

Speculations on Cosmology

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Abstract

This article propounds the view that our cosmos exists neither as some steady-state, nor as an expanding universe consequent upon a Big Bang, but instead revolves progressively through four stages: I.) Active Concentration (to a Singularity); II.) Active Expansion (from a Singularity; this would represent the current status of our universe); III.) Passive Contraction (back to Singularity); IV.) Passive Expansion.

The article further suggests that the “Singularity” and the hypothetical point of “Infinite Expansion” actually represent two approximations, using the language of finite experience, for an identical status. The conception that these two states represent different ideas (and that a finite cosmos exists as it passes from “one” state to “the other”) is considered to be the ultimate “joke” which causes the universe to come into being.

Speculations on Cosmology

I have spent most of my life working up a comprehensive outline of metaphysics (*vide: Patterns of Illusion and Change*, <http://www.tree.org/patterns2.htm>). This is not intended to be a description of how everything works

— it is merely an outline of the abstract principles which would form the prolegomena to any such description. Therefore, whenever I try to understand some aspect of how the world works, I try to follow the abstract principles for clues as to how the physical operations might proceed.

I have just been reading Bill Bryson's amusing little volume, *A Short History of Nearly Everything*, (Random House, 2003, ISBN 0-7679-0818-X), and I see that the scientific establishment hasn't yet quite achieved much clarity on two fronts — the microcosm and the macrocosm. There seems to be no consensus about what is actually going on, and nary a clue about why or how. So let me see what I can do about clearing up any little loose ends.

I begin with the Macrocosm, although I want to start off by repeating the old Hermetic axiom that the Macrocosm is reflected in the microcosm, and that the solution to the obscurities of one will suggest the solutions to the obscurities of the other. Einstein was rightly convinced that it was way beyond "untidy" to have to deal with two entirely separate systems of theoretical physics, one for the macrocosm, and another one for the microcosm. Surely there must be some "unified field theory" that can explain both of them with a single set of principles. I do not say "a single set of laws," because one of my principles is that "anything" is either non-existent, or it is simultaneously either one thing, and/or its total opposite, and that potentiality is what allows the universe to exist at all in the first place. (0 = infinity) The universe is certainly not a wind-up clock.

According to this theory, the Universe itself sprang into being spontaneously as the alternation between the ideas (which of course are equivalent) of Zero and Infinity. It is only the "imaginary" field composed of the movement between the two "opposite" extremes which presents us with the illusion of an actual, manifest

cosmos. I call this the Original Joke, God's laughter to which constitutes the creation of His cosmos (*vide: Hermetic Alchemy*, <http://www.tree.org/b11a.htm>).

In the present paper, I want to take a closer look into the mechanics of all of that, venturing a little further out from the safety of abstract ideas to speculations which will touch upon some of the questions disturbing modern physics.

I wish to offer a disclaimer at the outset that I consider my special field of expertise to be in the realm of the abstraction, so the further out I range into questions of physics, the less confident I feel of the integrity of my solutions. So, if I sound like I am pontificating *ex cathedra*, it must be understood that I do so with suitably humble temerity.

I take as my jumping off point the notion of the expanding universe, consequent upon the hypothesized Big Bang, and I compare it with my own Patterns for the Process of Change. According to my Patterns, the process of change passes progressively and repeatedly through four primary phases, which correspond to the Four Elements of Aristotle, and the Four Seasons of Nature. These also correspond with the four values of Yang and Yin, which greatly clarify the concept which is but inadequately described by "Yang and Yin." (We may say that "Yang and Yin" constitutes the Second Arcanum, while, through the agency of the Third Arcanum, the four values constitute the Fourth Arcanum, physical manifestation. Those four values are — **young yang** (☰ Fire, Spring), **old yang** (☱ Air, Summer), **young yin** (☵ Water, Autumn), and **old yin** (☷ Earth, Winter).

