

The Myth of Simulation

Pluralistic “holism or the Real Thing

In criticising the assumption of **Plurality** in Science, there are a series of developments from basic Plurality, which have been developed by scientists and mathematicians to somehow address the more blatant errors, which are unavoidably precipitated by its involvement.

In the case of the former it was to bring their methods and extracted relations closer to the actually existing holistic nature of Reality. While for the latter, it was simply to extend the known mathematical forms then available into wholly new areas.

Obviously, both these later developments did not solve the problems. They were still both misleading and at least partially fictional. But as with **all formal** investigations and systems, they can be massaged to fit reasonably well in certain areas. And this “usefulness” means that they have to be given very detailed and accurate criticism, or they will be assumed to be not only pragmatically acceptable, but also true, accurate and indeed necessary.

And **that**, I must emphasize, they are certainly not!

The basic use of Plurality is to assume the **separability** of all contributing “Parts”, which “together” are assumed to constitute any given “Whole”!

NOTE: The inverted commas here are essential! For what is assumed to be a Part and a Whole is very particular, and is not the same here as would be the case in the use of these words in a **holistic** description of complex processes.

So, in the usual approach, anything, which makes these Parts easier to reveal, and even extract, is considered entirely legitimate.

Indeed, it is lauded as an important process, crucial to the attempt to understand complex Reality. But, I prefer to identify it clearly as the **Pluralist Experimental Methodology** beloved in Science generally.

In this process, specially erected and maintained **Domains** are always considered to be essential in which to carry out experiments, because they can be so arranged as to easily reveal certain important factors, and their crucial relationships.

Thus, whole families of these Domains can be separately prepared to each deliver a limited set of factors and one or another relation between them.

Now, the clear assumption is that such sets of Domains and experiments are revealing what is actually happening in complex, unfettered Reality without in any way distorting them by such simplifying arrangements.

They are assumed to be separable!

Now, once these experiments have been completed, and we have in our hands “**all**” the relevant constituent Parts and their separate relations, it is then considered to be possible to use them “together” to actually deliver Reality-as-is – that is natural, complex and wholly unfettered Reality as it is in World around us.

Various means have been developed to give the impression of doing this.

So, for example, a kind of “faked” **General Formula** can be constructed, which includes all the separately extracted relations, fused together in such a way that when each set of Domain constraints are set up, the overall, general formula directly reduces **that Domain’s** originally extracted relation. And the same would be true for all the other Domains and their relations too. The **frigged** general formula is then claimed to be a kind of Theory of Everything in that particular area.

What utter rubbish! It is no such thing!

But, such never **exists** within Reality as a simple, disembodied, all-determining general LAW. It is a clever, man-made frig, which can enable employees to turn the handle and get the results. It is nothing to do with understanding the situation, and will **ONLY** work if the all Domains are set up, and isolated from each other,

in turn, so that the resources and products can be routed from one to the next through a complete sequence - **like an Oil Refinery**, for example.

In unfettered Reality NONE of these separately extracted contributions and relations are the *same*. For there they are NOT **components** but *aspects* of an integrated Whole, and crucially do not exist except when in that whole.

Indeed, it is the Whole, which plays a significant role in the nature of the “Part”, and, what is more, nothing remains exactly the same throughout. They are all subject to incipient changes, and will at some point change into something else. Can the separated relations or even the combined general equation deliver these crucial changes? The answer is “NO!”

Our artificially “farmed” and extracted relations are similar, but qualitatively different to the real relations.

Now, such so-called **Additive Complexity** is only one, rather crude, attempt to deliver holistic Reality via an amalgam of pluralistically extracted relations.

The next trick is to have all the separate, pluralistic relations acting simultaneously, and to cycle round them, putting in the current required values into each in turn in an iterative way.

This is another approach, but it too has many major flaws!

The main one is that at particular junctures one of the relations ceases to be even remotely like what is going on, and has to be replaced by another (found separately in different *isolated* circumstances).

To signal the necessary switchover, there is another feature of this method.

It involves the finding of **threshold values** of key parameters, at which the old relation must be dumped, and replaced by the new one.

Of course, there is no way that this kind of regime could be administered by a human being (or even a closely coordinated team of human beings). Too much testing and switching and then applying is required.

This methodology is used almost entirely on computers, in what are termed **Simulation Programs**.

Ideally, though not usually, these need to be multiprocessor computers, so that many of these different processes can be done simultaneously (involving a corresponding increased complexity in the necessary programming, of course!).

But even so, it is yet another frig!

NOTE: I am once more pressed to liken such methods to Discreteness posing as Continuity, in that instead of an immanently self-modifying and changing complex, we substitute “moments” wherein we can interject our pluralist findings.

Now, the critic will, with justice, question why, if this is true, that such frigs can *approach* Reality so frequently – for it does so in the very best simulations. And in answer to this is **Dominance!**

Classical (simple) Holism would have all things equally contributing to an “almost random” mix, but that is rarely the case. Plurality approximates to real Holism by concentrating on those factors, which, for a time at least, dominate.

And while that remains the case, in what are termed Stable Interludes, the pluralistic extractions are not far from what is actually going on, especially in appropriately “farmed” circumstances.

But, as with all simplifications, such methods will always at some point fail, and fail catastrophically when stability is severely threatened, and an important *qualitative* change is nigh.

The essential relations are still the pluralistically extracted ones, and so are different from the similar relations, which hold (and sometimes changes dramatically) in unfettered Reality.

These then are the current ways in which a completely plurality-dominated experimental methodology is attempted to be used to model totally holistic, real-world situations.

Clearly, the major holes in a Science totally dominated by such pluralistic ideas and methods, appear in all true **Development** – in those episodes wherein significant qualitative change occurs. The most profound such Events are often termed Revolutions, but the connotations associated with that word limit it to such happenings within Society, involving conscious human intervention towards various opposing ends. But, more generally, for they appear at every level of Reality, then they are termed **Emergences**.

As with all names, even this term appears to infer gradualist, incremental changes culminating in the New, but this is incorrect!

Emergences are short interludes of dramatic and significant changes, which always (if successful) result in a whole new Level of self-maintaining stability, with its own new entities and laws.

The classic such Emergence is, of course, the **Origin of Life on Earth**, and its wholly new Level – **LIFE**, which is characterised by its own science – Biology.

Yet this, though the most important and certain, is only one of many, many Emergences, via which the Reality of today has been created.

Clearly, the role of those philosophers of Science, wishing to correct the mistakes of a wholly pluralistic approach and methodology, must be the detailed study of Emergences.

NOTE: This author has redesigned Miller's famous holistic experiment in which **amino acids** were produced by emulating natural processes of the primaeval Earth. This new version tackles the inherent opaqueness of the original, and uses modern methods to supply continuous, time-based information throughout.

He has also, within the last month, produced a *Theory of Emergences*.

(1,443 words)