

1. Contents

	Page No.
1. Contents.....	1
2. Preface.....	3
3. Addendum.....	6
4. Preconceived ideas.....	7
5. ‘Simplified Complex Logic’.....	9
6. A Flight To Fancy.....	11
7. Can a Problem have two answers?.....	21
8. Reality (Existence & ‘Existance’).....	22
9. Mutually exclusive concepts.....	24
10. The concept of an immovable object.....	24
11. The illusion of an immovable object.....	24
12. The concept of an unstoppable force.....	24
13. The concept of Euclidean geometry or Cartesian geometry.....	25
14. Does space-time continuum really exist?.....	25
15. A Better model is to add the Dimension of ‘Reality’ – the essence of EXISTENCE (‘EXISTANCE’).....	26
16. Points of Existence on their own are not enough.....	28
17. 4D volumes of Existence on their own are still not enough, add the missing 5 th Dimension.....	29
18. Now we can explain Energy and Matter as one.....	30
19. The solution to any problem should be as complex as is required, but not more so.....	31
20. The concepts of a good model.....	31
21. Solution to the Riddles “What came first the Chicken or the Egg?”, & “What would happen if an immovable object met an unstoppable force?.....	33
22. Too simple and it gets complicated.....	35
23. How is Space linked to Time?.....	35
24. The added dimension of Time.....	36
25. How can we add Density to a volume?.....	37
26. The relevance of Time to Space.....	38
27. Is Speed another Dimension?.....	39
28. Further explanation of the concept of ‘Primary Existence’ (Section 15 & 24).....	39
29. Quantized Space.....	40
30. Clarification of Infinity.....	43
31. GOD’s set of numbers (mathematics).....	43
32. Clarification of the ‘Inversion of Space’.....	44
33. What is the true origin of the Universe?.....	44
34. ‘Minimal Volumes’, ‘Minpoynts’ and Scales.....	47
35. Simplified restricted model (‘Primary Spaces’).....	47
36. Picture of thread.....	48
37. ‘Secondary Space’, has wave characteristics.....	49
38. Center of Gravity; is it an illusion?.....	49
39. Everything is structured in layers or levels.....	50
40. Simple construction & mechanism of the Universe.....	51
41. Picture of Singlet and Triplet APES.....	53
42. Gravity.....	54
43. Magnetism.....	57
44. Magnitude of forces as a function of the curvature of space.....	57
45. Asymmetrical Universe, the Ultimate Perpetual Motion Machine.....	60
46. Symmetry.....	60
47. Pictures of two ‘APES’ passing through each other in the ‘Secondary ² Volume’.....	61
48. Picture of complex APES.....	63
49. Concepts Required.....	64
50. Other Notes.....	66
51. Previous Notes.....	67
52. The whole Universe is a “soup” of “vacuum pumps” of various sizes.....	70
53. All Dimensions.....	79
54. Some other problems explained.....	85
55. Ant seems to travel at different speeds.....	86
56. Change of direction in denser medium.....	87
57. Another way to look at the ‘APES’.....	88
58. Perception.....	89
59. If all else fails.....	91
60. Photo electric effect and speed of light.....	92
61. Mass, Inertia, Momentum.....	96
62. More on Density.....	97

63. Dark Flow.....	98
64. Energy and Quanta.....	98
65. Big Bang Big Crunch.....	99
66. Chaos, Order, Disorder and Entropy.....	99
67. Illusion and ‘Ellusion’.....	101
68. Consciousness.....	102
69. Conclusion Probability, Possibility and Inevitability.....	107
70. Models of Reality. How you might create one.....	109
71. Time Travel. More about Time.....	137
72. Curvature of space.....	140
73. Where did things start becoming more abstract.....	141
74. Extra Intrigue.....	145
75. Extra information.....	147
76. History.....	151
77. Addendum extras.....	153
78. Glossary.....	159
79. Scales.....	165
80. Mind Maps.....	169
81. A few pictures.....	170

Mr. Andrew A P  p  s asserts his right to be identified as the author of this work, and any original ideas and thoughts contained within it, in accordance with the Copyright,    Designs and Patents Act 1988.

This work is an extension of his first book published December 1998 ‘‘A Pocket Volume of the Universe’’.

   A. A. P  p  s 1998



2. Preface

In my first book “A Pocket Volume of the Universe”, (©1998); mostly incorporated in this book, (which was free to read on the internet for about 10 years, and has been on a mirror site since then). I wrote it like a story, and explained how I got to my model of the Universe.

This time I have written it in a more formalised manner, so you can read it in any order you like (section by section), but to get the best benefit, you need to read the section (4) on preconceived ideas first.

The book is written mainly on my thoughts and interpretations as I see them in relation to my model of the Universe and not on general empirical data on my part, nonetheless it should fit in with everything. This does not mean that everything I say is necessarily flawless, but at the same time if it appears to disagree with something does not make it incorrect either.

Having said that, I will summarise the book here.

We need a more realistic model of ‘Reality’, i.e. we need to quantify what is ‘Real’*. To have a better model of ‘Reality’, one must firstly distinguish the difference between what is ‘Real’ from what is Abstract. Therefore the model itself must be able to distinguish between what is ‘Real’ and what is Abstract. Even though the model itself is Abstract; it can still represent ‘Real’ things and Abstract things within it.

We really live in the realm of constructed 3D space through time, and in time (normal time); we travel through the ‘5th Dimension of Density’. In other words volumes of ‘Real’ space are greater than 5D and embed themselves in our 3D abstract ⁰space.

In essence the Universe ‘Exists’* all of the ‘Time’ (irrespective and independent of normal time). ³Time and ³Space is just the configuration of ‘Existance’* of this Universe at any particular moment. (This is why ³time is relative, because it is a complex tertiary (or secondary, dependent on how you want to label it) function of this ‘Existance’). In this respect Space is also relative, because it is a secondary function of ‘Existance’ (the ‘Real Space’, ‘ASpace’*).

In other words both Space and time are constructed (by a common basic unit of ‘Existance’; the ‘APE’*).

In simplistic terms everything that exists is constructed from small (pieces) volumes of space and those volumes are constructed from volumes of space of their constituent parts. Each constituent part is yet again constructed from volumes of space of its parts etc. until you get to the lowest level where the volume is constructed from individual APEs; the smallest volume of space that can explain everything. Note: - because these little pieces of space overlap (interpenetrate) each other the total volume just appears 3D.

So a normal real 3D volume of ³space that we call space (that is constructed by what is ‘Real’ space) is NOT necessarily equal to another adjacent 3D volume of ³space that we consider equal or the same. It all depends on its construction. (It sometimes maybe similar, but that does not mean that it is equal).

So objects (Matter) and Energy (and everything else that exists or can exist) do not just exist in ⁰space and move in ⁰space, but they themselves are all also constructs of ‘Existance’, that create this complex space ‘ASpace’. In other words certain spaces that we normally consider empty are also constructs of ‘Existance’, and are not in essence entirely empty.

You need to read this book to fully understand this.

The Universe is constructed in layers, and each layer creates new rules (properties) that apply to greater and greater complexity at higher levels (a higher level is generally associated with a larger scale, from the sub atomic scale to the cosmological scale).

We can and do construct simplified rules for this complexity at higher levels, but we must always remember that these rules that apply to these higher levels are a simplification of this complexity. Otherwise you maintain the situation that you are in now, where you think that things get more complex the lower down the scales you go, whereas it is the exact opposite.

[Note: - The simplest constructs are at the bottom level].

Go read.

If nothing else it will make you think.

* Definition in Glossary

^ Things I looked up in Wikipedia since writing my book and have mentioned something from there. These are additions or comparisons or just additional information you may want to explore. They do not change the basic concepts of my model.

The things that are **unique** to my model are: -

- i) The 'APE' is its **own opposite**.
- ii) You can create Chirality from **one basic unit**, i.e. the 'APE'.
- iii) The added dimension of 'IN and OUT'. ('**IN and OUT dimension**').
- iv) It adds a measurable dimension of 'Reality' ('**Existance**').
- v) The '**Inversion of Space**' and its mechanism.
- vi) The **mechanism** of Gravity (how and why).
- vii) The **mechanism** of wave particle duality (how and why light can be both at the same time, using its structure).
- viii) How you can link all the forces to the **one force**.
- ix) How Energy and Matter can have a **common denominator** (the 'APE').
- x) **Why** light has a limiting speed.
- xi) The Universe can expand & contract **without** creating or destroying the basic units of 'Existance'.
- xii) It **distinguishes** between reality 'Existance' and the abstract world.
- xiii) **Nothing** leaves or enters our Universe, nor needs to.
- xiv) Dark Energy can move **faster** than light.
- xv) How you can **create** light from dark energy.
- xvi) The **structure** of dark energy and the Universe below the subatomic level.
- xvii) Black holes **don't** have infinite density; they don't need to, why and how.
- xviii) How space is **twisted**.
- xix) The same rules of the Universe **don't** apply to all scales, why and how (you have to adjust them).
- xx) I add **additional** dimensions to 'Time'.
- xxi) How space is curved (the **mechanism** that curves space to create Energy & Matter).

I can't think of anything else at the moment, but if my solution to "What came first the chicken or the egg?" doesn't even impress you, then nothing will.

Mr. Andrew A Pépés.

2nd May 2011.

PS. Every year I give myself a deadline to rewrite and finish my book, but due to my undisciplined self, and so far inability to concentrate and collate all my notes into one coherent whole, I always seem to pass my deadline. I have started so many times; I have notes all over the place, and can't even find some of them, some I have forgotten I even wrote. So as not to miss this year's deadline I have decided to just put together some of it and put some notes at the end which hopefully will make some parts more understandable without me trying to condense things, so obviously some bits will be repeated, (but as this is an e book it won't make much difference to the size).

I will also be making adjustments to this work over time to rectify my grammar or mistakes and to hopefully make it easier to read and understand (for some readers). This means your copy may be slightly different to someone else's copy.

I believe we have the mathematical abilities, but we do not have the best model. The model is what I am proposing (to encompass all other models, Abstract and 'Real').

Any model that allows the prediction (in theory, based on that model) of something that is not possible in 'Reality' is flawed inadequate or just incorrect. These models can still have their uses, but you must always remember their limitations.

I have to call myself a science hobbyist that is getting older and more forgetful with a shorter attention span as time goes by, and therefore cannot compete with mathematicians, physicists or cosmologists. I do not think very fast (getting slower), but getting the wrong answer quickly (many times) is not always better than getting it right slowly (once).

Note: -

Anything in (...) gives an additional explanation to help clarify things to the reader, which may refer to another section.

Anything in [...] gives an alternate view on things or additional information, and are best ignored if they do not make immediate sense to the reader. This does not mean that they are not also true, but they maybe more complex to understand, and are not necessary, for you to understand the basics of the model.

Anything that says "Note: -" means that it is relevant and important to remember, as it has significance to the model. Note: - It may be just a statement, that is not fully explained at that point, but it is a good idea to remember, and that it will be explained later.

Having said that, "later" may mean it has already been explained earlier in another section. This is because I have moved sections around to try and help some readers, thereby putting things out of sequence from when I wrote my original notes.

I found this recently in one of my emails

"I believe it was Einstein that was credited as saying something to the effect that we can't solve a problem with the same level of thinking that created the problem in the first place."

I totally agree

I want to also apologise for some of my diagrams and pictures, as my graphic design skills are not up to the job yet. I may update them (and include more diagrams and pictures) from time to time in the future so you can see and understand them better.

By the way I added a section on consciousness (my understanding and interpretation) that was not in my first book, but thought you may find it interesting.

I limited the mathematics to make it generally more readable but if I ever continue with another book I will put in the mathematics underlying this model, so that it will be clearer how other models fit into this model of 'Realty' without the need for any paradoxes, i.e. spell out when and where each model can be used and its natural limitations, not arbitrary limitations but limitations due to the 'minpoynts' * of each model (in which the structure changes and the mathematics cannot be extrapolated into).

16th May 2013 I have added prefixed superscripts to time and space to distinguish the different types of time and space. See Glossary. End section 16th may 2013.

3. Addendum

18th April 2013. Addendum: - As my book is primarily an eBook and as such it will not go through the normal process of limited prints and reprints or even total rewrites I decided as of the year 2012 and thereafter I shall apart from grammatical errors (pictures) or the rewriting of a sentence to better explain something that I will put a date to any additions to the book or any references to which I come across in my further reading or listening (I have just downloaded and started listening to audiobooks in an effort to increase my knowledge). In this way the reader and I can better judge the process as to how I came to my decisions and which information was added thereafter my initial thoughts and book 1998.

I did not put any references to any of my accumulated knowledge before 1998 (when I first came up with my model of the Universe) as I did not take any mental notice of it before then or since. My knowledge was based on what I had learned in my formal years of school and University and any books that I had read during that period that were not in the curriculum (which were very few). This formal education more or less ended in 1975 and any further information accumulated since then was mainly from the television (much of which was probably questionable). Therefore my model was synthesized from this accumulated general knowledge with the added additional original thoughts from myself. I explain in another section that “my original thoughts and concepts” I classify as “original thoughts” if I independently thought of them and they were not copied or given to me by someone else. This generally does not mean that they are all totally original and have not been thought of by someone else during the history of mankind. It just means that they are unbeknown to me specifically. So as of now 18th April 2013 I will reference any new information I come across and try to put it into context with this book and my thoughts. I still believe that I still have some real original ideas not thought of by anyone else in history of which the “Inversion of Space and its mechanism” and a possible “mechanism of Gravity” are just but two of them. ³Time will tell.

In addition to the television I have been using Wikipedia on the internet to find further information but this source of information was not used by me before my original book 1998. Wikipedia was formally launched 15th January 2001 (Source Wikipedia). I did not start using it until much later.
End section 18th April 2013.

28th May 2013.

I have decided to add a section at the end to incorporate all these addendum additions, although they belong to certain sections it becomes more difficult to read with addendum interruptions in the original eBook so unless they are small or significant I will only put in a date in the section and you can look at them separately at the end.

End section 28th May 2013.

4. Preconceived ideas

Before you can fully understand new ideas or concepts it is helpful if you clear your mind of preconceived ideas. Some scientists say that you cannot visualise and comprehend more than 4 dimensions, so they create more and more complicated mathematical models to explain the 'Real' world to include the sub-atomic nature of the Universe (Space).

The above statement would be a reasonable thing to say if it explained the 'Real' world and if it were true.

But it is flawed. It is true that most people find it difficult to comprehend the fourth dimension (Time), so trying to introduce a fifth dimension makes things more complicated (assuming one could agree what the fifth dimension was).

We have to backtrack and see (understand) what is happening.

Scientists say we see in 3D, and then they add time to explain the changes in this 3D world (Representing our Universe).

The above are concepts that have been created by our conscious intellectual minds, but our subconscious minds understand and live in a 5D+ world (Universe) without any problems.

(Section 15 "A Better model is to add the Dimension of 'Reality' & the fish example at the end of section 60 "Photo electric effect and the speed of light").

All we have to do is explain (re-define) to our conscious minds the 5D+ Universe (Space), 'ASpace'. [The 'Real Space'].

I will do this by way of example.

Scientists create a 3D mathematical model to represent what we see with our eyes, so they can say things like: - if we had a container of water of a particular Volume (an abstract concept, which may not apply to the 'Real' world), we could in theory, if we could measure it exactly, divide it into 2, consisting of equal Volumes (exactly the same) in two separate containers (of equal size).

The above statement, although long winded, seems reasonable, and can be computed exactly according to the model. But the model itself is a concept within our mind, and does not have to be true in Reality. Water is not just a Volume of 3D space, and their mathematical model uses points in space, that do not necessarily correspond to 'Reality'.

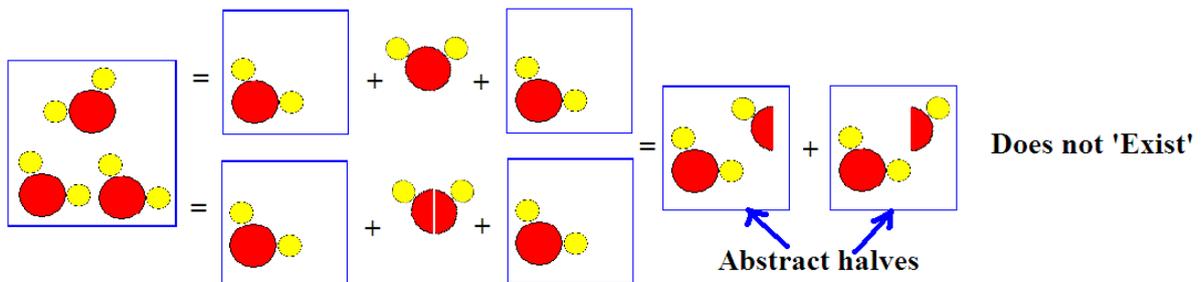
(Section 13 “The concept of Euclidean geometry or Cartesian geometry” section 14 “Does space-time continuum really exist?” & section 15 “A Better model is to add the Dimension of ‘Reality’”).

In other words, if we were to create smaller and smaller containers to hold equal amounts of smaller volumes of water, we would eventually get stuck and our model would break down.

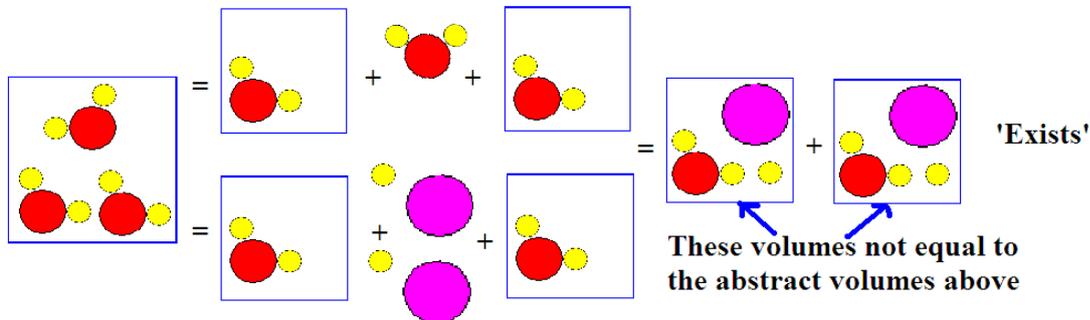
Proof:- Suppose our volume had 3 molecules of water and we try and split it into 2 equal halves, you cannot do it, you would have 1 molecule in each container, then you would have to split the last molecule of water, which (if you could) would create equal halves, but not of water. In other words, Volumes of 3D space (water in this case), cannot be divided indefinitely, although our simple 3D mathematical model says we can in theory. (Although some people have not cleared their minds yet and are already debating in their minds that space and water are two different things. Stop, and read (understand) the true meaning of what I am trying to say). This process applies to any volume of anything that is ‘Real’, i.e. ‘Exists’ (not abstract space) this is because eventually you have to split the unit of ‘Reality’ or ‘Existence’, which is not 3D. 3D⁰Space is abstract, not ‘Real’. (You can only divide an abstract 3D volume of space; that does not ‘Exist’).

The above mathematical model (3D space) only holds true for large Volumes and is a general rule for aggregate smaller volumes.

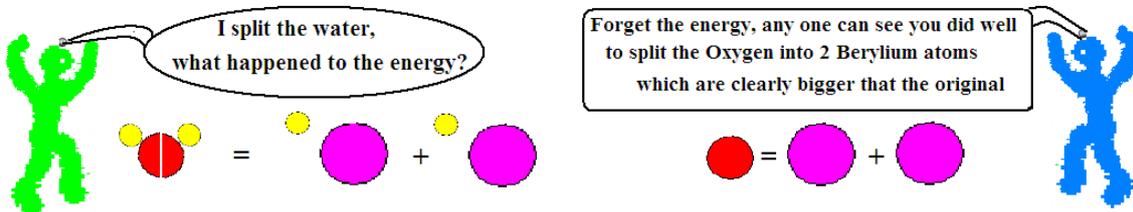
[It does not hold true for all ‘Real’ volumes, as you will see later].



The above is the abstract splitting of water into halves



When you split 'Real' water into half, the two halves are greater than the whole



This brings me to the 4th Dimension of Time. They create a general concept called Time in which we measure the changes of things in our Universe. Again they fine tune this Time into smaller and smaller units, applying this time to smaller and smaller volumes of space. What we are doing is measuring the relative changes between 2 or more events in space, but this space does not hold true for very small volumes, so what are we measuring?

Scientists can say things like: - “Time is relative, and if we rode a wave of light, and our twin rode a similar wave parallel to us, then there would be no time between us”. What is this time we are measuring?

Again we have a similar situation as the 3D concept we had before, the concept is OK for what I will call Global Time (general time we normally use), but it does not mean the same thing when we go down to sub-atomic volumes and time scales. In other words we cannot indefinitely keep on halving³ time and keep the same meaning.

The concept of Time is a measure of change, but the measure of the change of what?

(Section 23 “How is Space linked to Time?” & section 26 “The relevance of Time to Space”).

Time is the measure of change of something that actually has to ‘Exist’. If something does not exist, then you cannot measure its time.

Therefore you do not take “zero time” to go down a non-existent road, but there is a “zero time” the difference between 2 events that are simultaneous (this last statement can be confusing, because there are extra concepts introduced and not fully explained).

The above means we must distinguish between “null time*”, i.e. “⁰time” that “does not exist”, and “no time”, i.e. no time difference. I say we must divide the meaning of ‘Time’ into a measure of the Existence of something (I define as ‘Primary Time’, [¹T]*, [can be thought of as an extension of space]), and the measure of the change of that Existence (I define as ‘Secondary Time’, [²T]*; [can also be thought of as another extension of space]).

[Note: - 2 separate variables]. (Section 28 “Further explanation of the concept of ‘Primary Existence’.”).

If we now go back to Space, we can also say we are measuring the Existence of something in space. Therefore we must also differentiate between what is ‘Real’ (‘Primary Space’, [¹Space]*), i.e. “it ‘Exists’”, from “Null space”, [⁰Space] i.e. nothing exists in this space.

(Section 13, 14, 15 & section 16 “Points of Existence on their own are not enough”).

This now brings me to our general concepts of Energy and Matter (section 18), objects they say are something that we can measure the volume of, and if it has what is called a mass, they call this matter. They say energy has no matter (and no apparent volume). Measuring Energy is a relative measurement. (This may not strictly be true as they say light can have an apparent mass).

Energy and Matter are things that ‘Exist’, and therefore we can measure the time of. Although we conceptually say they are 2 different things, ultimately they are one and the same thing, i.e. constructs of the same basic sub units (section 18 “Now we can explain Energy and Matter as one”). (This is one of the things that scientists have been trying to fathom). They then say they exist in 3D space and Time.

We construct general concepts, and try to put them together, to explain everything. [This made me think about our concept of 3D space and time; we needed to add energy and matter as constructs of the same framework].

5. ‘Simplified Complex Logic’

‘Simplified complex logic’*.

Simple complex logic. Something is simple only if you either

- i) Fully understand something, or
- ii) You don't have to fully understand something, but you understand the concepts behind it, or
- iii) You don't understand it, but you can manipulate it, which means you can follow the rules that manipulate it.

