is beyond our deliberate intentions as individuals. The very particular form called the 'hexagon' is not one of those 'perfect forms' that honeybees rationally use to guide their behaviour. The hexagon is the form that is induced in the dynamic of a collective by the dynamics of the space they are included in. (see the following illustration of beecells, packed soap bubbles and convection cells in near-boiling fluid).





The fact is that the 'hexagon' does not arise in nature as a local object structure, it is a spatial relational form that emerges from inner-outer dynamical balancing; i.e. it is purely relative rather than 'stand-alone' just as the circle/sphere is in the huddling herd/crowd. All of these 'hexagons in nature' are like the 'convection cell'; i.e. they arise from spatial-relational energy-sharing in the common dynamical space they share inclusion in.

Whether we are observing a collection of bubble cells, bee cells, convection cells, or the resonant airflow cells in a flock of geese flying in formation, it is apparent that Mach's Principle applies (the dynamics of the individual cells condition the dynamics of the common space they are included in at the same time as the dynamics of space conditions the dynamics of the included participants) and that these cell collectives are 'energy-sharing' collectives that manifestly 'give themselves up to' dynamical-balance-seeking.

Why then, should we suppose that ‘body cell collectives’ are collectives of ‘local, independently-existing object-systems with locally originating behaviour’? It is this Platonic ‘universal exemplar’ assumption that then forces us to mentally contrive some pie-in-the-sky cybernetic peer-to-peer communication system based on ‘chemical gradient sensing etc. etc. to explain which such collectives ‘behave as one’. Yes, Virginia, modern scientists do believe that bees ‘understand hexagonal cell architecture’ and that they deliberately, rationally construct hexagonal cells. The ‘mainstream science community’ does not YET accept Mach’s Principle in biological phenomena and thus that the bees assertive work in a cramped place sources an accommodative backpressure that inductively shapes the unfolding of their productive cell-building potentials. To allow such understanding would ‘torpedo’ the causal model of mainstream science, taking down with it such ‘sacred cows’ as Darwinian ‘natural selection’.

That is, the model in which ‘local, independently-existing object-organisms with locally originating behaviour’ COMPETE no longer makes sense when we re-conceive of these entities as interdependent ‘convection cells’ whose natural ‘ethic’ is energy-sharing that seeks to sustain dynamical balance; i.e. natural collectives work with the opposite intent to that which mainstream science says they do; i.e. neighbouring cells do not seek to amass more energy than their neighbours, they seek to sustain dynamical balance through their energy-sharing (e.g. ‘storm cells’ in the atmosphere) and while imbalances do happen in a continuously evolving system, they do not arise from inter-cell competition. As already mentioned, the storm-cell’s (hurricane’s) birth and life is in the service of energy-sharing (spatial energy balancing). And so it is in nature in general and some humans do take the hint if their self-image local, independent object-organisms animated

by 'the American Dream' doesn't first manage to run off their 'anima mundi'.

Meanwhile, Plato would have us examine the commonalities in the multiple particular instances of imperfect rendering of an implied 'perfect form', so as to capture the 'essence' of the 'perfect form' which can then be expressed as a local object. Gone from this reduction, is the spatial-relational 'included participant' aspect wherein the dynamics of a bee collective condition the dynamics of the space they are included in at the same time as the dynamics of space condition the dynamics of the bees included in it.. That is, to the bee, 'my inside wall is to my outside wall as my neighbour's outside wall is to his inside wall, but if I use Plato's commonality method, I end up with a local object form in the singular with one absolutely inside wall and one absolutely outside wall' (the opposite side of the wall). This defines the form in absolutely local terms, and in so doing invites us to forget about our participation in something greater than 'what we do' and encourages us to see the hexagon as a stand-alone local object and to 'replicate them' and put them into place; i.e. construct a matrix of them.

Just as the six wave crests did not arise in nature as replicated instances of a local object-form, the multiplicity of hexagons did not come into being in nature as replicated instances of a local, universal object-form.

