Unstable Permutational Cannibalistic Collapse [U.P.C.C.] Hypothesis

Abstract

We propose the Unstable Permutational Cannibalistic Collapse (UPCC) Hypothesis: an inflationary onset characterized by discrete, unstable permutations of expansion rates. Stronger domains cannibalize weaker ones, collapsing the infinite branching of eternal inflation into a finite multiplicity of survivors. UPCC offers a minimalist counter model to smooth inflation, consistent with Occam's razor and the principle that nature wastes nothing.

The proposal is based on observations that current cosmological modelling is burdened with broad assumptions and over-assertions to satisfy mathematical, near-perfect solutions that reinforce preexisting cognitive biases. These kinds of approaches neglect some basic principles, such as: 'infinity' = wrong answer(s), and 'nature wastes nothing.' The Cosmos neither, initially produces surplus, nor creates waste on the grounds that, the pre-CMB, inflationary period did not contain any more material than it was possible to make use of for any given opening permutation(s), nor could such be created within the assumed smooth, even transitions of flawless sequential doublings, giving rise to the current, seemingly flat, singular universe.

Current cosmology has fallen victim to its own "just-so" stories (the fatal flaw anthropology strives to avoid) for lack of further data, and/or the technology to acquire and compute such data. The current stable of informational phantoms formulated to support false assumptions and presumptions is large, and wholly unacceptable for Science of any field; such phantoms only belong to the pseudo-sciences – at most. By falling back to basics such as the judicial application of Occam's Razor and redefining initial pre-CMB criteria to the minimums, the over-blown inflation model(s) might be returned to more functionally useful parameters. The vast majority of cosmological and quantum mechanical suggestions, ideas, hypotheses today seek to expand possible potential outcomes, whereas the U.P.C.C. hypothesis is proposed to do the opposite, reduce the number of potentials to a realistically manageable/testable prediction, if not all but the one probability that we currently exist as.

A primary aspect of the U.P.C.C. (Up-see) hypothesis is to also adequately account for something like “structural integrity” into cosmological modelling by accounting for structural formations and the influences thereof on continued progressional evolution of cosmological structures, a.k.a. the unavoidable influences of the Fibonacci Sequence (F.S.) on the Universe as we can see and measure it today. Purely sequential math alone doesn’t resolve it all, nor was it even possible in the Planck Epoch; Fibonacci (and/or other informational structures) were certain to exist prior to cosmic inflation, suggesting sequential structure(s) may only become possible *after* the CMB. In no uncertain way should it be overlooked as to the larger implications of such, which is a potential “biological” perspective of cosmology – the Universe as Information as Living Matter/Energy, or even, a unique Organism unto itself. Not only is this another possible tolerable allowance for the Up-see hypothesis to run on, it’s also another likely, expected even, probable aspect of the protocosmic substrate to anticipate.

Modeling Parameters:

Motion equals two things, energy and curvature, both are default ‘byproducts’ of the same; “heat equals molecular motion.” is a fundamental aspect of quantum mechanics, so too is curvature to be an expected product, even if so finitely, infinitesimally small as to be functionally indetectable. Where infinite flatness appears in modelling scenarios, it should be assumed a function of incomplete, or incorrect mathematics, not an acceptable final resolution for physical structure. The “twenty-one points of hydrogen particles” hypothesis may be enough data to ratify the discussion, but our limited, current four-point view is much too restricted.

A limited amount of multiplicity may be allowable, as long as it falls within testable parameters and means already in understood/known existence; when a cannibal perturbation overtakes, absorbs, and cancels out another, it has also canceled out the preexisting probabilities in both, enough so that neither produce/manifest anything but complete annihilation of all potentials, likely in something similar to a declining chain reaction. The final outcome may not be zero possible outcomes/multiple-parallel universes, but a drastic reduction is not irrational, but expected, even anticipated – however warped and dysfunctional such parallels may resolve to.

