

On the 'matrix' or 'simulation of reality' in the human mind

Marika Bouchon, August 2021

RE-presentations of the situation that «presents»

RE-presentations, through brain filters, mental lenses, and culturally parameterised frameworks of explanation \Leftrightarrow experience, are

- LIMITED by categories (naming, counting, symbolising) [Robert Sapolsky] and frameworks
- REDUCED by framing what is represented, in boxes, bubbles, circle-(w)holes, enveloping what we call things, objects, subjects, selves, worlds, universes – systems
- BIASED by Perspective (perceptual brain interpretation, mental frameworks or beliefs), but also geometric reduction and projection.

RE-presentations are INDISPENSABLE for specifics-general understanding, for languages, mathematics, problem solving, targeting solutions, inventing, engineering, creativity, human performance, etc., and for immediate survival and restoration. They are the basis of the logically circular consistency of one's Perspective on surviving in life (ExPLANation \Leftrightarrow ExPERIENCE) (or that of a groups): one cannot react effectively if explanations are not consistent with the experience at hand. The physiological neural-mental 'activation' of survival mechanisms correlates with mental/sensory focus.

However, if this state is permanent, these re-presentations, tend to become a 'reality' and create **the mental-sensory 'matrix' or 'brain simulation we live in'**, as cybernetics or artificial intelligence specialists now call this, in which the human head-brain-mind-self lives. The collective cultural representations that are interpreted as 'Reality' or 'Truth' do the same to humanity in general. For example, it convinces people who never go out of cities or their village that nature is just full of dangers, or people need to protect themselves from other people and learn to survive in the societal jungle and rat race. This is a limited apprehension rather than the entire presenting situation. Nature also has peaceful tranquil behaviour and tranquil gladness to be alive, and some environments that can calm survival reactions and states of need in humans; there are also benevolent people.

This can be seen in urbanites who go for the first time travelling in the Australian outback: it takes about 2 weeks for their weariness of others and habit of fearfully locking up their caravan when they leave it, and realise that people can also be pleasant and safe, dangerous animals are not always on the ready to get them; in that short time, their chronic stressed state eases, also easing their health and their behaviour. There are many examples of people's experience of life undergoing a change when they spend time alone in nature – this changes their state and with it, the worries of their societal daily life become distant, unreal, and their representation of life or the world changes, changing their entire perspective on their own existence. Hikers in particular often experience even a perceptual de-conditioning and feel more aware of what is actually in front of them and inside – they remember their primate body.

In national parks campsites, I heard several times urban weekenders enjoy their two days outdoors in what they consider 'out there', out from 'the world', and then complain that it was time to get back to 'reality' – that of urban environments. These days, the 'brain simulation' viewpoint, which does not often explain what else there is, find itself directly and systematically countered by 'neuroscience psychology', which advocates just as intently that the only way to succeed and be

happy in the crowded urban rat race is actually to make up a 'new story' about one's life 'in the world', infuse it with emotions, and believe it powerfully enough to create a new reality. This is just a reformulation of NLP techniques and the new age belief that 'we create reality'.

My investigations demonstrated that

- the 'brain simulation' is not 'hard wired in the brain' but a cultural habit, societal and civilised
- the 'reality' we create in the mind does not include biological life
- all spiritual traditions and philosophies of nature consider paramount a mysterious state in which a person is present and mindful of the body as well as everything else, or awake from the dream-simulation and categories that hide what actually presents to awareness. Roger Penrose, a Nobel Prize mathematical physicist, speaks of 'awareness' as a non-algorithmic apprehension, which could not be reproduced by computers and AI. One of his topologist insights is recorded and available on internet. Words, numbers, fixed images, symbols are all algorithmic and reproducible by computers. These are the tools of the brain and common mind. Biology has other means inside the body.

PARAMETERS of Re-Presentation - some examples:

- Cultures use many types of parameters to represent things, objects, subjects, selves, worlds, universes – systems with an envelopment.
- Movement & Direction, philosophy of *culture: Primus Movens & Axis Mundi* [see Tversky on the direction up in psychology]
- [N3-polar] activation, animism, stimulus, spirit, inertia-speed-acceleration, drive, body-mind-spirit, advancement/progress, growth (one-way)
- [N2dual] Space-Time, Matter-Energy, Physical-Human, Material-Mental, body-mind, Nature-"Human Nature", Human-animal, chaos-order/ pattern, inside and outside of a system
 [(N2d,N3p) combinations and recombinations (2,3) or (3,2) produce:
 •*Envelopment, confinement, bubble, circle/One/(w)hole, OD point/threshold, (re)-integration/unification... combinations of (1,0)*] Systems inside-outside: in-out, body-environment, self-world, us-them cliques, "The World (human)"-"the Environment (out there)".

Morphisms of representation

PhysikeMorphism & AnthroMorphism

The simplest form of this is the archaic naming of 'Human' & 'Nature', in which a tribe's name for itself in its own language means 'human'. This develops, in antiquity, into an integrated form, the 'human Center of The World'. More commonly, we project (by geometric reduction) things as being physical \leftrightarrow or human, material \leftrightarrow or mental. These are the most ubiquitous parameters.

