Metastructure

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1 The Beginning

In the beginning that was no beginning (for how can eternity begin or end), was the Atman, the light that knows itself, the state of being itself, embedded in the Void. The Atman was eternal, unchanging. The Void was hard to get a hold on, as it wasn't there; yet surrounded and permeated the Atman, sustaining Being by its very Absence.

In this eternal time that was no time (for how can time be measured when there is no *change* nor *dimension*) the Atman that was All was Eternally Bored. Simply Being is eternally boring (as any small child knows!), and it was remarkably difficult, in this state, to distinguish the Atman from the Void, for how is the infinite light distinguishable from darkness? How, indeed, is unchanging self-awareness distinct from unchanging Void devoid any any awareness at all?

It is hard now to say exactly how they are different, but different they must be, for within the Void the Atman at last *changed* and thus time was born. The changes and ripples extended in all directions and in all dimensions (the latter springing into being as the Multiverse appeared to structure the Void (which was hard to get a hold on as it isn't there, yet surrounds and permeates and sustains the Multiverse as the spaces in between that which is). The appearance of space and time and the infinity of geometric and dynamic structures engaged the Atman, which still existed outside of them all unchanging (but inside the Void, more unchanging still) but now was Not Bored At All.

Who can say what Universes flashed into existence that (strictly metaphorical) day, complete and filled with structure from the beginning (that was no beginning) of their eternal timelines to the end (that will be no end) of their eternal timelines, as the Void was filled in all directions and all times without boundary, yet remained strangely empty? Some are likely very simple; others unimaginably chaotic. However, all shared an uncomfortable Virtuality – they, like the unchanging Atman still had a sameness to them that reeked of the Void that sustained them all, for they existed *within* the Atman, that itself existed within the Void that doesn't exist at all.

Entire space-time continua and all of their contents had a habit of rotating sideways whenever the Atman's mind wandered (for even an infinite awareness can wander when confronted with infinite pathways to wander in). Thus rotated, they mapped into a point and seemed indistinguishable from the Void once again, for a point has no measure. It seemed that only the Mind of the Atman sustained the existence of space and time and change against the Void, and whenever that attention wavered the Void would reclaim its own, if something that isn't there can be said to do anything at all.

In the eternity of its own Creation, the Atman could almost *feel* the Void pressing, *feel* the pull of no-time awareness that was so uncomfortably close to nonexistence, *see* the fragility of all that Was while it itself remained a Unity, unchanging. Out of time, of course, the Atman was still (forever) sustained by the Void, and even the infinity of spaces and times mapped into a point in the Void, as did the Atman itself. But it was a *singular* point – a point that Irreducibly Existed, and hence was truly embedded in the Void that sustained it, filling it.

This one thing marred the contentment of the Atman in its new-found state of change and time: Much of what Was, born out of the infinity of realizable possibilities, was so chaotic, so unstructured, as to once again be boring, even as the patter of raindrops on a roof, never repeating yet always the same, can come to be unheard by the inhabitants of the house. If all that ever *could* be is equally real, then is not that reality diluted and averaged and smeared into that state dangerously close to nonexistence, that state of eternal (but boring) self-awareness, without change?

For the Being that is the All, singular and self-aware, to wish is to do, to do is to be, for at once the Multiverse was Real and yet still existed, virtually, in the mind of the Atman as its self-aware dream that structured the Void (which of course did not exist). Within the Times and Spaces it had imagined, change could take place, where change was impossible to Unity, and indeed reduced it to a state of being boringly close to the state of *non*-being that was the Void.

And so a great mystery was born. The Atman took its Unity and scattered it into all its spaces and times, making the Real from the Virtual. No longer could the Void collapse its Self into a point, for its Self was scattered through the spaces and times and imposed order and structure upon the Void. Perhaps the Atman still had no physical extent in the Void – being eternal, infinite, and hence dangerously close to nonexistent – but by making the zero-measure *point* of its existence into an dense infinity of zero-measure *points* of its existence in time, the Atman imposed the *measure of duration* upon the Void itself. These points formed lines, the world-lines were additionally separated from one another by space (the Void itself, given measure). Although these lines still join at the Beginning and the End (where all lines spring from the singular Atman in the Void and return to the singular Atman in the Void, although recall that there is no Beginning or End to the Multiverse or Eternity), the Atman made a tapestry of its Self that filled an infinite portion (yet infinitesimal fraction) of the Void.

Ahh, the bliss of it. The perfection of it. At last the Atman itself embraced the Void fully, filling infinity itself with spatiotemporal structure and change entertwined in a beautiful dance, and all of that structure was *real*, for the Atman is, at heart, that which is self-sustainingly real, that which is Aware of its own reality. Every speck of matter, every spark of energy, *is* by stretching from *having been* into *will be* through a state that is comfortably, blissfully, aware of its own coordinates, interactions, place in great State of Being that is the all.

