

Formalising the Heavens – Paper III

The Results

Now, in Parts I & II of this continuing response to the New Scientist article, I attempted to establish the ground for the ideas expressed there. And, as that ground is NOT my own, I contrasted it with the alternative to which I subscribe.

In this section I want to go on to particularize just how their ground (and its consequent methodology) was displayed in the various ideas and conclusions that were included there.

The writer of the article first traverses a somewhat surprising path from Copernicus to Modern Cosmology, as if there is a continuity throughout. He even talks about Copernicus “turning in his grave”. Sorry, but attempting to give the following ideas some of the respect due to Copernicus will *not* work. Copernicus was only talking about a very small section of the objects in the heavens – the Solar System, and his theory is as correct now as it ever was. Leave him out of it. This theory is ALL YOURS!

I suppose that as a result of Copernicus’s theory the conception of the centre of all things being the Earth was overturned, and as the new cosmological position seems to imply that the Earth (and its environs) have been re-established at the centre of the Universe, some reference might give colour and attractive contention to the ideas involved, but nothing more.

The real theory under question is nothing to do with Copernicus, but a modern, universally subscribed to theory that is less than 100 years old. This is the so-called Standard Cosmological Model, and is based very largely on the ideals involved in the Copenhagen Interpretation of Quantum Theory. There have been many problems (as well as brilliant successes) with this Theory which has led to such ideas as Dark Matter and Dark Energy to paper over the cracks, as well as many other minor creations.

The approach of the proponents of this New Theory does not, in any fundamental way, differ from that of those they seek to unseat.

They are all mere Mathematicians!

Now, of course, both sides will dispute this, but it is nonetheless indisputably true. Though they may add a few condiments of “formal speculation” to their theories, they are essentially purely mathematical. They may well get their data from astronomers, which they attempt to ensure will be consistent with their mathematical models, but at no stage do they abandon mathematics as mere idealized Form alone, as it undoubtedly is, and, as scientists are expected to do, go on to *complete* their “theory” with a necessary scientific explanation.

Indeed, they are absolutely sure that all the answers will be found within their equations ALONE.

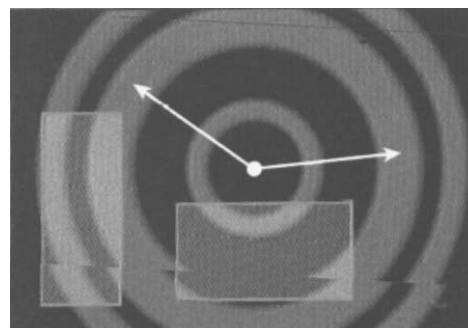
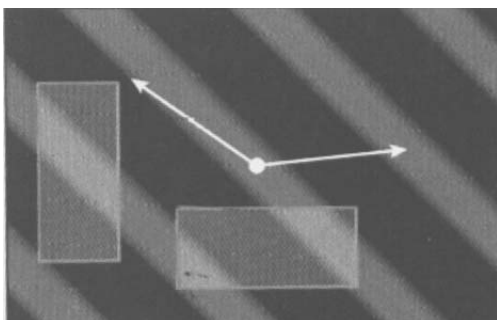
This is because their ground has made the relations and equations the Essence of the nature of all things.

Several problems raised their heads which cannot be dealt with by the current consensus version of the Standard Theory, and our critics did what all such mathematicians always do, and looked at the usual simplifying assumptions that were universally accepted, to see if a change in these could mathematically deal with the new non-conformities.

A discussion is commenced about the usual assumptions of Homogeneity and Isotropism of the Universe.

The former of these two assumes that, on average, the Universe is the same everywhere. While the latter assumes that the Universe will look the same in whatever direction we look.

Our author’s diagrams to demonstrate Universes, which do not conform to these assumptions are shown below.



Such diagrams as these immediately confirm my characterization of their standpoint.

Notice that neither alternative is at this point justified *physically* – I would even say, scientifically!

They are, on the contrary, merely alternative *formal* assumptions about Space, to give us a different formal World, with different formal consequences.

NOTE: I cannot avoid, at this point, mentioning a book by a very famous British mathematician, who attempted to explain changes in a developing embryo (from the fertilized egg) entirely in such formal, mathematical terms. The results were devoid of any real content, and I was able to multiply his mere “explanations” by a factor of at least ten times by instead using biological explanations. These two alternatives were like the proverbial Chalk and Cheese. And so it always is with Form-alone “explanations”. The reason always being the same, Form is description, and hence cannot explain anything. That is always a job for scientists not mathematicians.

Yet, mathematicians are always doing this.

The Non-Euclidian Geometries were invented by precisely the same sort of methods. Basic assumptions were changed, and the new geometries were the logical outcome. Even the old classic Euclidian Geometry itself, does NOT represent Reality. It too is a set of premises and assumptions that can be developed into an internally self-consistent system, which is a very simplified and formal-only analogue of a particular and selective view of Reality. On close inspection, it is seen to be packed with crucially wrong things.

