A Speculative "Information Metaphysics" (A kinda "Information Realism" according to a "relational triad")

Ian Glendinning 3 April 2019

2 slides – *Dense* statement of the Basic Metaphysics (A to G)
 2 Slides – Refs, Questions & Corollaries (*1 to *14)
 (Additional appendices with *rough* development of sources.)

Speculative Information-Based Metaphysics – Ian Glendinning

- A. In the beginning, always, everywhere and forever. Primordial (aesthetic) continuum, literal vacuum (empty of all physics including time, not just material "particles"). The ground of *all* possibility (*1). Nothing of any possible significance. Nothing (full stop).
- B. Except, how small and close together can possibilities be in this continuum and still be distinct, meaningful, significant? (*2)
 If the smallest dimension of significance were zero these points would be mathematical singularities. We need to be able to integrate any available information around (over the event horizon of) each point (*3). The smallest single "bit" is one such infinitesimal singularity.
 Bit = the Democritan "atom" (*4). Something than which there can be nothing smaller.
- C. In order to support possibility, the continuum must be *fluid*, flexible to change in the arrangement of bits (*5). Any perturbation between any two (or more) bits in this continuum is new information a pattern of bits. So far *this is entirely conceptual infinitely flexible possibility*, there is no physical embodiment of this information and no observer (or any consciousness) to perceive (or even conceive) it.
 - Q Is anything more fundamental than *possibility* even conceivable? (*Do not pass go*)

- D. From this concept of information (*6) all else is derived by algorithmic processes (*7): space, time, causation, physics, consciousness, life, the universe and everything.
- E. Algorithmic processing of bits has some very important properties. New entirely unpredictable and interesting "things" arise (*8) and sometimes self-similar things arrive at different "scales". And, having arisen, these things (and not merely their genetic bits) at different scales can be involved in further algorithmic processing in this new "layer" of interesting stuff. As a result of their history (*9) new things have their own properties and behaviours beyond the sum of their fundamental background bits.
- F. This process continues ad infinitum and fundamentally new layers of significant types (or species) of thing arise. This we call evolution (*10).
- G. Having evolved from this same information stuff, physics, consciousness and higher level models of the whole (conceptual and embodied, like this powerpoint slide) evolve in their own branches and continue to interact with each other through the common layers on which they (all) supervene ultimately. Some "things" become so far separated in evolutionary history that they can never communicate or interact. Quite different stuff (and physics) may exist in in different space-time "regions" of the cosmos.

Notes, questions and corollaries:

*1 – Northrop's "aesthetic" continuum (as used by Pirsig) but the "nothing" from which all else is created is recurring in human thought. ["Aesthetic" because it can be perceived here and now, in-the-moment – dynamically, qualitatively radically-empirically (a la James), – *without any* pre-conceived syntactical model of *any* semantics.]

*2 – Boscovich (as used by Mach, influencing Einstein) posited the idea of closest spaced points in the continuum [and went as far as deriving all (then) known physical laws and forces by a purely speculative (!) mathematical scheme].

*3 – Rovelli and Verlinde – at Loop Quantum Gravity level and at Cosmological scales have used this integrated informational view of the event horizons around black holes & singularities. (And many more, see IIT)

*4 – Democritus – the original conception of the indivisible atom (before physicists assigned the name to the smallest "particle" they currently knew about).

*5 – Fluid, as old as the *aether*. But also Rayner's model of naturally inclusive flow-forms, and in Verlinde and many others as fluid analogies amenable to Navier-Stokes representation (at all scales) involving integration around event horizons to resolve virtual singularities in the maths.

*6 – Shannon – Information as the complement to entropy in any description of object as ordered arrangement of possible stuff.

*7 – Kolmogorov et al (including Wolff, *also recently deceased Ryals*) – processing as compression, highly-ordered local entropy minimisation as part of cosmic entropy maximisation (2nd law)

*8 – Conway (game of life), Weinberg (cellular-automata), Hofstadter disembodied conceptual "slipping" (Tabletop) & many, many 20th C computer geeks ;-)

*9 – Non-Ergodicity ...

*10 – Darwin, obvs, but mainly Dennett (and many pan-Darwinists / New Synthesists). Laland and the EES (Extended Evolutionary Synthesis) project (out of Santa Fe).

*11 – Pan-psychism? – literally, not required at any fundamental level. Proto-psychic stuff is same as proto-material stuff (See **Res Informatica** "relational triad" model of Information Realism.) Q – review Kastrup latest on *idealism*.

