

# Emergence & Reductionism – Paper I

## *The Alternative Methodologies*

I am currently involved in a very abstruse area of research, which to do effectively and believably, seems to require that I must become an expert in practically everything.

I am studying both the causal structures that could be classified as **reductionist**, along with others that could only be termed **emergent**, and these are very different areas involving quite contrasting methodologies.

Perhaps I need to explain what is usually meant by these terms!

By **Reductionism**, I believe that there are a set of generally agreed assumptions and methods, which have the objective of making sense of Reality by first isolating and controlling a certain area of investigation, extracting from it useable relations and relating these together as a sequence of producing determinators. It's most far reaching achievements are those usually designated as Predictive Science, and to most practitioners they are seen as incontestable.

By **Emergence**, there has to be a very different set of assumptions and methods, for whereas Reductionism is exclusively **Pluralist**, Emergence *has to be* just as unswervingly **Holist**. For the latter must address the Evolution of Reality *of itself* - the successive creation of ever-new layers of Being all the way from the Big Bang to Human Consciousness.

Crucially, my key-stone area in Emergences can only be **The Origin of Life on Earth**, and I use that defining example extensively, but I'm afraid that most people seem to prefer to see *that event* as some sort of miraculous one-off, and not as just one of many occurring Emergences at a variety of Levels throughout the history and even in the development of Matter itself.

So sadly, there is not a great deal of serious discussion comparing these crucial and very different areas of Change in Reality. It is therefore clear to me that I must define many more of these Emergences to establish my area of study. But, as you may well have guessed, it is precisely *when* such Emergences are discovered, that instead of concentrating on the actual revolutionary processes involved, we generally set off, hot-foot into revealing the extent of the newly emerged Region. For such an alternative pursuit seems so much more important when we rapidly append to it the name of an entirely New Subject. Discovery is so much more immediate than tackling origins, is it not? But, of course, such appellations can both hide the nature of the creation processes involved, **and** restrict its use to merely identifying such wide and seemingly-arbitrary categories, and ignoring exactly how they all actually emerge.

But Emergences do NOT only occur in such areas. They turn out to be a great deal more frequent than the realisation of new subjects such as Biology and Geology.

Indeed, I have proposed that the result of a true Emergence should be called a **Level**, and that a meta-study should be undertaken on exactly how such Emergent Levels come into being. We need to know how the prerequisites for an upheaval accumulate until the epoch-making revolution is precipitated. And in addition, it must also be vital to get to grips with the sorts of processes which both cause and affect such a turnover.

The revolution may be rapid, but it will never be like a simple switching of one form of organisation to another. Indeed, many purely organisational change-overs DO occur, as in the regular and universal Changes of State, but they are not Emergences of the type we are discussing, which are best typified by the remarkable Emergence of Life from inanimate Matter.

These forms can **only** be seen as entirely **revolutionary**, because, on their fruition, new realities emerge **for the first time ever**. It is not a repeatable change-over, as from Solid to Liquid or Liquid to Gas, but is a thoroughgoing and wide-reaching change, which creates entirely new entities and new laws relating them. But, our task is clearly both considerably, and constantly undermined by the quite different and widespread ideas embodied in the by now standard methodology of pluralist Reductionism.

We must do detailed work on exactly how Emergences happen, and also tackle why they happen too!

To do this we must study the processes of change over, and finally we must look at the consequences, reach and future possibilities that turn out to be inherent in the new Level, yet which were *never* predictable from the **preceding Level**-producing situation.

What makes these difficult things to study is that a New Level does not only determine relationships *within* that Level alone. Indeed, their most remarkable property is that they are *self-maintaining*: they generate a wholly new stability. They thus select and then constrain lower level processes within the new Level so as to prevent their undermining it.

This effectively gives a measure of Top-Down determinism, as distinct from the generally accepted Bottom-Up determinism in more normal, directly and simply causal situations, which we generally term “reductionist” explanatory sequences.

Finally, these Emergences *Change the Game* in such a way that they pave the way for new, and **higher** upheavals in the future, where factors suppressed and held in check by the previous Emergence, mature and begin to undermine the situation for yet another Overturn. It is this series of Emergences that allow the development of Matter throughout its history all the way from the Big Bang to Human Consciousness.

**To be continued**

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