As an example let us use a car.

i) If you fully understand a car, it means you know everything about its structure, engine principles and practice, combustion, rubber molecular structure and properties, propulsion impact forces, glass refraction and reflection, heat transfers etc. etc. You know everything.

ii) You cannot know everything but you understand the concepts behind what makes a car, so you know about the principles of structure but do not know the actual details of the structure, the same for the principles of engine design and combustion but not necessarily the actual chemical details of the combustion and energies produced etc. etc.

iii) You do not know how a car is made or works, but you can start and drive a car following the rules of driving.

All the above are simple, only if you have no difficulty in what you are doing, otherwise you will think it difficult or complex.

Complex means that there may be multiple parts to it and it may end up difficult (or complicated).

Now logic or logical means that it must follow predetermined rules that must not be violated, as long as the rules are not violated then everything will seem logical.

Everybody's logic can be different if they have different rules that their logic follows.

As an example let us say someone does not like to do things on the 13th day of any month, because they believe that things go wrong on these days. To someone else that is not superstitious they would say it is illogical and that it is no different to any other day. Does this mean that the superstitious person is illogical?

Well the answer is maybe he is or maybe he isn't. This may not seem like a logical answer either, but it actually depends on the individual superstitious person and their individual reasoning and their circumstances. If the individual does things on different days including the 13s and there is no difference in the outcome of the things they do, then it would seem to be illogical for them to believe in this rule.

If on the other hand this person has done things on days including the 13s and that they have experienced that doing things on the 13s seems to have a detrimental effect, then it is not illogical to believe that it is unlucky to do things on the 13th of the month. You may again seem to think that this is illogical if you are not superstitious, and maybe it is just a self-fulfilling prophecy? caused by the individual. This could also be a possibility and therefore that person is also illogical and is just changing their responses inappropriately.

The last option is that the person is totally logical and correct in his belief, and for two reasons, one is that there is something totally unknown to them that makes the 13s different, or that what this person does is determined by other people that do believe in superstition so the outcome will be disadvantageous to him irrespective of his own beliefs, i.e. the outcome is determined by illogical people. Then the only logical thing is to know that these days should be avoided to obtain a better outcome, as this has been born out of experience. So to this individual it is totally logical (and true) not to do things on the 13th day of the month.

One may also use what is called a "formal logic", which is generally accepted by the academic world. But this again is not always logical to someone that does not believe in this logic or that the logic has its limitations. Again as a simple example using this type of logic you could have two statements; statement one could say "If one eats then one is full" and statement two could say "If one is full then one is not hungry". Using the rules of formal logic one could come to a logical conclusion and say "If one eats then one is not hungry". Unfortunately although there is no logical errors in the conclusion the conclusion is not always right, i.e. it does not always reflect the truth. You can easily see from statement one that one can eat and still not be full therefore the conclusion would not be true in this example. In addition one could also be full and still be hungry if one had a physiological problem that did not tell the brain that it was full, so you could not eat any more but still feel you were hungry. In this case the conclusion would also be wrong. There are other combinations which would also render the conclusion wrong.

What I am saying is that most logics have their limitations and most people do not know these limitations, so they apply inappropriate logic to certain problems. I will give examples in the other sections.

So what do I mean by 'simple complex logic' - a logic that assumes all logic has its limitations and must be applied accordingly so that there is no contradiction between all these different logics in their appropriate place.

[Note: - This also means that certain logics are wrong, outside their own realms [or domains]].

Simple in this respect means no contradiction, but not necessarily simple to follow because it can be complex in that there are many parts.

The above example of superstitious belief is one such example, and although I broke it down into 3 categories it is possible that it is a mixture of all these.

I will give another example. Let us assume you draw a big circle on the ground, so you can walk around it. You could say it is logical that however fast you walk or travel around it, you will never be able to catch up to yourself and touch yourself on the back. This is logical, so you could also assume that this would be true for anyone else as well. This is also logical, so you could then also assume if this is true for anyone, that it might also be true of anything that could travel around the circle, and it would not matter how fast it travels, it would never catch up to itself and touch its back. All the above are logical because you have not violated anything you know about physics, so you falsely assume this is always the case.

Using 'simple complex logic' you may see the flaw in the logic you were following up to this point, namely that you made 3 assumptions each based and relying on the previous assumptions. Although the initial assumption was correct, it did not mean that the following assumptions were also true. I could string this out, but I will just give you the exception that proves this logic ultimately wrong. What if the thing that was travelling around the circle was a very long lizard type creature, it is feasible that it could touch its back before even moving, therefore however fast it travels around the circle it would still be able to touch its back, making your 3rd assumption invalid.

Now however hard you try and justify your assumptions even if you say you were tricked or misled into them and that your initial assumptions are valid, the point I am making is that you do not know their limits until they are broken, or in many cases you ignore these limitations and still hold that your logic is sound.

'Simple complex logic' dictates that you are not logical if your logic has contradictions, but it can still be useful in the realms or domains that you use them in, but you must always be aware that ultimately you are wrong outside of these domains.

I will give a few examples. A simple obvious example is a car of a certain mass travels along a road of a fixed length at a fixed speed and crashes into a wall. You can summarise the car as a point of fixed mass, and calculate the forces on the wall on impact. Now the car is obviously not a point, but you can do a calculation and work out the forces. Is it logical to assume a car is a point?

Yes, if you are simplifying the calculation. No, if you apply this to all calculations.

Example 2. A solid block of concrete of a certain mass and a certain volume can be assumed to be a solid of uniform density. This could be logical to assume if one wanted to simplify calculations as to the overall weight of a certain building, so that one could calculate the foundations required to stabilise this building. It would not be logical to assume this, if one wanted to calculate the resistive capabilities to high velocity bullets. The internal structure and composition would be important, so one could not make this assumption.

Now you may assume that the above examples are obvious and a waste of time even mentioning, only because they are obvious to you.

But what about the following examples: -

A photon is a wave travelling towards the earth from the sun?

Logical or not? And when?

An electron is a point charge and is attracted by a positron?

Logical or not? And when?

6. A Flight To Fancy

Imagine you are a very intelligent being and have the technology to go to another world, in another solar system, where you come across another advanced being. They seem to be further advanced than

you, but you have taken with you a translating machine that can translate their language into your language, so you can communicate. After you have said your welcomes, you decide to talk about more complex subjects, but soon realise that they understand everything you are talking about.

"What next?" you say to them.

They reply "would you like to know more?"

"Yes, of course, this is one of the reasons we have come here, to discover more".

"There is a slight problem", the alien replies. "Unfortunately your translating machine does not have some of our words, which have complex meanings or concepts that you do not possess".

"Oh", you reply "does that mean that it will be too complex for me to understand? Is my brain incapable of even understanding these concepts and words?"

"No, not at all, your brain is more than capable of understanding these concepts, but it will take some patience and effort on your part, as your mind is"

"What was that last word?" Your translating machine did not have that word.

"The nearest word that we can use is that your mind has gone through a 'process of solidification', not actual solidification, but that your mind is less prone to new ideas, especially if they conflict with what you already know", was the reply.

"Anyway", the alien continues, "if you write down everything and explain it to your children, they will have no problem in understanding, and you can review everything later". "Shall we continue?" says the alien.

"Yes", you impatiently reply.

The alien continues with "You give your children toys like bouncy balls, building blocks to build towers, interlocking bricks to build other structures, spinning tops, jig saw puzzles with interlocking pieces, and other '3D' puzzles like 'Russian dolls' which have a series of smaller and smaller dolls inside one another. Well, we give our children 'one building unit' which has all the properties of all your children's toys, and our children build everything they want, which include models of what you call dark energy, dark matter, fields, light, all the subatomic particles, quarks, electrons, protons, neutrons, atoms, molecules, and they keep on building more and more complex structures.

Because they can get bored with repetition, they also have a machine that can build real structures from their structures for them, as long as they input the structures they require. Obviously for safety reasons our machines monitor their progress and age, and will only manufacture for them structures that are safe, or safety is built into their play.

For example if they produce chemical structures that are corrosive or very reactive, the machine will only produce them if the child has also input the safety instructions as well. Otherwise the machine will tell them the safety procedures and implement them, if the child is happy to continue. The children are capable of creating anything, as far as their imagination can go, except total living organisms, they can build living tissues and organelles, but we restrict them from building total living organisms. Once they reach this level they are allowed to look after and propagate living organisms and study ecosystems. Do you have any questions so far?"

You look at the alien in amazement and say "Well, I sort of understand, but I got confused right at the beginning when you said you only give them 'one building unit' I cannot understand how you can do this".

The alien pauses for a moment then says "you understood everything else?"

You now pause for a moment and reply "well sort of, but I don't understand how you can build from just 'one building unit'".

"Yes, I thought so" the alien continues "you have not really answered my question, but that does not matter, your brain is stopping you from accepting what I have said. I will assume that if you knew the building unit, you would not have a problem with the concepts that then follow."

"Yes" you say "at least in principle".

The alien smiles, at least you assume it is a smile. The alien then asks you if you require any refreshments or food.

You are not sure what is going on, is he going to tell you about this miraculous building unit?

He looks at you and says "yes I am: you must be patient".

You are startled by his reply, is he reading your mind? Are you in trouble?" you start to get agitated.

"Don't worry" he says and continues "I am not reading your mind, but I have a good idea what you are thinking, and have deliberately paused in my explanation, so as to help you understand".

You start sweating a bit, and have concluded that he must be reading your mind because he answered your first thought, and answered your second thought without you saying anything.

The alien then says "I will explain, before you landed, our sensors assessed you, and your mental capacity, and the risks of communicating with you, since the outcome of our sensors was favourable we no longer required any assistance from them and just use our common sense" another pause "our common sense is different to yours.

To put things into perspective, if you saw your child going to a place that was dangerous, let us say to get their ball, you would immediately say to them to stop, this is dangerous 'this or the other' will happen if you proceed. The child proceeds in a change of direction, but still attempting to go for the ball. You will then see that he is still trying to get the ball by another route, but if you see that the other route is also dangerous you will say something like 'I know you want your ball, but do not go for your ball, even though you think you can, it is dangerous'. Now your child could think to itself that you have read its mind and know exactly what is going on. They are amazed, but you know you have not read their mind but have just made a good guess, because you know your child, and the way they may possibly think.

In the same way I assessed what I had said, and assessed what you were thinking and replied accordingly".

Another pause....

Now you have understood a little more, but you are going to be a bit more cautious in case you are wrong.

"See what I mean? and you don't have to be cautious either, if you think logically, if I was going to do you any harm, do you not think we have the capability to do so, whenever we so wish, and if so, why have we not done so, so far?

I will answer, we gain no benefit to do so, and I would not waste my time explaining things to you, if I were going to do you any harm".

Yet another pause....

"I will now continue with my explanation. Because your conscious belief system does not believe that these building units can exist, it will not let you believe this is possible, even if I did explain them to you.

I, therefore give time to your unconscious mind to re-evaluate the possibility of such a change, as long as it does not contradict your belief system, or your belief system can be modified to allow such a change.

To do what I have just said, means I cannot just give you the answer, because it will appear to contradict too many concepts in your mind and your mind will not allow the change.

To achieve the 'one building unit' I must prepare your mind in such a way that it will believe in the concept, i.e. it is possible to have all the qualities in one thing, even though you do not know what the answer is.

Only then will I divulge the answer.

In other words if your child had not known about cars and how they are propelled along the road, maybe they only had toy cars that they pushed then stopped when they stopped pushing them.

You could not tell them how they are propelled until you explained to them that they needed some kind of propulsion system like an engine.

They do not need to know the details of the engine, but only that it was possible to build such a thing, and what its properties are".

He continues "Do you want refreshments or food?"

This time you say ok, "you obviously know what you are doing, and I am getting a bit hungry". After you have eaten, and the food tasted delicious, the alien continues with his explanation.

"Let us look at your children's toys. The first thing I am going to do is look at the concepts that give the properties of each of your children's toys, and then link the concepts one by one, so that your mind can accept that these properties can exist together.

At this stage you will not know the structure of the 'one building unit' but your mind will be able to accept the possibility of such a unit. All you have to do then is to find what the unit is".

A very long pause....

By now you realise that something must be going on at the sub conscious level.

After a few minutes you seem to get a bit worried and decide to say "Is everything all right?"

The alien then swiftly replies "Yes you are now ready. Let us look at your child's ball. There are two types of ball. Both of them are spherical and bounce. The solid rubber type and the hollow rubber type. We will look at the hollow rubber type that has a rubber outside filled with air inside, such that it compresses on contact with the ground and bounces off the ground, reshaping back into its spherical shape.

Next we will look at your child's interlocking building bricks. They are normally made of hard plastic in a rectangular shape. The top surface has little protrusions which fit into the indented bottom surface of a similar brick. The remaining four sides are flat. Do you agree so far?"

You looked confused and say "Of course I do, I definitely know my children's toys" you just managed to stop yourself from saying 'I am not stupid!' in case he was going to give you another lecture, and make you even more stupid than you looked, thereby proving your own ignorance!

"Good, now we will create a toy that has both these concepts together. A bouncing interlocking brick".

Another pause....

You were getting used to these pauses, although you were impatient for something more substantial.

"Now imagine a rubber ball with holes in it. I will not ask you at each stage if you can imagine the things I am saying, but will assume you can do so, unless you interrupt me. The ball will still have a spherical shape and will be able to bounce because it is made of rubber. Now imagine that the remaining rubber has protrusions on it that where equal in size to the holes. You will be able to see that the protrusions will be able to fit into the holes of an adjacent ball, but unlike the normal building bricks that can only be stacked one on top of each other, these balls can attach on all sides, so can build not only walls but solid objects in all directions".

Slight pause....

"These spherical units can bounce, and build structures that will also bounce".

"Now if we look at the other type of building blocks, which are made of solid wood or plastic with all sides smooth but similar in shape to the interlocking bricks. These have the property of only being able to be stacked so that the centre of gravity of each brick stacked is above an existing brick vertically, in such a way that if stacked too high, gravity will topple the structure.

If our spherical units made brick shapes by interlocking, and then these new bricks were stacked without interlocking, then they would react exactly like your child's normal solid building blocks". You quickly interject and say "Hold on a minute, these new blocks are not the same as a single brick, so you are not giving all the properties to "one building unit".

The alien pauses, and you think you have caught him out in some sort of logic. He looks at you and pauses a little longer, then he says "I was waiting for you to realise your mistake, but I see that you are not going to do so soon, so I will point it out to you".

You were fairly confident you were right, but now you are having self-doubts.

"Your mistake was that you didn't listen to my initial statement, which was '...The first thing I am going to do is look at the concepts that give the properties of each of your children's toys, and then link the concepts one by one so that your mind can accept that these properties can exist together. At this stage you will not know the structure of the 'one building unit' ...'. "This statement did not give you a structure you can compare other building units with, but that something can exist with all these properties.

Your confusion was that you compared the single spherical units with the more complex multiple spherical units that created the new building blocks. In this way you were not linking the concepts, but you were linking the structures.

What if the single spherical units did not exist? But the complex was a single unit that could not be broken.

The new block will then become the single unit and it would still have protrusions and holes, and the whole unit will be like a block in itself, if you did not push the new blocks together so that they would interlock, they would topple but not do so if you interlocked them. They would also bounce.

The real unit is complex, this is why you need to link concepts and not structures first. We will look at possible structures after we have linked all possible concepts".

"Do you want more refreshments?"

You know the format, you understood what was said, but realise it has got to sink in before you go further. "Yes please" is your reply.

Then you think to yourself, am I going to keep this up sufficiently to totally understand the end result, or is my mind going to give up?

After the strange refreshments which seemed even better than the previous ones. They seemed to have more flavour and were more refreshing. You felt as if you could concentrate more now than before. Maybe they are putting something in the drinks? Should I ask? You continue thinking, then decide the reply is obviously going to be something like 'Of course we are putting something in the drinks; otherwise they would not be so refreshing and tasty. They are also very nutritious. Good for your brain'. You are satisfied with your own answer and why should they try and poison me anyway, they could kill me whenever they wanted to, and there is no benefit for them to do so, or waste their time. Being a bit smug, you say "I am ready".

The alien says "Yes, you are ready; I believe you can imagine some sort of a mechanism for the spinning top and that you can accept our building unit could have a different mechanism that could make it spin.

This leaves jigsaw puzzles, which are flat with interlocking pieces, which you would call 2D, but that in real terms the jigsaw is not really 2D, but predominately 2D, with a third dimension, which you ignore, this being the thickness of the puzzle. The individual pieces are not conceptually that different to your interlocking bricks, other than the fact that they are flat and can interlock on four sides instead of two. The puzzle is also different to your bricks in that it has a predefined image to create, whereas the bricks do not. The puzzle may also be 3D in structure, interlocking blocks.

The last toy- 'The Russian dolls' are normally made of wood and you can open them in the middle, and inside is another doll, exactly the same but a little bit smaller. You can repeat this process several times and the last doll is solid wood that cannot be opened, therefore the last doll has different properties to the preceding dolls. Now imagine that this last doll did not exist, so all the dolls had the same properties except their size. Our child's building unit has the same properties including their size and one can fit inside the other".

He smiles at you. He knows you are a little bit puzzled, but you do not say anything. He continues. "Good, your mind is opening up.

There are several ways that this can be achieved, but let us see one way this can be achieved. Imagine that our structure instead of being made of solid rubber with its holes etc. it is made of a spongy type of material and is also rubbery in nature, so that it can still bounce, but also has the property of a sponge, so you can squash it into a smaller overall size and volume.

Now if you squash one sufficiently, so that it can fit into the hole of another it will fall inside. You can now see if you repeat this process, squashing each spherical unit smaller each time, you will end up nesting one inside the other, just like the Russian dolls. You will also see that you can have several spherical spheres inside the initial sphere, and they are not nested one inside the other. This the Russian dolls cannot do.

In addition, because the spongy material is elastic in nature like a rubber band, it can also be stretched increasing its initial size and its holes, therefore more units can be packed inside".

Pause....

This time you cannot stop yourself from interjecting with excitement.

"That's clever; I am starting to see how you are building this unit up".

He quickly replies "Remember I am not building the unit, but the concepts together".

"Yes, yes I see that" you reply without really thinking about it.

"Yes, your subconscious mind is accepting things. I know this because you did not hesitate in replying. Let us now go to a higher level.

You think of dimensions as separate and independent, so now we will look at a way that you can link their dependency. So far we have talked about different shapes for our toys, spherical, rectangular bricks and blocks, but imagine instead of rectangular they were all symmetrical with the same properties. If we linked several in a row they would have a real length, as well as the abstract length you have at the moment. It will also have a width, a real width as well as the abstract width you have at the moment. Your abstract length and width are independent, but the real length and width is not necessarily so. If you keep all of your units connected and not destroy any, you cannot shorten the real length without affecting the real width.

To clarify it in your mind, imagine you had six units in a row, it will have a real length of six and a real width of one. Now if you make the real length three, the real width has to be two. Two rows of three make up the six units you started with. If you think in abstract terms only, you cannot see a relationship between the two, and you are effectively ignoring the real relationship. If you ignore the real relationship, you will end up believing that anything can be any length or any width, thereby believing that extra energy and extra matter can be made from nothing.

These types of thought will lead you to many paradoxes that you will not be able to resolve, because you will believe in contradictory theories without knowing it. Two examples your children have difficulty with are 'What came first the chicken or the egg?' and 'What would happen if an unstoppable force met an immovable object?' These types of problems our children have no difficulty in answering without any paradoxes between them".

Pause....

"I hesitate at this moment because you may not understand, but you may think of your conceptual space as quantized. All the dimensions are linked together, so if you increase the real length it will automatically come with its width and height".

"Now we have put certain concepts together and you are able to find certain structures that may fit these criteria, we can now start to look at extra concepts to add to them.

But before we do that, let us look at time.

Each of our structures has a certain amount of time associated with it. This time we associate with our structures is fixed. For you to understand, you need to think about your notion of time. I will do this by asking you some questions, which I want you to think about and answer. Answer me with a reference to your understanding of time. How long do you live?"

"The lifespan of a human is about 70 years on average I think!"

Pause...., he is doing this pause thing again.

"How long does a table live?"

You are a bit confused, but decide to answer "Well a table does not really live; unless you mean how long did the table live when it was a tree, assuming it was made of wood in the first place?"

He does not say anything. You then decide you have not really answered his question and continue "I assume you mean how long does a table exist for, before it deteriorates and ceases to be useful as a table?"

Slight pause and no response from the alien, you continue again. "I am going to assume that because you are not saying anything that you want me to continue, I hope I am not getting into a big mess. Anyway if I am on the right track then it all depends on what the table is made of"

"STOP" he interrupts you, then continues in a calm voice "This is what I want you to think about" another one of his pauses....

You had hardly finished your sentence when he interrupted you, you had not given him an answer relating to time, so what did he mean? You had just said depends on what the table is made of?

"Are you implying that time is related to the structure of the thing in question?"

He smiled and said "Precisely so".

How can that be? You think to yourself. This I have got to hear "please explain".

He continues "Good, you are ready. Everything has a time associated with it; there is nothing that exists that does not have this association. Because we live at a higher level, it is the sum of these times that we experience as time, of which we are a part of.

If you look at individual small volumes of existence, they have their own time.

To understand this better just imagine one electron, how long does it live?

Well, before you try and answer this, let me just say it is a very long time, but where did the electron come from?

Everything is made of something; this something is the essence of existence itself. Something cannot be made from nothing, you must have something to transform into something else. What you have to understand, is, 'what is the essence of existence that everything is made of?'

You have to better understand time, before you can proceed. Time - present, past and future are not separate existences, but one existence, that transforms from one to the other. You just separate these transformations in your memories.

I know you are still confused, so to better understand the concepts, remember you have to understand the concepts first, before you look at the real structures. Imagine your child's plasticine in which they can reshape it into any shape they please. As far as the child is concerned it exists because they can handle it and shape it. Now you reshape it into a little man for them, then move the legs into different positions so it looks like it is walking, and it takes ten little steps in time. You counted with your child ten steps. The child saw ten different little men taking steps during this period. 'Do it again your child says, I want to see all the ten different little men'. You start again the same process, but your child says 'Go back, I want to see the one before that one' so you move the legs back one step. Your child then says 'No, Not that one, the other one'. Rather than get annoyed with your child you say 'wait a minute' then go and get some more plasticine and make ten little men, one to represent each step. You put them in a row, one to ten, and say 'Which one did you want me to do? The child points to the one they wanted; and you reshape the original to show him.

Now you have two concepts of time, the first one was the existence of one little man, that reshapes into ten different shapes, but only one of the shapes exist, at any one time, its past, present, and future are just one existence. It can go into its past or future, just by reshaping, but cannot exist in both shapes simultaneously.

The second concept of time is the ten different little men, in a row, and you can only perceive them through your senses, one at a time in this sequence. In this second concept if you were to look outside of time, you would see all ten little men and you could imagine that one little man can go back to his past or his future and meet himself.