Original protocosmic substrate conditions should be assumed as being of the absolute minimum, not in a “scalable size” context (smaller than an atom), but in a material content context. In primordial conditions that are completely inconceivable to us today, nothing

[within the accepted table of elements] exists by which to scale with/from/to = any "size" is allowable in modelling, but that too must be kept within the absolute minimum. This is a 'zone' of proto-quantum-plasmatic, material/fluid that would be predecessor to hydrogen – per the current 'standard model' - (most likely around what the minimal isotopic 'count' need be), and at least 1 other complementary, opposing 'proto-element'; in keeping with the barest minimal for simplest function principle, it may be accepted, even expected, for 3 such distinct 'proto-variable'. One possibility to run could be the lowest/highest isotopic hydrogen types as the opposing 'proto-elements'; a 3rd potential would logically be the middle isotopic option, if the 3rd is needed.

To make an extended example using known binary of 1s/0s – a 3rd option we can call 'naught' in the context of "neither option", now we have a "1/^\0" base structure to build with.

If 'quantum entanglement'/the "proto-potential for" isn't readily available, the function/variable should be calibrated for, by some mechanism; the 'naught' potential/place – the energy of transitioning between – may be that the source/pulse, and the/a discontinuity within be a possible trigger potential; a simple 'drop' in an otherwise constant, consistent 'hum'/flow/simmer/freeze can and will initiate enough disruption to propagate into enough instability to trigger an inflationary event.

When such an event begins as an uneven irregularity it should be assumed that it continues to propagate irregularly, not rhythmically as is suggested by the current 'perpetual doubling' to have sequenced until finally running out of enough 'perpetual' energy to continue exponentially, then stalling to the 'slow' lightspeed we seem to observe today.

Instead of the presumed, basic sequential mathematical doubling alone, the Fibonacci Sequence [F.S.] is the much more likely pattern for the structural growth itself, and quite likely the only option that will produce results that also reflect this same process of progression everywhere else we look – it is just simply much too readily overlooked, or even intentionally disregarded as too complex to use. In short, the U.P.C.C. hypothesis modelling should run using the Fibonacci progression in both a/the source/trigger, and from the beginning of physical structural inflation onward. As the F.S. structural formation progression emerges, it too begins to impart influences – enter morphodynamics.

'Cannibal Permutation': when a slower, less energetic inflationary permutation is overtaken and then absorbed, dissolved, or otherwise disrupted by a secondary, or any post-sequential positioning, more energetic permutation. With the originating permutations

happening irregularly, like a flickering shudder, there is never a steady, even, doubling of progression intervals. The doubling intervals do not, by default, need to occur in a mathematical multiples/evenly divisible progression, meaning it can be 'intermittent', mathematically speaking, as there's no, or not enough, preexisting progression to shape/guide/follow such a precise sequential doubling, the originating original most likely is not to be either. The best, nearest example of, likely reference model for, cannibal permutations and their behaviors, are solar flares.

Proto-Biological-Function Potential

A proposition that the Universe as a whole is a Living Organism unto itself is far from a fresh idea. That Consciousness is a functional aspect down to the quantum mechanical level(s), stemming from a basic type of 'self-awareness' that at its most basic determines "me/not me" discernment capacity for all base, fundamental particles – whatever they may be – based on a simple conjecture that without said awareness base components would simply and collectively self-annihilate due to too much randomness that cannot be overcome otherwise.

A Living Universe need not be any more 'intelligent' than any single-cellular organism one may allude to as an example, after all, one thing virtually accepted across the cosmological/quantum mechanical board is that the (our) universe is one contiguous mass – whatever else it may/may not contain or consist of or within. Multi, parallel, singular, or otherwise – none by default exclude a 'living' informational base structure. The Cosmos as one contiguous cell is simply an alteration in an individual viewer perspective, not an addition/subtraction to/from existing data sets and modeling's conjectures.

To suggest that primordial, pre-inflation matter/conditions [hereafter protocosmic substrate] had the capacity to function in ways similar to what we witness in contemporary biological chemistry, juxtaposed to stellar, geological, or any other non-biological chemistry, is not meant to imply "life, living matter" as we currently understand it to be defined/described. It is merely the suggestion of similarities within innate properties and functions; while the plasma-base formational hypotheses remain far from

disproved/proved either way – in the larger context of 'plasma' one may shift to a "blood plasma" model – hot or cold notwithstanding – for an easier, familiar visualization mechanism. While standard doubling-model projections can/do account for the formational attributes of matter's expansion within the current cosmological models, the structural aspects matter forms into are still the purely 'organic' Fibonacci sequential, recursive types. The very nature of the protocosmic substrate being constrained by the 'proto-biological' conditions alone can readily impose limits that our current mathematics simply cannot discern.

