## The Time has come to Bury the Dead

Friends, colleagues, scientists, listen to me!

The scene all around us is littered with the dead and dying and the war is finally won.

In order to proceed we must, clear this present carnage, and in an orderly and respectful way, bury the dead, and proceed to construct a New Order.

But first, we must identify each and every lifeless corpse, certify their demise, and with dignity consign them ALL to the ready earth.

There are those, still standing, who would deeply mourn the passing of these heroes, and they are honourable men, but I must be true to myself and boldly declare that I do not truly mourn their passing. Nonetheless, I am here without hindrance from their still powerful supporters, to justify the evident slaughter, so it is clear that they are all honourable men.

So, let us begin. Let us start with the leader of all these men, both dead and still alive, the indomitable Rock against Change; the veritable Cause of the recent war.

Yet, we must be charitable, as his friends are now clearly charitable in allowing me to speak to you now - for they are truly honourable men.

Here lies Plurality, for that was his true name, who in spite of his many grievous wounds (some inflicted over 2,500 years ago by the mighty Zeno), did stand and fight until now, when he has finally and irretrievably halted by death. Let us intern him, and all his colleagues with due honour, by clearly crediting him with what he gave us, that you all, I am sure, could recount, and cover him up FOREVER!

Plurality stated clearly, and it was agreed by all to be the certain truth, that every Whole is made up of separate Parts, and indeed this profound premise DID open the door to a simplification of the World in order to study it. Now, Pluralism has at least one hidden partner. If we are to isolate the Part from the Whole and ignore all connections, links and even causes EXTERNAL to the Part, we are similarly easily pressed into also ignoring all trivial and clearly negligible relations, which STILL pertain after isolation. Indeed, how could we determine from where cometh any tiny variations still evident, after we have established our Part-defining conditions? We can't do it!

So we say that maybe the isolation is not absolutely perfect, and therefore, following our principle of deep study of ONLY the dominant relations of the Part, we exclude what else we can, and also ignore what we don't seem able to eliminate entirely. Whether these tiny variations are small still-existing links with the rest of the Whole, or trivial-but-contained relationships WITHIN the Part, we dump them any way.

So, this partner of Pluralism can be called Simplification – the dumping of the inconsequential!

Together they drive the dumping of a good number of relations, leaving only the required dominant relation for study. Thus Pluralism demands not only the division of the Whole into its "constituent" Parts, but also intimates that ONLY by the methods outlined above can the individual dominant relations be effectively tackled and understood.

This tenet can be shown to lead irrevocably to crucial assumptions of descreteness and continuity, which were clearly demonstrated by Zeno's Paradoxes. These were the first and enduring cuts to Plurality, for they were incurable, but he and all his disciples ignored the evident damage and carried on regardless – carried on because they could see NO alternative. To lay hold of the World and bend it to their will, they had to make some objective sense of it, and the division into Parts, and their subsequent study, DID allow real progress *of a sort*.

Why was this the case? It was possible because, though the division into parts was an imposed and unnatural imposition, the fragments so isolated still carried with them some measure of their true nature. The parts were not totally arbitrary inventions, but simplifications, that limited the particular area of study, which still contained objective content, and this "blood" was sufficient to enable the determination of fragments of truth ( aspects of Reality) to be extracted, and some progress was seen to be possible.

Let us attempt to objectively assess this contribution, while at the same time exposing the virus that the method slipped in unnoticed from the very start.

In identifying a Part and naming it, we are already isolating it from its concrete, real World context. Indeed, we are truly extracting it from all relations that reach beyond its "local", internal definition. It becomes an extracted "organ" from the "body" of Reality, that we subsequently study, recognising only what is present within it, and *dispensing* with its intrinsic position in a greater Reality.

Now, such a simplification did help. Many things could be studied within the extracted "organ", and "local" explanations could be devised. Quantitative relations could even be abstracted into mathematical formulae, and these were valid – as long as we always replicated the original isolation process before we used them. And this was a legitimate simplification if USE was our objective, because what we had dispensed with were barely discernable. They were certainly negligible in the given, constrained situation. We all obeyed the necessary constraints and were able to USE these partial truths with predictable results.

But, we were overconfident! The World became littered with these extracted "organs", and clearly their interrelationships were impossible to address, because they had been surgically extracted from their actual places in an integrated whole, and their inter organ relationships had been entirely lost in those operations. The World seemed more and more to be composed of separate organs. Attempts were made to collect obviously related Parts together under collective categories. We devised groupings such as Physics, Chemistry, Biology, Sociology, Psychology and many more, including quite abstract categories such as Philosophy. But, though the groupings were a help, they obviously elicited the question, "How are these categories related?"

The definition of the groupings said nothing about their interrelationships! They existed (somewhere) but we couldn't actually pin them down.

In fact they were actually impossible to reveal, once again, because of Plurality! The local sequences, of course, had been discovered within the individual organs had persuaded us that such a method was both universal and sufficient! It was even overtly identified and named as Reductionism, and has been enormously successful for many years – successful, that is, as long as we did not try to explain one organ in terms of another, or, even more daring, explain one Science in terms of another. Then it invariably failed miserably to deliver any indisputable causative relation.