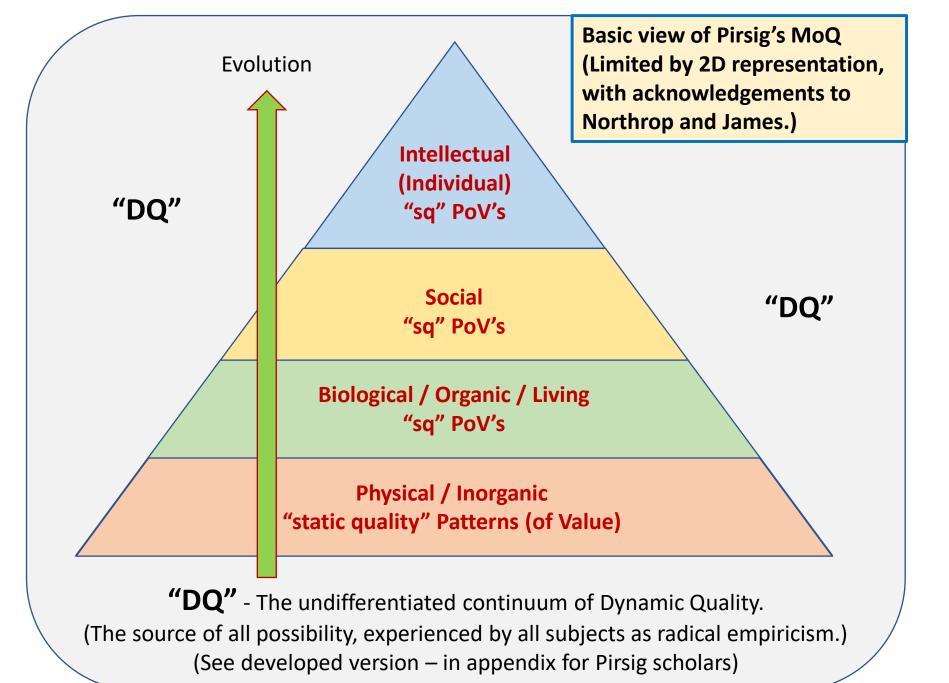
*12 – God? / Intelligent Design? / Matrix? / Supernatural Programmer? – No need for other worlds or beings beyond this world. Spiniozan - all effects including intelligence and design-led evolution naturally evolved in this world. (And, there can be regions in this world beyond event horizons with different non-communicating physics, even if we can never know them. Physical Laws evolve like anything else - Unger & Smolin.)

*13 – Consciousness, Free-Will and Subjective Humanities? – All are real and interacting causally with the physical world – Dennett and more. (Subjectivity is no more an illusion than the physical world need be an illusion to an idealist. See *relational triad* view.)

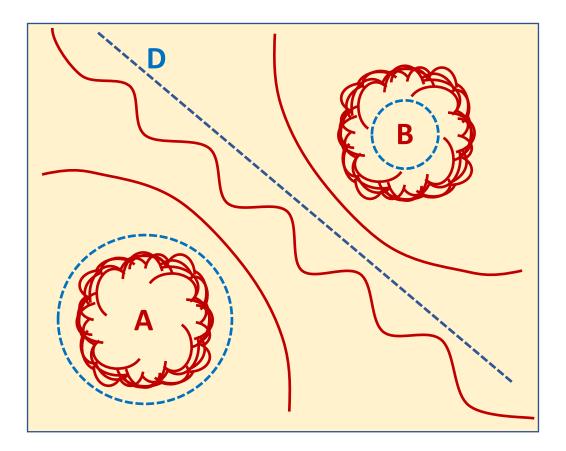
*14 – Time & Causation – remain intractably weird (!) but **presumed** to any fundamental theories or metaphysics. Common sense impressions arise in organising relationships in the evolved world, *even if* they don't evolve per-se. (Ditto, real, not an illusion even if our perception is misconceived.)



