## Interrupted Development & Bursts of Creation Paper II Emergent Levels of Evolution

Now, such situations do not exhaust the possibilities. The data from the study of actual Emergences is that, though external factors can play a vital role in these Events, they do NOT have to be calamitous.

Take Mankind! One theory for the sudden adaptive radiation of early hominids in Africa was climatic change, which drove these creatures into relatively new habitats, and perhaps the most significant was the move from up in the trees, to survival down on the open plains. The almost continuous forests were making way for much more open country in greatly drier conditions, and his relatively upright posture rapidly became even more erect, and the necessities of both flight from predators, and constant travelling to find the scarcer means of survival, made substantial changes in both the Foot and what was to become the Hand.

These major changes also brought about even more significant changes, and indeed enlargements, in the appropriate parts of the brain, to accommodate entirely new facilities and flexibilities rapidly becoming available in these limbs.

Surely, we must supplement the radical Mass Extinction/Adaptive Radiation, step-like changes with other, intrinsically-driven Revolutions too? Indeed, the most important evolutionary developments were NOT externally driven by catastrophes, but internally brought about by intrinsic Emergences.

Why do we concentrate on the catastrophes?

We do it because they are explicable in very straight forward terms. They can be fully explained fairly easily. Emergences, on the other hand, are ALWAYS **inexplicable**!

Now, this inexplicability has always attracted an avalanche of criticism from opponents, who even question the actual existence of any Emergences at all. For they often assert, "If you cant explain them, it proves that they are a figment of your imagination – a rationalisation of things you simply do not understand, and most likely DO NOT EXIST as such!"

Of course, these sound like valid criticisms, until you ask what other things can explain profound Events of Change – such as the Origin of Life on Earth. The total lack of anything approaching a reasonable alternative deflates their criticisms somewhat, and further investigation shows that being "inexplicable" tells us more about OUR **inabilities**, rather than the existence or not of such profound Events.

The nature of Emergences does not involve an absence of causes. There is no doubt that such must exist. What is crucial in these, the most demanding Events in the development of Reality, is Mankind's inability to *explain* exactly what is going on. Mankind cannot reveal the actual trajectory of Emergent Change because of the way he builds his understanding of Reality. His methods, though often pragmatically successful in many areas, are are founded upon the basic assumption of **Plurality**.

This is the assumption that everything in the Universe is composed of identifable and studiable PARTS - that every Whole is composed of Parts. This approach, unavoidable in Mankind's history, was the ONLY way that he could begin to simplify Reality in order to attempt to understand it in a piecemeal way.

He could ONLY study limited "bits" of complex, interacting Reality, so his process was to identify, and then study, the more obvious Parts that presented themselves as discernable. He developed techniques for identifying, isolating, extracting, and eventually abstracting relations evident within his Parts into useable forms. He did this by a process of control so that he could discard the containing Context, and by consciously ignoring any minor, simultaneous processes. This quite brilliant series of inventions "laid bare" features, that were normally inextricably embedded in a complex and confusing Whole.

This methodology enabled him to get a handle on what his methods had revealed as the most DOMINANT relations pertaining. Not only did these methods allow him to extract a large number of such relations, but also by similar controlling of the circumstances, enabled him to USE his extracted relations to some desired purpose.

These developments constituted a revolution in Mankind's methods of investigating Reality.

Now, during periods of what I am pressed to called "Stability", all these methods were fine. As long as he was in such a period, and enhanced the conditions even further by his OWN fabricated controls, his extractions were valid and useable.

But though such "stable" periods are "the Norm", they must be contrasted with the inevitable, short interludes of total "instability" which are Emergences. To reject that such Events do happen is indefensible when we consider the Origin of Life on Earth. If this was NOT an Emergence, what was it?

And, as soon as we admit of a single Emergence, they teem out of the as yet unexplained areas as an obvious, and natural, Form.

And, such Events MUST have a radical engine behind them. The old dominances of our pluralistic method must be increasingly challenged by both profound Context Changes, and by the increasing influences of the previously ignored "minor" contributions. They are no longer minor, and no longer ignorable. Indeed, these previously DUMPED elements are the actual engines for the Turnover. Where else could they come from?

In other words, all the gains by Man were restricted to the Dominant relations which pertained ONLY within the previous Stability. When the Emergence was brewing, ALL of these became increasingly irrelevant. In a short period an avalanche, or indeed, a series of successive avalanches, did CHANGE radically the situation, and finally precipitated a new Level. In this "new" stability, ALL the old dominances, which were the content of all our relations had vanished, and hence *so had the relations*. Our previous laws were no more, and hence couldn't be used to explain the new Level.

It could not be other than INEXPLICABLE!

Surprisingly, perhaps, the new Level settled into a similarly stable state as before, EXCEPT that all the Dominances were different. But, the old investigative *methods* would work again. The pluralist assumption would deliver in the new context, but the relations would be NEW. entities, properties, qualities, relations and processes would ALL be OF the new Level.

But, quite clearly, what he could NOT do, was explain the actual transition – the trajectory of a accelerating series of avalanches and profound changes. Emergences were inexplicable in terms of Mankind's ONLY weapons – his redundant, old-dominance and now totally defunct relations.

This failure reveals a profound new frontier of Knowledge – the creative, and transforming power of Emergences.

(1,063 words)