The Evenness of Illusory Space

(as produced in a Shell Universe with Totally Internal Reflections at its Boundaries)

One feature that would clearly be the case concerning the Illusory Space that an observer would see from any position within a Shell Universe, is that its apparent shape would be converted into a seemingly wholly Spherical Form with an extended size.
And each and every source of radiation, be it a star or indeed a whole galaxy of them, would be mirrored many times over at the boundaries of such a Universe, if radiation was limited in propagation to only ***within*** that Universe, and could not proceed beyond into "Total Nothingness".

Such a situation would certainly mean that radiation approaching the boundaries of that Universe, could only continue their propagation by "reflecting back" into the body of the Universe. And then the possibilities for subsequent reflections at both such a Universe's both inner and outer boundaries would be greatly increased.
The observer at any particular point would therefore see the radiation not only directly (in a straight line from Source to Observer) but also indirectly due to reflections at the boundaries, and the number of these would involve the radiation travelling different distances to arrive at our single observer. One star may be seen several times from different directions and at different distances due to these effects.

Though all the actual Sources would be within the narrow populated skin of the Shell Universe, all of the illusory images of these sources would appear to be outside of the outer boundary, or within the inner boundary of the actual Universe.

Now, two major features of this Illusory Universe are worthy of note.
FIRST, it will not appear as a Shell, but as a Spherical Form, and
SECOND, all real sources within will be replicated ***outwith*** the Universe, which because of the simple ***single*** reflections will balance those within, for they will appear to be as far outside the Universe as are the Sources within it.
And, overall, just as in a Hall of Mirrors, with reflective surfaces in every possible direction at points of incidence of light, they would produce images literally everywhere, comprised of both real and virtual sources. Such a system of image replication based on reflection will impose a balance, or evenness of distribution, in the distribution of the full set.

Now, there could be another reason for the relative evenness of the distribution of sources in our Universe. It has for many years been explained by the occurrence of something called **Inflation**. This is supposed to have involved a very high speed expansion of the Whole Universe, which would have the effect of ultimately delivering this evenness, and would be impossible given ONLY a Big Bang type explosion as sole source. No reason for this Inflation was ever produced: they simply had to have something, which would deliver the observed nature of the Universe, so Inflation was "necessary".

Now, when attempting to think through this same period in the development of the Universe, I am more than unwilling to accept such clear "frigs"! (When something is introduced totally without a causal explanation it is a "frig"). Though my own musings about the Universe can (and will) be roundly criticised, it will not be for the reason of a wealth of such "frigs". The assumptions that I have made were certainly not arrived at by such means. Indeed, the ideas involved in reflections at the Boundaries of the Universe, were direct consequences of ideas about the Nature of Space that were developed to explain the Famed **Double Slit Experiment** (and did, by the way, successfully manage that objective). Those ideas may well turn out to be mistaken, but they were based on scientific knowledge and not on totally unexplained "frigs".

NOTE: Of course, there is a more basic reason for the "frigs" of the theorists in Modern Physics. It arises out of the condemnation of all Explanation as the basis of the Copenhagen Interpretation of Quantum Theory, and the consequent total reliance on Equations as the driving forces of Reality. Thereafter, if you could present a

piece of Mathematics which matched with a phenomenon, then, it was mis-named as a **Theory**, and accepted into the "set" of such, which together were considered to deliver the "consensus description".
The old reliable (if temporary) ideas of ***sufficient evidence*** and ***objective content*** were dumped for **consistency** in the mathematical representations of what was observed. The confidence of such theorists amazes me, for surely such a stance is wholly **idealist**? With abstract and wholly disembodied relations ***driving*** concrete Reality, it can surely be nothing else! But it was ever thus!
Listen to most scientists talk and they invariably say that Reality acts as it does because it has to obey the Laws of Science.
Isn't that exactly the same thing?
It is quite a different basis for Science, don't you think?

The proliferation of such things as **Parallel Universes**, **Physical Singularities**, **Elastic Space**, **Dark Energy**, ***causative(?)*** **Cosmological Constants** and all the rest, are not only placeholders for a required subsequent Explanation, BUT, on the contrary, considered to be the last word!
This though, can be traced way back in History to the beginnings of Mathematics, and consequently in the Philosophy of that subject.
The initial gains in Mathematics were in areas such as **Euclidian Geometry**, which were NOT about Reality-as-is, but an ***idealised*** version of it, which turned out to be not only coherent and consistent, but also (in certain situations) very useful indeed.
In Mathematics such a standpoint has always been the case since that time.
Yet in Science, that was certainly not so (or at least not completely so).
Prior to the "revolution" of the Copenhagen School, scientists considered their investigations to be for the **revelation** of the **necessity** of Reality, so that they described it as Natural Philosophy.
Yet that continuous search for the **path** to the Emerald City of Truth was abandoned for instead a compilation of eternal essences of Reality as expressed solely in **Equations** alone!
The globally unifying force of comprehensiveness was totally lost! But, individual equations don't "fit" exactly and inexorably with one another. They are both independent of one another and eternally true as abstractions. The subscribers merely know when to put one down and pick up another, and, of course, which one to choose!
Such overall Meaning was swapped for a museum full of Working models" for everything – a repository of Equations!
Now, I have always called this major change a **counter-revolution** with some justice. Equations, in spite of their universality, flexibility and indeed clarity, are STILL only ***descriptions***. The World behaved the way that it did, and every Theory must fit, like a piece of jigsaw puzzle into an overall scheme that includes everything.
But, the analogy of the jigsaw is **too perfect**: it is more accurate to see the individual equations as "***approaching, but not touching***" other assumed to be closely related forms. There is ALWAYS a necessary gap! Equations are generalities, which are applicable in many, many separate and causally unrelated cases, so they cannot fit exactly ANYWHERE! And there is another even more important weakness in the sole reliance on Equations. The crucial conception of **Universal Reductionism** is simply not true!
Indeed, you cannot automatically move from one equation to the next, when it dramatically fails. The Godlike observer intervenes to switch to another formally totally unconnected form, which experience, NOT explanation, informs him that it comes next! Even at its best, the usual methodology is **not** conceptually continuous at all: it is most certainly discontinuous, and is more like a system of floating quilts than a "fitting puzzle piece". The supreme and final arbiter for what was used, and when, was always Reality itself (or more accurately the specially prepared and wholly distinct Domains for each and every equation).
The traditional scientists did not take upsuch an arrogant stance, but basically a very humble one. They knew that everything they extracted would in time be superceded by something better. How could you be arrogant with such clearly admitted temporary gains?
But, the victory of the proponents of the **Copenhagen Interpretation of Quantum Theory** changed all of that!
Blinkered Pragmatism ruled OK! And anyone attempting to explain phenomena in the "old way" was vigorously condemned.