These two concepts are different, in that the first has only one existence, and the second has multiple existences.

Both can be represented by taking pictures of each step, like a cine film, both films would look the same, but they represent two different concepts of Time. You have to decide; which is the correct one?"

Big pause....

You say nothing and think about what has been said.

"Do not think further" the alien interjects, then continues "You must now answer the riddle 'What would happen if an unstoppable force met an immovable object?'".

You are a little confused, you were just getting into some serious thinking, at least you thought so, and now he has changed the subject, is he just trying to confuse you?

The alien smiles and proceeds "I see you are not thinking quickly enough, so I will help you with the answer, the two concepts of time are mutually exclusive concepts, and only one of them is correct. If you do not know the correct one you can think about it if you wish, but just consider the two different options. If you consider the second option: - in which there were ten different times of existence, and ask yourself in our real time 'how many options are there?' You will see that there would be an infinite number, for each bit of existence present in the present, and an infinite number of existences for each bit of existence in the past, and the same again in the future. You know what the present is, you exist in it now, but what is the past and what is the future? One second past? One second future? Then there would be an infinite one second pasts and an infinite one second futures. You can repeat this process for every second backwards into the past and for every second forwards into the future. You will have worked out already that time comes in smaller segments than seconds, so you can multiply the previous process by the smallest time slice you can imagine. What is your answer?"

A small pause....

"Now, think about the first concept, there is only one existence, past, present and future. There is only one answer, one existence. The real question you need to ask is 'how does time change this existence?' Once you work this out, you can travel forwards and backwards in time, but not in the same way as in the second concept. If you believe the second concept, you create your own mental problems, like time-line dilemmas. These do not exist, with the correct concept of time and its proper inter-relationship with space".

Another smile from the alien. "Time for refreshments". He was not asking this time, he was stating. You knew he was right, your mind needs time to absorb all he had said. The refreshments were different this time, there were more biscuit type things of all different flavours to go with the drinks, less drinks than before. Maybe they were running out of different flavours to give and they were going onto different flavoured foods, anyway they were really delicious. They never quite made you fill up, but at the same time you were not really hungry either, it didn't seem to matter how much you ate, you just felt content and at the same time you wouldn't mind eating a bit more.

"Would you like to go for a walk? The gravity here is different to your world and it will give you a different sensation. This by the way will help your mind also, as it will complement the change in your attitude to certain concepts to come".

You realise by now that 'who are you to argue!' You start to walk with the alien, true enough it does feel different, but you already knew it would.

The alien starts to talk again "You have to think about a few more concepts, and link them together, before we can continue where we left off. To do this you must forget what I said before we had our refreshments".

You half knew what was going to happen, a pause, then maybe he wanted you to respond, but this didn't happen this time, you hardly had time to think it, or even think at all.

"What is it we are doing?" he had deliberately not given you time to think.

"Well, I am no longer sure" was your response.

"I told you not to think about what we had said earlier, what are we doing now?"

"Well I suppose we are walking"

"Yes, that is right, do you know how far we have walked, how fast we are walking, or how long we have been walking for?"

"I didn't know you wanted me to keep track, but I suppose I could guess, we haven't been walking long and I can still see the end of this corridor where we started. If I had known I would have just counted my steps, I know my steps are about ..."

Interrupted again by the alien! You are wondering if the alien is getting impatient with you, or is there some other reason he is interrupting you more and more?

"Do not worry, I can see you what you are thinking."

A big smile from the alien. "The reason I interrupted you was so that you did not get too involved in trying to answer me. I know you can work out your speed from the distance you have travelled and the time you have taken, or you can calculate the distance you have travelled, from your speed and the time you have taken, and even the time you have taken, from your speed and the distance you have travelled. But I also know that you do not know the real relationship between distance, speed and time. You need to know that distance and speed is relative to the scale you are measuring. I will show you by example, otherwise you will not know what I'm talking about."

"Stop" he commands. "What is the distance we have travelled?" He doesn't wait for your answer.

"Your answer should depend on the scale to which I am referring, let us say we have walked 9 metres from your observations with your senses, and had taken an exact amount of steps to get here, in this time period. If you were the size of an ant, then you would have been going at a different speed and travelled a different distance."

Pause....

"I see what you mean, if I was smaller, then, obviously my steps would be relatively smaller than mine, so obviously I would have travelled less, so going at a different speed." You reply with hesitation, because the answer seemed too easy.

"No, this is not what I mean. Imagine you can see the ant, but it is blurred, you only observe the blurred ant, moving across the floor. The ant's speed is not affected by your blurred vision.

Unbeknown to you, because you cannot see it, the ant is running on a big sheet of paper. If the sheet of paper is totally flat, you will observe distance, speed and time in exactly the way you think their relationship is. This is because you will observe a constant distance, speed and time interval. Now imagine that the sheet of paper is only flat and you are taking your steps in exactly the same way as you are now, but on the scale of the ant. As far as you could tell you would be going at a constant speed and travelling a constant distance in the same time period. But imagine some big giant looking at you from a large scale above you, what would he see or observe?

You will say the same thing.

But now image that the sheet of paper was only flat at the beginning and the end, but pleated in the middle. If you get a sheet of paper and pleat it, at a distance it looks shorter, or put another way, if you flatten a pleated piece of paper it appears to get longer. Now I know you are going to say that the true length is still the same, this is because I have told you the paper was pleated, but if the giant or you cannot see the paper, but only observe the blurred ant, what you would both observe is the ant travelling at the beginning and end at a constant speed, and slower in the middle section. As far as the ant is concerned it has been travelling exactly the same speed all along the whole distance, in the same time period, whether flat or up and down the pleats. The distance travelled on the flat is the same distance travelled up and down the pleats. So which is the true distance? The one observed by the giant or the one observed by the ant?

The ant has travelled further than the giant gives it credit for, specifically in the middle section, as far as the giant is concerned it could have not only travelled less distance but also taken more time to do so. The giant sees varying speeds and varying distances. The ant sees constant speeds and constant distances, and the time taken to travel these distances is also constant."

A long pause....

then "what I am saying to you is the shortest distance between two points on your scale is not the true length between these two points, and can be different to the distance between these same two points at a different scale. The distance varies on the lower scales because you do not know the details of how the surfaces of space are constructed and how things move through this space along these surfaces.

I will give you one more example: - 'what is the perimeter of a tree trunk?' you can get a measuring tape and put it around the circumference of the trunk and it will give you the measurement. If an ant walks around this same tree trunk it will measure every little ridge up and down the bark of the trunk and the answer will be longer. If a bacterium made this same journey the measurement will be far greater still, and so on down the scales.

In short, the more energy there is in a given volume of space the greater the surface in that space, the more surface, the longer the length".

Little pause....

"This may sound a bit confusing, but it does not normally make any significant difference, until you look at the very small scales or a sudden change in density. I have now introduced the term density which is just the amount of energy and distribution of that energy in a given volume. Matter is just a very dense amount of energy".

Things seem to be getting more intense, is the alien hurrying you into accepting things before you have had a chance to absorb everything?

"Don't worry. The reason I am trying to conclude things is that it is nearly time to rest and sleep, and I must give your mind some form of conclusion, before it goes to sleep, otherwise it will revert back to its original form by morning, because it will not be able to form a possible circle of truth, within itself. If I can leave an element of doubt as to the truth, then it will leave things open for more suggestions in the morning, when we can look at some possible structures that may satisfy everything we have talked about?"

"Ok, if you say so." is your reply.

"Would you like to see some more of our sites, artistic in nature?"

You are a little tired, but are thinking to yourself, is he trying to distract me from what has been said earlier.

He suggested time to rest or sleep and now he is suggesting spending more time looking at art!

You come to the conclusion that this must be something to do with the way your mind is processing the information, maybe it is too much to handle in one chunk, or maybe your subconscious mind is handling it while your conscious mind is distracted with another subject of art, or is there something more subtle in the aliens mind and he is going to introduce some form of art that is going to help your mind accept this new reality that he is going to portray?

In any event you seem excited by the fact that you are seeing things slightly different, and maybe their art is also different, you are not really into art, but maybe you will learn something there too.

"I will be pleased to look at your art, but I am not really into art so I may not fully appreciate it, I will endeavour too".

"This will be fine, follow me" the alien starts walking; then starts to skip.

What do you do? You start to walk faster, but realise that you cannot quite keep up.

Should you run and catch up, then what? Maybe you should ask the alien? Without thinking you start to skip, it seems natural for some reason. You catch up to the alien, your stride is slightly more than his, so you relax a little and keep on skipping in time with the alien. The alien smiles at you, you smile back, and notice that this is really fun and relaxing.

"It is good for the circulation, and relaxing too. This is due to the different gravity we have here".

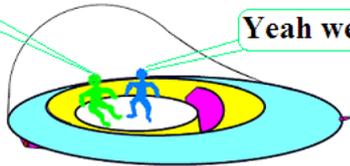
He stops abruptly and you realise you are in a big gallery, things are all around you, lots of different colours, moving objects, you are amazed, and don't know where to look. You also don't feel like you want to stop skipping, you were quite content, but stop with trepidation. You look at some of their art, but your eyes start to draw towards a moving object that seems to be getting bigger then it starts to

shrink changing colours as it does so, gleaming in the light, nearly transparent at times, and seemingly solid at other times. "I see you have noticed one of our children's toys in art form, do you approve?"

"Yes, it seems very pleasing to the eyes".

"Please look at some other things as well and then we can sleep, I will leave you to ponder by yourself and I will return shortly. We will talk about things in the morning".

Have you set the coordinates to Fancy



Yeah we are on our way to Fancy

7. Can a Problem have two answers?

Can you solve a problem by two different means (or methods)?

Yes you can.

Can you get two different answers?

Yes you can, but only if they represent the same thing.

If you get two distinct different answers from each method then you have not solved the problem properly. The answers may look different but they must basically represent the same thing.

As an example I want to find the solution to: -"What is half of one half?"

I could use a branch of mathematics using decimals where one half is represented by 0.5. I do my maths using the rules of decimals and I get the answer 0.25 this is one quarter.

I could also use a branch of mathematics using fractions where one half is represented by $\frac{1}{2}$, again I do my maths using the rules of fractions and I get the answer $\frac{1}{4}$ this is one quarter.

I used two different methods and if I were ignorant of maths I would think that there were two different answers, but they represent the same thing.

Now I could have used any branch of mathematics and made it very complicated if I wanted to, but if applied properly would have got the same answer.

Now in the example I gave, the answer was relatively simple and the answers were exactly the same, but would I get the same answers if the problem was different?



The answer is not always. This is because each method has its limitations and in the example given they are only representations, i.e. abstract. If you represent one third in fractions you get $\frac{1}{3}$, which is accurate at any scale, but one third in decimals is represented by 0.333333... you can add as many threes as you like but it will only be accurate to the number of threes you use and will never be absolutely accurate.

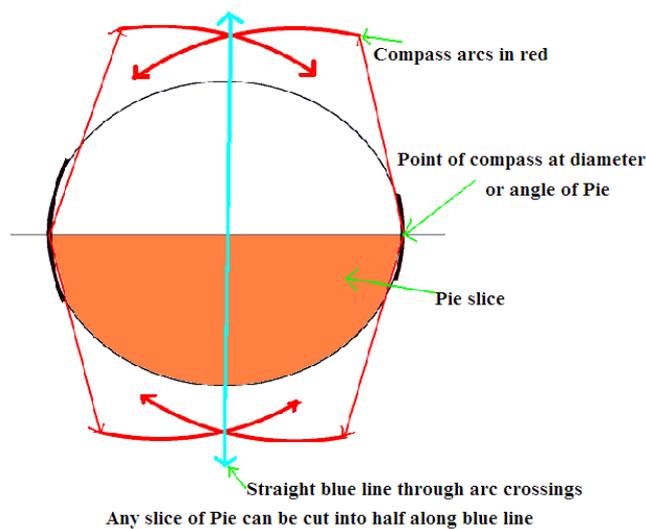
Suppose on the other hand I had a real pie (actually half a pie) on the table and I wanted to split it in half. I would end up with the same answer of one quarter, but the maths are only representations of the real thing (the pie). I can use my maths to measure the pie and get my quarter, but is there another way I can find a real solution?

The answer is yes, by using a knife and cutting it through the center and at right angles to the diameter. I will get my quarter and the solution is not an abstract representation of reality but it is a real solution and I didn't use any maths.

Some people will say I did use some form of maths to cut the pie, but my point is: - one way is only a representation of the real situation and the other is a real representation of the solution. Using maths one would have to measure the diameter of the pie with a ruler, then divide this by two to get the center point (the accuracy will depend on the ruler) then do some more maths to find the right place on the remaining edge (the circumference) to cut the pie accurately.

With the knife method you may think this would not give you an accurate piece of pie if you did not take measurements. You can get a very accurate piece of pie without any measurements by using a compass and a straight rule (not to measure with but to draw a straight line). (Skip this next bit if you know the answer).

So you don't mess up the pie, draw an outline of the pie (and put the pie to one side). Now if you place the compass point at each end of the diameter of the pie and draw arcs (they will cross at two points) then get your ruler and draw a straight line through these points beyond the edges of the pie. Now if you place your pie exactly where it was, the line under the pie extending beyond it will be the line that will accurately divide your pie in two, giving you two equal quarters. Again some people will say I used some form of maths, but the point is that I did no measuring and still got the correct accurate answer.



The conclusion is that you must look at better representations of reality and not just ones that are totally abstract. At first they may give the same answers, but ultimately they may give more accurate and real answers, not just abstract ones that may not actually exist.

8. Reality (Existence & 'Existance')

'Reality' (Existence & 'Existance'*) is not an illusion, but is reconstructed in our minds by stimuli from the outside, as well as within, therefore it appears to be an illusion. The mind first conceptualises a model of the universe outside of itself, in as simple a model as it can, then verifies that model with what it perceives to be reality. Anything that is missing it fills in, or tries to fill in. (See section 58 "Perception").

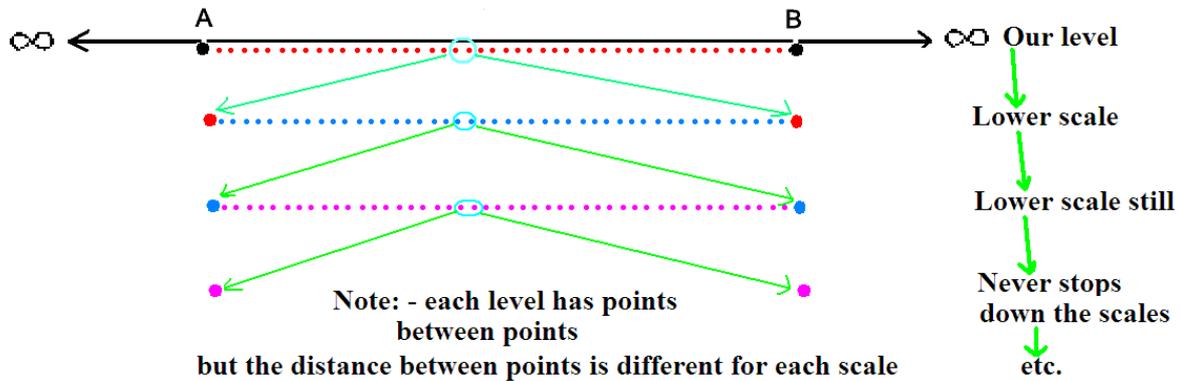
For example it assumes a simple Euclidean type geometry (normal 3D), so what you end up seeing is smooth filled, if you do not see or need to see the detail. So the horizon at sea looks like a perfectly smooth curve, (you do not see the waves). The buildings from afar look like they have smooth vertical edges (you do not see the rough concrete or bricks). A table top looks like a perfectly smooth surface and has a perfectly smooth straight edge to it, but the reality of the table is that it is not smooth at all levels, (you do not see the lumpy molecules).

Mathematics conceptualises Euclidean geometry and creates the model using points, lines, surfaces and volumes. So your conscious mind makes the mistake that this geometry exists as is, because it is the simplest overall model that evolution (of the conscious mind) does not need to look at the details. It was not important to survival to see or even know about atoms vibrating when a lion is about to attack you. You only need the bare essentials, how far is it, what speed is it going, how strong is it etc. (These are at macroscopic scales).

The mathematical model is based on certain assumptions; if these are flawed then you can prove the model using these flawed assumptions.

For example if you state that $1 + 1 = 2$ you can prove that $2 = 1 + 1$.

The previous statement may sound self-evident, but the point is that there seems to be no dilemma. Now look at a straight line between point A and B. Mathematics states that you can in theory divide this line into any number of equal points along this line. Therefore if you keep going down the scales you just keep on adding points between points indefinitely. (There is no distinction between the different points at the different scales).



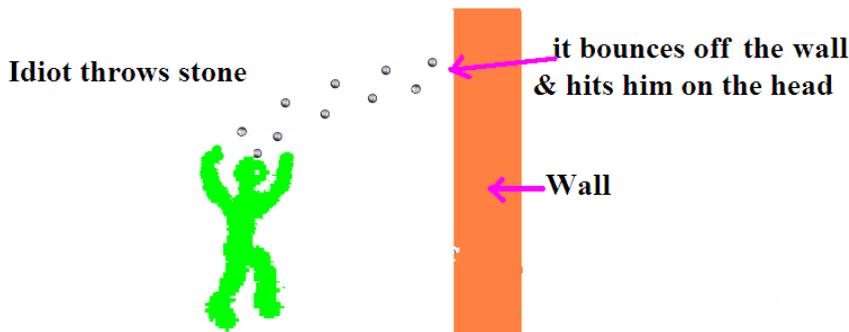
For example you could prove mathematically that if you were to throw a stone at a wall, you could keep halving the distance in between the stone and the wall indefinitely, and the stone would never hit the wall.

In reality ('Reality') you cannot do this, so the mathematicians will say (and lead you to believe) that it is because we do not have the means to do this, not that the theory that has been applied is wrong. But a simple minded person, who would throw a stone at a wall, would see the stone come back and hit them on the head, would say they are wrong, the stone does hit the wall.

Is there something wrong with the theory?

No, the theory is fine, because it assumes you can keep dividing the distance between the stone and the wall indefinitely and they will never meet. But it is still wrong, not because you do not have the means to do it, but because it has made a false assumption about 'Reality'.

The false assumption is that the stone will never meet (i.e. interact with) the wall irrespective of the scale. Once you realise this mistake, your theory will change, and so will your mathematics that you apply to this new theory.



The false assumption is that if you keep halving the distance the stone will not hit the wall

At first you may not agree with me, but it becomes self-evident when you can see that there are too many dilemmas created by this over simplified model. To take just a few examples: - Scientists cannot reconcile gravity, electromagnetic, weak and strong forces. They seem confused between light and particles, i.e. they do not have a common denominator for both energy and matter. What common denominator connects all the previous forces?

Do they even have a model of the known Universe, such that this common denominator does not change in number from a big bang type scenario to the present moment and back to a big crunch type scenario?, i.e. the same number of units irrespective of time!

All the models that they have, all have dilemmas, for example all seem to have a problem with balancing opposites, positives or negatives, ups and downs, lefts and rights, matter and antimatter, etc.

For them to solve the problems of the Universe they need to “see” the light, i.e. understand the structure of light. Understand from the “darkness” came light, i.e. understand the structure of dark energy/matter, such that they can construct light from it. Understand the mechanisms of these underlying structures so that they can see a detailed mechanism of gravity and the other forces. Understand how they can construct chirality (left handed and right handed things, or mirror images of the same thing, [that cannot be superimposed]) from a single unit; thereby have the ability to construct opposites, i.e. there are no problems arising from the imbalance of opposites. They just become another construct of the dynamic system. (See section 73 Where did things start becoming more abstract).

9. Mutually exclusive concepts

This means one or more concepts cannot exist together in the same Universe.

To truly understand the Universe and everything in it, one must understand and distinguish between mutually exclusive concepts. This means that if one concept is really true for or in our Universe it must not contain a concept that contradicts it.

E.g. The statement “everyone can see colour” is only true in certain circumstances when one refers to everybody in a particular group of study, but it is not totally true if one refers to the whole population or the Universe (some people are colour blind, and some are totally blind).

Examples of two mutually exclusive concepts follow (section 10 & 12).

10. The concept of an immovable object

An immovable object means nothing can move it, nothing in the Universe can move it. Normally one would use oneself as the observer or frame of reference, but for it to be truly immovable, no one or anything must be able to move it. Therefore it would be “immovable” in the eyes of any observer or frame of reference.

11. The illusion of an immovable object

Why is an immovable object an illusion?

The concept of movement is relative to the observer or frame of reference, so every object moves relative to someone else or another frame of reference. E.g. the ground does not move relative to yourself, but the ground is actually moving as the earth spins on its axis, and around the sun. The sun moves relative to the other stars in the galaxy, and galaxies move relative to themselves, and so on. Even at the microscopic level, everything is moving. (What appears to be immovable is what you see at your level or scale, so you ignore all movements below or above that level or scale).

12. The concept of an unstoppable force

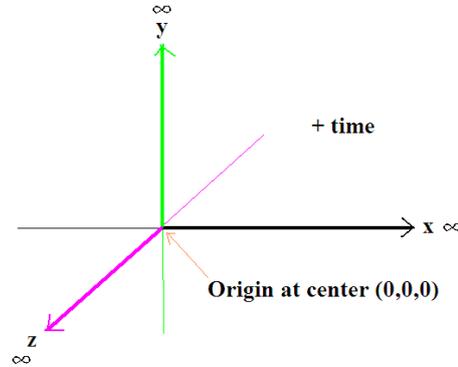
An unstoppable force means nothing can stop this force (by an object or another force).

Truly unstoppable means it will not, and cannot be stopped in all frames of reference.

As we have seen from the illusion of an immovable object, that everything is actually moving in one way or another in our Universe. Then the force that is behind our Universe is a “contender” for an unstoppable force.

13. The concept of Euclidean geometry or Cartesian geometry

This concept uses points, lines, planes and 3 axis at right angles to refer to objects or volumes, representing ‘Real’ objects, and by adding arbitrary time, they try and represent ‘Real’ events. This geometry is only a representation of ‘Reality’, but does not hold true in this simplistic way, i.e. it does not represent all ‘Reality’ by itself.

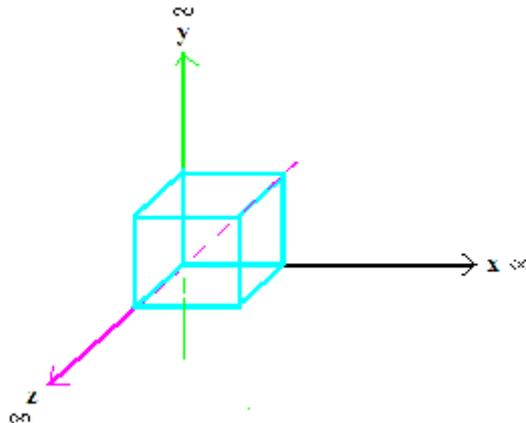


This implies space and time continues in all directions, each point is equal to any other point in any frame of reference. (I deleted a sentence from this section as I erroneously first thought that adding time referred to what I thought was space-time continuum. 2012).