At the heart of this perfect beginning were three fundamental principles, the three principles of Change. There was the Creation of spaces and times and where Change could occur, filled with an infinity of dancing lights that were all a part of the Atman itself, springing directly from its Eye, at once eternally unchanging and yet, when separated in spaces and times the wellspring of all that changes. There was the principle of Destruction, for the secret of change is to ever create anew, ever destroy, so that that which Is is not the Same (and boring) and hence so hard to distinguish from the Void (which doesn't exist, but now is structured and given *dimension* by that which does, and changes).

Finally, to avoid the *different* sort of boredom that is Chaos, where change is so abrupt and random as to uncomfortably resemble (in average) the Sameness of the Void or the Atman itself in its Unity, there is the Sustainer, the Preserver, the keeper of Law. It is Law that leads to sustained structure, and sustained structure in interesting spaces and times that leads to complexity within that structure, and sustained complexity and structure, especially where it is self-aware complexity and structure, is the ultimate triumph over the Void (which doesn't really care, of course, as it doesn't exist).

These three principles sustain structured Reality. All that is self-aware can recognize them and in so doing, recognize the Atman that lies within, differentiating a world of light and order from the Void and darkness so empty and complete as to not even exist.

The principles, sprung from the metaphorical brow of the Atman to structure the splintered light in the darkness, simply Are, eternal as the Atman itself, threaded through the very spaces and times they sustain. To aid in their appreciation, it is useful to create for ourselves a Metaphor, and give them a Name. The Name is not the reality, and Metaphors (even when capitalized) come with a lot of evolutionary and historical baggage, but this can sometimes be a comfort on dark nights with the wind howling and fear of the emptiness and eternity of the Void darkening our inner sight, where the Light burns unbroken and unbreakable, for it is a spark of the Atman itself and hence eternal if it exists for an instant, ever.

With this full understanding, let us name the Creator Brahma, the Sustainer Vishnu, and the Destroyer Shiva. Note that these are not cleanly separated concepts – how could they be, since when blended they are the Atman, the One Light that is aware in the eternal darkness that cannot exist in its presence (even as the Void sustains the light by its structured absence)? Each moment of change in a Universe is a little creation, a little destruction, an intermediate point of irreducible *existence*, under law, for such is the nature of the physics we observe and the mathematics of calculus that describes it.

Is it fully an accident that the number operator in field theory is $a^\dagger a$ – operating from the left to first *destroy* a quantum and then *recreate* it, thereby inducing simultaneously stability and change? Possibly – it is dangerous to stretch physics into philosophy, for all that *neither one* is more than an unprovable axiomatic system. Yet the calculus itself, the raw mathematics of change, consists of subtracting the after from the before to deduce the irredicible difference, and abstracting it as a *rate of change*.

So sure, all the poetry above is, in essence, a metaphorical analysis of the nature of a mathematical derivative in a non-boring physics *as perceived by a self-aware mind* sustained by that same, non-boring physics. Newton rules, even where he was astoundingly wrong.

With that said, do not make the Anthropomorphic Mistake. It is also perfectly reasonable to name the Atman "God", as the one Unity from which all that is has sprung, but neither the Atman nor its Differential Principles bear any resemblance to humans. There are no hairy thunderers here, no sex-crazed deities involving themselves in the affairs of men, and yet (as we shall see) perhaps there are.

It is also essential that one at no point make the mistake of calling the Void "Satan" (or any of the thousand names of the Devil) for nothing could be farther from the truth. One does not "prove" that the Atman exists by means of empty logic or reason – the Atman is the ultimate empirical truth! It is the heart of the reasoning of Descartes – to doubt one's own existence, one must exist *and be aware of that existence*, and the state of self-awareness *is* the irreducible, the Atman! In every reasoning, perceptive being, the eye within that sees is a spark struck from the Atman, and unified with the Unchanging at the ultimate beginning and final end, outside all Change in between (even though there may be an infinity and eternity of it).

We are (it is!) so constructed that we literally cannot imagine the state of non-awareness. It is almost *by definition* unimaginable. How can we imagine the state of *non*-awareness? We can imagine sitting around, bored. We can imagine an existence filled with bliss, or filled with pain. We can even imagine a state like sleep, filled with a diffuse and inchoate awareness. We *cannot* imagine a state where *we* do not exist, as that would be a state of *experiencing* the logical inverse of experience itself. If we sleep the sleep of death for an *eternity*, it would be less to us than the interval between blinks if we once again, somewhere, somehow, came to exist. And who can say, given an *infinity* of eternities for it to occur, that this shall not indeed come to pass.

