

Investigating Cascades of Avalanches

(in a Holistic way?)

The Ground & Proposal for a New Miller's Experiment!

PAPER IV

Miller's crucial experiment was undoubtedly a holist experiment!

Obviously, many different and simultaneous things were happening AND, very importantly, not only provided new substances for further reactions, but played all sorts of encouraging and inhibitory roles, so that necessary conjunctions of substances were produced at the right times and with the right conditions for the next steps to be possible. Many stages would have come and gone and their roles would **not now** be evident. Indeed, all the problems of observations, and even experiments, in a holistic environment were necessarily present here too, and in spite of the profound significance of the results, no-one could give a certain and useful sequence of what had been going on.

Amazingly, this magnificent experiment was **ONLY** used as an **argument** for the natural Origin of Life. Along with a whole set of other confirming experiments, they all became merely evidence, and none were pursued further and scientifically. (Indeed, there was a great deal of criticism and even dismissal of such experiments by those opposed to either the inferences being drawn, or, even more widespread, the "unscientific form" of the experiment!)

Of course, such a revelation could not be junked.

A considerable group of scientists greatly applauded this first real evidence of a natural step towards the Origin of Life, while others asked "What next?", and when nothing was forthcoming dismissed the experiment as proving nothing! Of course, **BOTH** groups were **RIGHT!** It did indeed point towards the Origin of Life, but it was of itself, totally insufficient to establish what had happened in this Emergence. Remember, at this time, **MOST** scientists still dismissed **Emergences** as figments of some peoples lurid imaginations.

Many more contributing experiments were carried out by various other scientists, perhaps the most important being those devised by the Russian Oparin, whose experiments with *Sols & Gels* revealed properties that were certainly, long after the establishment of Life, harnessed in single celled creatures such as the *Amoeba*. But, once again, they turned out to be merely "moments" in an, as yet unrevealed, revolutionary process that **MUST** have been involved to actually precipitate the very First Life on Earth.

Indeed, it is clear that none of these experiments were actually **vital elements** within the Origin itself. They were what we should call necessary **precursor** processes, rather than **creator** processes actually **causing** the Origin.

Thus, they had to have happened, in perhaps the way that they were regarded, but most, certainly, **prior** to the Origin of Life.

They could in no way be said to have **caused** it.

Such experiments didn't thereafter, and of themselves, **lead** anywhere.

Literally thousands of such processes must have occurred in the pre-Life period and similarly led nowhere. The pluralists did, and still do, attempt to deliver a storyline in which **all these** came and went at various times, but in time, and entirely by Chance, came together, at the precise same moment, in a simultaneous "action" that precipitated Life itself: their simultaneous presence automatically generated the First Life.

Such a "theory" is, of course, utter rubbish, **and** for more than one reason.

First it implies that the Origin of Life was an entirely positive and inevitable forward-march, waiting only on the simultaneous presence of many quite normal processes to ease non-living Reality, quite gently, into the entirely new forms of Life itself.

Such gradualist nonsense would clearly be not merely "unlikely", but actually "impossible"!

These "theorists" predicated their "theory" on probabilities and hence were certain that it only needed sufficient time for even the most unlikely conjunctions to occur, and hence produce Life.

I'm afraid that is nonsense! The Origin of Life on Earth was no automatic process, but a **Revolution**. No other form of change could establish Living Matter and its persistence **against** all the non-living and well-established processes conforming to the Second Law of Thermodynamics. For Life to actually appear, the processes involved HAD to totally Change the Game – **had** to first effectively demolish all currently deleterious processes, bury the famed Second Law, and then protectively establish entirely new and safeguarded sets of processes, which would, as a co-ordinated set, totally change the dominating elements and even the dominating laws of the preceding regime.

This could be NO gradually-reached and chance happening.

It could only be, initially at least, a catastrophe, which over a relatively **short** period of destructive chaos, thereafter began to resolve into a wholly New Level of Reality, which had never existed before.

Of course, any explanations with Chance as the **cause**, (indeed with probability as cause) can only be an excuse for having NO explanation. [Quantum physicists of the Copenhagen School please note!]

