

Order Out of Chaos: III *Addendum*

These papers promise a great deal. Ostensibly dealing with Mathematical Chaos, and rejecting it as a crucial causative factor in Emergences (such as, for example, the Origin of Life on Earth), they also, and importantly, discuss the actual range of causative factors, both in any Current Stability, and significantly in *its* actual demise and replacement..

The actual appearance of Mathematical Chaos is only touched upon, and must be further explained, but it is not the crucial factor involved here, and what needs immediate amplification is the whole topic of **concrete, causative** factors in Reality.

These papers of mine are, I'm afraid, still seen in a basically **pluralist** way (it is, after all, our usual methodology). Everything is seen in terms of Parts, and with such a traditional approach, the innovative contributions are always seen as to do with the relative significance (or insignificance) of all these **eternal** Parts in the current mix.

What is NOT dealt with (and is certainly crucial) is their actual **creation** and **demise**, and I do mean their first appearance and their complete disappearance - their initial **birth** and final **death**!

Instead of using the pluralist assumption that all of these factors are ever-present, but not always having the same significance, or even dominance, we must explain how they at one time simply **did not exist**, while after an Emergent Transition, they suddenly **did exist**! We must do away with the now ubiquitous, post-modernist re-mix, and varying significance, as the **main reasons** for change, and turn it **right around**!

Significant Qualitative Change produces **wholly new factors**, which did not exist as such previously!

Clearly, if this is the truth, we will never explain an Emergence entirely in terms of the factors present in a pre-Emergence situation!

Formulae, as we use to deliver relations, relate **given** factors according to some rule! They cannot deliver wholly new factors, which **become** the **causes post**-Emergence.

Indeed, let us be crystal clear, disembodied abstractions **cannot** drive concrete Reality. They can **describe** how a purified version of Reality can be driven by **something else**, but they are **never** causes in themselves!

Let us see what this means!

Consider that we are in a stable Level and it clearly has its own entities, properties and laws. (The laws of Living Things are clearly entirely different to those for purely inanimate matter). We will NOT, for the moment, concern ourselves with **their** origins, but will instead consider what will occur as the stable Level vanishes via a cataclysm, indeed an avalanche, of multiple dissociations, and, somehow, out of this seeming chaos a new and very different Level is established.

The crucial idea in this transition has to be **creation**!

Instead of a re-mix, and a re-weighting of eternal, which is the usual assumption, we must see just how the wholly NEW appear.

It occurs when Reality is driven into a circumstance of wholly new possibilities, which will never have occurred before.

All prior entities were products of prior situations. What happens when completely original conditions are encountered for the first time ever, AND I do not mean a new mixture of old things? I mean NEW because it will have a unique history, which certainly will never have occurred before, and that history guarantees the uniqueness. We are not cycling around a limited set of possibilities, inherent from the outset!

It is clear that in a holist World, as distinct from a pluralist World, whatever were the forming factors in the prior Level, are now not significant, indeed, they are not even existing any more. Many factors from prior Levels either vanish totally or diminish into insignificance.

But also, and most importantly, entirely new factors are **created**. They are NOT merely existing factors that have grown in significance, but definitely new creations. The history, plus the cataclysm, and consequent **re-**

build, has generated entirely new entities, and these then relate to one another in completely new relations and laws.

We must see entities and laws, as forming out of a new “plasma” of Reality, and which not only have never existed before, but are devoid of the stabilising relations which maintained the previous Le

This conception MUST reject Parts in the pluralist sense, as being the producers of everything in the Universe.

They are *temporary products* of a given Stability, and will dissolve away with its demise.

The END of a stable Level must involve a dissociation of stable Parts and all their inter-relationships, which had also *made* and *maintained* the Level. The result is a different situation, in which all such conservative and inhibitory restraints have been dissociated, and **anything can now happen!**

WE are so used to our usual methods of analysis and explanation, using relatively stable Parts with unchanging properties, that when the END of a Level is finally precipitated, we cannot conceive of what has been produced/ We cling to our precious Parts, and attempt multiple re-mix rationalisations to explain the “new”.

We fail, because we are attempting to explain Cheese out of Chalk!

It is, of course, impossible. The Chalk was parts of the “old”, now dead Level, while the Cheese is a Part of the “new”, recently established and *living* Level. And it is impossible to directly relate the two! Between one stability and the next, there occurs an interlude, in which all are returned to a totally uninhibited set of inter-relationships, enhanced by history to make new things possible for the first time. And even then no simple process is sufficient to produce a new Level. Indeed, it is becoming clear that a whole series of potential “new Levels” come and go at an alarming rate, each one persisting for longer than the last until finally a persisting, and self maintaining, new Level is established which is packed with new things and new laws.

Elsewhere (and much later than when I wrote the paper to which this is an addendum) I have begun to trace the trajectories of Emergent Change, which is when dissociating elements within a stable Level grow sufficiently to precipitate a general collapse of the previously self-maintaining system, and a series of positive feedback avalanches of dissociation seem to be driving it to complete chaos.

But that does not happen!

Following a Nadir of Dissociation, a remarkable series of new proto-Levels and their almost immediate dissociation, climb a steep hill of innovation until a final Level emerges, like a Phoenix arising from the Flames, which “takes off” and does indeed persist

Clearly, this research, which is still a long way from completion, is what is required to address the questions raised in these papers currently under discussion.

(1,111 words)