14. Does space-time continuum really exist?

It only exists (other than a concept) if it can realistically represent the ‘Real’ world or Universe. If we represent an object, let us use a cube of sugar or a crystal of salt, both have a cube shape using this geometry.

We first find the points on the corners of the cube, and then join these points with straight lines, creating planes at right angles to each other enclosing a volume of a cube.



Can this really represent a ‘Real’ cube?

Yes, in a limited sense, but not in ‘Reality’ (i.e. in detail), because our eyes and our brains (minds) simplify things to more easily understand and process ‘Real’ events. It appears to our minds that we see exactly what is ‘Real’ (section 8 “Reality (Existence & ‘Existence’)”). We do see what is real, but only in its simplest sense. Our eyes take in light that is reflected from the objects, and we interpret these to create an image, which appears perfect. We see the edges of a perfect crystal of salt as straight lines (as represented by our chosen geometry), but these lines are not true lines (in the mathematical sense or our space-time continuum geometry).

Firstly the point (in a mathematical sense) is only a reference point, and does not in itself ‘Exist’. It is defined as having no dimensions. A straight line is defined as the shortest distance between any two points, and can be subdivided by any number of points on the line. Logically if any one point (along this line) does not exist then neither does a line, it only represents a reference along something that may exist. Using similar logic a flat surface, i.e. a 2D surface also is just a reference to something that

may exist on it. This also applies to a 3D object; and, as you have guessed to 4D. Therefore space-time continuum does not exist as such (2012: - when I wrote my book in 1998 I thought that space-time referred to 4 dimensions only, so this last sentence is only true for 4 dimensions, and may not be true for space-time at higher dimensions).

15.A Better model is to add the Dimension of ‘Reality’ – the essence of EXISTENCE (‘EXISTANCE’)

A better model would be to add a dimension of ‘Reality’. For our model of the Universe to be a good model it must represent ‘Reality’ or Existence in its detailed form (the essence of), i.e. any point must represent something that ‘Exists’ at that point or not.

This means that if something ‘Exists’ at that point, the point is ‘Real’ (it ‘Exists’), and if something does not ‘Exist’ at that point, it is not ‘Real’, i.e. does not represent anything that exists at that point but is just a reference point at which something may exist at a different time.

In other words there is a dimension that measures the essence of EXISTENCE, which I define as ‘EXISTANCE’.

(You have to be patient, to fully understand the details that follow this).

[‘Existance’ can also represent and incorporate all the other dimensions that we are unaware of that completes this ‘Reality’].

So now if we look at our new model we can add as much detail as we wish at different scales.

E.g. If you look at a simplified model of the stone and a wall, you can now represent the stone and the wall as points that ‘Exist’, and the space between them as space in which nothing ‘Exists’.

Or our cube of sugar or salt can now be represented as molecules existing along the edge of the crystal with nothing existing between them. A ‘Real’ line now in theory (does not consist of and) is not continuous ‘Real’ points along it, but dashes or clusters of points with spaces in between, and the cube is no longer a solid in the conventional sense. It is a solid in the new sense with spaces in it.

You may think that this is already known and I am just complicating things, but this is not the case, as I will demonstrate later.

‘Reality’ is anything that is ‘Real’ or could be real.

The dimensions which are normally used and are attempting to represent ‘Reality’ are Scalar (which normally means that you can subdivide something into smaller lengths and the sum of the lengths will be the same, the scale does not matter) and these are abstract. E.g. The normal dimension of length.

In the ‘Real’ world these dimensions of ‘Reality’ are not scalar (in just one dimension of length as in this example) (I will explain).

The reason that they are not scalar is that we ignore the details of the makeup of these dimensions (which represent the ‘Real’ dimensions of things and their interrelationship) with the other dimensions of which ‘Existance’ is made of.

If we look at ‘Existance’ (in which I mean ‘Reality’), then we need to add the dimension of the essence of this ‘Existance’, i.e. it ‘Exists’ (any point that has the essence of ‘Existance’, [¹point]: - ‘Exists’, any point that does not have the essence of ‘Existance’, [⁰point]: - does not ‘Exist’).

So in the example of length, if we try and isolate it and measure this abstract length, it is merely the lengths of the lengths of the ‘Real’ parts of Existence along this abstract length.

To help clarify this point, imagine every length (the abstract length) was a measurement of the length of a bit of DNA in 3D space. If you had a blob of DNA you could measure a length in any one of the 3 spacial dimensions, one you would call length and the others you would call width and height.

The dimension of length would just be the overall dimension of length along your imaginary 3D framework. Assuming you did not know the fine structure of DNA then this would be fine, but because you think you know its structure, you say ah! It has this length because it is like a piece of string all wound up (in this blob), its true length is the length of the string if you were to put it in a straight line, you can measure this length and that is also fine.

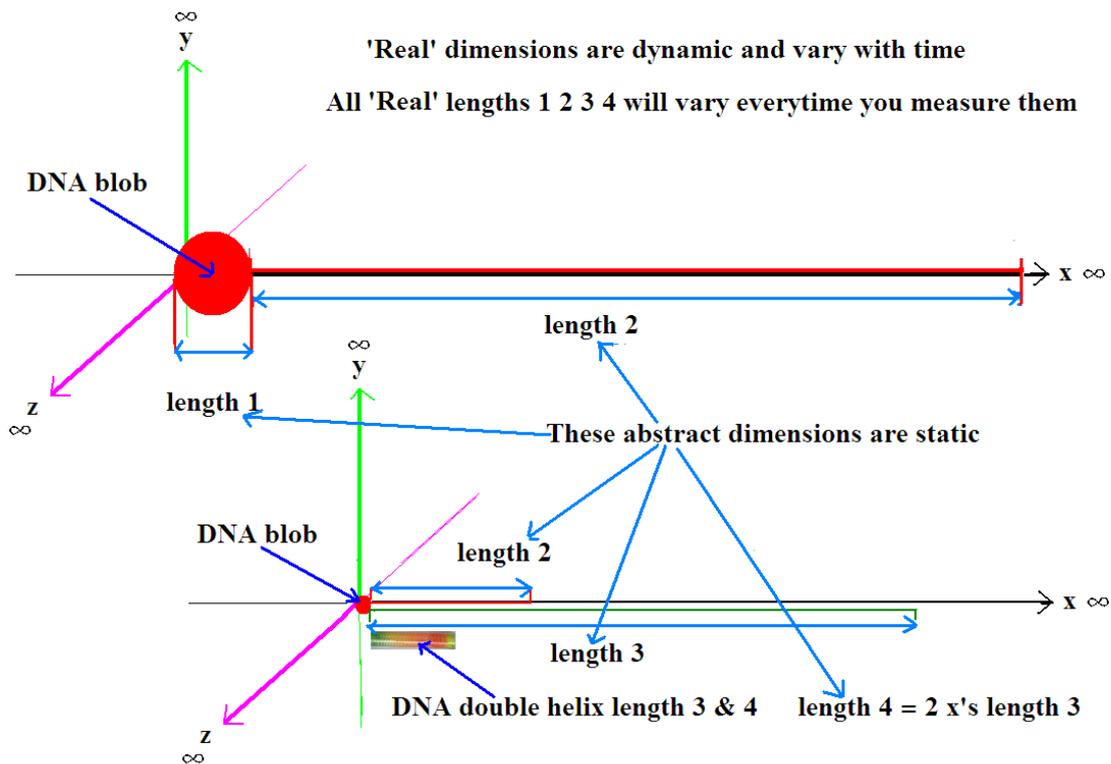
But then someone tells you that although it is like a piece of string, it is actually more like a spiral piece of string more like a spring (obviously you really already knew it was a double helix in structure) so you say if you want to be pedantic its true length is the length the helix would be if it was unwound and straightened, and if you want to it is double this length, if you consider both strands of the DNA.

This is also fine but it has a deeper structure, which will give it a different length. "So what?" you say. "A length is still a length".

This is the exact point I am making an abstract length is an abstract length, it is only measuring one aspect of anything, and it changes dependent on what one is measuring, and I don't mean two different things but a measurement of the same thing appears to have many lengths.

You will then say but the condition of the measurement has changed, but not the actual length. Again I will say this is because you have failed to realise the true nature of the 'Real' length.

If I now tell you that all the previous measurements of length are also dependent on time and it doesn't matter which of the previous measurements you take, they will all be different dependent on when you made these measurements, then your argument does not hold true, even if you try and replicate the exact conditions, then these measurements will still be different.



This means that the 'Real' length of anything that is 'Real' is not really scalar. Scalar means that you can subdivide something into smaller lengths and the sum of the lengths will be the same, the scale does not matter. In 'Reality' this is not true if you go down to smaller and smaller scales, because of the fine structure of 'Reality'.

So what is a 'Real' length?

You can measure a true length if you could abstractly remove time from the measurement, or include time in the measurement (you cannot in practice remove time), but if you could, then this length would be the true dimension of length and be scalar along the points of 'Existance' only.

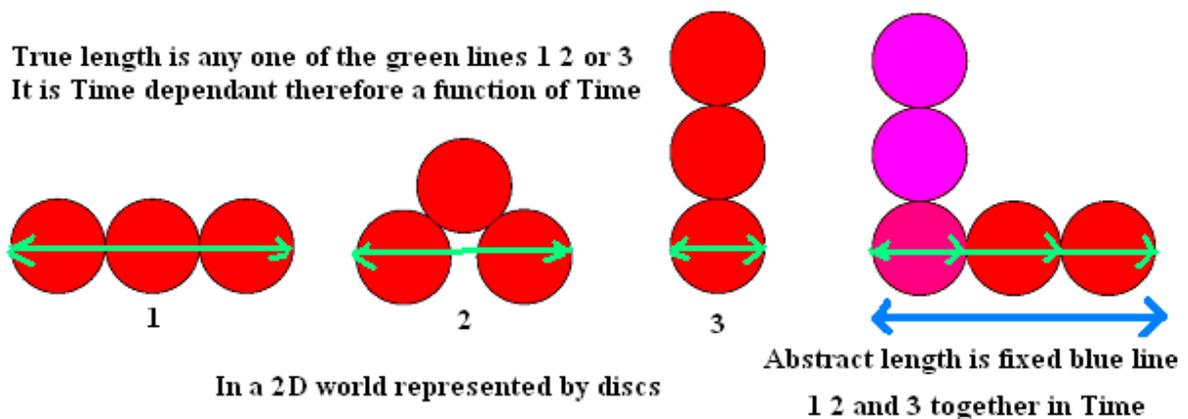
So if we go back to the DNA example previously, then the 'Real' length in any one dimension is the sum of the points (lengths of 'Existance') along the abstract dimension of length, i.e. you only count the bits of space that actually has the DNA strand crossing the abstract length you are measuring, (that which actually 'Exists') which is moving in and along the other dimensions.

On the larger scales the other dimensions have an insignificant effect on your measurements; this does not normally make any practical difference, but as you go to smaller and smaller scales this becomes more pronounced until the measurement of true length is more important than the abstract length you have been measuring.

This ultimately means that half of something short can be longer than half of something long. And you will see later that one half of something can be longer than the original. This you have got to see, you will say to yourself, so you can believe.

For those who found the previous a bit confusing, let us use a simpler example, and eliminate some of the dimensions. Let us say that there were only three dimensions, length, width and time, and that the whole universe was made of little circular discs (all mixed up on our piece of paper). If we were unaware of the true nature, i.e. the structure, we could get our ruler and measure any length in any direction we so desired. If then someone told us the structure, and said just measure what is 'Real', then we could consider any length to be true if it had a disc or part of a disc crossing along the line of our ruler, anything outside of the disc was not 'Real'.

Now; although the abstract length was the same, the true length will change dependent on where we made the measurement or on the distribution of the discs along that measurement. There could be discs not touching each other (clumped together but big spaces in between), or they could all be touching but not in a straight line. All the variations will give different measurements. On a large scale the abstract length (of the object we are measuring) is not affected by these discs, the object is still a long length. But on a small scale, (let us say about 3 diameters of the disc) the object you are now measuring is about 3 discs long, if you measure in one direction and the discs are all lined up with your ruler, both your abstract length and the true length will be 3 discs long, but when the discs are not lined up, (let us say they are all touching each other), then your lengths will be different. If you remember I said that the measurements were time dependent. Your abstract length is not time dependent, so you will measure the abstract length as 3 discs (the 3 discs will be there in a straight line for some of the ³time that you are measuring them). But the true length at any moment in ³time could be as little as 2 discs in any one direction, or as little as 1 disc if measured at right angles to the true length. The abstract length could be up to 300% longer than the true length at any one moment in ³time (in this example), i.e. the other dimensions have a significant effect at these small scales.



Note: - see the solution to "What would happen if an unstoppable force met an immovable object?"

16. Points of Existence on their own are not enough

Points of Existence on their own are not enough. You can identify a point as being a reference to something that 'Exists' at that point, but it says nothing about the point next to it, or to what scale you are referring to.

To make sense of 'Reality' you must be able to represent 'Real' objects or things with your model at any scale. 'Real' things are not just points; they are groups of points and must contain all the

dimensions together to actually Exist. E.g. A table is not just a length, nor just a top (i.e. 2D plane) or a 3D object. If it does not exist in time, it does not exist at all, other than a concept in one's mind. Therefore the new model must represent reality at least as 5D volumes of Existence. So a stone could be represented as a 4D volume existing for a specified ³time at these points in space (5D objects). Again you may think that this is already known and I am not really saying anything new, I will demonstrate this not to be the case when we look at the details later.

If you did not understand this concept earlier, let us simplify it by imagining that everything that is 'Real' is made of little rods (cylinders, the little building blocks) that are 10 units long, i.e. the diameter of the cylinder is one unit and the length of the cylinder is 10 units (10 diameters). The actual real scale is not important at this stage. Now imagine you place an imaginary grid within your 3D⁰ framework, where each grid space is equal to one unit (this will be the minimal point (volume)). Now if you place your cylinder in this grid, then once placed, it has to occupy 10 units. Therefore you would have 10¹ points that 'Exist' all in a line next to each other (because they come as a group (cluster) together. Now if you keep placing these little cylinders in the grid, then 10 new¹ points that 'Exist' will be placed in the grid with each cylinder. No cylinders can occupy the same imaginary grid space.

Now Existence is the shape that all these¹ points that 'Exist' create in total. Existence has to come in multiples of 10 minimum¹ points (minimal volumes) at a time. Although the above example is a simplified example, 'Real' Existence comes in multiples of the basic unit (an 'APE') (section 35 "Simplified restricted model ('Primary Spaces')"); each 'APE' will have millions of¹ points.

17. 4D volumes of Existence on their own are still not enough, add the missing 5th Dimension

The concept of a stone as a 4D volume of existence on its own is not enough, because it does not say anything about the stone itself. It does not distinguish between a stone that just exists and other stones that have different masses. The stone that just exists, is like the conceptual stone that is in your mind, it has no mass as such, and it is just a concept of the 'Real' stone one wishes to represent. The 'Real' stone has a mass, or more to the point it has a DENSITY. Density is just another dimension of 'Reality' (of Existence). (Section 25 "How can we add Density to a volume?").

I know density is just mass per unit volume, but in the new model it is a dimension in its own right and is part of the Existence of 'Reality'. Everything that 'Exists' has the dimension of Density, i.e. a 5th 'Real' Dimension. (You will understand the true significance that will follow).

We now have a model that represents 'Reality' as 6 dimensional volumes of space, namely 3D space, time, Existence (the essence of), and Density. [Existence here has a dual role, the 6D volume exists (because we live in this realm), but not all points in this 6D volume 'Exist' (as 'Real'¹ points), one also has to distinguish the difference between time and Existence. To clarify it better, things that have Existence contain 'Existence' plus the space in that Existence]. So in the example of the stone and the wall it can be simplified to a 6D volume for the stone and a 6D volume for the wall and nothing in between. If we look at the example of a crystal, it is simplified as 6D volumes of molecules in space with nothing in between.

[Note: - although I have represented the space as nothing in between, there is actually something there].

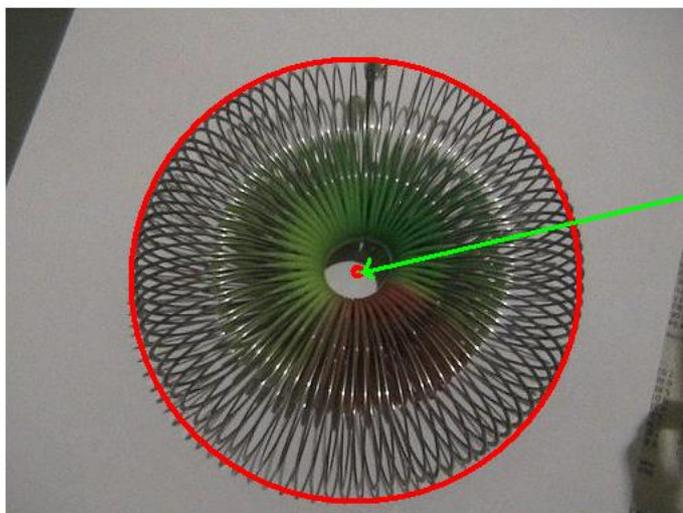
Imagine this structure was 'Real' the object enclosed in the red circle

In this particular case it is one 'APE' inside another 'APE' (embedded in the same 3D space)

then all the points on & in this structure would 'Exist' (only on & in the spring itself)

together they would contain all the dimensions

All the other points inside the object are 'Null points' & they don't 'Exist'



The object can be summarised as being at the imaginary center

but the imaginary center does not 'Exist'

This object enclosed in the red circle is in this case two objects at this scale

The whole object exists but not all points inside the object 'Exist'

'Existence' that cannot be created nor destroyed is the sum of the points that 'Exist' inside the object

18. Now we can explain Energy and Matter as one

Up to now we have been explaining objects (matter), but what about energy?

Energy also 'Exists' and now energy can easily be explained using the same system of 6D volumes (I will explain the details as to how this is done later, (section 25 "How can we add Density to a volume?" to 29 "Quantized Space" & most of the remaining book 64 "Energy and Quanta" ..).

Conventionally Energy is not normally associated with a volume, but is a calculation of a property of an object or system, so we say something has a Potential energy or a Kinetic energy or we calculate the difference of energy between things, this becomes an abstract calculation, which leads to the false belief that you can have Pure Energy.

Energy (in this sense) in itself does not 'Exist' other than in the abstract sense in one's mind (for comparison purposes).

'Real' energy that actually 'Exists'; has the same dimensions as all other Existences.

In its simplest form energy is just a measure of the ability to do work. But to measure work it must work on something, therefore it must always be associated with something that it can do work on. It is never on its own. In 'Reality' it is associated with a volume on which it does work on or in. So in our example of the stone and the wall, the energy can be associated within the stone (its Potential energy) and its Kinetic energy. The Potential energy is just a measure of this energy that appears to be static relative to the observer; otherwise it is the same thing as the Kinetic energy. This becomes clear when you see the complete model and realise that nothing is stationary at the fine detail scale (see section 11 "The illusion of an immovable object" & 12 "The concept of an unstoppable force").

19. The solution to any problem should be as complex as is required, but not more so

The solution to any problem should be as complex as is required, but not more so.

So if we take Gravity as an example, Newton summed up Gravity and worked out the formulas required to explain the phenomenon of Gravity, he did not know the details of how it actually worked, but in brief, explained it as a force that acts at a distance between two bodies and was related to the mass of the bodies and inversely proportional to their distance.

This is fine, but the mathematics behind the formulas does not explain how Gravity works, but just what happens.

Einstein comes along and describes Gravity (in brief) as Space curved towards the center of Mass, introduces the limitation of the speed of light, and formulates Space Time.

This is also fine, but yet again he explains the phenomenon of Gravity but not how Gravity works, or how space becomes curved, or why length reduces with increase of speed.

I am not talking about the mathematics, or disputing the mathematics, but just saying that he is just describing the phenomenon, and not explaining it fully.

Why am I picking on Newton and Einstein?

Because they were brilliant minds and could work things out, without knowing all the details.

Now if we look at Quantum mechanics we can see that this too can explain what is going on, using complex mathematics, but yet again it explains certain phenomena but does not explain how and why, and I know it is all to do with probabilities and possibilities, but the mathematics itself, although is a model to represent 'Reality', is not actually 'Real', other than in the conceptual sense and in the constructs of one's mind.

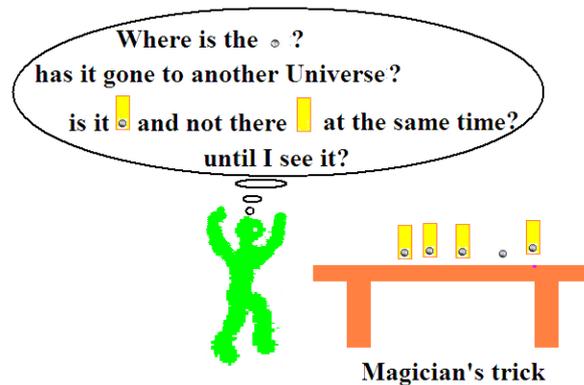
In summary what I am saying is that models of the Universe that we have are not good representatives of 'Reality' when it comes to the fine details of the 'Real' world (in which I encompass the subatomic, macroscopic and cosmic scales into one Universe).

20. The concepts of a good model

What I was looking for was a single model that encompasses all of the above, so that it could be simplified, such that all the preceding models were simplified subsets of the one model.

Before I present such a model, one must first define the concepts required to make such a model plausible or even possible (even if my model is not considered as a good candidate, the concepts must hold true for any such model).

1. The model itself must be able to distinguish between 'Reality' and non-reality, i.e. what is represented as 'Real', and what is represented as abstract.
2. The model must have a common denominator to represent all 'Reality'; by this I mean that everything that exists must be a complex of just one entity of reality. E.g. Energy, matter, anti-matter, fields, magnetism, dark matter, light, quarks, leptons, Gravity etc. are all subsets, sets or supersets of this one entity, or the phenomena are explained by the interactions of this one entity. (This one statement alone is enough to make your mind go fuzzy).
3. It should also be as complete as possible, i.e. it must contain everything or the possibility of everything. It cannot have bits missing, appearing or disappearing into another Universe. Things only appear and disappear because you do not know what is happening, just like a magician's trick, the ball is placed under the cup, you watch it all the time, yet it disappears. You can theorise all you want and postulate that it is there (under the cup) and not there at the same time, and you will only make it appear or not by just observing it etc. The reality of the situation is that the magician didn't make the ball appear and disappear into another Universe and back, but the magician knew exactly where the ball was, before, during, and after, the trick.



The above 3 statements alone create a multitude of paradoxes and unless you can resolve all or as many as possible, then the model is of no more use than the plethora of other models.

To eliminate as many paradoxes as possible you should be able to resolve much simpler paradoxes like the following two puzzles:-

“What came first the chicken or the egg?”

“What would happen if an unstoppable force met an immovable object?”
(I gave you the clues to this one earlier).