There is never a valid reason to accept infinity as a/the legit, final resolution to cosmological mathematics; "infinity = wrong answer" isn't negated simply because current human mathematics seems to have played out its own potentials. An as yet resolved variable makes much better evaluation of current cosmology than 'indefinite, infinite, parallel, flat' multiverses as even a placeholder for ignorance, let alone a/the viable, final solution when it simply creates more complex potential than it can possibly resolve – as said resolution complete; this is nothing short of a complete cop-out. Most importantly, it validates the limits of (human derived) mathematics on-mass, a fully functional washing-out – it has nothing left to give.

With so much left the worse for it all, it's quite clear to the most basic of intellect, just because math can't reach it, doesn't mean the Universe, multi or otherwise, has no edges(s), as long as we overlook the 'false edges' added to the equations to keep them from falling apart. This is nothing short of deliberately creating informational phantoms!

The cosmos can easily be 100X older and larger than we can or will ever be able to 'math-out;' while I still accept mathematics is/will be the final resolution, the current models are simply lacking the adequate variable(s), or tweaks, or, . . anything but a busted, falsified infinity; and when the obvious existing, obviously possible variables are intentionally disregarded and omitted merely on the grounds that 'life' cannot be mathematically rendered, is just another capitulation to the weaknesses of pure mathematics unto itself. That 'life' doesn't follow a mathematical formula is complete denial, and inclusion of Nature's recursive modes.

That it will require massively energy-hungry, mega-computing with "inconceivably" smart A.I. to resolve these issues, are most likely the realest set of obstacles being faced.

If a/the manner and method of cosmological transition from exponential growth to regional/localized recursive growth models that observations seem to prove are the existing norm, is it then, that a/the real practical missing variable merely the formulation of a 'symbol,' character to represent such?

At this point, we're well beyond the writer's current mathematical potential to do more than pose a hypothesis in a straightforward question format, resorting to the limited role of pure theorist. This is also where the U.P.C.C. hypothesis may be returned to, as it is the likely point within the inflationary period such an event transpired.

A 'scaled size' is wholly arbitrary in the protocosmic substrate conditions state/period context, and as such, is absolutely meaningless, little more than a lame effort to impose anthropomorphic capacity/potential on an otherwise completely incomprehensible set of circumstances. To say it all began "smaller than an atom" is as ignorant as it is hubris. "Not Known" IS the only proper way for it to be stated, scientifically and otherwise; formulating informational phantoms to bridge gaps is 100% unacceptable – full stop.

Absolutely, the very originating moment/event/catalyst would have been as infinitesimally "small' as would have been possible, but that still has no real-world relevant "size" correlation in any tangible anthropomorphic context. That doesn't 'default-in' a "without context" however, especially not a humanly derived one. In the final calculus however, it matters less now than it did there; if the mathematics keeps coming back with 'infinity' as resolution (be it infinitely small or infinitely large), then [current] mathematics are insufficient. Finding more ways to tabulate irresolvable infinities doesn't prove anything, but infinite foolishness, and desperation maybe.

With a/the innate potential for irregularities one might liken to hick-ups or burps, that's all which is required to inject unstable permutations into the initial inflationary sequence, inducing collapse that then results in a very limited number of possible parallel realities, if not all the way down to just one final permanently stable, existing one, the one we exist as within. There are clear, obvious points where innate disruptions happen and that is in the increase of digits; going from single-digit to double-digit, double-digit to quadruple-digit, etc. are those very volumetric bumps, simply annotated numerically in the Arabic number system. Those jumps and lurches aren't just 'in the math,' they are very much in every natural process we witness doubling taking place – literally and physically. Taking the perspective of increased digits as the most likely potential points for unstable permutations it is quite clear how quickly and often, they occur; between the first '1' and the first '1-million' is just twenty-one/two permutations, but the whole affair was well settled by then. The first hick-up is from single-digit into double, the transition between the 5^{th} and 6^{th} permutation, but this would have been so small, so quick – plus the absence of 'room' – as to simply served as the seed event. The next transition is from double-digit into

triple-digit, at the 8th/9th permutation transition, and it is here where there now exists the 'room' for the seed to propagate. There is also the capacity/'room' for an "echo" or reflection, which is a/the secondary wave potential; by the time the 11th permutation initiates it's the transition into quadruple-digit numbers, with at least 4X the 'room.' The 15th into 16th permutations is the transition into five-digit numbers, the 19th into six-digit, and past a million with the 21st permutation, although the Cosmos is well into millennia of post-CMB glow – inflation ending with the secondary wave cannibalizing the primary wave at the 15th, the annihilation of both initiating the CMB itself, possibly the 19th permutation at the very latest in the sequence, and the 21st seeing the maximum brightness being reached.