We might describe those four values for our present purpose (of course, as abstract concepts, they might be described differently, but comparably, for different

applications) as **young yang** = active contraction towards a point; **old yang** = active expansion outward, away from the center; **young yin** = passive contraction back to the center; and **old yin** = passive expansion outward. Old Yang might be described as the extreme of Order (or Infinity; **The Creative** in the *I Ching*), while Old Yin might be described as the extreme of Chaos (or Zero; **The Receptive** in the *I Ching*).

My first observation is that, while cosmologists are trying to make a single determination for the state of the cosmos, my own assumption would be that the universe is now undergoing its second phase, that of the old yang. So, instead of supposing that the universe “began” with a Big Bang, and has since been expanding outward, I would rather assume that the universe has passed through the “singularity” represented as the turning point between young yang and old yang, and is now in the process of its active, outward expansion towards greater complexity and higher states of order (my system posits two sudden changes and two gradual changes; the next change, that from old yang to young yin, will be extremely gradual). The fact that the expansion of the universe is or appears to be accelerating suggests that we are nowhere close to the turning point towards young yin.

This already seems to me to put the ebb and flow of the cosmos into a more understandable context, but I want to continue the analogy to my Patterns of the Process of Change to suggest that we are simply enjoying one of an infinite series of universes, each one very similar to the one before it, but slightly changed, incorporating some new elements of Novelty with each successive universe. Thus, with each passage through that point of Singularity (the *Omega Point* of Pierre Teilhard de Chardin), the new incarnation of the universe that follows will be just

a bit different than the one that preceded it, much like the evolutionary succession of lives of any living species.

[I must make a side track here and mention that the succession of lives does not assume a reincarnation of previous consciousness; I rather hold to the principle of the continuity of consciousness. The point of my analogy is simply that with every successive life of any living organism, there is the opportunity for a fresh spasm of Novelty to promote a gradual evolution.]

Now, to imagine an infinite series of universes coming and going in this way is a whole lot easier for me to understand than the notion that our Universe just suddenly popped into being out of nothingness, fully blown, like Athena from the head of Zeus (in the abstract — I have no real interest in the actual physical process by which it accomplishes this feat; I leave that for the physicists, for whom there will still be plenty to do once I have left the table).

What? I thought I was the proponent of creation *ex nihilo*, suggesting that the universe did, in fact, do just that? Aha: yes, but not to this point; not to this universe we are currently enjoying! My third conclusion is that the succession of universes follows the pattern of the creation of life; namely, that it happened very, very slowly! I would suppose that our current universe represents a very mature specimen of universe. Universes may have been “blinking on and off” for many trillions of such incarnations (each one, of course, existing for the length of time usual with universes, so that the process I am describing did not happen in any six days).

Of course, none of this (yet) describes how the very first one popped into being, but we are getting to that. At least looking at our universe as a manifestation somewhere quite well along, after the succession of universes has had

quite an extensive time to evolve from its primitive and abstract beginnings, makes a whole lot more sense to me than anything I have heard described heretofore.

Let me compare the evolution of successive universes to the origin of life on earth. I don't find the origin of life to be so surprising, after all. I am still quite amazed and dazzled by the implications of Consciousness, but life itself seems simple enough. I think Wilhelm Reich was on the right track in his descriptions of the origins of life from very primitive beginnings, starting with simple heating and cooling (following the day and night cycle of the earth), followed by a progressively more pronounced and definite pulsation ("bions" he called them; not yet alive, but precursors to life). These grains of sand in the desert (where there is a large fluctuation in temperature between day and night) may have gone on pulsating in some elementary way for untold millions of years before the intersection of another alternation, the wet and dry cycle, may have boosted the pulsation to something just a tad more complex. After as many more millions of years as you please, we still might not want to call the little pulsating jolt "alive" or anything, but we can see the handwriting on the wall.

Obviously, there was never one fine morning when the cute little thing suddenly passed into "life" from its pre-life origins. Even after all of these many millions of years, what we may have is so primitive that no one will agree upon the point at which to call it alive. We might say that at some point in the distant past the bit of pulsating matter could not really be called "alive," but by so many hundreds of millions of years later, it really did seem to exhibit properties which might merit the term, even though in an extremely primitive way. If the world be fifteen billion years old (give or take a few billion, and dating it just from the most recent passage through the Singularity), there is plenty of time for this process to evolve as sedately as you please.

