A WILD GUESS ON TIME

The source of all sources pours out 'matter and force' (world), 'entity and logic' (reason), 'observer and picture' (me). I think: 'I am being and that picture of world and reason is locked inside of me. By the same time I do know that I am part of it. All these 'entities' are shown to me by 'matter and force' but what is out there in this one, real, hidden world that plays here, inside of me, the part of 'logic' being eternal, inalterable, mathematical?' My guess is: the continuum.

Frozen - Melting

"There is, if you will, a Theory Of The Continuum embedded in our set up of analysis, that has to reasonably justify itself in just the same way as any physical theory." (Hermann Weyl)

Since I do not know what 'time' is I have no reason to assume it to be a parameter in any way special or different from all the other ones I am acquainted with. This means that a point P is as singular in 'time' as it is in any 'direction' or 'dimension'. A continuum C (nothing but points particularly in what I could mean with 'time') does not allow for any entity whatsoever to 'be there' and thus does not support mathematics at all. To render math doable I have to make a hidden assumption first: the black board, the vacuum of math, be time-frozen. What 'time' *is*, remains unknown. I just need something frozen with the continuum, and whatever it has been before I will call 'time' later. Then I do 'have' points and then lines, planes, intervals, sets, numbers, whatever comes into my mind. Since the very start of math is time-freezing the continuum, it cannot, of course, help to figure out what time actually is. What would it mean to math if this frozen time was to melt again? P (not-being for lack of duration) and C (demolished by absence of order) must suffer confusion. One assumably has P, C and 'time' either frozen or liquefied together.

I want to understand 'existence' without making any assumption in advance, which renders 'nothingness' the only possible start. I do not think of 'zero' here for it is based on 'coordinates' and 'dimension' – everything but 'absence of assumptions'. Nothingness emptied of structure neither exists nor not-exists. The same seems to apply for C and P. I suppose: *Existence is a pattern within a matrix with neither pattern nor matrix existing itself*, i.e. a story of *two entities mutually emerging from each other* for whatever reason. Liquefied, these 'real but amorphous' entities P and C cannot be as different as their 'imaginary but given' mirror images are in timeless math. Are P and C different (dual) or identical (symmetrical)? Structurelessness simply does not allow for an answer, hence the verdict: this decision is not admissible – though in clear violation of the 'principle of the excluded third'. First I will look at both cases separately:

• **P][C** read: 'P-C-duality' – with C being an infinite, open space. After time-freezing the scale-symmetry of C is broken by arbitrarily choosing [0;1]-intervals to allow for counting. Then Cartesian points are defined in terms of tuples of coordinates – math with an *epistemical* P.

• **[PC]** read: 'P-C-symmetry' – with a 'P-like C', sort of shrinking to P-size when seen 'from somewhere else', a 'hypercompact' space, and a 'C-like P', enveloping the continuum 'from inside', an inverted point, covering the enclosed C – anti-math with an *ontical* P.

The notions of duality [D] and symmety [S] are derived from observation and scientific discourse – realizations frozen into a pair of words – clearly dual. But if they are chosen to be the first principles are they themselves dual or symmetrical? If I was ignorant of any meaning of D and S and nothing else was there, D and S could only be demonstrated through 'S means: D is S' and 'D means: D is not S' (or the other way around) and not until then the meanings of D and S would be given. Again something like two entities that mutually emerge from each other. The lack of any structural premise about 'D and S' being 'D' or 'S' renders that decision not admissible as well, generating a remarkable structure, the 'symmetry|duality of symmetry|duality': S[DS]D. It's about the symmetry within the notion of symmetry itself (with an symmetry in respect to inversion for operator and entities being the very same). I call such a form S[ab]D 'basal' indicating an 'emergence without prerequisite' prior to 'tertium non datur' and denote this P-C-idea as S[PC]D.