Signposts "along the way" were revealed in disparate, but isolated Parts, but the trivial "joining of the dots" did NOT explain anything. It just described the trajectory of the Path, after the event. The "experts" from the various "organ studies" even began to say that description WAS explanation. It wasn't, and isn't!

#### But finally the chickens began to come home to roost.

What had we thrown away when we performed our "organectomies"? Could the crucial linkages have been lost in the gory detritus? The Sciences had been successful, but only as long as their Parts were viable – as long as the functions revealable therein were sufficient. As soon as the relations between Organs, and most vitally, any causative links were required, the Part proved to be totally "dumb".

Now, elsewhere, Science had revealed the evidence of a History of Reality that (when seen as a whole) definitely indicated that it had actually DEVELOPED: it had both Changed and Evolved!

The sweep of that History could not be other than that Reality was SELF-MOVING and CREATIVE. New things, properties and even Laws were coming into existence FOR THE FIRST TIME EVER, as readable from the physical records of that history, written in the very rocks beneath our feet. New situations actually regularly emerged in that record. Now some investigators noticed that the named categories, such as Physics, Chemistry etc. were clearly related to this, in that they had their OWN entities, properties and Laws too. What therefore had happened in the History of Matter?

Had there been a growth in the actual Qualities of Reality? Had it produced wholly new Levels which contained completely New Things? Had creative Emergences taken place?

Now, though the majority of our organ experts dismissed such nonsense, some thought that it might just be true, and began to look for the cause for us having completely MISSED what must have been THE most important features in the History of Reality – its ability to create new things, with new qualities and Laws. Returning to our studies, we could find NO errors in our work. All our demonstrated Reductionist sequences were sound! Yet no crucial links were available.

### Then it dawned upon us.

Our basic method of separating the Part from the Whole – Plurality could well be the culprit.

If all the features of the Part were insufficient to explain something like an Emergence, we HAD to consider what we had THROWN AWAY – the context of our Part and its negligible perturbations.

Now, it was clear that we had always reconstructed, as far as possible, the correct constraining conditions for our isolation of the Part and its qualities, so what may we have done wrong?

We had ignored negligibles! We had only considered the obviously DOMINANT features, and had merely DUMPED any small variations as wholly negligible. We had even developed the conception of "Background Noise" to cover such "tiny intangibles", and dealt with their small spreading effects via averaging and error ranges. Could we be sure that these almost "invisible" features were, and still are, and always would be negligible?

The answer is that we could not! Behind our assumptions had stood a powerful tool of our dealing with the world – Formal Logic. And this discipline did not, in any way, deal with qualitative Change. Its primary rule was the Identity Relation – A = A, and it was equipped ONLY to deal with the full consequences of qualitatively *unchanging* systems.

Situations where the negligible became dominant, and the dominant became negligible were not possible using Logic. It seems that even our methods of Thinking had become impregnated with the consequences of Pluralism: for the Part was eternal! How could it be otherwise? Its demise was unexplainable due to its extraction from its determining context. How could it possibly vanish and be replaced by something else? We could NOT address Qualitative Change!

The situation was beginning to form in the minds of a minority of thinkers. It would seen that our assumed bases in how we deal with Reality, study it, and even think about it, were impregnated, through and through, with the consequences of accepting Pluralism.

We MUST refurbish our approach. It had already started in a piecemeal way with Evolution, and Hegel had addressed the trajectory of Change in Thought 200 years ago. But, now it had to be brought centre stage and the "impossible" areas finally and properly addressed.

Plurality had begat Reductionism, but the latter could not explain its own demise and the Emergence of New Levels, so it could not supply a truly universal method of explanation. Plurality in its worship of the Part had also fathered Formal Logic, which though useful was also a straight-jacket, unable to cope with Qualitative Change. It was a means of dealing with immutables ONLY!

Indeed the demise of Pluralism was precipitated by a growing number of contrary indications,: not least the growing body of evidence for Emergences, commencing, indisputably, with the Origin of Life on Earth, which in the old fabric of explanation was inexplicable, almost magical (as the theologists were quick to notice). So, Emergence now becomes THE crucial area of study, where previously it had been derided and dismissed, essentially for what it demonstrated – the incompleteness of Reductionism.

To proceed we HAD to KILL this false tenet. Pluralism had to DIE as the truth, and be demoted to a mere frig - a pragmatic method, which would always be wrong in essentials, even if it could deliver in local situations and practical problems

### Now let it work. Mischief thou art afoot. Take thou what course thou wilt.

For detailed and profound support for these ideas may I presume to cite **Zeno**, **Hegel**, **Darwin and Marx**, and also draw attention to the many papers by the author on this area and related topics?

# Jim Schofield's Current Areas of Study (2007)

Modern Physics & particularly Quantum Theory	A Structure of Diagrams – diagrams as
The Philosophy of Science	aids to communication
The processes & Productions of Abstraction	<b>Open Tunings in Music</b>
The Limitations of Mathematics	Science without the Scientific Method?

Ideality – the Realm of Pure Quantitative Form Evolution Physical Singularities? Emergence Cosmology The Origin of the Universe The Storm before the Calm – Perturbations prior to an Emergence Families of Re-entrant Tessellations The Soma Strand – a 3D, re-entrant strand that completely fills Space

(2,194 words)

The mathematics of O.R. A Machine independent Fortran Compiler Theory & Reality Access & Control – the principles of Multimedia Authoring in Dance