Appendix A Some supporting materials and additional links

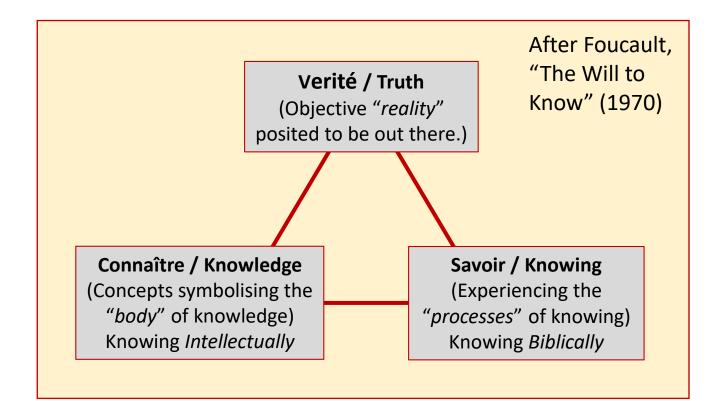


Significant difference, this'n'that distinct Identity, narrowly and broadly "defined" Distinguished by dividing line(s) – "good fences" Identity is a (political) choice – to "make a point"

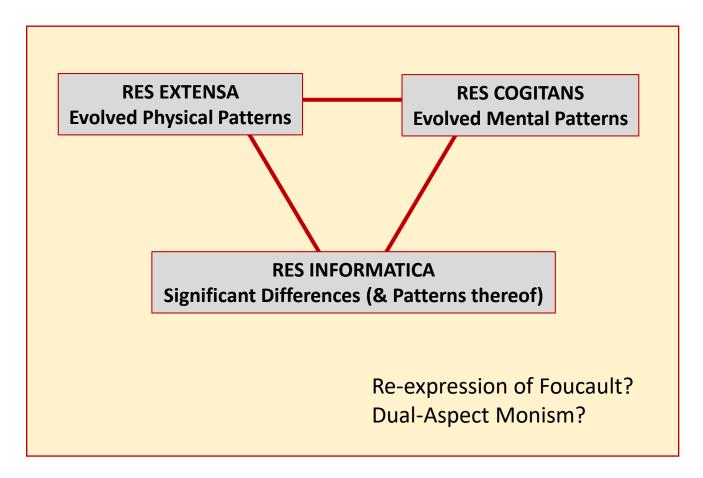


MORE / LATER

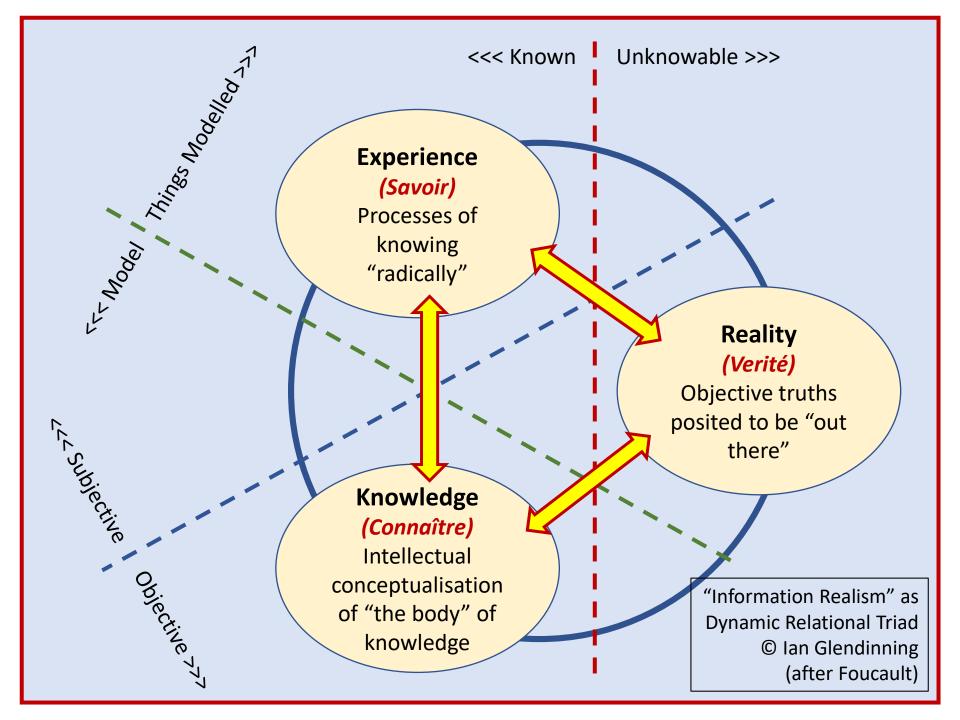
Flow-forms a la Rayner <u>http://www.psybertron.org/archives/8856</u> Navier-Stokes & Singularities <u>http://www.psybertron.org/archives/12378</u>



English (or any one) Language – even the purest mathematical logic – is restricting when it come to knowledge & knowing. No one "model" can accurately express all others and itself – Kant, Nietzsche, Wittgenstein, Gödel, Einstein …