The objective of the New Science (think of New Labour, and it will make sense) was to find **the** equation for each phenomenon and then use it! They ceased to be scientists and became engineers of Sub Atomic Physics. And such "magic" continued to impress the non-specialist public (and the purse-string holders) as Engineering always has – to the former by means of their successes, and to the latter by means of the revelation of profitable applications.

When, I went to University as an undergraduate and was given this claptrap for the first time by prestigious academics, I could not believe it. Not only had the real purposes of Science been dumped. (It should START precisely when the equation has been fitted to the extracted data, NOT as in these cases STOP DEAD!) But the piecemeal pragmatism has somehow, in spite of its non-integrated character, elicited a confidence (which is almost arrogance) in its practitioners.
When I had the cheek to question my betters on the drivel that they were peddling, I elicited the most vigorous and even hate-filled reactions from my teachers, coupled with the derision of my peers.
Yet in most of the areas I (in my admitted ignorance) had put forward, I have been proved to be right and my "betters" wrong!
Such a situation was frankly criminal in the damage that was done to Physics and Cosmology ever since the Solvay Conference of 1927. And this damage has not only had its effect on the development of Physical Theory, but absolutely vitally on the many young people who really wanted to plug into real science. The only sources for real science are the old scientists such as Helmholtz, NOT for their theories, but for their approach and Philosophy. The alternative of reading Heisenberg, for example, is incredible. If anyone needs convincing of the philosophical depths to which the Copenhagen School sank they only have to read Heisenberg's ***Physics and Philosophy*** – a book not only lacking any real Physics, but also including absolutely **zero** Philosophy. as demonstrated by the following quotes:_
"***What alone matters is our faith in the West***" and by following his lead, we are informed that we will find our understandings:
"..ranged spontaneously about their common centre"

> NOTE: If you wondered what he meant by "their common centre" I am pretty sure he meant Mathematics.

Now, long ago, when I was introduced to Science, my teachers were clear that here was the means to reveal Reality as it really is: the means to reveal both understanding and integration of the differing phenomena of Nature. They also never made any current theory an absolute. All would be superceded – and that would be **your** job! That was why Science was so valuable. Indeed, any theory that was not capable of being "disproved" was NOT a serious contribution to Science. Proper scientific theories had to have this dual character – they must attempt to explain what was the case in Reality, but must also be totally available for their own disproof, if incorrect.
Such OPEN Science was dependable ***because*** it was ever open to improvement and renewal. And the same must be the case now, and particularly in Cosmology!

Let us take a single feature of the Universe that I have described. . [The reader will have to look in the appropriate papers by this author for a full and comprehensive description].
A finite duration Big Bang could only produce some sort of Shell Universe.
So, my task, as it should be, was twofold.
ONE: To make as much sense as possible of this hypothesis – pushing the consequences as far as possible.
TWO: To clearly point up consequences which could lead to it being proved wrong, if mistaken.
You **must** do both!

And my choice for the latter was Star Clusters.
Taking the basic concepts involved in a Shell Universe with Totally Internal Reflection (actually a special version of it) at its boundaries, I was able to show that a single star could be seen by an observer (within that Universe) as a complete Star Cluster. For instead of a single path for the light from that star to reach the eye of the observer, there would be many, and they would not be exactly the same. A bunch of similar length paths would give similar (but **distinct**) images of the single source, and many features of the seemingly separate sources within the "seen cluster" would be reasonably alike.

The problem of Star Clusters as results of a Big Bang origin must be evident! How could they ever occur? But, if they were illusory, there would be no problem! Also, of course, careful study of such clusters would very soon scupper my contention, if it were **incorrect**!
So, with such necessary riders constantly in mind, I could indeed speculate and see where it took me.

Also, even if my researches did not prove correct for an explanation of the Cosmos, they would demonstrate where ***our*** methods of deduction could lead, including also how they could mislead too!

(2,227 words)