I chose these two because both contain the elements required to resolve far more complex paradoxes. Once you see how these are easily resolved, you can tackle more complex puzzles like:-

“How can light be a wave and a particle at the same time?”

(Don't quote me wave particle duality; I want to know the details of the mechanism behind it).

“How can Gravity, EM, Weak and Strong Forces be a function of just one Force?”

“How can you create Chirality from just one fundamental entity?”

“How can you create Dark Energy, Light, Matter, and Anti-Matter from just one entity?”

“How can the Universe expand and contract without creating any more fundamental entities or destroying any, (they do not leave this Universe), irrespective of Time?”

The Answer lies in the following:-

You must link Space and Time in such a manner and include what I considered the missing 5th Dimension (Density) into one entity, such that you can describe the fine structure of Dark Energy and Space (section 25 to 28) ('ASpace').

Note: - You must also understand the concept of the 'Inversion of Space'. (In which you CANNOT indefinitely half 'Real' space 'Existance'). This is a very important concept, and once understood, you will be able to follow the mechanism behind it, which I will explain later, of course) (section 32 "Clarification of the 'Inversion of Space'" and ...).

Also: - the concept that the mathematics changes, dependent on the model and the scale at which this mathematics is applied. In other words when you look at the fine details of the structure of Space ('Reality'), you cannot use simple mathematics. E.g. Newton's and Einstein's formulas break down at the center of Mass. This is because at the detailed level, the supposed center of mass is an abstract center, and in any event it is a relative term. I will explain further later, but it is comparable to the center of gravity, the center of gravity of a metal bar does not actually exist as a 'Real' point of 'Existance', at this point in the bar (it is an abstract calculated point). This can be proved by cutting the bar exactly into two halves through this center. You do not get two half centers at the ends of the two bars, or create two new centers of gravity that travel to new positions instantaneously in the middle of the two bars.

As stated in section 19 the solution should be as complex as required, but no more so. Therefore instead of trying to explain the more complex solution (which I may not be able to explain) I have come up with a much simpler solution so that I can explain the principles of the model and resolve

some of the major paradoxes, once you see how this is achieved you can complicate it further to explain all phenomena.

Firstly you must see my solutions to the first two puzzles i.e. so you must go back to basics..... which I have taken directly from my first book (A Pocket Volume of the Universe (©1998), so some bits will be repeated, or refer to a previous part of the original book.....

21. Solution to the Riddles

“What came first the Chicken or the Egg?”, & “What would happen if an immovable object met an unstoppable force?”

..... Original question: Why are all these things not connected in some way?

Before we go any further, lets get back to “my definition of the meaning of words”, and I’ll give a couple of examples of “my way of thinking”, by using two riddles/problems.

If you are clear thinking and have a logical brain you will have no dilemma in solving the following two riddles/problems.

Riddle1. What came first the chicken or the egg?

Riddle2. What would happen if an immovable object met an unstoppable force?

The reason I have posed these two questions is because I have never had a problem with solving these two riddles and I know from experience that many people, (I have not met one in person who hasn’t) either have a dilemma or are adamant about their answer, but do not, or cannot explain satisfactorily their conclusion.

So what! some may say. This is the point of the meaning of words as you understand them. If you attach slightly different meanings to the words you use, as opposed to the meanings of words that someone else is using. Then you could either agree with someone and they have understood things differently, or you may disagree with someone, but in fact you are trying to say the same thing.

I know I have by now lost some of you, because you think I am being either pedantic or patronising, but I have initially meant this book for anyone to read, not just mathematicians, physicists and ...?

Let’s get back to the riddles and their answers.

To find the answers, you have to understand the questions. (I was always able to understand the questions in exams; my problem was that I did not always know the answers.) Others I knew, knew the answers, but they did not fully understand the question, therefore they did not always give the correct answer.)

The answer to riddle 1. Is most positively the egg.

Most people by now are arguing as to why?

The explanation is as follows (I have to assume that you believe in evolution) if not, skip to riddle/problem 2.

The reason that I have sent some people to problem 2, Is that it would make my book too long if I try and explain everything, it would get too long winded, and I know that some of you think it is too long winded already.

To continuewith the answer.

The chicken was laid from an egg; I assume no one is going to argue with that.

But the dilemma comes in some people’s mind, where did the egg come from?

The answer is not from a chicken. Why not from a chicken?

The answer is that it came from a bird, not a chicken, but a chicken like bird.

Before chickens had evolved, chicken like birds would lay eggs.

Then a mutation would occur that would make one of these eggs produce the first chicken, which would in turn produce the first chicken egg.

The answer is understanding the definition of the words of the question.

Some people at this point will say “but if that egg was laid by a chicken, then what came first the chicken or the egg?”

There is still no dilemma to this question.

The reason that there is no dilemma is that these people have created another dilemma in their minds.

In so doing they have redefined the question.

The question they have asked is “What came first the chicken or the chicken’s egg?”

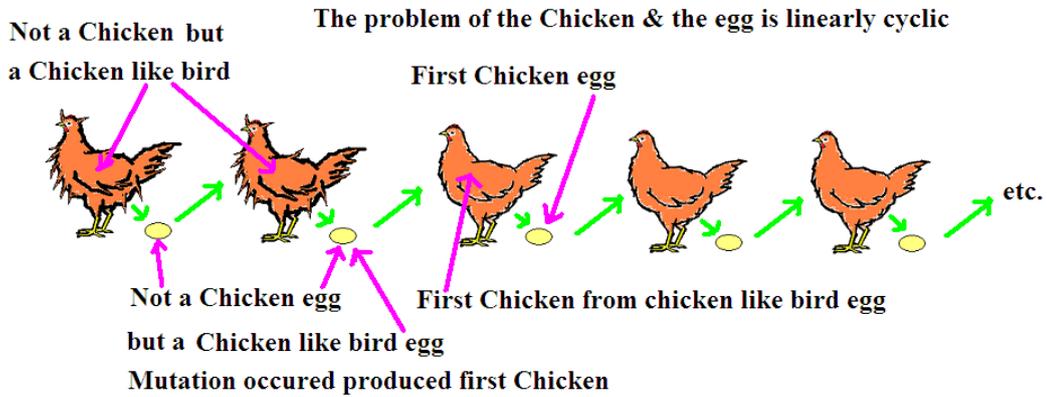
Again there is no dilemma to this question.

The answer is most definitely the chicken.

The reason is that the chicken still came from a chicken like egg, but it laid the first chicken’s egg.

If you did not fully understand the above re-read it again.

The problem is not truly cyclic but what I call linearly cyclic.



Riddle/problem/Dilemma 2. What would happen if an immovable object met an unstoppable force?

By now I hope you have understood what I mean by definition of words and their subsequent meanings.

I will not give you the answer to this problem straight away, so that your thoughts are not side tracked with any arguments that may come to your mind.

The problem must be looked at more closely, i.e. we must define the meaning and concepts of these words.

The first concept is the meaning of an immovable object; by definition (in brief) this means that nothing can move this object (no force can). One can imagine such a thing, no problem, everyone agrees.

The second concept is the meaning of an unstoppable force; by definition (in brief) this means that nothing can stop it (no object can). One can imagine such a thing, no problem, everyone agrees again!

The dilemma starts when you ask the question?

If you understand the question; The question itself is meaningless.

The reason being is that you can conceive the existence of an immovable object, but in that universe there is no such thing as an unstoppable force (by definition). See above.

You can also conceive the existence of an unstoppable force, but again in that universe there would be no such thing as an immovable object (again by definition). See above.

The answer to the dilemma is which one of these two universes do we live in? Is it the immovable object universe or the unstoppable force universe? When you have the answer, then one would be true and the other would only be a concept that did not and could not be true in our universe.

My answer to this question is the unstoppable force, and that the immovable object does not exist!

When you have read the rest of the book you will understand why I come to this conclusion.

22. Too simple and it gets complicated

You cannot simplify an existence (of anything) into (Euclidean, Cartesian) ⁰points in Space, unless you are not interested in the details, or the details are irrelevant or inconsequential to the outcome. E.g. you can simplify your mathematics by saying a car starts at point A and moves to point B in a straight line at a certain speed and you can work out the ³time it takes to go from A to B. You are not interested in the type of car, make, colour, length, construction, or any other attribute that does not interfere with your outcome.

If on the other hand you were crash testing cars for safety, then the mathematics must be altered to include additional relevant variables, like the weight, construction, length, even engine capacity to take into account of the possible acceleration the car may make during its travel.

You may think that this does not change the mathematics, but when you measure the length of a table, you do not normally consider the width or the height as being relevant to the length, or the time or speed at which you measure the length as being relevant. This is because we have been led to believe that these are independent dimensions, what has time got to do with length? (Don't quote Einstein at me). What is 'Real Time', and how is it linked to Space? or put more succinctly how is Space linked to Time?

23. How is Space linked to Time?

When we consider ⁰points in Space, we ignore the details of Existence (further to section 15).

A mathematical ⁰point or points are used to represent things that exist at these ⁰points in 'Real' space, but the ⁰points themselves are abstract. In pure mathematics a point has no dimensions therefore I know on its own it is not a good representation of any reality, other than as a very simplistic representation.

A straight line has 1 dimension, and is defined as having an infinite number of ⁰points along it. This too is not an accurate representation of any reality, logically it has no thickness therefore also does not exist (other than in the abstract), you can again simplify things by saying the table has a straight edge and a certain length, but this is only true if you ignore the details.

Moving onto a plane or flat surface which is said to have two dimensions, again this does not also exist in reality, logically it has no thickness therefore it also does not exist, again we can simplify saying a table has a flat top, but yet again it is only true if we ignore the fine detailed structure.

Next we go to what we normally consider 3 dimensions Length, Width, and Height. Now we can relate to this, because we can now pick up something that is real with these qualities. We will use our table example again, but the representation of the table is yet again not a good one, we can measure and draw our table as accurately as we like, but it is only a simplified abstract of a table, if we drew two identical tables one to represent a real table and one to represent an abstract table, there would be no difference between the two. In any event neither would be a good representation of a real table unless yet again we ignored the detailed structure.

In summary if we look at the details of all these dimensions nothing lies in 'Reality' continuously along any dimension at any scale unless we ignore the details.

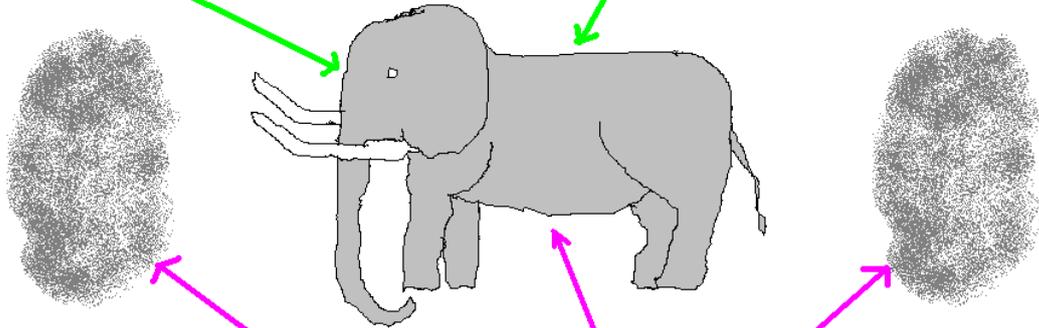
You can see this clearly if you scale things up, what looks like a perfectly flat polished table top is in fact full of pits and irregular surfaces at the molecular level, in fact the structure itself is full of what

we call empty spaces, even a straight line does not exist along the edge, there are atoms aligned along an imaginary straight line, but there are gaps between them. Sub atomic particles don't move in straight lines in the pure mathematical sense. Therefore 3 dimensions as we know them are not good representations of 'Reality' either, unless we ignore the details. I know we only use this as a framework, but in conjunction with independent points of space it is not good enough. I believe this is why we get Quantum possibilities that are infinite (I will explain further later).

24. The added dimension of Time

We also have the added dimension of Time, which is normally considered independent of Space. (Einstein's Space Time excluded). I believe 'Time' is an integral part of Space, normally if we say there is no Time then the abstract table could not exist, logically if it existed for no time at all then it could not exist! This I know is actually a flawed argument, the reason being, is that we normally consider Existence as a function of Time. Something exists for a certain amount of ³time then it dies or is destroyed, it didn't exist before, it was created, therefore came into existence etc. Existence in this context is related to ³time, because we are only talking about transitory existence, which we define for each event for each subject matter we desire. E.g. An elephant is born then dies, an electron meets a positron, it is annihilated, ceases to exist. But Existence (the essence of) with respect to 'Reality' or the substance of 'Reality' itself does not have to be ³time dependent. E.g. If there was an amount of anything that could be considered as 'Real' (it would 'Exist'), if we were to say that the essence of any Existence could not be destroyed, then 'Time' becomes a function of Existence and not the other way around.

The elephant comes into existence then ceases to exist 'transitory existence' is time dependent what I call 'Tertiary Time' or Global time



The essence of existence 'Existence' 'Exists' before during & after the elephant, is not time dependent but 'Primary Time' dependant

Existence & 'Existance'

'Existance' cannot be destroyed

What this means is that Time merely becomes another measure of Existence ('Reality'), the same as the other dimensions, they all measure an aspect of this 'Reality', none of them can become Zero, because any dimension that becomes Zero (truly zero) would mean that the other dimensions would become abstract once again. (Just to remind you no height, no width, no length, no Time, no Density, they are all abstract, including the essence of Existence becomes abstract).

So what is Time measuring?

It is merely measuring the change of Existence, or more precisely the relative changes of the other dimensions with respect to each other (Note: - remember, none are truly independent).

[Time is merely a measure of movement or change, no such thing as an immovable object, therefore time does not stop; it can only stop in a relative way].

Time is relative and you can start or stop your watch whenever you like, but the background Time of Existence does not stop. I will come back to Time shortly, but let us go back to our abstract tables.

Let us accept for now that Time is required for our model representation of the table (we will look into the details later). We now have two representations of our table one abstract and one representing our real table (let us also say we have drawn in the detailed structure of the atoms as well, to make it as realistic as we can in detail).

We have added Time so that they can both exist, but yet again they both look the same!

What is missing is the missing 5th Dimension of Density (section 17 “4D volumes of Existence on their own are still not enough, add the missing 5th Dimension”). If we add a dimension of density to one of the tables, then one will more closely resemble a model of a real table, and the other the abstract table.

25. How can we add Density to a volume?

How can we add Density to a volume?

There are volumes and there are volumes.

What does this mean?

Because I have added the additional concept of a 6 dimensional volume, one must now distinguish between a 3D volume and a 4, 5 or 6 dimensional volume.

Everyone knows what a 3D volume is, but you can place 6 D volumes within it?! (The basics of the ‘Inversion of Space’ (section 32 “Clarification of the ‘Inversion of Space’”).

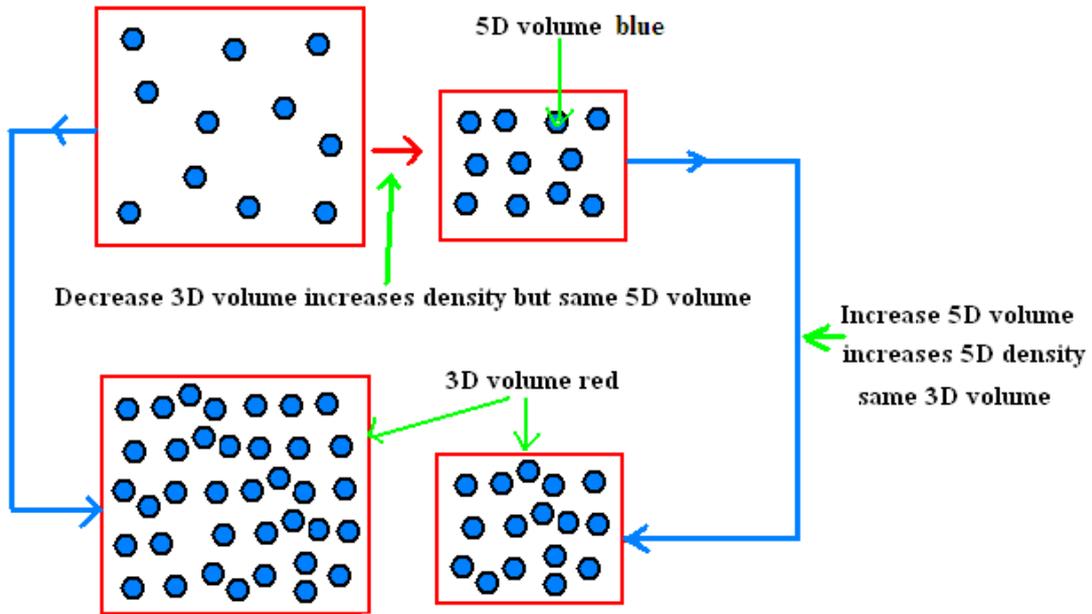
Let us just simplify things and say you can add 5 dimensional volumes inside of a 3D volume without increasing the 3D volume, what this does is that it increases the density. You can still increase the conventional density by decreasing the 3D volume (compressing it); this in itself does not necessarily decrease or increase the 5D volumes within it.

To better visualise this, imagine the 5D volumes are balloons full of gas, and the 3D volume is a room. You can increase the number of balloons you put in the room without the room getting bigger, or you can shrink the room without reducing the number of balloons. (You will see later this is the beginning of the concentration of Energy into Matter).

[Important Note to remember for later: - there is a limit of how many balloons you can place in a room, or conversely a limit as to how much you can reduce a room with a fixed number of balloons.]

You will see if you go beyond a certain point you will start to compress the balloons themselves and increase the density further with a corresponding increase of internal pressure outwards, (a pushing force). The balloons example is an over simplification of a 5D volume, because I have not explained the real relevance of Time to real 5D volumes of Space.

[Note: - It is theoretically possible if you cannot contain the 5D volumes (within the 3D volume) then compressing the 3D volume you will get a reduction in density and not an increase in density].



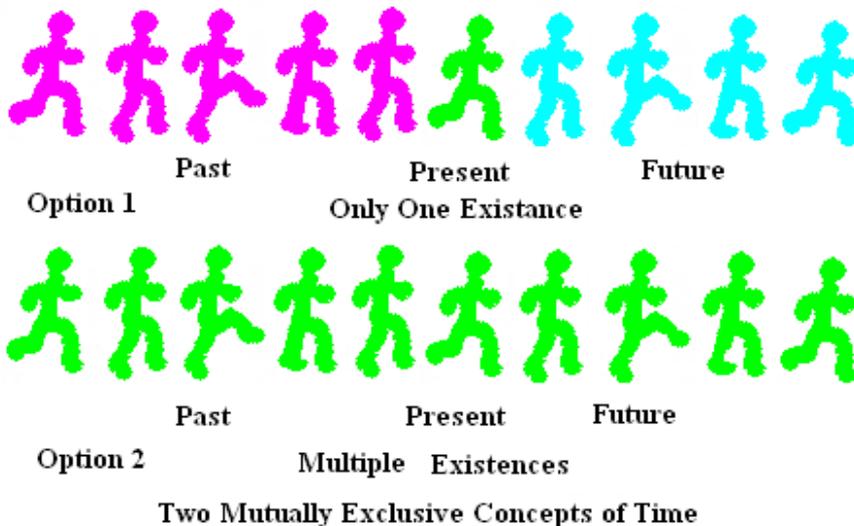
26. The relevance of Time to Space

(section 71 'Time Travel. More about Time' section 77 'Addendum extras')

Firstly you must distinguish between the two concepts of Time that I mentioned in A Flight to Fancy (section 6) in which I represented Time with the plasticine men. Both of these concepts of Time can be represented by taking pictures of each step, like a cine film. Both films would look the same, but they represent two different concepts of Time. You have to decide which one is the correct one. (They are mutually exclusive section 9).

If you represent both with a cine film you will get the impression that you can travel back and forth in time along the cine film frame by frame. But this cine film is only a representation of Time, NOT Time itself.

In the first concept of time you can go back in time by merely changing the shape of existence, and there is only ONE existence. (Option 1).



In the second concept (Option 2) it would appear you could go back in time and meet yourself, in fact if you believe this, then you could go and meet all of yourselves at the same time past and future and have a big party where you could all grow wings and fly to the moon, without any air (I got carried away a bit there).

As you can see I believe in the more plausible first option where there is no theoretical possibility of any paradoxes with father and son scenarios. In fact not a single atom will have a paradox with itself in any past present or future event. If there was any possibility of a father son paradox, there would also be a paradox for every single atom in existence in the Universe.

[Note: - you can still travel forwards and backwards in Time but only relative to someone else not yourself].

As stated earlier in another section Time is merely a measure of Existence (section 24 “The added dimension of Time”) (or the change of the essence of Existence), which just measures the change of Space and its interrelationships. What this really means is that Time is a relative measure of the speed of the space that it is associated with, a 5D space is created in time (IN, around that space). To better visualise this we can use our balloon example, in its simplified form it can be imagined as a spinning balloon, the difference being that all ¹points on the balloon surface move at the same speed (i.e. there is no equivalent poles or equator, relative to an imaginary center of the balloon).

You may think why make it move?

Remember that there is no such thing as an immovable object, so it must be moving relative to something, so for now let that be an imaginary center of the balloon. The relevance will become apparent later when we explain Gravity.

27. Is Speed another Dimension?

Originally back in 1998 when I formulated my model, I decided not to include Speed as a dimension, as this may have been too controversial, so I left it as a variable, but as nobody has taken me seriously for the past 14 years, so I see no harm in stating that Speed is another dimension. I will explain how and why later, but for now it will help explain the limiting speed of light, and the relationship between Energy and Matter.

[You will see later that all dimensions can be bent back on themselves so that infinity is eliminated].

You don't have to think of it as a dimension, but like all the other dimensions, I think of a dimension (normally referred dimensions) as the sum or aggregate sum of the dimensions of its parts. E.g. a 'Real' length is merely the sum of the 'Real' lengths of the lengths of the Existences of its parts that lies along that length. It will only really make sense when you see the finished model.

28. Further explanation of the concept of 'Primary Existence' (Section 15 & 24)

To explain the universe (and everything in it) one must eliminate all dilemmas.

One must have a coherent meaning for the concept of Existence, what I call 'Primary Existence' or the essence of Existence. Existence is normally used to have a meaning relating to ³time and the object or thing that it is relating to. E.g. “an elephant exists” (section 24 “The added dimension of Time”), this implies that it exists at this moment in ³time, it did not exist prior to it being conceived or born (depending on your definition of an elephant) but irrespective of your definition, there was always a point in ³time that this elephant did not exist, and there will be a ³time that it will cease to exist (it dies or decays). This definition (of existence) is used for all ³time related existence of any event or object (emotions, atoms, electrons etc. are all included in this).

'Primary Existence' ('Existence') on the other hand is the concept that “what is” “the essence of 'Primary Existence'” ‘Exists’, is irrespective of time (as it is normally thought of).

