

## Explanation via Chaos Paper I

### *The Inexplicable Nature of Crisis*

Within a very short time of the massive Stock Exchange and Bank slump of October 2008, the BBC had presented an hour long mathematical explanation entitled *High Anxieties: The Mathematics of Chaos*. Now though this was supposedly mostly about Anxiety, it turned out to also be an urgent contribution to the widespread questions generated among vast sections of the population as to why the Crash and Fallout all happened and who was to blame. The remit had to deal with the obvious anger of one section of society, while at the same time consoling the Anxiety of another quite different section. It was obviously NOT going to be achievable by any Economic-type explanations. Indeed, concentration on such an approach could merely increase the anger side and consequently also the anxiety side, so some more natural and unavoidable causation would be ideal. Something independent of the actions of men and a feature of Nature itself would be ideal. The area chosen seems to fit the bill perfectly. It was mathematics – that cornerstone of our understanding of Nature and weapon to control and transform the World. Could it also demolish and destroy?

In another world, the fast spreading conclusions were that it was seemingly inescapable that the culprits were greedy, lying bankers, who had parted large numbers of the ignorant from their savings in order to generate vast bonuses for themselves, and if possible still get out while the going was good. It was clearly concluded that these people had pumped up a fictitious bubble of boom based NOT on new means of production or the invention of new techniques, but solely on unsubstantiated credit.

It was also dawning on the “angry mob” that these bankers MUST have known what they were doing. They were certainly NOT the victims of the final crash. The CEO of Lehman Brothers admitted that in spite of the bankruptcy of his firm, his personal fortune was STILL in the hundreds of millions of dollars. In spite of being nearly moved to tears, it was obvious to everyone that he would cry all the way to the bank, but then feel much better all the way home. The general conclusion was that these men were con men of the first water and that hundreds of them were now quietly sitting on their ill-gotten gains, waiting for the “bottom” of the market when they could buy again in order to quadruple their wealth when the Market recovered. The millionaire shopkeeper Green was seen only the day before checking out the situation on Iceland, looking for things to buy. He was clearly extremely angry that he had been spotted, and the news item was obviously a mistake, as it was immediately “pulled” and didn’t appear again in subsequent bulletins.

So, it was in this mounting momentum of the “angry” that this programme appeared.

Som sort of excuse was essential, and as the Act of God was the best bet, Chaos as a natural phenomenon seemed ideal, and certainly was the thesis of this extensive programme immediately after the latest round of “bale-outs of the bankers” (now renamed “rescues of us all”) had occurred.

How did they do it?

We were initially informed that “since the days of Newton we had believed that the World was a knowable and therefore controllable place” Indeed, “the mathematics that governs the World said so!”, we were told.

But, it turns out that this was a gross simplification by us(?) all. The World was “perhaps not as predictable and controllable as we once thought. Events have demolished our illusory beliefs and “exposed Reality as it is”.

To this end we were introduced to a prestigious set of professors and other academics, all singing from the same hymn sheet. No-one who didn’t conform to the agreed thesis was given a voice. Instead, the contributions from a team of co-operating runners with the same explanatory idea were co-ordinated so that they passed the baton from one to the other with seeming assuredness and skill.

This was NO discussion.

It was a “party political broadcast “ on behalf of those who understood the “truth”, led by master of ceremonies David Malone.

We are, at the outset, presented with Professor David Ruelle, a physicist and mathematician, who asserted that there is a growing awareness that the World in which we live is unpredictable and indeed chaotic (Chaotic?) NOTE: As Ruelle was deeply involved in the mathematical establishment of Chaos, you have to expect that what he helped to bring to fruition had to be of World-Wide significance.

Now, at this point I must step in before too much momentum and choruses of agreement are established by our carefully mustered team, by saying that Mankind KNEW already about such things for millions of years, indeed, it was his first World View! In his long, slow early history he was never able to predict anything with either certainty or success, mainly because he didn't know anything, but also because his control of the environment was minimal for most of his time on the planet. And, though, in the last few thousand years, this precarious existence did improve with his world-changing inventions in what is termed the Neolithic Revolution, his greatest tools were still made from fragments of knapped flint.

By 2,500 years ago, some significant advances had been made by the Greeks in Europe and the Buddha in India beginning to realise something of the true nature of things.

The Buddha, in particular, realised that the World was made up of myriads of mutually determined and even contending forces. Everything affected everything else, and seemed to prohibit the longed for situations of security and progress, that had been only glimpsed, and required inconceivable measures of control to achieve. The Buddha's "solution" was to embrace the World *as it is*, and attempt what *was* available to each of us – to live within the incessantly rolling Wheel of Birth and Death, yet to accumulate enough Human worth to finally escape this eternal sentence and achieve Nirvana.

Though there were those who alternatively found things, and even people, to blame for this misfortune, the wise knew that all was Change, and everything was as it could only be, but only for a time. The cataclysms were culminations of the resultants of holistic forces arriving at some temporary conflux and precipitation, and they would **all pass!**

So, there was an ancient understanding of the nature the World, which included the cataclysms as well as the explosions forward.

A different change in the early attitude was perhaps first initiated by the Greeks, in that there were those among them that rejected both the fatalistic AND the holistic conceptions of Reality, for what can only be termed an alternative Pluralistic Version of Reality.

This new view considered that to understand the World, you had first to divide it into identifiable Parts, which could then be studied and then shown to reveal cause and effect. Such studies would invariably lead to the further division of these Parts into their components, and so on.

Pluraliity, though, was NOT an instant success, mainly because the division into Parts and their detailed study was impossible mainly due to that fact that Mankind did not yet possess either the Knowledge or the Control to carry it through

**To be continued**

(1,231 words)