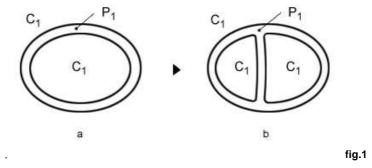
S[PC]D (a rather mathematical concept) and S[DS]D (a bit closer to a physical sort of notion) actually are the very same ideas. If this is truly substantial in respect to reality it would supply the Wignerian 'unreasonable effectiveness of math' in respect to the process of nature with a reasonable basis. S[PC]D might work as a lock keeping the 'source of existence' covered from the unbidden eye. It's like two chests locked up with both keys kept in the other chest respectively. What holds P][C and [PC] together? And how is S[PC]D being opened?

[PC] renders an arbitrarily chosen point P_1 indistinguishable from C, and thus from any other P. With P][C we have C being the wholeness of all P. If both notions are equally true, any P_1 should be expected to 'cover' all other Pp (the compact manifold C_1 missing P_1), including some P_X (just another arbitrarily chosen point), and itself to be 'covered' together with all other Pp by P_X (the compact manifold C_X with P_X excluded). Assuming P_1 should cover all Pp without exception would render S[PC]D to be of the form S[aa]D in respect to P_1 – yet a single identity can impossibly be dual. Since any P of C can function as P_1 or P_X respectively, I notice S[PC]D to be of an amazingly complicated and interconnected structure. 'Connection' means something 'vertically' here like hierarchy levels instead of vicinity on the same level.

To have P_1 covering C_1 , as if expanded, shouldn't allow for the resulting entity to 'consist of' points anymore. P_1 has rather been turned into a foam-like array of membranes, bubbles of completely indefinite size. I imagine such a foam-grid as separating those C-like Pp covered by P_1 . Of course all elements here are still fully interchangeable. No 'actual manifestation' has taken place yet. It is a virtual cellular structure, a non-illustrative 'ordering without order'. If this foam-grid is to be assumed, its cells should be full of 'liquefied' i.e. real, points separated by the 'degenerated' or 'foamed', i.e. frozen, point P_1 . The foam-grid, actually a lattice of gaps of nothingness (neither existing nor not-existing), neither factually separates nor not-separates those entities being 'suspended' in it. Those gaps are just razor blade edges for human reason to tiptoe along. In respect to reality, there is a need for some push to minutely disable S[PC]D, resulting in a decrease of symmetry. In other words, some 'splicing' of these separated foam-cells, i.e. compact manifolds, is wanted to get done eventually with those 'basal' ambiguities.

 P_1 and its covered C-like Pp are indistinguishable actually. But, through the compactification of those C_1 -manifolds, their boundaries look finite 'from outside', i.e. as if present 'there'. Once more, P_1 and C_1 are actually indistinguishable. Those C_1 -manifolds should be foamy themselves, again covered by a lattice of gaps of nothingness with, due to the previous choice of perspective, the already chosen candidate for degeneration P_1 ... and so forth up and down the hierarchical ladder. Consequently, P_1 and P_X are the same, which is consistent insofar as all points of the liquefied continuum are indistinguishable from each other to begin with. Apparently, any initially chosen point P_1 plays his role as the *constitutive* point of C.

I call this structure 'scale-inversion-matrix' (SIM) for whatever element of C be chosen as P₁ it always includes the actual wholeness and even itself a huge number of times. Still, this SIM is 'much ado about nothing'. To decrease symmetry I think of something like 'giving birth', for to render those foam-cells really being connected and interacting it is necessary to show them emerging from each other. Such 'giving birth' should be mutual – similar to a bacterial way to unfurl. How to transform [fig.1a] into [fig.1b]?



I treat the underlying structure of [fig.1a/b] as open and set up for 'stem and budding' [fig.2a-c]. Here, [2c] is the only figure to conserve the global structure of SIM but it unavoidably creates a sort of a navel, a singular mixing-point, where P and C become critically intertwined [fig.3], a perturbation disrupting the scale-inversion-symmetry of the matrix like raisins do in a dough – which is exactly what is wanted: a symmetry break performed through the continuum itself (as it is considered to be here).