The potential for doing major mischief in the dynamics of social collectives, by the imposing of 'idealized form' on our shared, common living space (an unfolding fluid-dynamical space), began to be the case in the 16th century when the notion of 'sovereignty' was imposed on the land;

“Sovereignty became "the dominant concept in the field of ... political assumptions. ... the essential qualification for full membership [in] the international community." The concept of "sovereignty" provided state power with an "inside" and an "outside." (Bartelson, Jens. *A Genealogy of Sovereignty*. Cambridge University Press, 1995.). States claimed supreme power inside what they called their "domestic" realms and defined other states' realms as "outside." --- D'Errico, *American Indian Sovereignty: Now You See It, Now You Don't*, <http://www.umass.edu/legal/derrico/nowyouseeit.html>]

“All significant concepts of the modern theory of the state are secularized theological concepts, not only because of their historical development ... but also because of their systematic structure.” (Bartelson, as above)

“State sovereignty "is a 'religion' and a faith." (Lombardi, Mark Owen. "Third-World Problem-Solving and the 'Religion' of Sovereignty: Trends and Prospects." Mark E. Denham and Mark Owen Lombardi, ed's. *Perspectives on Third-World Sovereignty*. Macmillan Press, Ltd., 1996). The skillfully drawn borders that cartographers have provided for us are ... spiritual and philosophical abstractions representative of a form of quasi-belief. They are ... not detached maps of reality as proponents would have us believe. These geographies reflect an ardent desire to make (or impose) sovereignty a physical reality as natural as the mountains, rivers and lakes.... ‘[Id.]

The imposing of idealized imaginary-boundary-line based forms for the purpose of delineating absolute (sovereign) land ownership superseded the prior arbitration of territorial access by 'stateless' nations, where 'nations' implied 'people collectives' such as nomadic 'tribes' and more sedentary sheikdoms. These 'stateless' peoples' approach to managing territorial access was more in keeping with the non-idealist animal approach of dynamical-balance-seeking rather than being based on the absolute inside/outside demarcation and policing of imaginary-line boundaries. Such 'pre-sovereignty' nations can be visualized as clusters of population on the unbounded land, much in the manner of spiralling hurricanes in the unbounded atmosphere of the planet. While things could get stormy if one ventured too close to a population cluster that 'one had not established friendly relations with', there was no notion either of an 'inside' to a nation or of a 'supreme central authority over internal affairs', since there is no physical experiencing of an 'inside' to a populated region in the unbounded natural landscape.

'Sovereignty', and with it the imposing of ideal forms (with an absolute 'inside') on the management of the dynamics of social collectives, came about as the Christian Church, under pressure from European monarchs during the colonization of the Americas, sought to delegate authority over 'the temporal realm' to the secular kings and political rulers, while the realm of the spiritual was kept under the authority of the Church and its theologians. The 'land' was taken to be part of the transient 'temporal realm' (i.e. nature was seen as a created object for man's use).

As Peter D'Errico notes, the concept of 'sovereignty' of the nation-state is a secularized theological concept that gives supreme powers over 'internal affairs' ('internal' is defined

by the imaginary-boundary-lines that are 'thought up' to delineate the 'local, independently-existing object-state) to a notional 'central authority'. The 'separation of church and state' (the separation of the theological from the secular, the spiritual from the temporal) is thus built dependently upon the idealism and hidden axioms of 'local, independently-existing objects' and its idealist cohort, 'absolute, fixed and void [Euclidian] space.'). The absolutism of the Gods, defended so ably by Parmenides in his advocacy of binary true/false logic and further validated by Plato and Aristotle, finds its way down into the notion of the 'sovereign state', hence the observation that the sovereign state is a 'secularized theological concept'. That is;

“[T]hat the ultimate moving force which inspires and controls political action is a spiritual force -- a common conviction that makes for righteousness, a common conscience (Ahmad, Ilyas. *Sovereignty: Islamic and Modern*. Karachi and Hyderabad: The Allies Book Corporation, 1965)

This suggestion is startling because we are used to the western notion of separation of church and state. Western discussion can speak of "common will," but gets nervous with the thought that this phrase only acquires meaning in spiritual terms. As we have seen, however, western political thinking itself is grounded in theological concepts of "Christian nationalism." The notion of "absolute, unlimited power held permanently in a single person or source, inalienable, indivisible, and original" is a definition of the Judeo-Christian-Islamic God. This "God died around the time of Machiavelli.... Sovereignty was ... His earthly replacement." (Walker, R. B. J. and

Mendlovitz, Saul H. "Interrogating State Sovereignty." *Contending Sovereignties*. R. B. J. Walker and Saul H. Mendlovitz, ed's. Lynne Rienner Publishers, 1990.)