The “explanation” of Life by the chance coming together of many quite normal processes, is too laid back and imperceptible to produce anything as World-shattering as Life!

All such Emergences **have** to be cataclysms!

You don't get such miracles via “pin-heads”, but only by **prodigious leaps!**

And we must not forget that what persists in unfettered Reality, does so because the overall nexus of processes **maintains** a status quo **including** those elements.

To even allow the wholly new, the old self-maintaining regime **must** be shattered! Life did not pop out of conducive corners, it emerged from a wholesale and general breakdown, and what actually caused the breakdown could be either intrinsic cumulative factors, or even externally caused calamity, but such gradually accumulating causes, would not be those **for** Life, but those **for** dissolution.

All Emergences in Reality have shown themselves to be, first and foremost, **disasters!**

Minor destructive processes, normally kept in check, begin to grow in significance due to general changes, and start to undermine the status quo. These can accumulate, until the old dominances and self-maintaining systems are actually overthrown. Obviously, the initial result is most certainly some kind of chaos with, instead of the usual suite of processes and their products, entirely New things are happening, at first to also disappear, but finally to dominate to produce new entities and their inter-relating laws too.

The current conception in Emergence Theory sees such Events as a whole series of calamities, each producing a short-lived, intermediate regime, only to be very quickly consumed in the next cataclysm. The final resolution, after a series of those, being a New and persisting Emergent Level.

ONLY, by such an overthrow, have new systems any chance of establishing themselves as the new order. After all, each and every Level in Reality, must be a conducive set of processes and products, which as a **system**, perpetuate each other to the exclusion of contending others.

To make great, and entirely new, leaps forwards, **requires** the cataclysmic destruction of the old Level FIRST!

Students of Geology know of its evidence for the Evolution of Life, and are well aware of both disastrous cataclysms, AND adaptive radiations of colossal power and creativity.

Though hard to believe, at the time of the destruction of the Dinosaurs, (and much else) the mammals were all tiny subterranean mouse-like, insectivorous creatures, yet after the quite evident disastrous cataclysm, these have evolved into the whole range of beasts alive today – from whales to tigers, and elephants to human beings .

And many other such crises have since shown themselves to be of a similar nature, and with similar creative outcomes.

Even the pluralist scientists tackling the Origin and subsequent Development of the Universe itself, cannot avoid similar Emergent Events at all stages of that fundamental process.

And, even after the Orogen of Life, similarly momentous changes have been evident in the fossil record, and surround us NOW in the rocks beneath our feet!

How on earth did Consciousness emerge?

Now, all of this, though still sketchy in this paper, is merely preparatory to a suggested Holistic Way forwards for Science.

Instead of the now universal pluralistic methodology of the current Scientific Method and its experimental methodology, we have to conceive of an alternative, which addresses unfettered Reality *directly*.

Various things have been tried already, wherein pluralist assumptions, methods and laws are brought together in an amalgam, and where crucial threshold parameters are used to trigger switches to other active laws as circumstances demand.

The largest computers on the planet have become necessary to use vast computer programs built on this kind of plan to predict the Weather. But, obviously, such systems can only be **retrospective**, so to identify threshold values and appropriate laws, it must mean that such changes have already happened in the past, and been factored into the prediction system.

In addition there can be NO holistic amalgamations. The order in which thresholds are tested, and how they can be changed by different circumstances is not at all *cracked*. It must be clear that thresholds are pragmatically arrived at frigs: the world isn't itself merely monitoring these parameters and *switching* on cue. That is how *we* attempt to **pluralistically** emulate what actually happens *holistically*.

What the very best Weather Simulations deliver is the best predictions of future weather possible on the basis of past weather alone.

And ALL simulations, whatever they are modelling, have exactly the same weaknesses.

But, as they say, "If I wanted to get there, I wouldn't have started from here!"

We are locked into a methodology which gravely limits what we can do. The very methods that reveal dependable relations, also limit their application to ONLY identical circumstances. And when we look at holistic experiments such as that performed by Miller on the postulated Primaeval Atmosphere, we are at a loss to know how to extract the meaning contained therein.

(1,610 words)