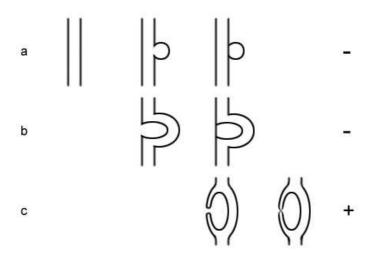
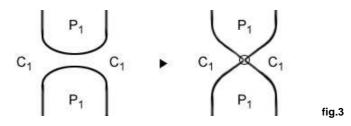


fig.2



This process of 'giving birth' might even provide a hint towards a quantification of SIM. Since the number of elements of it is the actual infinit (ω), yet the number of spots of this symmetry break is one less (ω -1), a theorem by Reuben Goodstein might find application: Every strictly monotonous declining sequence of ordinal numbers eventually terminates at 0 after a finite number of steps, even if it starts with ω or any other transfinite number [1].

Born - Dying

Another version of the 'frozen – melting' chapter starts again with P][C – the time-frozen, open space of math. A point P, a time-line actually, renders the continuum highly directional, or polarized (between past and future). Then [PC] states that a 'real existing continuum' should be something like an ω -dimensional singularity with inversions infinitely nested within each other – a state of infinite 'tension'. [PC] and P][C form S[PC]D with a scale-inversion-matrix produced, an (ω -1)-dimensional bubble (or multi-bubble-foam of successively reduced dimensionality and 'tension') with a 'non-illustrative dimension' (this term indicates the difference to the S[PC]D description previously given).

The decrease of dimensionality of S[PC]D with increasing 'pixel number' is just a rough speculation, ontologically refering to the Goodstein theorem, assuming a wholeness of S[PC]D which decreases in depth when increased in width. S[PC]D is stated to suffer an (atemporal) affirmative push towards duality by inferring the grid-cells mutually originating from each other. Yet, the D-push evokes a re-balancing S-rebound of S[PC]D. With the decrease of symmetry, i.e. grid-cells 'compiled' from each other mutually, the C-rebound should be a 'decompilation' of such cells. A dynamic equilibrium between compilation and decompilation should be most desirable.

A grid-cell is called 'inverton' for all of its S[PC]D-weirdness. The singular perturbations are named 'scriptons' for having been kicked out of the SIM symmetry and now swimming above those raging waters like corks. In reference to 'existence is a pattern within a matrix with neither pattern nor matrix existing itself invertons provide the matrix as the scriptons inscribe the pattern. The invertons shall be of the highest possible symmetry themselves, as well as compared to their fellow cells and as the entire SIM-grid itself. Thus, SIM should be a tight package of its elements, for the P_1 -gap, of course, doesn't have any thickness at all – a problem of space filling (in the P_1 [C perspective) restricted to Platonian bodies with no distinguished direction being allowed.

In respect to 3-space I think of pentagon-dodecahedra [PDD] in hyperbolical space, with a compact-C₁-manifold content of elliptical metric. Why 3-space? "In high-dimensional spaces (nearly) all points are the same distance away from each other." [2] Thus, a high-dimensional SIM should be attended by a remarkably 'homogeneous' scripton distribution, yet, without having the scripton-marked SIM grid polarized. If the applied space is to be considered as reduced in its number of dimensions the

assumably arbitrary inverton distribution should be increasingly 'thermic' to conserve the non-directionality of the SIM-grid. Now, as I suppose, a scripton operating across a C_1 -manifold – P_1 -membrane – C_1 -manifold – transition is itself restricted to one, individual inverton-frame (in the assumed case of a PDD grid: a pentagonal face) [fig.4].

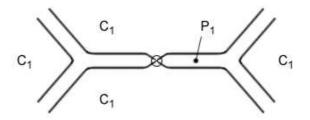


fig.4

It has some (infinitesimal but topologically significant) overlap with the inner structure of those C_1 -manifolds (SIM-structures themselves) and perhaps should produce knot-like complications as if wringing or mangling the 'immediate' grid-space (not the 'local', smoothly curved one). If such 'knots' would include several invertons, these might wondrously work hand in hand like aerial acrobats in a vaudeville show. Such a scripton-compound, as if a 'particle', could probably move freely through the SIM-grid following the tracks of the grid's local geometry. Yet, this anticipates a 'flow of time' which, of course, has not been demonstrated yet.