Nowhere is the rivalry of the fluid-dynamical and local object dynamics worldview alternatives, with their respective sailboating and powerboating psyches more active today than with respect to sovereignty and 'nationalism'.

My own maternal side antecedents, coming from peasant stock in the Italian diaspora of the late nineteenth century, had clearly been 'touched' by the views of the anarchists who were far from philosophical relativists but who believed that we are all participants in an unfolding global dynamic that is greater than ourselves. Accepting the natural primacy of their sailboater over powerboater psyches, they let their actions be inductively shaped by the dynamics of the place-time they found themselves situationally included in. There was no way that they were going to submissively defer to commands that issued forth from the idealized supreme central authority over 'internal affairs' of an imaginary-boundary-line based 'sovereign object identity', if such commands were not in resonance with their felt sense of inclusion in a humanity-wide dynamic.

While my maternal uncles all voluntarily enlisted in the Canadian military in WWII (voluntarily enlistment grew the ranks of the Canadian military from a few tens of thousands in 1939 to over one million by 1945), it was in the context of enlisting in Doctors Without Borders or other nationalism-blind non-government initiatives and certainly not for 'the honour and glory of serving one's imaginary-boundary-line based local sovereign object-nation'. The

rise of fascism in Italy under Mussolini, contrary to their ideals of global brotherhood and community, exposed the dangers of putting 'idealism' in an unnatural primacy over 'lived experience'.

As Thomas Mann observes in *Mario and the Magician* (a fictional commentary on the rise of fascism in Europe in the 1920's);

“The capacity for self-surrender, he said, for becoming a tool, for the most unconditional and utter self-abnegation, was but the reverse side of that other power to will and to command. Commanding and obeying formed together one single principle, one indissoluble unity; he who knew how to obey knew also how to command, and conversely; the one idea was comprehended in the other, as people and leader were comprehended in one another.”

Of course, when 'people and leader' are locked into this type of unconditional 'commanding and obeying' 'powerboating' arrangement, we have the situation wherein the 'idealism' of local object identity animates the dynamics of people and pulls them out of their natural 'sailboating' mode where they let their behaviours serve the sustaining of balance in the dynamics of place'. Such separation of the dynamics of people and place has been warned of by the aboriginal chiefs in the terms that it 'will one day lead to the white man suffocating in his own waste'.

The animating of individual and collective behaviour on the basis of idealism that rides roughshod over place-time based participation was not only eschewed in the prior

generation of my family but seems to have been a characteristic of many in the people-nation (community) of Canada as contrasted with the idealized political entity known as Canada. For example Marshall McLuhan noted that;

“Canada is the only country in the world that knows how to live without an identity”

Pierre Berton similarly observed that;

“One of the unifying forces of Canada is the long debate about who we are.”

And Arthur Erickson perhaps best summed up this feeling that giving deference to a local-object-identity runs counter to where we need to be going;

“Canada’s lack of national identity will prove to be our strength in the next century as the world moves towards a ‘humanity-wide consciousness’; ... by having no history of cultural or political hegemony --- almost no history at all to hinder us - -- we are welcomed over all other nations. We are more open to, curious about, and perceptive of other cultures.”

All of this represents the ongoing rivalry between the relative precedence of the fluid-dynamical worldview with its sailboating psyche and the local object dynamics worldview with its powerboating psyche.

