Real Science?

Paper IV: A Patchwork of Parts or a coherent, indivisible Whole?

IV. The Emergence of the New!

So, before we can attempt to establish a methodology for dealing with such dramatic and major changes, we must first halt the "flight from Change" which is built into pluralist science, and instead address Change fullon. We must be able to "tell the story" of Emergent Change.

Now there are indisputable Emergences, which have totally transformed Reality in the distant past, and though Hegel chose Human Consciousness and Thought as his Sphere of Emergences, we must choose an area for which there is ample evidence available to all, even though it took place around 3 billion years ago. It is, of course, the Origin of Life on Earth.

Such an Event (as they always will be) was no mere automatic reorganisation, of previously non living entities. In many ways it has all the remarkable features that always define Emergences as truly both transforming and creating interludes. They do not merely happen leaving some sort of mark, but globally change everything in such profound ways that the record of the rocks is entirely different after the Origin of Life from what it was before. The whole nature of Reality was transformed by this Event, and its effect was to continue to resonate ever since. Waves of change initiated by this Event are never ending and continue to be happening right up to the present day.

Now, this has not been a single Emergence.

It is evident that the whole history of Life on Earth has involved a whole series of Emergences, which , if anything, have grown bigger and bigger with each new overturn

To use a modern expression. Emergence extends the Possibility Space of Reality with every such Event.

Entirely new things come into being with each such Event, and then STAY – they appear and then because they establish their own necessary conditions, they are self-maintaining via the ability to modify the context that produced them.

So, we will stick to the Origin of Life for obvious reasons, but the more we investigate our World, the more evidence we unearth of many, many Emergences, both before the Dawn of Living Things, and since that profound Event.

The subsequent Evolution of Life is also shot through with new Emergences. Attempts to turn this rolling miracle into some inevitable mechanism are false. They replace the Events themselves with merely their necessary precursors – pluralistically tracing features prior to the cataclysm, and inferring that these are "sufficient cause" in themselves. They, of course, are no such thing!

There is NO inevitable, built-in path, for Life to necessarily traverse. Retrospective discerning of a trajectory is NOT Explanation, but mere recognition.

It must be clear that the crucial essence MUST be the Form and trajectory of an Emergent Event.

Ask ANY revolutionary, fighting to ensure the success of a Social Revolution.

NOTE: In his *History of the Russian Revolution*, Leon Trotsky does both. He describes the precursors for the Event in great detail,, but unlike the Mensheviks, does not then sit down and wait for the inevitable and natural Event to occur all by itself. He, and the other Bolsheviks, worked night and day to Understand every singlemoment of Change. They, like Michelet in his *History of the French Revolution* HAD to understand every event hour by hour. But, in contrast to Michelet, it was not a retrospective History, but an incessant retooling for the currently happening Event, which they KNEW could go either way. To begin to get to grips with Emergences, the student MUST read such vital tracts (and John Reed's *Ten days that Shook the World* too)

No inevitable avalanches, all in the correct direction, could be left to carry through this Event by themselves. Indeed, many such crucial happenings were in the opposite direction. By the July Days Lenin had to go into hiding in Finland, and Trotsky was thrown in jail.

Yet by October these committed revolutionaries had redirected the tumult towards insurrection.

Now, most people would NEVER address these questions via such a study of Social Revolution. Read any history of such events and you will see how the real content is wholly missed, and a history of heroes and devils is substituted.

We, therefore must concentrate on the Origin of Life as our exemplar for Emergent Change.

The real content of an Emergence cannot be addressed by the consensus pluralist approach. For, whereas the latter involves an extensive and rigid control of a chosen small area and a subsequent period of both experiment and analysis, the Emergence can only be conceived of holistically. No control, no experiment, no means to a pragmatic end is involved in what we need. Instead the researcher MUST embrace a situation which though initially stable, is careering towards dissolution, which will NOT be a single cataclysm, but a whole series of them. As the factors which had long ensured the stability of the situation begin to deteriorate, and wholly new (indeed seemingly from nowhere) factors urgently grow in strength before our eyes, only to merely destroy the Old but also to precipitate some temporary New.

S

As with Natural Seklection, a whole series of such contending positive feedbacks will not only bodily move the situation into new areas, but will indeed CONTEND (again in a similar way) so that mutually conducive processes will gain at the expense of mutually contending ones.

Out of Chaos, order will be preferentially extracted. It will tend to persist, while the contending ones will subside.

Now, any single such situation will mean nothing of itself.

The thing abour such an avalanche of avalanches is that they will, for some time, seem to be careering towards total dissolution.

But that is NOT the case.

Indeed the selection will always be for mutually supporting processes to survive, and MAYBE, just MAYBE, a tipping point will be reached, after which the clear and obvious path is towards a new and stable Level. An Emergence has occurred.

Conclusion:

Now the reader will be perfectly aware that the promise of a Real Holistic Science has by no means been delivered in this short series of papers. Indeed, the chosen vehicle is not the one for establishing such a profoundly important system. Neither are the thoughts of a single contributor likely to provide all the answers required. The purpose that can, and I believe, has been tackled here is the posing of the right questions, and initiating the cooperative efforts required towards such an objective.

Two further short and connected papers will follow this series, which will hopefully deepen the discussion. They come under the inclusive title of Order out of Chaos, and will commence at the next update of the Journal.

(1,129 words)