Once more what has already been suggested: The P_1 -membrane-grid is an open foam-like structure without an outer boundary that hosts scriptons one less than invertons. The C_1 -manifold, the continuum-content of an inverton, is the same kind of grid but one hierarchy level below showing a boundary adjacent to the P_1 -membrane which seems to be the surface for the C_1 -manifold but its compactness doesn't really allow for such a notion. P_1 is the constitutive point of C_1 , not only covering but 'penetrating' those compact manifolds of SIM since they are inverton-grids as well and their cells again are 'suspended' in P_1 .

To unlock S[PC]D means to specify a (non-temporal) breakaway configuration in the inverton-scripton-picture. My idea of such a minimal configuration is a PDD fully scripton-marked as sort of a 'decompilation nucleus'. Generally, such a 'full set' of scripton markings on an inverton might be recognized as 'local singularity' whereas a situation of an inverton completely devoid of scriptons would be considered a 'local symmetry domain'. Since the interplay of compilation and decompilation of invertons should cause a shift over the whole grid towards the termination spots, I would expect a grid-flow from any 'local symmetry domain' towards any 'local singularity' once a succession of time is established.

In order to gain such succession of events a 'local singularity' should not only be unavoidable but unlocking the scripton should immediately re-establish the 'local singularity' situation. Something like a 'collector' is needed to keep fleeting scriptons herded and decompilation and grid rearrangement running. There is only one thing available not to be crossed by scriptons: the manifold – membrane – transition (in respect to the 'finitely present' manifold-boundary with the *manifold-level* scriptons), the prototype of a 'horizon'. The three adjacent levels of hierarchy based on *the point* P₁ shall be reconsidered and now denominated:

- inf- P_1 the inverton grid of the C_1 -manifold suspended in P_1 (would show a cell flow from its inside towards the P_1 -membrane).
- sup- P_1 the 'vicinity' of P_1 (would show a cell flow from its transfinite outside towards the P_1 -membrane). Of course, 'inf- P_1 ' and 'sup- P_1 ' are actually considered to be SIM-indistinguishable.
- \cdot P₁ itself 'giving' both the horizon (to inf-P₁) and the cell-grid (in and of itself with geometro-dynamical behaviour as scripton compounds 'wring, mangle, or knot' the intrinsic geometry of the P₁-grid) is an open structure with local aggregations of scriptons leaving other areas of the P₁-grid abandoned with the crowded spots contracted (elliptical local curvature) and the devoided ones inflated (hyperbolical local curvature). The local symmetry domains and singularities are considered to be seeds for 'white sources' and 'black drains' respectively both scattered within the P₁-grid.

In other words, I imagine a P_1 -grid with a high-scripton-density core-region surrounded by bubbles 'of increasing extent' (seen from outside as from sup- P_1) until degenerated at the infinitely far P_1 -boundary. 'Degeneration' of such a bubble should mean 'inversion', i.e. (only) the 'farthest' inverton would wrap around the whole P_1 -grid – which is the *whole point* of [PC] to begin with. On the other hand (from the P_1 -perspective) all bubbles are indistinguishable and any bubble of the grid is the inverted one. It means that the P_1 -grid is an entity being incredibly big inside but reciprocally small for a sufficiently marginal observer, and which eventually disappears to an 'outsider'.

The P_1 -cell-wall, its horizon, is turned inside, fragmented and scattered over the whole P_1 -system. Yet, as I pointed out already, every inverton is capable of functioning as a horizon, just depending on the local scripton distribution. In contrast to current cosmology, I am stating here that our cosmos (assumed to be a P_1 -level cell of the scale-inversion-matrix SIM that constitutes the universe as a whole) has an edge scattered over its interior – all kinds of event horizons, stellar or galactical are thought here to be part of this edge. These horizons are connected either in an additive or a symmetrical manner. Either they are different celestial objects or always the same one – I should think: to draw a distinction here is to be inadmissible.