The proposition “Hitler (or ‘the Nazis’ or ‘the Germans’ caused WWII” has a certain Parmenidian simplicity appeal to it; i.e. the appeal of the neat and tidy idealized local object dynamics where we can explain everything with

certainty since there are only two choices ‘what is’ and ‘what is not’ and once we have discovered ‘what is’, there is no point in further addressing ‘what is not’.

We may also acknowledge that that when we opt for such local object dynamics based ‘truth’, we are choosing “not that which is most true but that which is most simple”, and that we are all participants in a (fluid-)dynamical unfolding that is greater than us. In this case, we may remind ourselves that political pundits were already predicting a ‘next war’ on the basis of the harsh terms of the Treaty of Versailles that ended WWI, and used twenty years as the gestation period, based on the time it took an infant in 1919 to grow up engulfed in the harsh place-time conditions in post WWI Germany/Europe. As mentioned elsewhere in this book, The accruing influence of place-time tensions conditioned the dynamical space of Europe in the manner that a long drought conditions a forest, and the apparent power of those pyromaniacs who would do mischief in these circumstances, is amplified a thousand fold. A ‘Hitler’ (local object) does not ‘cause’ the destructive outcome in this expanded view, but he may trigger a bomb that has been waiting to go off, in the manner that the negligent butt-tossing cigarette smoker does in the drought-desiccated forest.

Again, there is the seductive appeal of Parmenidian simplicity that urges us to go with the causal model of local object dynamics and to judge the corrective action to be the elimination of the causal agents of war and destruction, but this would be to shape our actions on the basis of choosing “not that which is most true but that which is most easy” and such a blunt idealized response could in itself provoke tensions so as to nurture the accruing of still more ‘bombs’ that some small triggering influence will set off..

In this context, it is popular to say that the notion of 'peacekeeping' is outmoded, and we now live in a world where we must smoke out and destroy evil-doers before they destroy us, ... yet such a view simply flags the desperate clinging to a two+ millennial run of dominance of idealism (local object dynamics supported by a powerboating psyche) over sentient experience (inclusional participation in an unfolding fluid-dynamic supported by a sailboating psyche). As my maternal family (Italian descent) were well cognizant, our dynamics condition the dynamics of the living space we are included in at the same time as the dynamics of space condition the dynamics of we who share inclusion in it. Thus 'peacekeeping' makes much sense in this fluid-dynamical worldview where the accruing of tensions amplifies or attenuates any mischief that is triggered within the conditioned place-time. The ethic in the family was to throw one's body between those persons who were about to do injury to one another so as to allow (their) wiser and cooler heads to prevail. As tensions build, we tend to 'demonize' one another (portray the other as a local, independently-existing object/organism with locally originating 'evil' behaviour), and if no-one steps between us and we do do injury to one another, we see this as confirmation of the 'demonization' and the tensions can continue to build in a mutually attempted annihilation of one and other.

Our only release from this psyche-driven death spiral is to acknowledge that we, the combatants, are both included in an unfolding (fluid-) dynamic that is 'greater than ourselves' (the WWII young soldier, German or Allied, was swept up in an unfolding fluid-dynamic that predated his emergence).

'War' is the inevitable consequence of the local object dynamics worldview; i.e. 'war' is the inevitable

consequence of elevating idealism into an unnatural precedence over our real-world sentient experience. It's 'certainty' is built upon a 'relativism' of a different type, the arbitrariness of notional locally originating form, purpose, behaviour of the 'local object dynamics' (idealist) worldview, in the face of our sentient experience informing us of our participation in a fluid-dynamic greater than ourselves. The latter understanding 'speaks to our sailboating psyche' and invites us to put our behaviour in the service of sustaining dynamical balance and harmony with(in) the dynamics of the common living space we share inclusion in.

'Dynamical balance seeking' where we acknowledge that we are co-participants in a common fluid-dynamical unfolding also involves 'strife' and 'bloodshed' but it does not lead to a death-spiral of intensifying mutual demonization/polarization of self-and-other as is the consequence of the local object dynamics worldview and its powerboat psyche.