Now to compare all of that with my succession of universes — when my first “universe” popped into being *ex nihilo*, it really wasn’t any instance of “something” popping into existence out of “nothing.” It was the joke of considering the alternation from “zero” to “infinity” to have any meaning. It was only after many trillions (all of my numbers, of course, are purely arbitrary — magnify by whatever orders of magnitude you please; such questions don’t really interest me all that much) of such alternations that there was anything present in the passage between zero and infinity that might appear to anyone as anything real. Indeed, the whole substance of my theory of cosmology is that “Everything is all a Big Joke” (–Dr. Ed Madden, University of Connecticut, *circa* 1954). Or, to express it more specifically, what we think of as the manifest cosmos is really only the field of illusion that seems to exist as God laughs His way from Zero to Infinity and back again.

Still more specifically, I assume that if all of the matter and energy of the cosmos were added up, it would be equal to, yes, take your pick — zero and/or infinity. And this is exactly what happens when “all of the matter and energy of the universe is compressed into a single point of no dimensions” as it passes through the famous Singularity (the Big Bang) on its way to incarnating as yet another Universe in the series.

So, when a new universe pops into being, it doesn’t really come out of nowhere — it follows the inertia of the previous universe, creating a new one very similar to the one before, only this time modified with some additional Novelty as it continues to evolve.

I know I am repeating the expositions of my earlier works when I say that this concept of Novelty is “movement away from the center,” (Yang “the Creative”), in

contrast to the Inertia of God which tends to return to the center (Yin, “the Receptive”). “The Devil” has been defined, ingeniously enough, as “distance from God,” suggesting that movements away from the center are movements towards the Devil, while movements towards the center go closer to God. However, I find it more illuminating to think of these two directions as two different aspects of God; there is not a “war in Heaven” so much as an eternal interplay of these two ideas.

The movement away from the center is Novelty, which becomes Creativity and Complexity. However, if this movement continues further and further away, it becomes Confusion, and, finally, Chaos. But without that creative movement away from the center, the cosmos would eventually resolve itself back to nothingness.

So after all of this, I think the nature of the cosmos is a little more clear, yet there are two questions still unanswered. One question is, of course, “why should this Joke have happened, anyway?” And, secondly, “just how much potential for Novelty is there?”

As to the first question, I might say that the concept is inherent in the metaphysics, which is another way of saying that there really isn’t any other basis upon which you could postulate a cosmos. Or, you might simply say that a universe without any potential for novelty would never, therefore, have any chance of coming into being, so, since there seems to be a cosmos here of one sort or another, then clearly such a potential had to exist. I am trying to say that the joke of nothingness being separable into Zero and Infinity is a form of tautology. I am also saying that my descriptions of the Patterns of the Process of Change are the only such patterns which are possible, hence they are inevitable and inescapable. If

we were to start all over again with “Nothingness,” sooner or later God would have to appear, popping into existence Himself as His laughter creates His cosmos.

The second question is a bit more subtle. If everything were constantly switching into its opposite, there would be no stability at all, and there would be nothing but total chaos. However, I don’t think there is some “Cosmological Constant Novelty Factor.” I recall some very interesting studies of chaos, in which it is discovered that “pure chaos” is impossible, since “pure chaos” is really a kind of order. I think that the study went on to suggest that whenever there is set up any situation of “chaos,” sooner or later it seems to resolve itself into orderly patterns. That is to say, total chaos is ultimately equivalent to total order.

Like genetic mutation, novelty is attempted constantly. Most of the time, novelty goes nowhere, and becomes simply a deviation towards error (towards the Devil), but every once in a while, the random reaching outward into Novelty accomplishes something sufficiently interesting so that the likelihood of it happening again increases. And Who knows to what consequences that might lead?