The U.P.C.C. hypothesis uses as few 'rules' as is possible, preferring Occam's Razors in both hands, and seeks to strip away everything but the bare minimum necessary for the model to function; no extra add-ons to account for any/every 'potential' mathematically conceivable, no – only the bare minimum is needed, as we'll see. One 'rule' is "if it can happen, it will happen.", when it pertains to the most basic and simplistic of a system. While polite math will prescribe the same basic doubling to the S-wave as the P-wave, there's absolutely no reason to presume such be the case in the Planck Epoch. There's zero reason to assume inflation happened in one, clean, smooth progression of doubling, and there's every reason to assume the protocosmic substrate's processes and sequences are what laid down the patterns we see everywhere we look today. Inflationary, doubling growth happens in fits and starts, fits, lurches and even lunges, the one thing it *never* is – is smooth, even, and easy. Even without trying to, the S-wave is nearly always going to outpace and outgrow the P-wave within such close quarters, and nothing else but the two (and the substrate itself) to interact with.

Here's where I have to borrow and reinvent to better outline what I'm conveying, bear with.

A basic number line of doubling, identical to our data groups, conveniently.

This is our 'P'-wave line:

1 – 1 – 2- 4- 8 – 16 – 32 – 64 – 128 – 256 – 512 – 1024 – 2048 – 4096 – 8192 – 16,384 – 32,668 - 65,336 – 130,672 – 261,344 – 522,688 – 1,045,376

This is a series of twenty-one doublings across twenty-two steps, just to be clear.

The S-wave begins as a bump/blip at the 5th permutation, the 8|16 transition; three permutations later is the 64|128 transition, where the S-wave begins to gain, the initial 'bump' growing into a 'burp,' and 128 'picks up' the 'echo/reflection' of 64 – cast by the bump's displacement – and becoming 192. Following polite mathematical doubling, the S-wave becomes: 192 – 384 – 768 – 1536 – 3072 – 6144 – 12,288, etc. – providing both waves stay intact as is, which is certainly not possible beyond some point. By the very next

permutation – the 9th – the S-wave is larger than the P-wave, so it is already only a matter of progression before the P is completely cannibalized by the S, most likely in a complete collapse and annihilation of both. Another of the rules to engage here is, “it will only last as long as it needs to.”, meaning the entire progression took the absolute minimal amount of time as was possible – inflation was less than a “split-second” event. So then if inflation followed a ‘polite math’s progress and followed the basic doubling progression, then the P-wave may have held on as long as it took for the S-wave to be double the P; anything beyond that seems most likely just absurd.

This model is about the shortest elapsed time possible, not frilled up with infinities. If there were another way possible, to have S cannibalize P as fast and violently as possible – that would follow both rules currently in play. With our S-wave back at 192 again, the combined energies of the 64 and 128 merging, and the ‘draw/vacuum/inertia’ of the P-wave still being ahead – at the last possible instant S ‘drafts’ P and reaches the 512|1024 transition simultaneously if not just before, and by “side-swiping” (think gravity assist slingshot) 192 “picks up” 512 for a whopping 704, and then begins to double. How long the S and P can continue to independently double before all the inevitable instabilities disintegrate one or both will take a lot of modeling simulations to run and resolve. Per the U.P.C.C. hypothesis criteria, it was over by the 13th permutation and the CMB was shining by the fifteenth.

The final caveat here is that the Fibonacci sequence — or a closely related recursive informational pattern — is almost certainly embedded at the foundational heart of the Universe’s perpetual, evolutionary, cyclic existence. It isn’t merely a mathematical curiosity, but a structural, pre-sequential behavior of information under constraint. In this light, Fibonacci stands as a potential, protocosmic, inherited /foundational informational structure, possibly the primary driver of cosmic self-organization itself.