* * *

Conclusions to this Appendix: Historical Rivalling of Object and Fluid Worldviews

Twenty five hundred years ago, the Western worldview was undergoing a shift, from explaining the world dynamic in terms of Gods having made it so, to putting 'nature' in the middle, but in two very different manners. In the view of Heraclitus, the world dynamic could be understood as a dynamically unifying (continually renewing) flow in which we were all included participants. There is nothing truly 'local', in such a fluid-dynamic (other than 'appearances' as in 'locally-apprehensible dynamical forms'), everything

is inherently 'nonlocal' and yet there is the sense of a particular and individual 'soul' that associates with the uniqueness of our inclusional situating in place and time or 'place-time'.

Both Parmenides and Plato had a hunger for 'certainty' and 'absolute truth' as the foundation for their understanding of the world, and in order to extract this from Heraclitus' ever-changing flow wherein nothing was permanent, a 'trick' was used whereby we could surmise that the particular instances of like forms (which in Heraclitus worldview were 'locally apprehensible dynamical forms in the nonlocal fluid-dynamical continuum of nature') were the imperfect rendering of perfect forms. While these imperfect renderings are available to our inclusional sentient experience, the perfect forms are only available to the realm of 'ideas'; i.e. to our thinking. Thus the manner in which certainty and permanence was to be extracted from our sentient experience of ceaseless change and evolutionary flow, was to give precedence to 'thinking' over our worldly 'experience'.

Over history, we have been asking ourselves 'who are we?' by way of the question 'do the times (i.e. place-time dynamics) make the man' or 'does the man make the times'. The divided public view on this has been explored here using the example of Hitler and the place-time of Europe in the wake of the Treaty of Versailles (1919). In a sailboating psyche, born of our sentient experience, we understand that our power derives from the dynamics of the place-time we are included in, while in a powerboating psyche, born of the idealism wherein we see ourselves as a local, independently-existing object/organisms with locally originating behaviour, we understand that we possess an internal power within that sources our behaviour, ... behaviour that we are fully and solely responsible for.

Does the sourcing of our form and our behaviour come ‘locally’, from within us, as today’s popular science would allow? Or does our form and behaviour come from the inductive spatial accommodating of our intrusive potentials as with dynamical forms in a fluid dynamical space? Is the individual we know as Hitler truly responsible for the dramatic outcomes of what is ostensibly ‘his behaviour’, or is he like the mischief-making butt-tossing cigarette smoker whose causal outcomes vary radically depending on the condition of the dynamical place-time (forest) he is situated within. If we say that his behaviour is shaped by the condition of the dynamical space he is situationally included in, we are saying that he (and we) are participants in an unfolding spatial dynamic that is greater than us, that our apparent behaviour is inextricably bound up in the accommodating backpressure of the dynamical living space we are included in and that we cannot even speak of a behaviour that is ‘ours’.

As mentioned elsewhere in this book, if we were to accept Mach’s Principle, that our dynamics condition the dynamics of space at the same time as the dynamics of space condition the dynamics of we who are included in it, then we would not stand idly by as the tensions in our shared living space rose in the manner of the forest becoming tinder dry (out of balance) in a drought. We would put our behaviour in the service of restoring balance, the equivalent of ‘watering down’ the forest so as to thwart the politician who sought to harvest the huge amplification of his pyromaniacal mischief.

But the local-object-dynamics worldview does not incorporate Mach’s Principle and does not acknowledge that our dynamics condition the dynamics of our living space in such a way that tensions can build or be dissipated.

In this as in many similar instances, our scientific thinking has us “choose that which is not most true but that which is most easy”; i.e. it is easier for us to choose a worldview that does not require us to change our behaviour, that mean sort of behaviour that conditions the dynamics of the living space in which we are included participants, and sets up the conditions wherein a politician can radically amplify his pyromaniacal mischief.

Which of these alternative worldviews we opt for; i.e. for local object dynamics or fluid dynamics with their associated powerboating and sailboating psyche options, is an ongoing source of division in our society.