First, it is eternal and unchanging. Second, all Points have no extension, all Lines have no thickness, and features can be laid out on infinite, perfectly flat planes.

It has the same advantages as the early Science of the Heavens, in that, in such a drastically simplified World, useable ideas can be made and manipulated. But no-one would insist that the World conforms to that Geometry. That is because even Euclidian Geometry is a Purely Formal and greatly simplified invention by Mankind. Its original conception was indeed a stroke of genius, but it is NOT an eternally true system.

It is Form without Content.

And the same sort of approach is employed here!

The second strikingly incorrect methodology involves adjusting the Universe to fit do-able mathematics.

You can't do that!

If some alternative structure of the Space of the Universe is to be proposed, you must work from existing physical conceptions and theories to produce a better, more comprehensive theory, which is still coherent with all other established elements of currently accepted theories. What you are proposing must answer all the above constraints, and still deliver a *physical* improvement. To not build from currently established theories is merely speculation, and, of course, such a thing is common when your purpose is primarily formal .

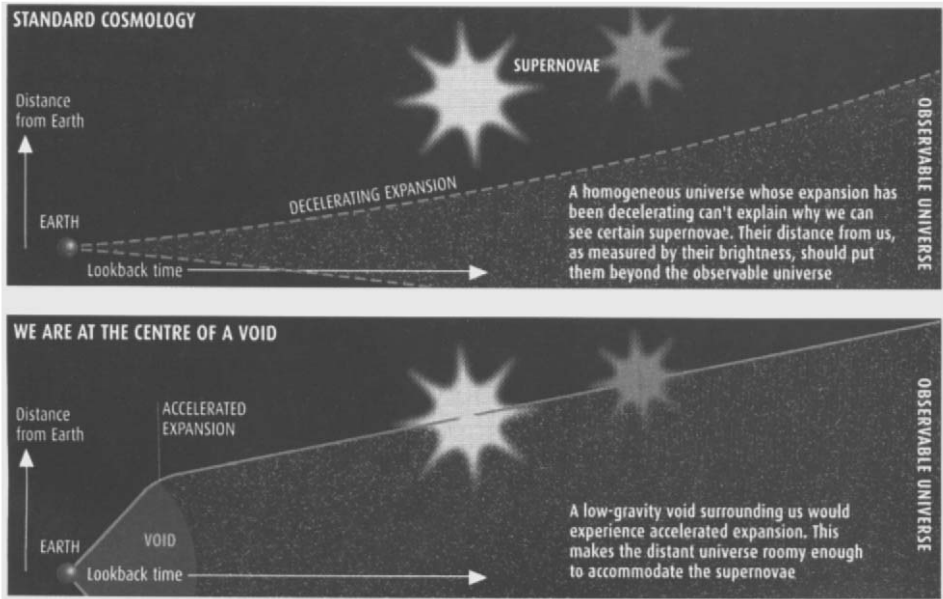
To manipulate your models, without physical impetus and concrete reasons, so that they fit in with available data, and yet continue to explain **nothing** , is not Science!

And to say, therefore, that is why the New Universe must be like that, is an inversion of Science.

The whole method of working **from** the mathematics à la Maxwell and Einstein, is both clever and revealing, but NOT Physics. These contributors developed our set of types of Form, and by so doing allowed our previous conceptions of Reality to be modified somewhat, but they didn't explain anything. For example saying that Space is curved is a description. There is NO explanation as to why it should be curved – by what mechanism. So it is not a scientific theory. It is a formal theory - it only describes!

We MUST insist that Mathematics is NOT a Science. It is merely description taken to the most succinct method of expression and dealing with Form and nothing else.

As such it is relevant, but does not explain anything beyond our own errors concerned with Form.



A couple of other diagrams (shown here) are provided to contrast the old. Standard Cosmology with the new alternative presented in this article.

The problem to be solved involved the explanation of the discovery of several supernovae in places where the Big Bang theory said they could never be.

The reader is directed to the New Scientist article for a fuller discussion of this particular point, but the details are not pertinent to the point that needs to be stressed here.

Now, what do you do when such a situation occurs, for they happen all the time in Science? What our mathematical theorists do should by now be entirely anticipated. They assume that we are misinterpreting the Form of Space and this seems to put the Supernovae where they shouldn't be. Immediately, paper and pencils are got out and mathematical calculations are carried out, at the end of which, our contributors propose that there **MUST** be a bubble surrounding the locality of the Earth (and its environs), - a void in which the gravitational conditions are different to the rest of the Universe. These differences would allow of an accelerated expansion to take place there, which we, incorrectly, would assume applies to the whole of the rest of the Universe, and hence lead us to put these Supernovae ***in the wrong place.*** Now, as a scientist I immediately ask, "Why and how could such a void come about?" Is there any Physics at all in your New Structure, or is it purely Mathematics?

To be continued

(1,476 words)