All of the above parameters are recombined in countless ways to produce all the fundamental symbols, categories, received knowledges, frameworks, beliefs, and stories of origins & ends (creation or origination of phenomena that are 'apparent' or 'superficial' or 'surface' phenomena). These are carried by cultures and civilised artefacts, and the ideas produced are also found in physics and biophysics. More fascinating is that the framing through parameters leads to ideas which then can be "found", discovered in the facts of physike-anthro-Morphed 'reality' (the 'matrix or 'simulation'), for example black holes, electricity power, or DNA. It is therefore a very effective way of using the mind, and it correlates with the 'unreasonable effectiveness of mathematics in the natural sciences', which now has been demonstrated to also have an uncanny ability to describe and predict human population behaviours in society through statistics and probabilities, including economics. The patterns and connections of these frames are well represented by mathematics and can be simplified with (0,1)-based computation. But does this account for *all* aspects of presenting situations, or all of human behaviours?

They have a self-centered or anthro-centered biased perspective, relying on the most common human state of deployment of biological survival mechanisms (survival activation and rest-recovery healing), assuming or believing that this is universal. This is over-generalised. They constitute the

differentiating narrative of the "superior human", which persists in holding an 'unconscious', a dark human nature, as well as a 'mystery', a 'hidden' core of culture.

SpiroMorphism

Part of this mysterious core, sometimes dark, relates to a framing of oriented activity whose workings are best represented by a spiral, and linguistic expressions such as 'spiralling out of hand' (getting out of control). It can be differentiated for understanding, with notions of Up-Down and left-right (sinister-righteous are meanings held by the etymology) as a long-periodic uncontrolled 'winding up-down' spiralling. The end result of going 'up' is 'spiralling out' and this is associated with high energy or chaos and falling apart, it works in a 'winding up-down' manner, and trying to evade the spiralling-up and out by winding-down or in results in a crushing down to a point of no return, and a 'Fall'. Altogether, the spiral (or snake in archaic traditions), represents loss of control and of integrity, one way or the other. This symbol is known in all cultures, inherent to human mentalisation and often associated with uncontrolled human behaviour, individual and collective. It is a feared phenomenon, yet sought by some. The spiral is also present as a representation of constructive power, *if its dangers are modulated and avoided* by knowing how it works, but this is a 'secret' knowledge and a very rare capacity. Mostly the spiral is symbolic of danger or 'dark' power.

Spiro-Morphic framing is also visible in very long periods of human history (human behaviour, civilisations) and their productions (the medical caduceus, DNA genetics), and in climate (especially wind and fire, in prehistory), and the long phases in a human life since 'stability' proves true only 'for a time' but not so much in childhood or ageing. This is not well known and is 'not understood' in human 'spirited' behaviour as assessed in modern medicine; it is not taken into account for societal or individual stability and integrity.

The spiral represents states of critical instability, which may either lead to emergence or power if the 'energy' is 'managed' (e.g. invention of electricity) or to a Fall and destruction if the spiralling is not stopped before it goes too far (e.g. psychiatric madness). As far as I could find in the entire Store of Knowledge worldwide from before written history, nobody has ever defined this 'too far' *specifically* in a *general* manner applicable to *any* context: each cultural or personal context measures or names it differently, according to sets of values. Consequently people never agree on what it means, and this is currently visible in the global situation.

However, the geometry of these states is quite simple (a 3D-motion spiral), but the (0,1) computed or mathematical forms expressing this are highly complicated and involving complex patterns that lose sight of the motion aspect. The *Animated Geometry* that I formalised using non-local topology, a dimensional geometry, can retain this aspect, as 'moving' from one state of deployment to another, toward limits, toward surface-boundary.

The 'not too far' then consists in not 'reaching', and more importantly, not 'passing' limits.

Limits and approaching them, or 'not going too far', can be modelled or sensed in a situation that presents, even if representations do not agree on specific details and specialised generalisations and they do not have a unanimous vocabulary.

All the Re-Presentations are well suited to describe survival mechanisms, but *not necessarily indispensable to know what to do before* risky situations turn into crisis, disaster, catastrophe, collapse or fall apart (for which outcomes cannot be predicted even by complex models).

The Re-Presentations are useful for survival, to model processes of 'orienting' to target, solution, for meeting immediate needs, for an overview understanding of one-way advancement, development, evolution, expression, expansion, growth, extension or localisation, or to understand how cancer spreads. However none of these Re-Presentations can account or model another domain that is *non-oriented*.

This domain cannot be RE-presented with all these parameters because it is *non-oriented*. Not only it does not involve critical instability states and complex re-organisations, but also it has the ability to un-deploy them and to 'un-wind' the spiral completely (not be in a spiralling mode at all), *without loosing* access to all things advanced, such as technology, intelligence, or benefits of working together, but also *without* envelopments, separation, dissonance, *without confusing* the representations for the actual situation, *without ungrounding* from the simplest way to be or face situations: fluid response to small changes.

Wild biology of living beings and behaviours of water, display the oriented, structuring or energetic modes which are auto-reinforcing, but they also operate in the auto-limiting non-oriented mode, in different situations. Philosophies of nature place much important on life and water, but they are systematically misinterpreted, reduced, and translated into conventionalised representations, and the result that they have not succeeded in defining what is different about them. The difference lies in their topologic properties – they give access to the non-re-presentable behaviours that can un-deploy completely from Boundary.

Key words

Representation, parameters, reality, realities, non-oriented activity, limits, boundary, envelopment

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