Never has the division been more intensely felt since the ‘idealism’ of ‘local independently-existing objects/systems with locally originated behaviours’ was ‘incarnated’ in the modern ‘sovereign nation-state’. Mass deferral to the ‘supreme central authority over the internal affairs of the idealized local object-state’ is what furnishes the ‘certainty’ that Parmenides and Plato hungered for. In this idealism-driven state of mind (sovereign states can be nothing other than ‘states of mind’), who cares about the sailboating notion that we are participants in a dynamic that is greater than us, that we must put our behaviour in the service of sustaining dynamical balance and harmony with. In deferring to an idealized sovereign central authority, there is no longer any need to tune in to the place-time dynamics our sentient experience informs us we are unquely, situationally included in. Instead, we can put our behaviour in the service of belief in a supreme central authority and become one with the pure Parmenidian powerboating causality that is (ideally) locally originating ‘inside’ of an imaginary-boundary-line defined ideal sovereign state. In this idealist mode, the source of one’s behaving is no longer coming from the inductive actualizing and shaping

of the dynamical space one is uniquely situationally included in and informed of by one's real-life sentient experience. One's behaviour is animated from elsewhere in idealist mode;

“The capacity for self-surrender, he said, for becoming a tool, for the most unconditional and utter self-abnegation, was but the reverse side of that other power to will and to command. Commanding and obeying formed together one single principle, one indissoluble unity; he who knew how to obey knew also how to command, and conversely; the one idea was comprehended in the other, as people and leader were comprehended in one another.”

Today, those sitting at the helm as supreme central authorities of local, independent sovereign nation states (i.e. those that constitute the idealized source of locally originating behaviour of the nation) are seduced by a powerboating psyche that informs them that it is in their power to construct a desired future for, and on behalf of their constituents. The powerboating leader amongst powerboating leaders, all holding to their Parmenidian certainty, must come to conclusion on ‘what is’ and ‘what is not’ and let ‘what is’ be the driver of his nation's behaviour. The powerboating masses that have installed him at the helm demand that he determine ‘what is’ and get on with it. Their part of the bargain is to relinquish their sailboating psyche; i.e. relinquish their sentient experience informed understanding based on their particular place-time situational inclusion, and become fully-committed, unconditional self-abnegating tools of the supreme central authority (without stopping to reflect on the fact that the very ‘idea’ of a sovereign nation is a ‘secularized theological concept’ put into operation by violent force,

that of taking control of an imaginary-boundary-line defined local object land-tract, and securing that idealized local sovereign object with its absolute 'inside' by trading to desperate people co-ownership rights in exchange for their commitment to bearing arms and giving their lives, if necessary, to keep everyone believing in the idea, those inside and outside the imaginary boundary lines that serve to define it and axiomatically affirm its (ideal) existence.

The subtitle of this book, *The Fall and Rise of the Sailboating Psyche*, reflects the shifting balance in the historical rivalry between the local-object-dynamic and fluid-dynamical worldviews. 'Sovereignty' is the flagship of putting idealism in an unnatural primacy over sentient experience and re-orienting the behaviour of social collectives to destination-driven powerboating authorities in local object centres rather than from conscious sentient experience of one's unique situational inclusion in place-time. The continuing dynasty of local sovereign object-nation driven social dynamics is currently being questioned, implicitly by the rise of NGOs and a rising humanity wide environmental consciousness (i.e. 'We are all participants in an unfolding dynamical space that is greater than us', and/or 'Our behaviours condition the dynamics of the space we share inclusion in at the same time as the dynamics of space condition the behaviours of we who are included in it'). As D'Errico et al observe;

Now, as the 20th century ends, "It is fashionable to argue that sovereignty is changing and that states are losing their validity and meaning." "[I]t has become virtually a cliché to discuss the decline of sovereignty." (Lombardi) ... sovereignty cannot be an accepted dogma either in terms of its theoretical utility or political sufficiency. The ... elevation of sovereignty and

statehood to universal supremacy is not just being called into question, but is being eclipsed by the press of events and ideas. (Denham and Lombardi).