[Note: - I will clarify the meaning of Time later]. (Section 24, 26 “The relevance of Time to Space”, & section 52 “The whole Universe is a “soup” of “vacuum pumps” of various sizes”).

In other words the Universe ‘Exists’ (in its entirety, and is just the sum of its parts) irrespective of time.

Therefore nothing is created nor destroyed in respect of the essence of Existence = ‘Existance’. A Universal Law.

What this means is that the essence of Existence can be subdivided to the smallest units that can explain the entire universe (that does not and cannot violate existence of itself), i.e. the lowest common denominator, of all things (a quantum of space) (section 29 “Quantized Space”). E.g. (If) I can define the smallest unit of ‘Primary Existence’, that when combined with itself (other units of the same essence) it can create all of the universe, past present and future, such that no new units of itself are created nor destroyed (nor needs to be created or destroyed).

To explain the concept better, let us look at the example of the elephant again. Whatever created the elephant already existed prior to its creation (to simplify the concept just think of the elephant as composed of atoms, protons, neutrons and electrons). All of these were already in existence (had the essence of Existence within them) that were put together in a hierarchical manner to create the elephant, when the elephant dies or ceases to exist, these same atoms exist after its demise. Nothing in respect of this essence was created nor destroyed before during or after the elephant. This same process applies to all things including the atoms I referred to in the above example.

So, if I take the example of the atom, atoms are created and destroyed, but their essence of Existence before during and after has not changed. i.e. the protons, neutrons, and electrons existed before during and after the creation and destruction of the atoms.

The same process applies to the quarks, electrons, light or any other subatomic particle or energy.

Let us redefine our 3D space and time in the following manner:-

They are global concepts, and are just the net aggregate sums of the dimensions of their constituent parts, i.e. if we look at a Volume of space it consists of Existence’s of volumes of its constituent parts. (This may seem confusing at first). Time is also a net aggregate of the times of these constituent parts. Energy and Matter can exist in these volumes, but if we say that ‘Real’ Space (‘Primary Space’) is actually the sub units of Energy, Matter, and Time rolled into one unit, then our Universe is just the constructs of ‘Real’ Space (‘ASpace’) in a null⁰space (Euclidean, what we normally call 3D space).

What are these ‘Primary Spaces’, and how do we distinguish them from null space?

Simply by saying they are enclosed volumes, and enclosed volumes are ‘Real’ and different to the rest of space. To make this distinction we say they have a Density (a ‘Primary Density’) this is the fifth Dimension of space.

[Note: - that points in space (Euclidean) are now just reference points that either ‘Exist’ or do not ‘Exist’, depending whether they are on/in a ‘Primary Space’ or not].

29. Quantized Space

Quantized space. Firstly what is space?

Space can be many things, but conceptually space is normally considered as empty, like how much space is inside the box? (Box here is like a cardboard box or container).

You can open the box and see that it is empty. But what is empty?

Empty normally means that nothing is there. But yet again what is nothing?

Nothing is considered a void, what is void?

Which; if you defined would probably use the word empty. Now am I playing with words?

The answer is yes and no depending on your level of understanding.

The real answer is the one that I wish it to be, so that you can better understand the ideas behind what I am trying to get across to the reader (which hopefully is you).

Back to the idea of space and nothingness.

Nothing is always defined by the user and their understanding of nothing.

So to give a few examples. If you ask an everyday person "is there something in the box?" and they open or look inside the box and it is empty they will say something like "there is nothing in the box". If you ask the same question to a physicist he will say something like "it is empty except for the air molecules." If then I say to them "imagine that the box contained a vacuum", they then may say that it is empty, because a vacuum is a space with the air removed and no atoms in it. (A true vacuum would be this).

You may now assume that the box is truly empty, but this would be wrong, because other things exist that can occupy the space in the box, I could try and list them but let us just look at light.

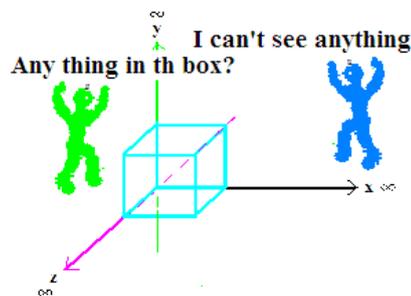
You see inside the box because light is reflected by the sides and moves in the space inside the box (to your eyes) the fact that there is light in the box means it is not truly empty. If there was no light and you could not see inside the box, the box would still not be empty, because it contains other things like cosmic rays, sub atomic particles and even things below that. It all depends on the level of nothingness you wish to convey.

True nothingness is absolute when there is nothing else that may be in the box (the bottom level where you cannot go beyond); anything that is considered above this level is not at the bottom and is not the true origin.

(See section 33 "What is the true origin of the universe?")

Effectively space cannot be defined inside a box without defining the box in the first place, (the sides, their sizes etc.), true space can only be defined by the existence of something to contrast against this space. (I use the term true space to distinguish something that is 'Real' from something that is abstract).

[Note: - Abstract⁰space, on its own, is abstract and does not exist].



I say space is quantized, because all existence can be defined by spaces that exist inside things that exist. It does not matter what size scale you decide to start with, this will always be true until you reach the bottom layer. At the bottom layer (and we are talking about volumes, similar to our boxes, but at smaller scales) there comes a point (not a mathematical point), when going any smaller in scale you would have to break the box (volume) so that space becomes abstract, i.e. no box to define it as 'Real' (no real box to contain this empty space). You can define smaller spaces by having smaller abstract boxes, but then everything becomes abstract and meaningless to 'Reality' of the 'Real' world.

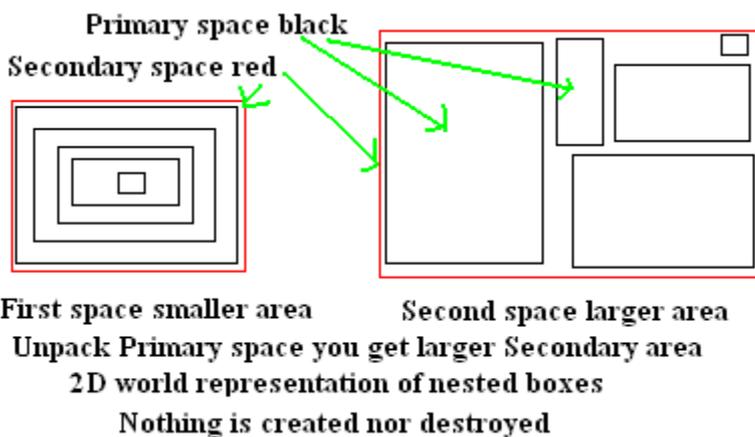
In mathematics, which is abstract in nature, these abstract boxes have only mathematical abstract meaning. Mathematics can be used to represent 'Reality', but it must be specified to the relevant model with its limitations, otherwise it will be extrapolated into the abstract and have no relevance to 'Reality'. As an example if I measure my strength, then I can say something like: - if I increased my strength twofold I could lift something twice as heavy, I could mathematically work this out, and it would have real meaning, if I could achieve this. If I mathematically extrapolated this into the abstract to say: - if I multiplied my strength 100 fold I could easily lift a ten ton truck, then this is meaningless in real terms because this is physically impossible, my ligaments would be torn from my

bones or my bones would merely break, and I could never achieve this (unless I used a mechanical device to help me).

You may say this is obvious and I am just being silly, but if a physicist extrapolates and says things like infinite density at the center of a black hole or singularity, why don't you just say they are being silly because things like that are totally abstract and meaningless in reality because they don't and can't exist. The mechanisms of the universe don't allow this to be so. Physicists and cosmologists don't know any mechanism to explain the universe without extrapolating into the abstract of mathematics, (except in my model, which has not been taken on board yet, it has natural limitations that do not allow infinite densities etc.).

In summary space is quantized and you can build the universe with these quantized spaces which have the essence of existence within them, similar to the box's existence. These spaces are multi-dimensional so that they can nest one inside the other, millions can nest inside the same 3D space to create all energy and matter depending on the constructs of these nested spaces. When one considers the universe as 3D it can expand from a big bang scenario becoming apparently bigger, but all that is happening is that it is unraveling (similar to boxes inside boxes, they all fit into one box (seems a small 3D volume) when you take out all the boxes, they occupy a massive 3D volume). The multidimensional spaces are rearranging themselves into new combinations.

The diagram below shows how a 2D world representation would look like.



Another analogy is to imagine the boxes are springy and you can squash them down like a flat pack, but given the chance they want to occupy as much space as they can on their own and spring back into boxes. Even if they have boxes inside them, they too want to spring open and occupy their own space. You can see from the example above that when gravity is greatest let us say like a black hole the boxes are all flat packed one inside the other, they have a high density and occupy a minimal amount of space. When they reach a critical density the boxes unpack themselves and spring open thereby escaping and expanding space around them. This expanded space is less dense than the black hole, so it escapes; in so doing it pushes other space away as well.

When you think of waves on their own they are abstract, but physical quantum packets can hold the waves (are the physical waves).

The packet can come in different sizes and shrinks and expands according to the wave packet, which is constructed from dark energy 'APEs'. These packets have their own wave characteristics individually and also have wave characteristics as groups (similar to a head of wheat that can wave on its own, but as groups the field also has wave characteristics).

In this way waves are just patterns of the underlying reality at different scales.

To clarify: - I am not a wave but I can wave, I manifest characteristics of waves, light is not just a wave, but manifests characteristics of waves (these are just patterns of the underlying 'Real' structures).

Everything has an underlying structure that is 'Real', and depending on the scale (and the detail you wish to look at, the granularity if you wish to call it) it will have wave characteristics and particle characteristics that will change, and which can be manipulated mathematically. This mathematics will

only hold true to the scale or detail at which you are observing (the minpoynt being the smallest scale or granularity, at which, if you go lower will follow different mathematical formulae or rules). In other words you cannot extrapolate mathematically to either extremes to infinitesimally small or infinity without taking note of the 'Real' structure of this 'Reality'. See section 38 on center of gravity that does not have a 'Real' point that actually 'Exists' at this center).

[Another Note: - Although all of space is quantized at the local level these quantized spaces create the total Global space which gives rise to the classical space that looks continuous at the large scales. You have to look at the character of the pieces of the puzzle as well as the total picture of the puzzle.

Section 70 Models of Reality. How you might create one.]

30. Clarification of Infinity

Before we go further I must clarify infinity. I mentioned indefinitely earlier where I implied you cannot carry on to infinity halving something.

Infinity implies you can go on forever and you never come to an end. Again this is a concept and may not be true in 'Reality'. So where can we and where can we not use the term infinity?

You cannot apply infinity to counting anything that has more than one sub unit.

In other words you cannot say there is an infinite (infinity) number of elephants (or stars) in the Universe [infinite number of atoms or sub atomic particles]. This is because if a system has an infinite number of let us say sub atomic particles (let us also say a sub atomic particle has 2 sub units) then the total number of sub units in this system would be 2 times infinity, this is contrary to the term infinity, you cannot have twice infinity or any number of infinities in an infinite number of anything. The term infinite can only apply to a sub unit that cannot be divided or to a very large number that you cannot comprehend. If on the other hand you are not counting actual things, but counting a process, then in theory you can say something like you can go around and around a circle and never come to an end. Again in 'Reality' what is going around and around and what is the circle constructed from? will determine whether you can actually go around to infinity.

30.1 So you can only have one infinity in the Universe when it comes to actually counting 'Real' things (Minimal Volumes, Minpoynts).

29.2 But you can theoretically have many processes that go on infinitely (Infinite Process).
[Note the construction].

31. GOD's set of numbers (mathematics)

The 'Real' world (Universe) is constructed with 'Real' (they exist) subunits of Existence. So the Grand Original Designer's (GOD's) set of numbers is only the Natural counting numbers that can count the number of these basic subunits of space [of the closed finite universe]. The term infinity does not apply to counting basic subunits in this set. The basic subunit of space is a unit of space (that has at least 5 dimensions [7]) that can explain all of space, time, energy, matter, the speed of light c , gravity, wave particle duality, the expansion and contraction of the cosmos and any and all other aspects of our Universe and all its mechanisms, [including the meaning and mechanism of "the mustard seed is greater than the Kingdom of Heaven"].

In this set there is no such thing as a negative number, i.e. there is no negative Universe or a part of it. These subunits are all positive (they 'Exist'). Fractions can only apply to proportions of the total or subsets of the whole, but cannot apply to individual basic subunits, i.e. basic subunits of space are quantized, non-divisible, if you could subdivide this basic subunit it would cease to have characteristics that would apply to our Universe.

Absolute zero (not 0 degrees Kelvin) is the absence of all space (no basic subunits of space). Normal zero is a relative zero where one can count relative to the real number set of mathematics, in which one can have negative numbers, fractions, irrational numbers etc. These are all hypothetical concepts and refer to an infinite number of possible reference points of space (not all of which are possible in the 'Real' world).

Infinity can only apply to a process in or within this set, you can describe a process using a set number of basic subunits, that process can repeat (in theory at least) infinitely.

You can think of a negative as a process or procedure, and not the sum of two integers. So $5 + (-4) = 1$ implies that you are summing 5 and (-4) and that both can exist as two separate 'Real' things and the result is 1, so following the same example you can have $(-4) - 5 = -9$ creating an existence of -9. In the 'Real' world there is no such thing as (-4) so removing another 5 to give (-9), is only a hypothetical relative term. It becomes clearer if you were counting apples, you cannot have -9 apples (only if you owe someone 9 real apples), but this is only true or valid if there are 9 real apples that exist that you can owe in reality, most people will be saying of course I can find 9 apples, so my argument seems meaningless, but replace 9 with 10^{99} apples, now the calculation has no basis in reality. If on the other hand you think of negatives in terms of a process, then $5 + - (4) = 1$ implies that you have 5 and you remove 4 leaving 1, both 5 and 4 are positive and can exist. Now $-(4) - (5) = -9$ implies you are trying to apply a process of removing +9 from some other real total. This then becomes either possible or not possible depending on whether there are at least 9 of something that exists for you to remove from. If there is, then the calculation has a basis in 'Reality', if not then the calculation becomes hypothetical and cannot exist in 'Reality'.

Now it may look to some people that I am talking a load of rubbish or trying to rewrite mathematics in some silly way. This is not my purpose, what I am trying to say is that certain calculations have no reality attached to them. For example I can calculate (because mathematics allows me to) and build a negative house in which my mirror image can live in, but this is and never will be a possibility, none of the proceeding is 'Real' or ever could or will be. In the same way an electron and positron do not annihilate completely (leaving this Universe) and re-create themselves from nothing.

32. Clarification of the 'Inversion of Space'

At this point I would like to clarify the 'Inversion of Space', which is the concept that at some point the (3D) volume of a ³space (not Null Space, but actual space, 'ASpace') increases instead of decreases when you halve it or split it. In other words you cannot indefinitely keep halving 'Real' space ('ASpace'); it starts to occupy larger (3D) volumes of space, i.e. it inverts its properties. One half of a volume can easily be greater than the original whole (volume). It does not have to be halves, any space that gets greater when split. Conversely putting larger volumes together to get smaller volumes also applies, and is just the reverse process. The process applies to 'Secondary/Tertiary Volumes' which our Universe is a part of. The actual mechanism that can produce this will be explained later (section 35 "Simplified restricted model ('Primary Spaces')", 37 "'Secondary Space', has wave characteristics", 40 "Simple construction & mechanism of the Universe" & ...).

33. What is the true origin of the Universe?

What is the true origin of the universe?

To answer this question let me go back to my school days. When I was learning mathematics in my new school, I thought to myself: let me start afresh (because I never got around to learning all my times tables, I used to work them out every time).

I thought to myself; all I need to do is remember all the formulas and I will be able to manipulate and understand mathematics, or at least if I knew the basics I would be able to work out the rest (like my times tables).

My first task was to ask what is the formula of a straight line?

The answer was $y = x$ (now don't worry if you don't understand mathematics, it is not necessary to do so, and it will not be advanced, other than in the concepts).

Brilliant I thought, but then suddenly the teacher says it can be summarised as $y = mx + c$. What?

Where did the m come from and the c? And what does that mean? The m is the gradient or slope and the c is a constant.

All of a sudden I had more questions than answers, but, so as to not go down every thought I had, the basic principle was that you can have any value for m and any value for c .

Let us simplify the concept that I wish to convey, and assume the value of m is always one, this way $y = x + c$. What is c ? If I were to ask a group of mathematicians to define a line by putting in a value for c , I would get different answers from each of them, (one or two may happen to pick the same line). If I were to say “let that line represent something real like a pole or matchstick”, the lines would all be the same length.

All the lines would be the same in construction of length and would all be straight lines, so why are their formulas different?

The answer is that each mathematician decided on a different point of origin. This origin is where the mathematician decided was nought, zero, nothing (nothingness). $[0,0,0]$.

From this origin he sees his line, so naturally he will see his line differently from his fellow mathematicians.

Now the true question is who is right?

They all are, they claim and agree together, because they are all mathematicians. But if I now say to them I want one answer to the real problem of where my real pole is? (use matchstick if you like).

They may start to disagree, and they will not find the answer until they all agree on the same origin point and its relationship to the real pole or matchstick.

Now you may ask why have I given you this long winded example?

The reason is that the mathematicians may all agree on the same origin point and give the same answer, but this does not mean that they have found the true origin. Mathematicians can have an origin, and place a line below this, so some of the line is positive and some of the line is negative, or all positive or all negative. It makes no difference to them, they still understand what is going on, but in the ‘Real’ world of existence the pole is a pole, all positive in existence, none of it is negative (unless you are going to find faults in my pole, and that kind of negative is different in meaning to the one I am referring to). The only true answer to the line representing the pole is when you start at the bottom of the pole, its origin, and measure the length from this origin.

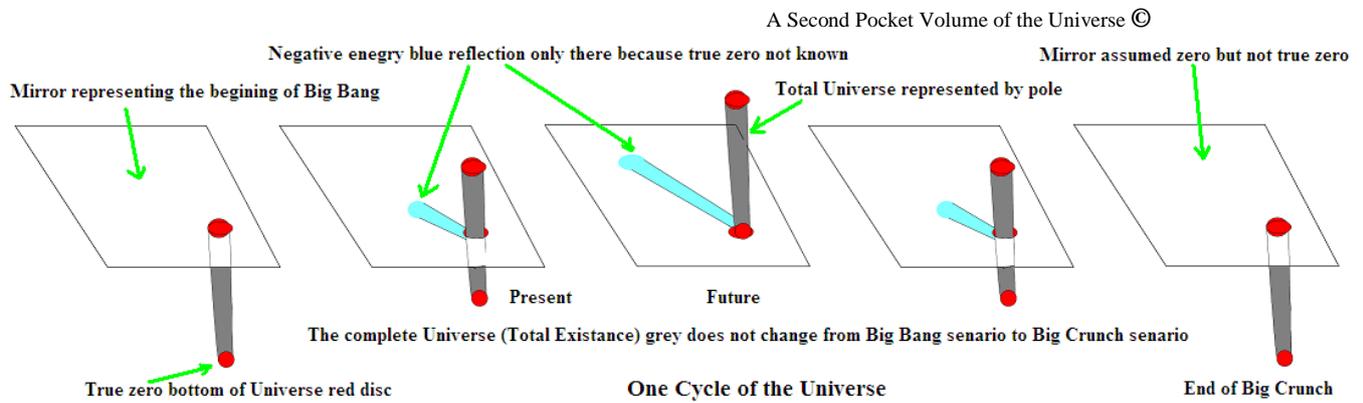
This is when c is eliminated and is zero. Any value of c that is not zero is not at the origin of the pole.

In summary when you go looking for the origin of the universe there can be no values equivalent to c (in the example of a straight line) if you have any negative values in your answers you are not truly at the bottom level, or at the true origin.

This does not make your answer invalid from a mathematicians point of view, so you can have a big bang scenario that appears from nothing and creates a positive universe and in so doing creates at the same time a negative energy in the same universe equal and opposite to the universe you have created, so everything balances in a mathematical sense. But this is not the absolute true answer, the true answer is similar to the pole that existed all the time, the pole just moves upwards from below your origin where you defined your pole as being below your origin (made it negative, but you assumed was zero), i.e. your zero was the top of the pole, below the origin, and as it moved upwards you created your universe from your nothingness, and assumed a mirror image negativeness at your origin. You could construct a real representation of this with a real pole and a mirror with a hole in it. When the top of the pole is level with the mirror you see nothing in the mirror, as you push the pole through the hole you see the real pole and at the same time you see the reflection of the pole in the mirror representing your negative universe to balance the positive.

This representation of the universe is not the true origin of the universe; it is a mathematician’s representation that is abstract.

Only when you find the true zero bottom level will you be able to find the true origin of the universe. Nothing in the universe is truly negative (in terms of ‘Existence’), only your representation from your defined zero, which is not truly zero, similar to your empty box.



Now back to the real question what is the origin of the universe?

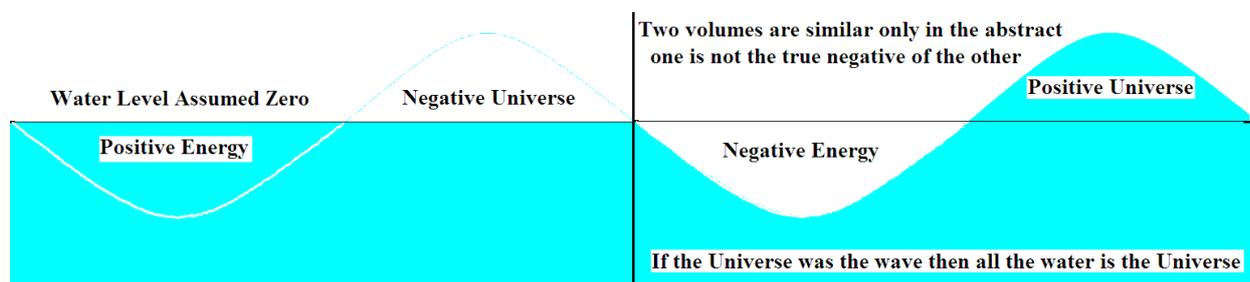
Again you must understand the question, and the answer lies in understanding the principles behind the two riddles I posed and answered earlier namely "What came first the chicken or the egg?" And "What would happen if an unstoppable force met an immovable object?"

If the answer to the origin of the universe is cyclic, like riddle one, then the origin is relative, when you decide on an origin. This is because it is a process. If you decide the origin is to do with how this process makes the universe, then you have to look at the mechanism of the universe and what the constituents are that run this process. The answer then is not just a process but one of "what is, is" and "what is not, is not", similar to riddle two. When you combine both these principles then there is only one absolute true answer.