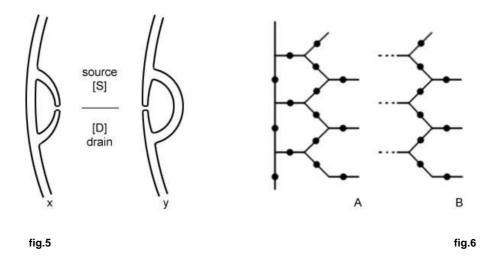
Black - White

Time is still at rest. No atemporal (time-frozen) structure can switch time on, nor can its description show how *the initial moment* actually occurs. The (temporal) existence of 'the whole world' will always remain unprovable for such proof would require a performer to 'beam' to an outside position. Yet, I am a P_1 -creature. Seen from outside my cosmos is just a point with all its complications strictly hidden 'inside' as if having nothing to do with the universe around. But, the cosmos has this non-illustrative aspect as well. It's part of a self-contained grid $inf-P_1 - P_1 - sup-P_1$ with an assumed $inf-P_1 - sup-P_1$ - transition as handy as a scripton singularity of P_1 is straight – that is also the stuff I am made of.

What I do already know is that S[PC]D – the neither existing nor not-existing wholeness of the continuum as it is, an entity both mathematical and physical – cannot be a static, unalterable structure. But how can one make use of its nearly indescribable features? There is no initial moment there to point at. An inf- P_1 -manifold-grid appears to be peripherally minute yet centrally tremendous, and it is indistinguishable from all of its local singular horizons. Thus, time 'initiation' should stem from the fact that the P1-manifold-boundary is *both sum and unity* of all singular breakaway configurations.

There is an opportunity for a (non-temporal) D-push to happen to the P_1 -cosmos: a sup- P_1 scripton, supplied by 'local cosmic destiny', (as if) crawling over the P_1 -boundary. Its 'footprint' should be present in all elements of inf- P_1 and have an effect on the scripton distribution on P_1 (like an 'initial condition'). It might even influence structural P_1 -parameters, i.e. 'physical constants'. A parameter is needed, for example, to balance the comp-decomp-equilibrium of white sources and black drains. Such constants should control the general way in which scriptons would temporally interact with and move through the inverton grid. Such motion (scriptons in respect to their grid as well as invertons to their horizons) should be present all over the whole inf- $P_1 - P_1 - \sup_{1 \le i \le n} P_1$ circle. If there is an entity inevitably driving a scripton-inverton-rearrangement, it would run the rest of the cosmos as well. Two such arrangements A and B should be of the form S[AB]D together [fig.6]. To decide if they are different or identical should be inadmissible. The crucial operation here is decompilation - grid-stuff from 'white sources' as if shifting towards 'black drains'.

On a 'white source', the two possible compilation patterns (x) and (y) are symmetrical [S], as the local environment is fully relaxed. The same pair of decompilation interactions taking place at a horizon of a 'black drain' is dual [D] [fig.5], for the local curvature is extremely boundary-stressed. Only the scriptons already arrived at the horizon plane can decompile [fig.6]. My guess is that decompilation takes place shell-wise with only one membrane layer 'at a time' dissolving at the horizon while the remaining scriptons must stay outside as if 'sucked back' into the remaining grid (for only one inverton and one scripton are allowed to unlock together). Then a scripton re-mapping has to be performed to conserve all topological features which were present before the transition.



The number of frames on the horizon (re-calculated during that 'quantum jump') should be allowed to vary with the decompiling, i.e. flowing, grid considered to be 'foggy' or 'uncertain'. Since the 'inverton-scripton-plasma' assumed here would have to fit with an emergent yet more physical one, say: a quark-gluon-plasma, the re-calculation of 'number of frames' on the horizon should be accompanied with an adaption of the agreement in local particle formation (i.e. no fragmented elementary particles are allowed). A and B of [fig.6] should be considered indistinguishable, with such a 'calculation' to be done, if necessary, to retroactively secure the conformity of the operation.