Those embracing firstly their powerboating psyche, who are currently 'leaders' of the most powerful sovereign nations, are fearful of an imminent loss of the Parmenidian/Platonic certainty 'gold standard'. The 'war on terror' is an intuitive response to stay the pressures that threaten to restore the sentient-experience informed consciousness of the humanity-wide populace to the helm. How this is being worked is described in the familiar elucidating comments from the diary of Gustave Gilbert a US Intelligence officer in his interviewing of Herman Göring at the time of the Nuremberg post WWI war crimes trials.

"We got around to the subject of war again and I said that, contrary to his attitude, I did not think that the common people are very thankful for leaders who bring them war and destruction.

"Why, of course, the 'people' don't want war," Goering shrugged. "Why would some poor slob on a farm want to risk his life in a war when the best that he can get out of it is to come back to his farm in one piece. Naturally, the common people don't want war; neither in Russia nor in England nor in America, nor for that matter in Germany. That is understood. But, after all, it is the *leaders* of the country who determine the policy and it is always a simple matter to drag the people along, whether it is a democracy or a fascist dictatorship or a Parliament or a Communist dictatorship."

“There is one difference,” I pointed out. “In a democracy the people have some say in the matter through their elected representatives, and in the United States only Congress can declare wars.”

“Oh, that is all well and good, but, voice or no voice, the people can always be brought to the bidding of the leaders. That is easy. All you have to do is tell them they are being attacked and denounce the pacifists for lack of patriotism and exposing the country to danger. It works the same way in any country.” --- Gustave Gilbert, *The Nuremberg Diary*

Current cynicism over the ‘good’ and ‘evil’ (Parmenidian ‘what is’ and ‘what is not’) justification (where the mission is to proliferate ‘good’ as in ‘democratic sovereign nation state’ and stamp out ‘evil’ as in ‘those who oppose ‘good’) for the wars in Iraq and in Afghanistan is further indication that the current rise in ‘sailboating psyche’ relative to ‘powerboating psyche’ is not going to be easily quashed.

‘Anti-capitalism’ and ‘anti-globalisation’ are further indicators of the rise of the sailboating psyche relative to the powerboating psyche since what is really being objected to here, is the blunt, destination-oriented powerboating mode of corporations.

Corporations are idealized local, independently-existing objects/systems with locally (internally) originating behaviours. They are ‘ideals’ rather than real things available to our sentient experience. They are, like the sovereign nation, or like the perfect form ‘hexagon’, an idealization extracted from the continuing fluid-dynamical living space that we all share inclusion in. ‘Tread lightly’ initiatives such as ‘fair trade’ and ‘fair travel’ are what

people are massively 'buying in to' which our humanity-wide consciousness would like to supersede the Parmenidian powerboating behaviours of those idealized local objects/systems called 'corporations' whose self-imagined independent existence is a secularized theological concept supported only by common belief, and like the imaginary-boundary-line based independent existence of sovereign object-nations, police-protected (threat of violence-protected) by order of the supreme central authority that owes its existence to common belief in those imaginary-boundary lines.

The disconnected-from-nature-and-sentient-experience tautological systems set up by idealisation based local object dynamics have proliferated through the world with the spread of dominance of our Western idealism-over-experience propounding culture. But it appears as if its bi-millennial heyday is coming to a close.

We need not fear some kind of apocryphal implosive collapse since the CEO of the corporation and the President of the sovereign nation never 'really' possessed the power we attributed to them in the over-simplistic Parmenidian idealist portrayal we gave to them.

There is also 'community', the stuff of our experience, wherever there is 'sovereign nation-state' and as we know from history, when the imaginary-boundary-lines shift and are remapped, and/or when idealized local independent object-nations dissolve or are absorbed by others, the people that make up community, the stuff of our sentient experience, does not dissolve. And in particular, the humanity-wide consciousness of our shared participation in an unfolding spatial-relational (evolutionary) dynamic that is greater than us (we did not create the world dynamic, the world dynamic created us) is going to sustain us no matter

how many idealized, common-belief based local
objects/systems/organisations/sovereign-states dissolve,
fragment and are reinvented by idealizing politician-priests
and their cartographers.

* * *