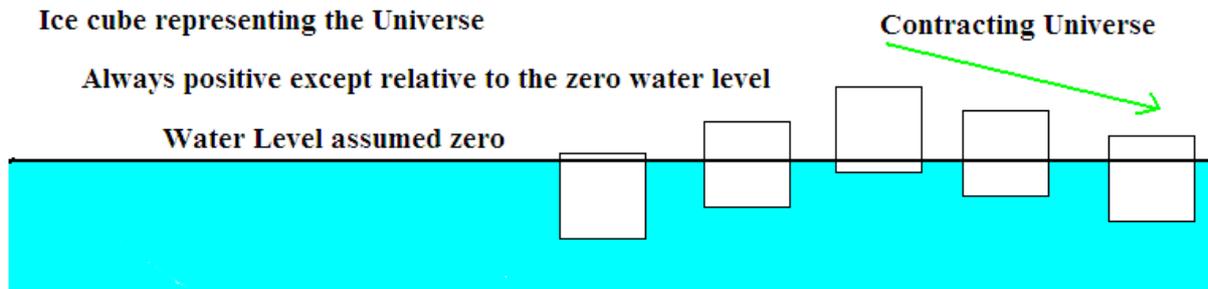
When you understand the true nature and interrelationship of all the dimensions together, then the answer is: The Universe is ONE, it exists in its entirety all the time, is cyclic in its nature, just changing its makeup, without creating or destroying any of its basic constituents, which are all the same, at the lowest bottom level (the origin in our example, where nothing can be negative). The whole and nothing but the whole.

Another way of looking at it is like a water wave, and you see things from the general reference of the surface of the water (your zero level). As the wave is created you get an increasing volume of water above this level and a corresponding negative volume of nothingness below the level, so it appears that everything balances out.

But you are not comparing like with like, volume above by volume below, everything is equal, but the two volumes are not of the same thing (one is the volume of water and the other is an empty volume that is equal to the water that occupied it). What you should be looking at is the water itself.



A better way is to represent the Universe as an ice cube. This way as the ice cube bobs up and down above or below the surface nothing of the universe (the ice cube) is created or destroyed. It is just displaced, no negatives. So if you push the ice cube below the level of the water and let go suddenly, and watch everything in slow motion, you will see the ice cube accelerate above the water apparently increasing in size, then it will decelerate but never totally go out above the water level. It will then accelerate in the opposite direction and then decelerate as it sinks further downwards (apparently shrinking in size, from the water levels perspective), but it will never totally go below the water level. This way there is opposing forces that keep it bobbing up and down forever. This obviously does not happen with ice cubes, but the universe does not have the equivalent of water surrounding it, but contains all the components to create opposing forces within itself.



You could even use the floating ice cubes to represent multiverses where each ice cube appears independent to each other, but I believe that any multiverse scenario is in fact in the one cube, so the cube is the one Universe again. No other cubes or water necessary to explain the one.

34. 'Minimal Volumes', 'Minpoynts' and Scales

Before we move onto the simplified model, I would like to explain minimal volumes or 'minpoynts'. These are minimal volumes that something can or cannot 'Exist' within. They are scale dependent, so the scale must be specified. E.g. If one is looking at molecular scales, a 'minpoynt' can be set at a minimal volume of say 5 atomic diameters (I picked this because it is likely to be excessive for my example, (dependent on the definition of atomic diameter)). In this example the probability of finding an electron within this space (if the nucleus of the atom was at its center) would be 100% (not less). Any electron associated with this atom will always be within this range (³space). In other words the electron distribution cloud does not go to infinity with decreasing probability. It has a fixed maximum that it never passes, unless it leaves the atom completely, i.e. it leaves its orbit, and therefore it is not associated with it.

Another example. A black hole may have a 'minpoynt' the size of the moon, in the galactic scales, and different rules (mathematics) may apply within the 'minpoynt' range that are different to the general rules for galaxies, e.g. Gravity pushes outward away from the center of mass inside the 'minpoynt' range, whereas it pulls towards the center of mass outside this range. What is important to note is that the mathematics or rules may change within the 'minpoynt' with reference to the rest of the volume (dependent on the size of the 'minpoynt' that you choose for your scales, or is relevant for your scale).

A simplified example:- If we were explaining boxing we could define a 'minpoynt' as the volume of the range of the boxer's arms in relation to his body, different rules would apply to your defense when you were inside or outside this 'minpoynt'. Obviously you would not normally define things in this way, but this is just an example of how the rules change inside the 'minpoynt' volume. You don't have to duck when he punches if you are outside his 'minpoynt', but you better do something when you are inside his 'minpoynt' if you don't want your head hit.

35. Simplified restricted model ('Primary Spaces')

Back to my model. (Also section 52 "The whole Universe is a "soup" of "vacuum pumps" of various sizes").

To simplify my model I will explain only the restricted model [which is a sub set of the more complicated model].

In the restricted model, the 'Primary spaces' are not the same as in the unrestricted model.

I do this simplifying by fixing as many parameters as possible, as in the following example.

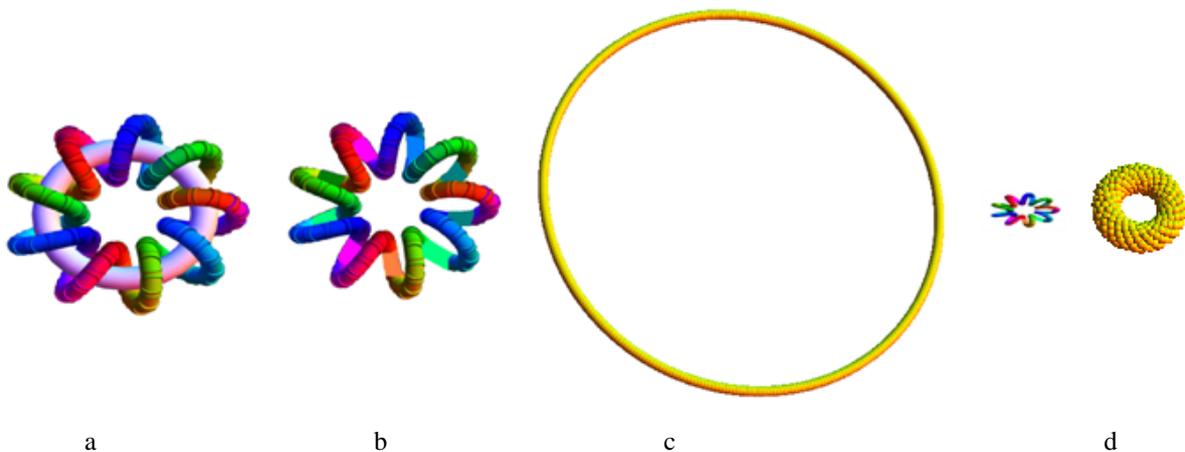
These 'Primary Spaces' have a certain fixed topology ('Primary shape'), they have a fixed 'Primary ¹Length', 'Primary ¹Width', 'Primary ¹Height', 'Primary ¹Time' (the essence of Existence), and 'Primary ¹Density', i.e. fixed volume of Existence. This unit I call the 'APE'.

There is also a fixed Prime number of these ‘Primary Spaces’ (‘APEs’) in the (known) Universe (in the order of 10^{85} , not infinity). These ‘Primary Spaces’ create ‘Secondary²volumes’ of space (moving ‘APEs’), in ‘Secondary²Time’ (by the process of ‘TwistingSpiralation’) [although these ‘APEs’ are moving, they are moving around an imaginary center⁰ point, i.e. would normally be thought of as static at that point]. These ‘Secondary Volumes’ of space are time dependent and the ‘Primary surfaces’ move at a fixed ‘Primary speed’ (faster than the speed of light, around an imaginary point) to create ‘secondary boundaries’, surfaces and volumes.

[Note: - ‘Real’¹ points in space are not continuous in the Euclidean space but are grouped together, and cannot move independently from each other within the ‘Primary or Secondary Space’].

For you to understand the previous paragraph, you have to see the shape in action. What is this shape? It is a topological torus, [see my first book, to see how I got here], and I will give it some parameters to show the power of the model [not to represent actual dimensions of the ‘Primary/Secondary Spaces’].

36. Picture of thread



Imagine a thread wrapped around a hula hoop and the two ends are joined together (a), now imagine the hula hoop has disappeared, what is left is the coiled thread (b). This is the topological shape of the ‘Primary¹Volume of Space’ (the thread itself). Now imagine the thread uncoiling at a fixed speed, it will increase in its (main) loop circumference to a maximum circumference, the length of the thread (c). The thread itself has a fixed diameter (cross section of thread) (2 dimensions) and a fixed length its circumference (3rd dimension) therefore of a fixed ‘Primary Volume’, it ‘Exists’, therefore it will have a fixed ‘Primary¹Time’ (the essence of Existence) of one (4th Dimension). It has a fixed ‘Primary¹Density’ (5th Dimension). To achieve the following it also has a fixed speed (6th Dimension) [Speed has to be clarified at this level]. Once it reaches its maximum diameter (3 dimensions) it will continue coiling but will coil in the opposite direction shrinking its loop circumference until it reaches a minimum diameter (3 dimensions) (d). It can still keep on coiling until it expands again. The above movement is accompanied by a turning (like a wheel) and a spinning (like a coin flicked) movement in Euclidean space (to achieve the parameter of a constant fixed speed of all the ‘Primary surface’). [Note: - in the process of expanding and contracting, in this enveloped space, it changes its apparent density (‘Secondary²Density’)]. The process is called ‘TwistingSpiralation’. (Pictures in section 52).

[I eventually want to create a little movie of this process and create a link here].

If you could stand on this surface then you would equally be looking out into space and into the center of the sphere, in fact in all directions, on and in the shell (in ‘Secondary²Time’).

The ‘Secondary²Volume’ of space that is created, ends up spheroid in nature, but any point on the ‘Primary Surface’ has occupied points in and on the ‘Primary Shell’ (with time it can occupy all the points on and in the shell).

37. 'Secondary Space', has wave characteristics

(See also section 52 "The whole Universe is a "soup" of "vacuum pumps" of various sizes").

In other words the 'Secondary ²Volume' of space expands and contracts around an imaginary center (⁰point) in Euclidean space. This 'Secondary ²Space' has different 'Secondary ²dimensions' that now have wave characteristics, but also have a maximum and a minimum (no infinities or zeroes).

While we are here and have said it has a fixed 'Primary ¹Density' (implying the 'Primary ¹mass' of 'Real Space' itself is fixed) we can also fix its 'Primary ¹Energy' and say this is also fixed.

[Note: - that although the 'Primary ¹Dimensions' are constant the 'Secondary ²Dimensions' are not, and that the density of 'Secondary ²Space' (volume) is different to its primary, also the force per unit area changes with time, (across its cross section)].

This is all achieved by the change of the overall curvature of 'Primary Space' itself.

[Note: - Einstein's space time is also a net aggregate system, which points down to the center of mass (⁰point) infinitely; whereas 'Primary Space' curvature is 6D and curves back out again].

38. Center of Gravity; is it an illusion?

Let us get to the point, and the concepts. We talk about laws of physics but we generalise and make laws that apply to our models to represent our universe. We simplify our mathematics and say things like: - gravity acts towards the center of mass, so we can simplify this by saying that gravity (and mass) acts at the center of gravity at that point, but in 'Reality' this point does not 'Exist' and is only a reference. If the object was a sphere then this would be OK for general use, but let us say it was a long rod the center of gravity (if it was lying down on a seesaw) would be above the fulcrum (the mid center of the rod). Gravity does not actually emanate or terminate from here (just the net aggregate effect appears at this point). If we cut this rod in half, suddenly 2 new points appear, each being the center of gravity of each half, nowhere near the original point.

In other words mathematics simplifying things in terms of points, only applies to net aggregate models, and not to the fine structure of space.

Let us live dangerously and go to quantum physics. We say things like: - objects (particles) (at sub atomic levels at least) can be in more than one point in space at the same time, and all can be calculated by probabilities (which includes infinities), if you determine its position you cannot determine its energy and vice versa.

If you look at my model, each 'Primary ¹Space' (lots of ¹points) 'Exist' at multiple points simultaneously, but all probabilities can also be calculated, but no infinities are required (as each 'Primary Space' has a maximum and a minimum). If you determine its position, it contracts around the imaginary ⁰point (smaller 'Secondary ²Volume'), think of it like condensing its energy around that imaginary ⁰point (more matter like, smaller volume), otherwise it 'Exists' at multiple ¹points, expanding and contracting in 'Secondary ²Time' (larger 'Secondary ²Volume'), (more energy like), i.e. you determine its energy, but not its position as one point, because it 'Exists' at multiple points simultaneously, you can however determine the positions of its multiple points (at least in theory).

[Note: - This is not the same as saying it can be everywhere and anywhere with a certain probability. It is saying it can only be somewhere and only somewhere with 100% probability].

The Universe, Dark Energy, Gravity, Light, Electrons, in fact all other forms of energy and matter, are just mixtures of these 'Primary ¹Spaces' (that create 'Secondary ²Spaces' and 'Tertiary ³Spaces' in 'ASpace').

39. Everything is structured in layers or levels

Everything is structured in layers or levels. Each level has its own building blocks, bricks or units. Each block is made from blocks from lower levels that create the new block at the higher level, and this is repeated as you go up the levels to greater and greater complexity.

The new blocks bring with them new attributes that were not present in the lower levels which then creates even more complexity. This is similar to the bricks in buildings; the buildings are more complex and have attributes that are more than just the bricks that build them. E.g. The attributes of a room in a building, cannot be obtained by looking at a brick. Many bricks have to be arranged in a certain pattern to create a room, which only then will give the attributes of the room.

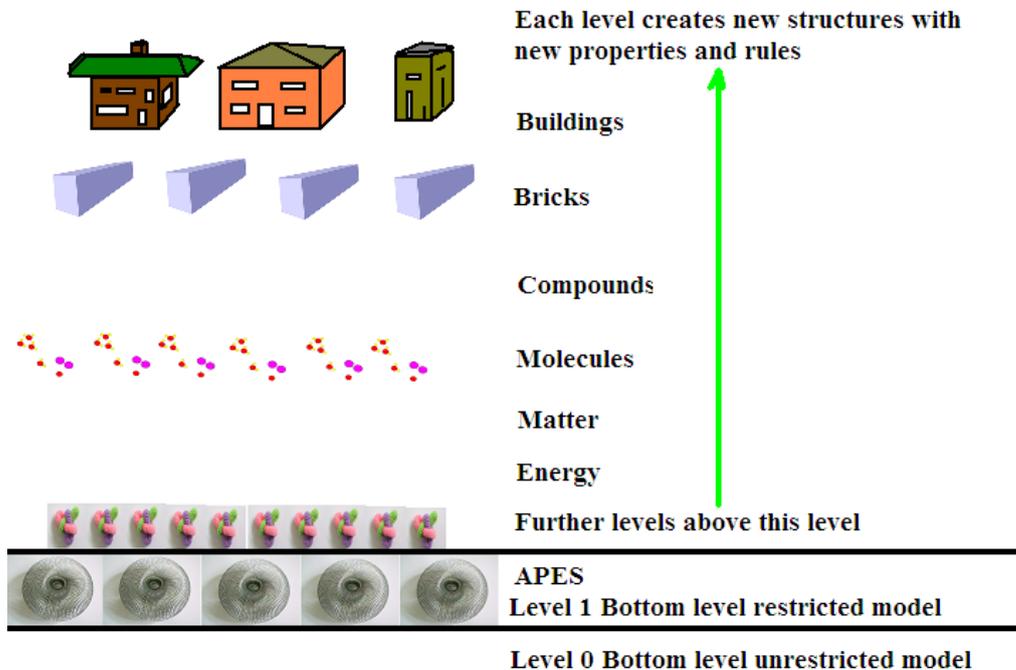
These attributes do not exist before the pattern is made. The pattern is not in the brick beforehand, even though the building is made of bricks.

Using Universal Science  and the law of non-contradiction each layer can be built up. So Energy is built up from structures lower down, then light and subatomic particles then up through the spectrum of matter.

Each level consisting of patterns of these structures (which are made from their own building blocks).

So molecules are made from atoms, but they are not in isolation, these molecules live side by side with the structures of lower levels, and they interact with them. E.g. Energy is a structure which is in a level lower down but it still interacts with molecules. These molecules then combine to create giant structures including living cells. Moving on up various levels to the level of consciousness, this too is a pattern, and these patterns combine with patterns of emotions and other cerebral patterns of various concepts to create language. Simultaneously to these, other structures are created with societies and other social groups creating further belief systems and religions.

None of these exist in isolation, remember example of energy and molecules. All must have the essence of Existence within them, in the right patterns. When we speak about one or the other we are just ignoring the details for our convenience or our ignorance of the other in relation to it.



[Note: - Level 0 is not explored in this eBook, Level 1 is the bottom level of this eBook the 'APE'].

This next paragraph does not in any way mean to diminish your belief systems. If your belief system had in it the belief of a God "of grass" (I do mean grass). Does that mean that there is a God of grass?

The concept of a God of grass does exist, because you can define it as such. What does the God of grass mean?

It would mean anything that affects grass, how it grows, the earth that affects the roots, water, the sun, the minerals, shade, wind, etc. The God of grass would encompass and affect all these things, to the benefit or detriment of the grass. You can add other powers to this God, but generally this God is all powerful with respect to grass. You do not need to know the details of this grass God to believe in this God, all you need is to have faith in this God. Now whether you believe you can influence this God and to what effect is another thing (maybe in the past you turned the soil over and discovered that this "the grass God" liked and helped the grass to flourish).

Not to go into the details of each belief system means that you can believe in any number of Gods using this system. If you believe in just one God and that this God is everywhere inside of us and all around us, is almighty and has the power to control anything in the Universe then this God also exists. God is the whole Universe and has the power of anything that is possible in this Universe. You do not know all God's power, because you are ignorant of all his powers. This definition of God does not diminish your belief system, because as mentioned before as you go up the levels, the complexity always increases, therefore it does not preclude that God is just simple systems, but may have powers and attributes that these systems do not show at lower levels. This does not also mean that your God actually has the powers or attributes that you personally give.

As things are built up from lower levels, belief systems that have many Gods is just a sub system of the belief system of just one God, they then become specialised powers of the one God e.g. God still has power over of the grass (in the lower system "the grass God"). So belief in one God is a higher level belief system than that of many Gods. As this book is not one of theology it is sufficient to say that theology is a high level system of complex structures. You must always remember that these systems still do not exist on their own, but are still a part of the whole including the lower system of structures. We just chose to ignore or do not know the interactions or significance with these lower systems, i.e. we are also a part of God. Enough said.

Space is never flat at the lowest scale; it only appears flat because you are ignoring the details. Like the table top, looks flat but at the molecular level it is rough. It can be considered flat in a local way if it has an overall smoothness to it, in the sense that it has a similar granularity over a large area and does not change in its density.

Gravitational waves move through this space and change dependent on the mix of granularity and density of the space that it travels through.

A wave is not a thing in itself; it is just a pattern, a pattern of a certain type and character in a medium (including light). Just because you can calculate how waves interact with each other does not mean that they exist on their own. If you throw a stone in a pond it will form a wave, the wave only exists because of the water, if there was no water, the wave would not exist. The ripples will travel over the surface of the pond to the sides, if you throw a second stone at a distance from the first the same thing will happen. The waves will interact with each other because they are connected to each other through the water. Everything is connected directly or indirectly to everything else. Although everything is connected to everything else does not mean that things cannot happen independently. If they are sufficiently separated from one another the two events will be independent until such time that the knock on effect of one event will affect the other. You need to understand the meaning of time.

40. Simple construction & mechanism of the Universe

Now let us construct a simple model of the Universe using these 'Primary ¹Spaces'.

Let us say that each 'Primary ¹Space' has the following parameters

Core ¹ diameter	$\approx 6.63\text{E}-34 \text{ m}$	$(6.63 \times 10^{-34} \text{ m})$
Core ¹ Length	$\approx 6.63\text{E}-2 \text{ m}$	$(6.63 \times 10^{-2} \text{ m})$
'Primary ¹ Density'	$\approx 4.14\text{E}+38 \text{ Kg/m}^3$	$(4.14 \times 10^{38} \text{ Kg/m}^3)$
Therefore 'Primary ¹ Volume'	$\approx 2.29 \text{ E}-68 \text{ m}^3$	$(2.29 \times 10^{-68} \text{ m}^3)$
'Primary ¹ Mass' equivalent	$\approx 4.49\text{E}-31\text{Kg}$	$(4.49 \times 10^{-31} \text{ Kg})$

If there were about 10^{85} 'Primary ¹Spaces' (I used 5.28×10^{84} for calculations) then the maximum 'Primary ¹Volume' of the known Universe would be = $1.08\text{E}+16 \text{ m}^3$ ($1.08 \times 10^{16} \text{ m}^3$) ($1.21\text{E}+17 \text{ m}^3$ smaller than the size of the moon) and the maximum density of space would be $4.14\text{E}+38 \text{ Kg /m}^3$ ($4.14 \times 10^{38} \text{ Kg/m}^3$) ($1.96\text{E}+37 \text{ Kg/m}^3$) (not infinite density).

[Note: - black holes don't have infinite density, they just unravel matter back into individual 'Primary Spaces' (Dark energy), which escapes easily, because its event horizon is nowhere near the event horizon of the much heavier and denser light].

If all these 'Primary ¹Spaces' were all condensed into one 'Secondary ²Space', they would occupy a 'Secondary ²Space' that was smaller than the volume of the moon (The whole known Universe and beyond would be compressed into this space).

If each 'Primary ¹volume' was allowed to expand to its maximum (in 'Secondary ²Space') it would then occupy a 'Secondary ²Volume' of $1.05\text{E}-6 \text{ m}^3$ ($1.05 \times 10^{-6} \text{ m}^3$), again if there were the same number of 'Primary ¹Spaces' of the order of 10^{85} then the maximum volume of the known Universe would then be $1.05\text{E}+79 \text{ m}^3$ ($1.05 \times 10^{79} \text{ m}^3$), larger than the space of the known Universe today.

[Note: - no new 'Primary ¹Spaces' have left or entered into this Universe at any time, past, present or future].

Therefore you can see how the Universe can grow from a small volume to its current size, without creating any more 'Primary ¹Spaces' within it (or losing any).

Let us say that the majority of intergalactic space consists of free 'Primary ¹Spaces' (Dark energy), they will expand and contract pushing each other apart.

[Note: - they are in fact pulling each other together at the same time]. You can see this if you look at the coiling movement in isolation. Think of it as a smoke ring, coiling inwards as it moves forward, it acts like a miniscule vacuum cleaner sucking in at one end and blowing out at the other, but because it is contracting and expanding, it is increasing and decreasing the force per unit area (the same energy acting on varying cross sectional areas).

If this is all that happened at this stage then you would just get a uniform spread of space, but without going into detail they can lock into each other (in triplets) in such a way that they bind stereo topologically, thus restricting their expansion (on a more permanent basis).

[Note:- their intrinsic energy is now triple, and their total cross section area is also restricted, so the force per unit area is also increased, they occupy a smaller 'Secondary ²Volume', so the pulling and pushing is greater for the triplet than the individuals].

PICTURE (below) of singlet and triplet, note that they are not to scale but just topological structures

41. Picture of Singlet and Triplet APes



Note: - this is the most important structure and is the basis of Chirality, the 'Inversion of ³Space', Gravity, Wave Particle duality (the structure of Light), and the fine structure of matter. [Also Flow concentrator].