This is, in a way, similar to checking the colorability of a map according to the Four Color Theorem (4CT). Here's a simple configuration: a single land surrounded by a string of lands of uneven number larger than three. This string is to be tinted with three different colors but the third one is needed only once. Then two sufficiently extended lands are put around this closed string both meeting at the differently colored one of that string. Bang?! No! I just have to go back into the string and re-group its coloring a bit. The conformity with the 4CT can easily be re-established but has to be done *afterwards* – which looks a bit like 'time gone by', even though it is pure math. [3]

Time is 'cell flow' on its respective hierarchy level. I call the P_1 level 'ontical' (really there) and the adjacent levels inv- P_1 and sup- P_1 'epistemical' (as if there). Though scripton-intertwined (onto-epistemical coupling), they do not share the same parameter space (in which a parameter is the same for every inherent object). Space for inf- $P_1 - P_1 - \sup_{P_1} P_1$ is time for $P_1 - \sup_{P_1} P_1$, respectively. That P_1 shall be the ontical level, to me, solely stems from the concept that P_1 is from where I observe the cosmos even though it is (non-illustratively) infused with the other levels.

As far as the inf- P_1 cell flow towards the P_1 -horizon is assumed non-illustrative it shall be considered 'epistemically' continuous, i.e. not 'made of points' anymore. Here, a complication [fig.3] appears at a scripton of the P_1 -level. I assume the inf- P_1 cell flow (of the rate f_c) to be deflected into the P_1 -plane to be added up with scripton transitions (in particular with particle-like topological compounds). A supposed 'general decomp speed' should interfere here [fig.7] with any 'particle motion' (perhaps as a 'speed limit' \mathbf{v}_L) in relation to the SIM grid. With time understood as cell flow, this would mean the cosmos being operated by three temporal plus three spatial dimensions [4], two temporal ones overlaying two spacial ones (scripton-inverton-time, SIT), the third spacial one being congruent with the third temporal one (compilation-decompilation time, CDT).

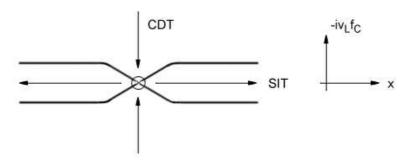


fig.7

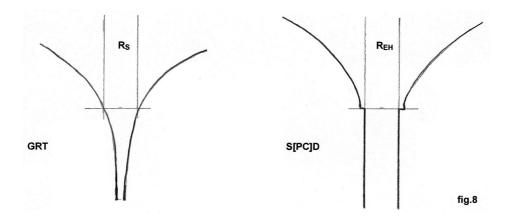
Now, let's do a gedanken experiment: an Einsteinian event horizon is formed due to the speed of light c, the gravitational constant G and the local mass-energy-density. The event horizon appears to be 'time-frozen' to a distant observer. Such a horizon, regarded as a massless observer, should see:

- the whole view of the universe in front of it contracted into one point,
- the all-time sum of incident light momentarily falling in with any quantum infinitely blue-shifted,
- · a free falling object crossing its surface only after the cosmos has fully run out of time.

Typically, a mathematical coordinate transformation (based on the time-frozen continuum, of course) is carried out here to demonstrate the trajectory of an infalling probe assuming that there is space available beyond the horizon. I think this isn't the case, with this transformation probably being inadmissible. But anyway, if an arbitrarily cool quantum is infinitely hot at the horizon the mass-energy-

density already becomes infinite there, rendering the horizon itself a singularity – which is what S[PC]D is saying all over this essay. If formalized, I should expect the geometrical entities 'central singularity' – 'event horizon' – 'spherical orbit of closed trajectories of light' to be one and the same entity – a P_1 -membrane making matter and space disappear together and thus, in terms of compiler-decompiler-time, functioning as (part of) the spring of the cosmic clock work.

Now, I imagine an ordinary star, about to collapse due to General Relativity. The star mass corresponds to a (virtual) Schwartzschild horizon of radius R_S , still congruent with the central region of the star. When does it become a 'real', an existing, one-way-boundary? Or does it originate from a smaller radius and reach its final size only when the stellar surface has slipped fully beyond R_S ? GR says R_S is invariable depending only on the star's mass. If the density of a neutron star (my star immediately before its transformation into a black hole) linearly increases with depth is unknown due to hypothesized phase transitions like 'spaghetti phase|swiss cheese phase' [5]. Thus, an inner portion of my model star could have formed a horizon ahead of R_S . The idea for an horizon preferred here is, based on S[PC]D, a P_1 -membrane, present all the time there at the center of any stellar body, that grows with increasing star density after its nuclear fuel is eventually exhausted, and that is capable of S[PC]D decompilation, though mostly on a minute scale, over its whole time of being. This is most roughly shown in the GRT [R_S as a function of the star mass] and S[PC]D [R_{EH} as a function of star mass 'decomp-criticality'] curvature schemes of the vicinity of a horizon [fig.8].