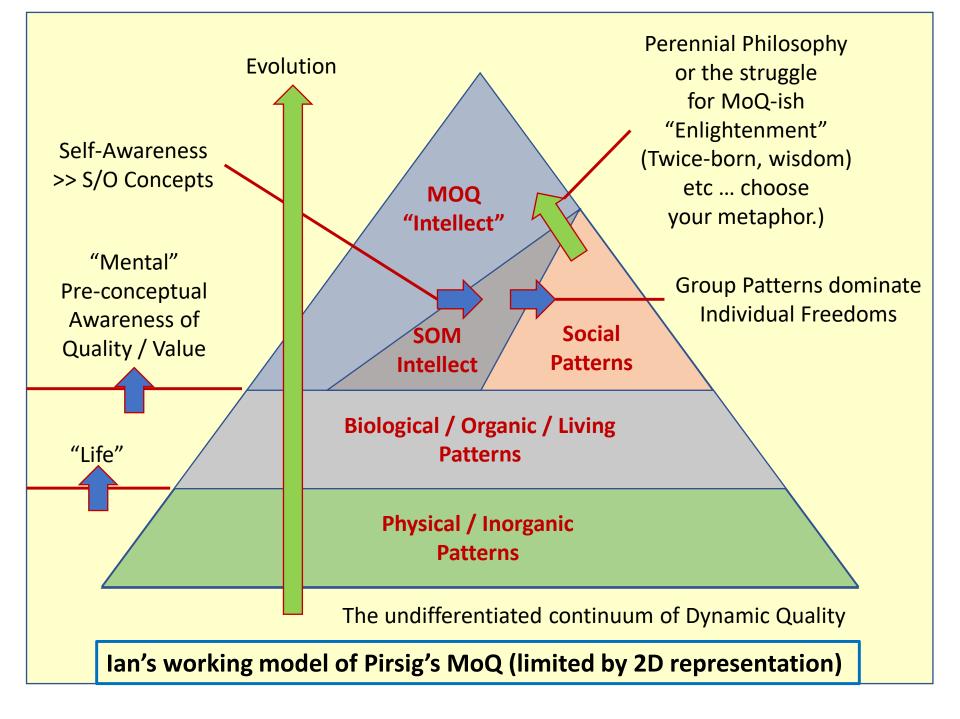
See dynamic "relational triad" >>>



This stuff is **ALL** already out there. (*Even if in other words*.)

- EES Extended Evolutionary Synthesis <u>http://www.psybertron.org/archives/11218</u>
- IIT Integrated Information Theory <u>http://www.psybertron.org/archives/10842</u>
- Boscovich > Mach > Einstein How close together can two points in space-time be and still be distinguished as having distinct identity – a quantum of significant difference? (eg Identity & Rayner diagram)
- Dennett, Unger & Smolin, Rovelli, Verlinde Evolution *is* an information-processing / entropy reversing process Best modelled as "flow" even at quantum (Democritan "atomic") level – always dynamic and the maths (processing the information) always involves singularities – Navier-Stokes / Entropy / Ergodicity / Directionality – Dennett / England / Brown - Reclaiming "intelligent design" !?! <u>http://www.psybertron.org/archives/13079</u> Flow-forms a la Rayner <u>http://www.psybertron.org/archives/8856</u> Navier-Stokes & Singularities <u>http://www.psybertron.org/archives/12378</u> Digital Physics - <u>http://www.digitalphysicsmovie.com/</u>
- Idealism <> Realism. Russell <> Barfield "saving the appearances"
- Etc, etc, etc ... much more.

Appendix B Fitting Pirsig to the Triad (Interest to Pirsig scholars only?)



Commentary on the Pirsig Diagram

http://www.psybertron.org/psybertron-pirsig-pages/ians-moqpicture

http://www.psybertron.org/archives/10828

The whole diagram is really an ontology, a *non-contentious* evolutionary ontology of everything that has come to exist (or may come to exist) in the world. (See Dennett, EES, etc and many more evolutionary philosophers.)

The Metaphysical bit (ie "the MoQ") is the fundamental field of "undifferentiated continuum" supporting DQ (Dynamic Quality) from which all else emerges – to be experienced immediately as "radical empiricism" but which are then constructed into patterns of sq or spv's (static quality or static patterns of value). Patterns of value inherent individually & socially, consciously and subconsciously as the model against which direct experience (DQ) is interpreted or constrained.

