

Explanation via Chaos – Paper II

The Inexplicable Nature of Crisis

So, let us return to the TV programme at the point at which we left it – about 2 to 3 minutes from its start. The programme had already reached that point in history at which the missing (and essential) attributes were becoming real and widespread. The position of Newton et al, made Plurality finally feasible, because they had enough accumulated Knowledge AND enough power to Control situations in which the crucial Parts could be carefully isolated and successfully investigated. What Newton and following scientists were able to do was **isolate, extract and abstract from** Reality, by rigid controls of limited environments, and systematic measurements of a very small numbers of factors that were still allowed to vary. They were able to study in a constrained situation that was, for the most part, “nailed to the floor”

In such conditions, their measurements, for the first time, revealed clear relationships, and, using the forms of an increasingly sophisticated mathematics, so-called “laws” were abstracted out and presented for USE.

Sadly, the laws did not work, of course, if you tried to use them anywhere. It quickly became obvious that to use these laws required exactly the same situation in which they had been extracted in the discovering experiments.

Plurality was now in its fully developed form, and Holism faded into obscurity as it could NOT provide the facilities that Plurality was rapidly making available. Many new things were achievable by the coordination of Knowledge and detailed means of Control. This phase of Science was never about Reality as is, but about how Mankind could investigate controlled fragments of Reality, discover its regularities, and then use them in similarly maintained contexts.

It was NOT really Science, but more like a form of technology.

But to limit what was going on at this time to technology alone would also be misleading.

For these early scientists (who called themselves Natural Philosophers) did not stop at producing useable equations.

They ALL tried to go a great deal further by attempting the next essential step of “Explaining why” things behaved the way that they did. From the start, they accompanied their pluralist achievements with a non-pluralist explanatory narrative, that named what were considered the essential entities and forces, and by these means “integrated” the results of many experiments into more general and coherently explanatory scenarios.

Only then could what they did be called Science.

Now, things were further advanced by the almost parallel and independent development of Mathematics. Since the Greeks, drastic simplifications of Reality had allowed the development of a “paper Reality”, which could be entirely dissociated from physical means, and dealt with on paper, or scratched into the sand. The initial area was perhaps surprising. Simplifications had jettisoned everything in a certain clearly visible area except Shape and Form. Geometry was born not as a Science, but as a form of Logic applied to ideas of shape and Form. Such an invention, in its day, was revolutionary, and for the first time raised Abstraction to a whole new height, in which literally a whole area could be derived from a handful of Assumptions and Rules. Mathematics therefore had preceded what we call Science by maybe a couple of thousand years, and further developed, though interspersed with interludes of stagnation too. Of course, this was initially completely independent of the advances which might be seen as the precursors of Science.

Mathematics was an unusual, wholly abstract area. It often was not seen as such because Number was so useful in everyday things, but it was indeed abstract. Simplifications of Reality led to abstractions which could be represented fully by symbols, and Mathematics was really about the abstract forms involved (or should I say the “idealised versions of those Forms?) and NOT about Reality itself. Indeed, it would be wholly correct to say that Mathematics always was, and still is, about Ideality – the World of Pure Form alone.

Mankind had learned to separate Form from Reality, and then investigate it in its own terms alone. It was a remarkable and revolutionary feat.

Yet most people do not recognise it for what it is, and mix up sums with Mathematics. The former is abstract and trivial, while the latter is also abstract, but can also be profound.

Now, it should perhaps also be stressed at this point that because we are dealing with Form alone, Mathematics is universal. Form is everywhere. But that does NOT mean that such form is either essential or can be conceived of as a cause, but, on the contrary, is always inessential and a consequence of Reality and its active elements.

Now, all of the above has been necessary because of the superficial treatment of such matters in this television programme.

Such things could NOT be left unchallenged. This is important stuff, that was being discussed.

We cannot allow the prejudices of this collection of subscribers to the status quo to be promulgated as the Truth, when it was certainly a very long way from being so.

So, perhaps I can return here to the programme – once more to somewhere like the second or third minute of the entertainment.

It seems that **”we thought we could control everything, but now we think that we can control nothing”**

Two things MUST be said about this remarkable statement. First, WHO ever thought that they could control “Everything”? It wasn’t the ordinary man or woman was it? And who now thinks that they can control nothing? Again, it can’t possibly be the doers of this world. They know what they can control. They do it every single day.

But, on the other side of this statement is the contributors reason for the “give up now, you’ll never do it” attitude. Their lack of control is down to Chaos! Peter Cox of the Maths Research Institute of Exeter University insisted that this was the case. And this led to the “realisation” that they “can never know enough to predict things confidently in this World, never mind Control it”. It seems that “from simple models and the mathematics which controls them are becoming a challenge to our old World view”.

Once again, I am forced to correct these statements. These proselytisers should explain what it is they are dealing with. If you can follow their explanations, they seem to be talking about absolutely EVERYTHING, but surely they are not?

The pluralist achievements of the last 350 years are still as they were. They have NOT “ceased to be”. As long as the situations are controlled in the ways described, the relations extracted will in identically constrained circumstances of use perform adequately. BUT, there are situations which cannot be so constrained, and the well known examples are those such as the Weather, Turbulent Flow and many others, are just such situations.

But, let us be clear, these are NOT new discoveries, they are the classical holistic situations of yore, which are considerably more general than the Chaotic cases “beloved” of these authors.

In full Holism, many different factors are both mutually contending and, indeed, determining, and these are NOT restricted to those at the same level. Factors below are relevant as you might imagine, but so are those from a higher Level. Everything determines everything else!

Prominence is given to Chaotic cases without even mentioning this more general situation. Surely there is an admission of Holism in our authors belief in universal Chaos? But, this is yet another sin of omission, which as we will see abound in this pessimistic position.

Indeed, I have evidence elsewhere that some situations where certain parameters are chosen to be those deemed to be determining, turn out to be not so at all, but are actually “totalling” or even “averaging” features – man-devised amalgams of a series of real contributing causes. There is indeed a point of view which addresses Chaos NOT as a fundamental contributor, in itself, but actually a product of maturing, holistic combinations, which can “as a system” ripen into a flip-over situation.

Making Chaos a “cause” is not to be recommended, and surely it can never be a determinant as is proposed later in this piece.

To be continued

(1,368 words)