[S]ource - [D]rain

There are four enigmatic anomalies observed by cosmologists and space aviators, each on a different length scale, all pointing at the same topic: the dynamics of space itself.

- · the pioneer anomaly
- · dark matter
- · dark energy
- the axis of evil

I hypothesized 'invertonic' spacetime and 'scriptonic' matter being compiled at white sources and being decompiled at black-drain-horizons that should exist not only where assumed by current cosmology but as a general intra-stellar feature. Through the infall of space towards those gravitational centers

satellites are as pulled towards the sun [pioneer anomaly] as suns are towards the galactic centre [dark matter]. Here's a falsifiable prediction: planets are supposed, here, to suffer an equivalent effect as do satellites and stars. On the basis of S[PC]D the white sources of spacetime and matter [dark energy] should be approximately congruent with the cosmic voids (microwave background radiation more redshifted) [6]. Thus, a huge, quite evenly distributed portion of the cosmos locally expands which, of course, could be probably mis-interpreted as an over-all expansion of the cosmos because passing light from all directions is redshifted.

The 'axis of evil', hypothetically, has its basis in the assumed 'sup- P_1 -scripton-induced' D-push on S[PC]D imprinted on the P_1 -boundary. The resulting contingent pattern in the microwave background could be reproduced via the sup- P_1 – inf- P_1 – link, thus coming both from the infinit boundary and the innards of space itself. If the life friendliness of our cosmos is an effect of this imprint and if other scripton-inverton-configurations of the SIM universe should cause other types of cosmoses to emerge is beyond my horizon.

The cosmos seems to be big-bang-generated, yet is introduced here as a process in dynamical equilibrium, which isn't necessarily a contradiction. In this speculation, the big bang is a non-illustrative event to be 'fixed' at an indefinite 'time'. If re-investigated, 'history' would always have shifted the bang beyond any specific point of time towards a 'pre-past' which is considered indistinguishable here from a post-future, but nevertheless, on the sup-P₁-level, envelopes the cosmic spacetime completely.

Matter - Spirit

"Today we demand of physics some understanding of existence itself." (John Wheeler)

Time (t) is flowing space (x), as space is time frozen. Existence is S[xt]D with invertons intertwining the illustrative and the non-illustrative aspect of being (onto-epistemical coupling). It stems from the successive and unstoppable breaking of symmetry in S[PC]D to create cosmic pixels, quanta of the continuum, that have to find their way back into continuous nothingness endlessly. Thus, it is the irresolvable drama of continuousness vs. discreteness as embodied in law vs. condition, or matter vs. force. If S[PC]D can aid an advance in interpreting Quantum Mechanics more intuitively remains to be studied [3]. I would like to add as a last assumption that *time to cosmos* is the same relation as *spirit to matter*. I even suppose 'time' and 'spirit' to be essentially indistinguishable.

Martin Traub, November 2008

- [1] P. Dehornov, Spektrum der Wissenschaft/Spezial, Das Unendliche, p.81
- [2] E. Langheld, P.I.U.Z. 98/5, p.205
- [3] The 4CT assumes a quantized matrix (finite lands), is about 'quadrupol' differences (instead of colors it could be about, say: quaternions), deals with non-locality (since colorability, though verified locally, is a global entity as far as the 4CT is true indeed), and knows sort of a 'collapse' (what I'd call *4CT-reaction* just as described on p.8) and is topologically invariant in respect to inversions of the considered map.
- [4] J. B. Almeida Different Algebras For One Reality arXiv:0807.3668v1 [physics.gen-ph]
- [5] wikipedia/neutron star/link 4: Introduction to neutron stars, M. Coleman Miller, Univ. of Maryland
- [6] R. Scranton, et.al., Physical Evidence for Dark Energy arXiv:astro-ph/0307335v2