

The Demise of Formalism II: Part IV

The Rise of E M E R G E N C E

Emergences

As I have demonstrated elsewhere, the crucial and revolutionary processes of Change which have cumulatively delivered the present state of Reality have been Emergences, and though they didn't call them that, these were what they were investigating.

The major problem is that Emergences cannot be reduced to their pre-emergence preceding processes.

You cannot predict the Forms and content of an Emergence from its precedents.

Now, this immediately and profoundly contradicted the number one tenet of Science – the explicability of all higher forms and processes in terms of lower forms and processes – Reductionism. So, all their contributions were dismissed as wishful thinking. “Prove it!”, was the cry of the worshippers of Stability and mechanist explanation. Just as Science was moving slowly but surely towards ideas of Absolute Truth and Essence, and in so doing stripping Reality of all quality to leave only perfect mathematical “essence”, the dialectical materialists seemed to be turning to the inexplicable and embracing it!

There could be no coming together philosophically. And, of course, Marx was not content with academicism. His researches had revealed the most dramatic and significant transformations of societies throughout the History of Mankind, and he began to draw conclusions about the society in which he lived. He became a socialist, and, even worse, he was NO Utopian Socialist of the Fourier type. He was a profoundly intelligent philosopher of catholic interests, and he was underpinning Socialism with serious study. The whole of academicism of his time was, of course, peopled with the owning class, and the reaction to his politics was even more hostile. His contributions were ignored or summarily dismissed.

Yet the ideas spread throughout a certain layer, who had sympathies with the Working Class, and his writings became the Bible of Socialism.

Change & Science

Now, while the sequence of what had become Marxism was hermetically sealed within politics – indeed Revolutionary Politics, the steady march of Science was elsewhere constantly opening new doors and studying new and very different areas. The evidence for universal Change was cropping up all around, and in spite of their “principles” serious researchers HAD to address the problems that Formal Logic and Reductionism could NOT! From the fertile ground of Biology and Geology, serious study could do NO other than transform into Sciences of Change.

The most telling areas were most certainly in the Emergence and Evolution of Life on Earth, and the evidence of the physical Earth was shown to be packed with Change at every Level and ranging from constant ever present processes, to progenies – mountain building, tectonic plate movements and even world changing meteorite impacts. World wide near extinctions of all Life were followed by explosive adaptive radiations into myriads of new and very different species.

The Study of Emergence – Description or Causality?

The demand for a Methodology for dealing with Change became unavoidable. So, various scientists and philosophers (not usually from the committed Marxist conclave) began to address Emergences. At first it was only THE Emergence – that of Life on Earth, but as with Hegel all those years ago, it was becoming clear that Emergences actually were responsible for building the Universe as we know it today.

At the same time, the very areas that should have been the motive forces for the new requirements, were so far removed from the actual major changes, which themselves had taken place hundreds of thousands of years ago, or much longer, that the conceptions became **descriptive** rather than **causal**. Explanations were limited to scarcely differentiated Natural Selection plus random mutation of the DNA blueprints in every cell FULL STOP.

Now the problem of description versus explanation is NOT new, and in fact, the increasing gravitation towards mathematical formulae as “explanation” was rapidly becoming rife in the so called “hard sciences”, such as Physics.

But formulae are ONLY descriptions.

They merely put into mathematical form, that which is evident and has been measured. The very abstractness of equations is both their main advantage AND their disadvantage. The transformation into an entirely abstract nature has ripped them FROM any particular source situation, and made them universally applicable in many diverse situations displaying the same FORM only. They are thus useful over a whole range of situations (suitably controlled) but because of their total separation from a Real World context, they DO NOT explain anything! Otherwise, the exact same explanations could be used for ALL situations where the same mathematical Form was applicable. And, of course, that would be nonsense. NO! Formulae alone are purely descriptive of a given FORM.

Amazingly, in my own subject, Physics, I am constantly hearing of a “new Theory”, which on further investigation turns out to be embodied in a mere equation.

No, that is insufficient for it to be called a Theory. Theories require EXPLANATIONS!

They explain why, and not merely how!

So, the increasing dominance of “descriptive laws” in Evolution and Geology HIDE the causal nature, and the “explanations” appended are also purely descriptive.

NOTE: Watch any present day TV programme on Archaeology to see just how speculative and descriptive are the “theories” of the participating academics from a multitude of universities

Between the non predictive nature of an Emergence, and the increasing abandonment of real explanation, the substance of a real study of Change has been lost, once again.

The Broad Study of Emergences

The problems are demonstrated most clearly in the serious tackling of Emergences.

Now, the only non contentious Emergence is that of Life on Earth, and you would think that by now profound contributions would have been made to this – THE most important event in the history of the Universe, wouldn't you?

I remember as a young man coming across Miller's Experiment. He built (out of glass and in a laboratory) a circulating system which used pure water as the main medium. He filled his sealed and closed system with a mixture of what were agreed to have been the primitive gases of the atmosphere on the pre-Life Earth. By the application of heat, the water evaporated and was then directed through a still to be thereafter converted back to liquid water. He also arranged for electrical discharges (to simulate lightning) and he left his apparatus to “cook”. After a short time, the water in the base of the system had turned RED, and on subsequent analysis, this was shown to contain a variety of Amino Acids – crucial components in Living Things.

On reading about this, I was thrilled to bits! Along with everyone else, I considered that an extra brick had been fabricated, which along with many others of the same ilk, would ultimately allow the building of the Wall of Life.

The assumption should be immediately recognised as one based on a belief in Reductionism. Such elements would simply add together to produce Life.

I'm afraid NOT!