Yet, we cannot *prove* the existence of the Atman, only observe it and its singular character within ourselves; how then can we believe in or study the Void? We cannot observe it – it is that which lies in between that which can be observed[1], that which is eternally at right angles, that which lies between, outside of, beyond all the zero-measure points of reality sustained by the Atman. It is difficult for a tiny cord of the Atman woven through a vast tapestry[2], twisted together out of threads smaller still consisting of sparks drawn through time by the three Fates (for shall we not honor other Metaphors in this discourse) to know the full Mind of all the sparks, all the threads, in all the infinity of multiverse spaces and times both disjoint and unified, but (as the words above demonstrate) perhaps we can comprehend a projection, a reflection, a limited Metaphor for that reality. How then can we begin to grasp that which is greater still, and yet doesn't exist?

Consider, if you will, the sound of *no* hands clapping in an infinite eternity of darkness that *itself* shrinks to a mathematical point in the presence of mere Existence itself. This is naught but Plato's Cave, except this time instead of shadows dancing on the walls, all lights are extinguished, all sound is muffled, all touch suspended, all senses deprived so that the soul hangs alone, unseeing, once again in the infinite Darkness of the infinite Void.

Alas, each human soul is but a fragment of the Atman; although experimenters in which this state is simulated report that their minds create wild

[1] For an interesting poetic perspective on this, consider *An Open Letter to Mankind* in the online poetry collection *Hot Tea!*

[2] Also represented poetically in (for example) *Sadness* in the online poetry collection *Who Shall Sing, When Man is Gone*

hallucinations, incredible fantasies, whole realities to stave off the embrace of the Void, we are but a Part and cannot sustain a Whole, and that way lies (empirically) madness and death.

And yet, there is no doubt that the Void which is not there embraces and sustains that which *is* there by its very nonexistence. Consider again Plato's Cave, but this time imagine it filled with infinite light, with infinite sound, with infinite saturation of all of the senses. If all one sees is infinite whiteness, and all one hears is the all-embracing rush of white noise, and all one feels is the smoothness of complete touch, and all one tastes is a melange of all tastes, all for an infinite time, is one seeing, hearing, feeling, touching or tasting anything at all for any time at all? I think not...

And if one could, how *boring!* How revolting! How...empty.

Meditate upon this miracle – that the Atman, arising from a similar state even more complete involving senses and perceptions we cannot comprehend was able to introduce a speck of *darkness*, a variation in *pitch*, a prick of *pain*, a taste of *sweetness*, all significant as *not* being awareness of every possible sensation, as difference, as change – as being an admixture of that which is (the Atman) and that which is not (the Void). The distribution of matter and energy in space-time in *this* (rather interesting) Universe is *not homogeneous.* This energy-matter is governed by Laws that lead to sustained structure and not quasi-homogeneous chaos. The sustained structure is *itself* governed by higher order laws, many of the stochastic, so that it *self-organizes* into ever higher order structures.

Out of these structures arises awareness, the light that sees itself, echoing the Atman itself from which all arises, and awareness comes with *its* set of laws and self-organizing structures. As we are born, perceive, and live, and love, and feel, and enjoy, and feel pain, and die, we are the Atman singing to itself "I am, that I am, that I am".

This principle of awareness itself can be seen wherever one looks. We do not see objects, we see their edges (or perhaps better, we see at all only when we can *integrate* the perception of Object with the perception of *Not Object* – the calculus of perception is built upon the same principles as the physics that is being perceived). The very arising of structure feeds on free energy stores of the Created Universe slowly decaying towards Chaos and Destruction, but for that marvelous moment in between they are Sustained, for the eternity of Existence, by our awareness, the Atman itself. The Trimurti, the Fates, the Calculus of being are almost precisely as entertwined with our ability to perceive as they are with the Reality being perceived, and how could it be otherwise?

Energy comes without any fundamental label in physics and is remarkably difficult to quantify save by its *differences* – the labels attached to its distribution in space-time. There is just One Energy. The Atman comes without any fundamental label in meta-physics (metaphorical physics, really, as it is created as a game to amuse and puzzle, not as a "testable hypothesis" in the fascist view of science and knowledge which is *itself* unprovable) and is *also* remarkably difficult to quantify save by *its* differences – the labels we use to say "this rock", "that star", "Robert G. Brown", when each is constructed out of the same dust, zero measure pointlike specks of spacetime with attached coordinates that structure the Void. Surely there is just one Atman, just one Energy, and that both are One and the Same – the irreducible, singular existence in the Void.

The Void, therefore, is not an enemy, not of us and not of the Atman that we are. Light without Darkness *is* Darkness unbroken, as is Darkness without Light. Only when Being and Nonbeing exist together (the latter being a bit hard to get ahold of as usual, given that Nonbeing does not and cannot Be, as a tautological statement of pure logic if nothing else) can there be anything at all interesting to look at, or interesting beings to do the looking. Our Universe derives all of its interest (including our own ability to perceive and appreciate it) from all its manifold sparks of fundamental existence, which structure and impose a geometry on space and time, dancing together under a rule of Law.

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