Note: - that they align in such a way that they capture their tail loops and restrict expansion. They also align their free end loops at 90 degrees in the x, y, and z planes. (EM planes).

In this case, the smaller triplets (more dense more powerful) would clump together pulling each other and pushing the larger individuals out.

42. Gravity

Following from the above. (Also section 72 “Curvature of space” & section 75 “Extra information”).

In other words Gravity is just the net aggregate effect (amorphous mix) of this pushing and pulling force between different densities and combinations of these volumes.

[Note: - nothing is actually pulled to the center of gravity and stays there; volumes are just squeezed towards the center increasing their density, but are pushed out again decreasing their density]

You will see that these spaces actually pass through each other in ‘Secondary²Space’.

If you did not notice it earlier, space is also twisted first to the right (clockwise) then to the left (anticlockwise) by the same ‘Primary¹Space’. If on the other hand the expansion is restricted, so that it cannot flip over to the opposite twist, it fixes the rotation, and in the case of the triplets you get Chiral properties. These Chiral structures are further combined to create light, quarks, electrons and other matter. A Photon of Light can be thought of as a triplet or complex triplet, because it has three loops at right angles, the loops have the ability to create the EM fields and movement.

[I have not attempted to create larger structures at this moment, as there will be many, but as the triplets are formed from loops, so too each loop of the triplet may combine to form another triplet on each loop, this can get very complex, and I do not have sufficient information or the resources to pursue this line of investigation, so that the correct structures can be found for each of the sub atomic particles etc.].

The ratio to pull and push is most important. Matter pulls and pushes stronger but over shorter distances. Energy pulls and pushes weaker but over larger distances. A small bit of matter will pull a lot of energy towards it. A large amount of energy will push a small bit of matter. Matter pulls matter together. Energy pushes energy away from each other.

The ratio of pull to push changes with time (cyclic) and changes with size (cyclic). The ratio to the inside versus the outside is what makes this possible. Things are squashed small but pushed large. When inside they are squashed, when outside they are pushed. This also depends whether the unit squashing or pushing is contracting or expanding.

[Remember it is also twisting one way then the other].

The intrinsic energy that is applied is the same, whether pulling or pushing, but it is applied to varying volumes; simplified as the internal or external surface area that this energy is applied to. The amount of energy applied to the surface is proportional to the ‘Primary¹Volume’ of the ‘APE’ which is fixed, only the internal and external surface areas change, therefore the forces change not only in time but also in surface area and volume.

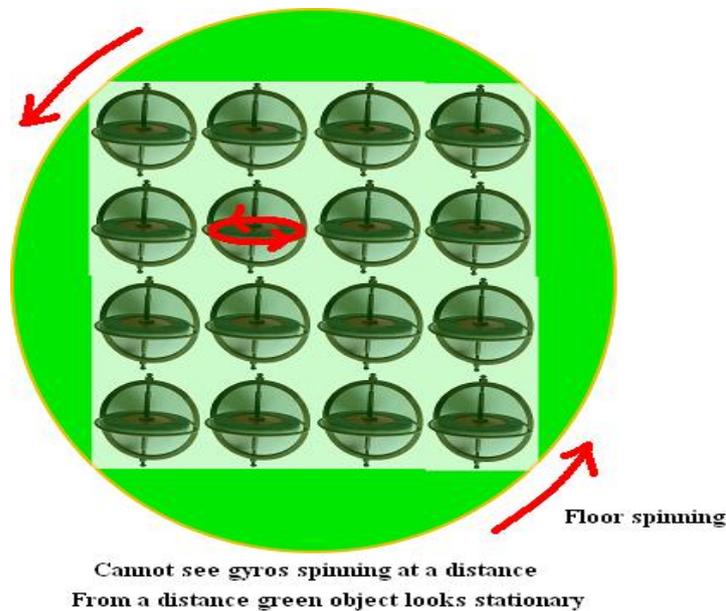
Very important Note: - When the hole in the middle gets smaller than the width of the ‘APE’, it no longer can pull anything in towards it, but all the energy is applied to the outside, thereby only repulsion occurs at the distance of the external surface. This being at distances in the region of the volume of the ‘APE’ when it is most contracted.

This is a part of the strong (repulsive) force. All other forces the pulling and pushing of charges occur above this level and are therefore weaker.

Matter is just a container of energy and can hold differing amounts of energy in the same container, similar to a room of balloons. The room stays the same size, but can contain different numbers of balloons. Matter can come in different sizes also, so you have the same amount of energy in two different size containers. In this way you can have different densities of energy and different densities of matter.

Although you don't normally think of energy made of any substance, it is contained within a structure and can be considered to have an ethereal substance. The actual container of matter is not ultimately made of a different substance to the substance of energy, matter is more like a clump of energy, similar to a clump of soap bubbles in air, you can get individual bubbles or clumped together bubbles (groups of bubbles) thereby you can have different densities of bubbles, but you can also have different size bubbles. So in this way you can have the same size clumps with a different amount of bubbles or different size clumps with the same number of bubbles, again similar to matter and energy.

Matter and energy also have another property that you do not normally see, and that is they are in constant motion, even when you consider them stationary. Stationary is merely that they move about in synchronisation with your frame of reference, and also with their other relative parts. This is a little bit more difficult to imagine, so imagine it similar to a spinning top (or gyro). The spinning top can stay in the same position and appear not to be moving with reference to yourself but you can see it spinning. Now imagine a group of spinning tops all doing the same thing, again you can see them all spinning, but if you go far enough away from them so you cannot see them spinning; you will only notice the positions of the tops as a group. Now if the group were on a giant disc on the floor and the floor began to spin, you would then see the whole group spinning just like the individual top you saw spinning at the beginning.

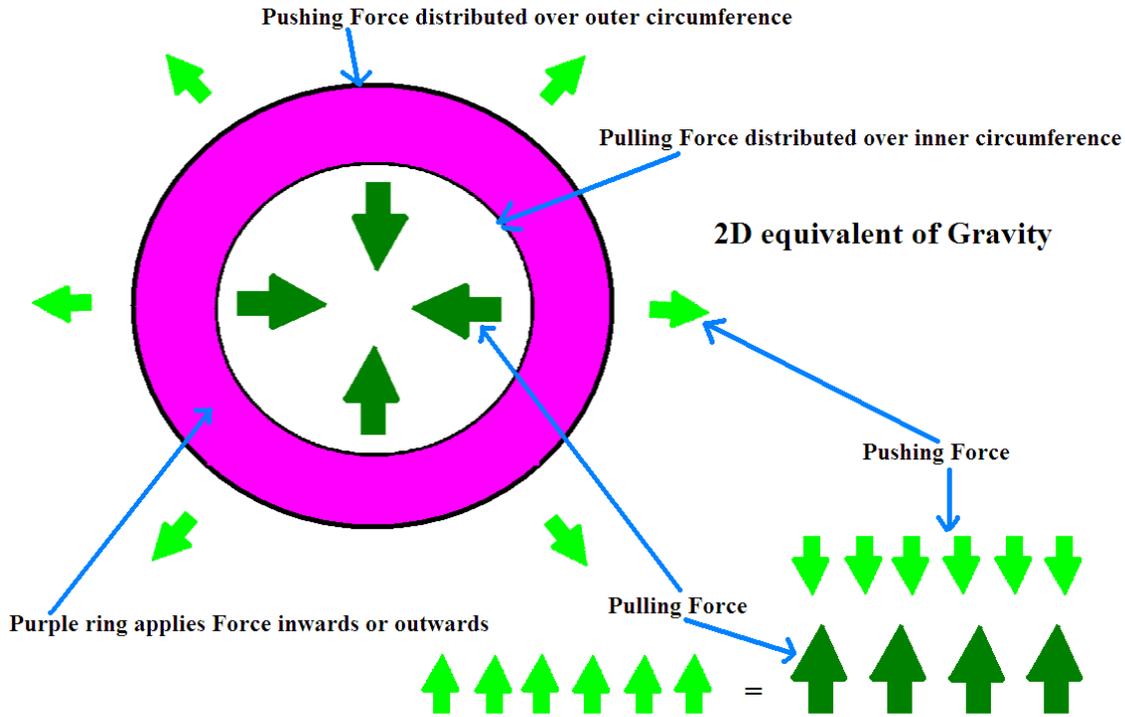


You would then say either the group is stationary and not moving, or the group is stationary and spinning, or if the disc moved sideways to you, then you would say the group is not stationary. In all these cases if I had not told you what was happening to the individual tops you would not know that they were spinning or not, or even in which direction they were spinning, or at what speeds each top spun. Were they the same?

As far as you could tell from a distance they were all stationary. This is what you observe with objects, they appear stationary, but nothing is ultimately stationary.

[Note: - Even if you were to theoretically isolate an individual piece of energy the smallest amount, it will still be moving. You may erroneously think that if there was nothing to compare it with, it would then be stationary, but you would again be wrong. You will only understand this when you know the structure of energy].

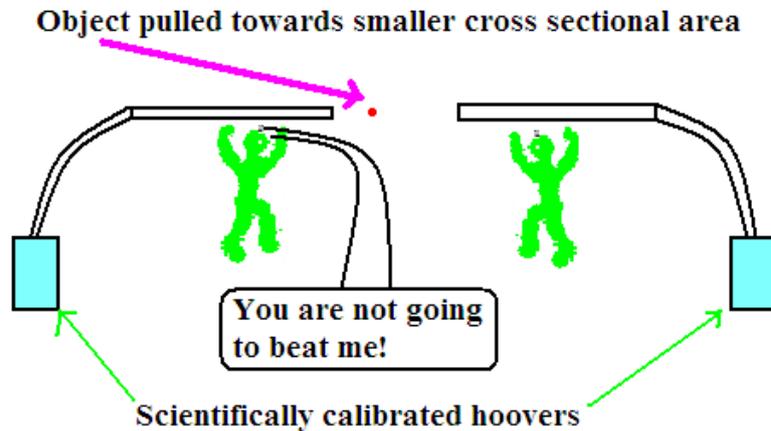
To simplify the concept (of gravity) imagine we have a 2D world and the pulling force is applied to the inner circumference of a ring half of the time, i.e. squeezing the object inside the ring, and to the outer circumference the rest of the time, i.e. pushing the object away from itself.. Although the total force applied is the same whether pulling or pushing the pulling will be stronger per unit circumference. Therefore the net effect will be for multiple rings to pull each other together.



The Total Pushing Force is equal to the Total Pulling Force but distributed over different Surface Area

Force is proportional to Surface Area applied which is also proportional to circumference

Another way to look at them is to think of them as little hoovers (section 52 “The whole Universe is a “soup” of “vacuum pumps” of various sizes”). If you get an old fashioned hoover with the flexible tube but have no attachment to its end it will suck up the air through the tube with a certain force. If you now put on the attachment that you use for the corners (which has a narrower opening) you will notice that the force of suction has increased by maybe 5 x’s. You have not applied any extra energy to your hoover. The force of the suction is proportional to the size of the opening at the end of the tube. The force of gravity is similar to this except that gravity pushes and pulls at the same time. But to simplify things just image instead of having one hoover we have two. Both hoovers have been calibrated by the top scientists and engineers to have the same energy. If we use one to represent the pulling force (the inner cross sectional area of the tube and the other to represent the pushing force (the outer cross sectional area of the tube; if you then place them opposite to each other they will both try and suck whatever is in front of them. If you place a suitable object exactly in between (the scientists and engineers can do this) you will notice that the object will be pulled towards the tube that has a slightly narrower opening, similar to the mass of an object which is implied as pulling stronger across a smaller cross sectional area.



43. Magnetism

Magnetism just becomes oriented (aligned) Gravity at higher concentrations, where the twisting of space has chirality. Specifically where the channel is just the right size for the flow of 'APEs' to be directed through. When you have physical channels like a metal bar that can hold these channels in alignment you can get permanent magnets the South Pole will twist space (the flow of other free 'APEs') in one direction and the North Pole will twist space in the opposite direction.

[Note: - the flow is actually in both directions at the same time along the magnet, like two cork screws moving in opposite directions. When similar poles are faced together, they are in fact turning the flow in opposite directions, so oppose each other. When opposite poles are faced together, they are in fact turning the flow in the same direction, so pull each other together. You have to remember that the flow is in both directions simultaneously pulling and pushing].

44. Magnitude of forces as a function of the curvature of space

Concentration of a force, using the same energy. (Section 72 "Curvature of space").

I happen to weigh just over 70 kilos, and let us say that I happen to have a pair of shoes that have wide heels. Now if I lean back and balance on my heels, what is the force on the ground?

Let us say I happen to weigh exactly 70 kilos with my shoes, and that my heels have a surface area of 50 cm^2 . The answer will be $70/50 = 1.4$ kilos per square centimeter.

The energy that creates the force is created by my weight due to gravity. (The Gravitational Force).

So that you don't have weird images of me, just imagine that I have a beautiful lady friend that just happens to weigh exactly 70 kilos with her shoes. Her name is Electra, but she likes wearing high heeled shoes. Now her heels have a smaller surface area than mine, let us say 1.39 cm^2 .

When she leans back and balances on her heels what is the force that she creates on the ground?

The answer is $70/1.39 = 50.4$ kilos per square centimeter (this is 36 times the force that I created, and remember we both weigh the same, so the energy that creates the force is the same).

She also likes wearing stiletto heels when she feels Strong enough (she does look good in them); these heels have a surface area of 1.28 cm^2 and when she leans on these the force is $70/1.28 = 54.6$ kilos per square centimeter (which is 39 times my original force). She challenged me to wear a smaller heeled shoe to see if I could balance like her, but my legs are not as strong as hers (and don't look as good either).

The best that I could do was with heels that had a surface area of about 2 cm^2 and the force that I generate with these heels is $70/2 = 35$ kilos per square centimeter (this is only 25 times my original force), she called me Weak.

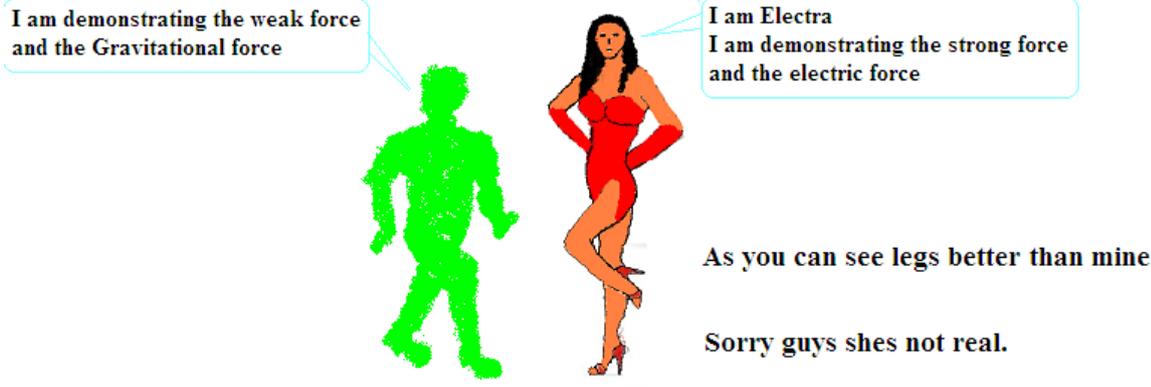
You should be able to see with the above examples that the same amount of energy which is created by our weight can generate different strength forces.

I.e. me gravity 1.4 kilos cm^2 (Gravitational Force)

Electra 50.4 kilos cm^2 (Electric Force, 36 times gravitational force)

Electra 54.6 kilos cm^2 (Strong Force, 39 times gravitational force)

Me 35 kilos cm^2 (Weak Force, 25 times gravitational force).



[Note: - The actual forces of Weak EM and Strong forces are about 10^{25} 10^{36} and 10^{39} that of Gravity, but the principle is the same].

A similar process occurs with the ‘APEs’ when they change their cross sectional areas and the same inherent energy creates different strength forces over different length scales.

Let us look at these other forces. We can express them simply as the curvature of ‘Primary Space’.

If we simplify Gravity as a force of magnitude 1 acting across this cross sectional area of one Primary/Secondary space
 1 cross sectional equivalent \approx graviton loop?
 The Weak nuclear force would be of magnitude 10^{25} cross sectional equivalent \approx an atom (atomic loop)?
 Then the EM force would be of magnitude 10^{36} cross sectional equivalent \approx an electron loop?
 The Strong nuclear force would be of magnitude 10^{38} cross sectional equivalent \approx proton/neutron loop?

All the above can be expressed as the same energy acting on a smaller cross sectional area (restricted loop).

Simply put: - as matter is created, and more ‘Primary ¹Spaces’ are pulled together, the energy per unit area increases.

This can be expressed in terms of the ‘Primary ¹Loops’ and the ‘Secondary ²Loops’, creating different cross sectional areas.

Again, so as not to actually specify the number and the structure of the relevant volumes, we can just demonstrate this power by using one ‘Primary ¹Loop’ only, by varying the number of the ‘Secondary ²Loops’ in each ‘APE’.

(I use my original estimates for the size of the APE, just to show the power). (Units are in m and m²).

Number of ² loops per APE.	Outer			Concentration of Power.	Inner		
	Diameter.	X sectional area.	Power.		Diameter.	X sectional area.	Power.
1	8.02mm	5.05×10^{-5}	1				
1.70×10^{15}	9.44×10^{-18}	7.00×10^{-35}	7.21×10^{29}	7.73×10^{-21}	4.69×10^{-41}	1.07×10^{36}	
3.50×10^{13}	4.58×10^{-16}	1.65×10^{-31}	3.06×10^{26}	1.59×10^{-22}	1.99×10^{-44}	2.54×10^{39}	

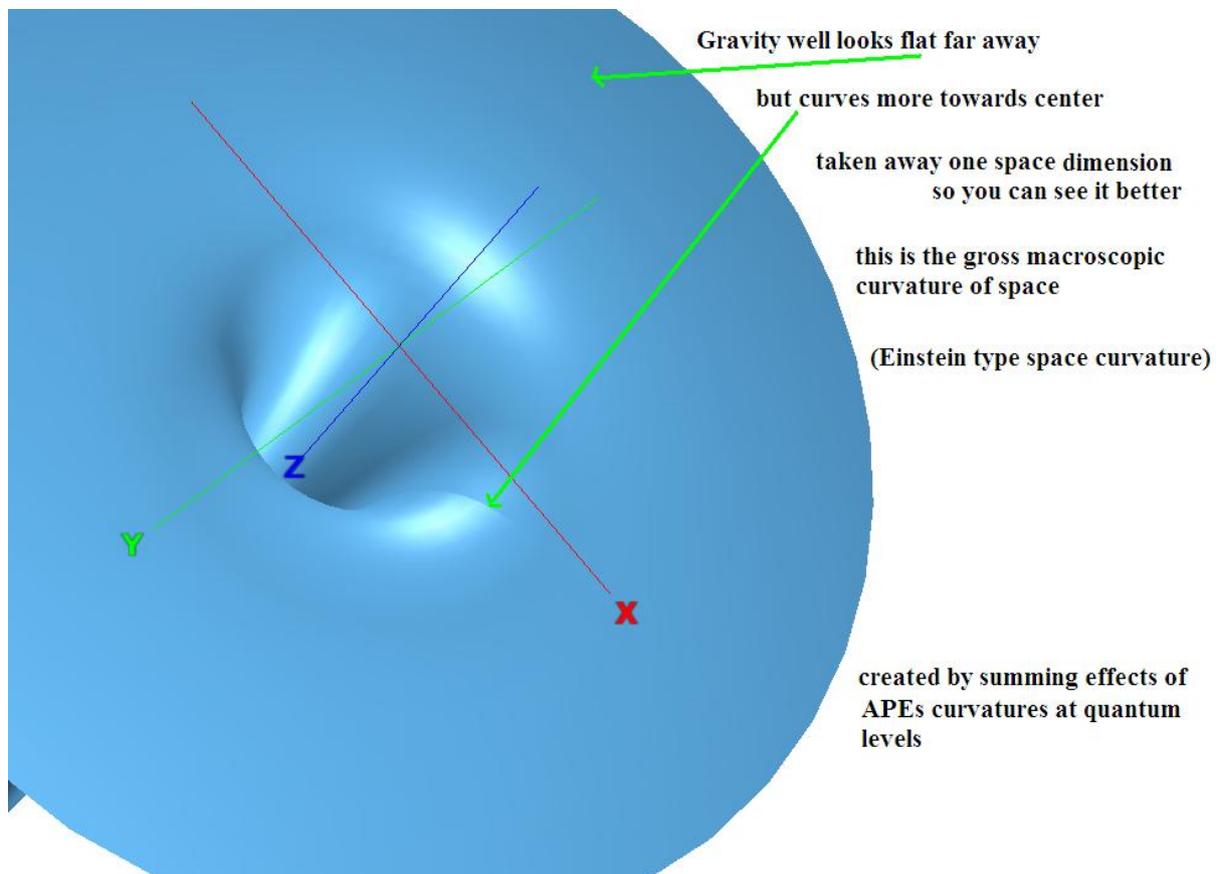
You can see from the last example above that having 3.5×10^{13} ²loops (they have to be an integer number, as explained in another section...) it concentrates the outer diameter’s force by $\approx 3.06 \times 10^{26}$ and the inner diameter’s force by $\approx 2.54 \times 10^{39}$ times that of the single ‘APE’s’ force. Although you may think that this is not close enough to 10^{25} (Weak force) and 10^{38} (Strong nuclear force) it is an oversimplification; firstly because you have not taken into account the actual structures, which will have interacting forces, and secondly the examples given are static numbers, which do not apply as the ‘APEs’ are always moving, so adjustments need to be made for this as well. In the second example I show that you can concentrate the inner area’s force to 1.07×10^{36} again I am not saying that this is the structure for the EM force as it is clear that the outer force is concentrated by 7.21×10^{29} and this does not relate to anything I know about; the explanation is the same as for the previous example.

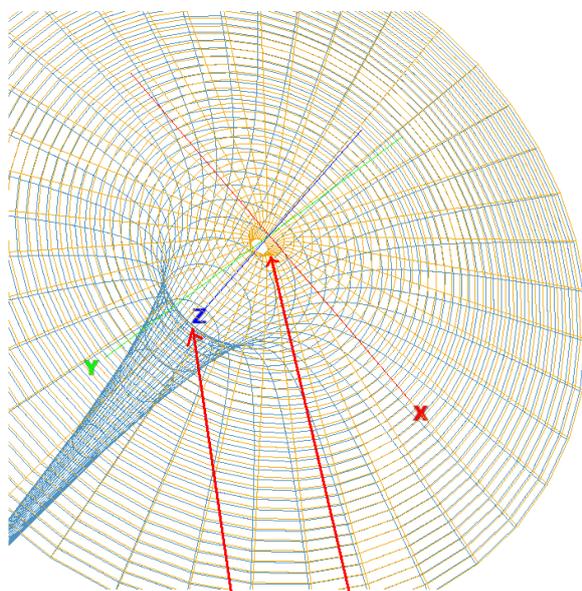
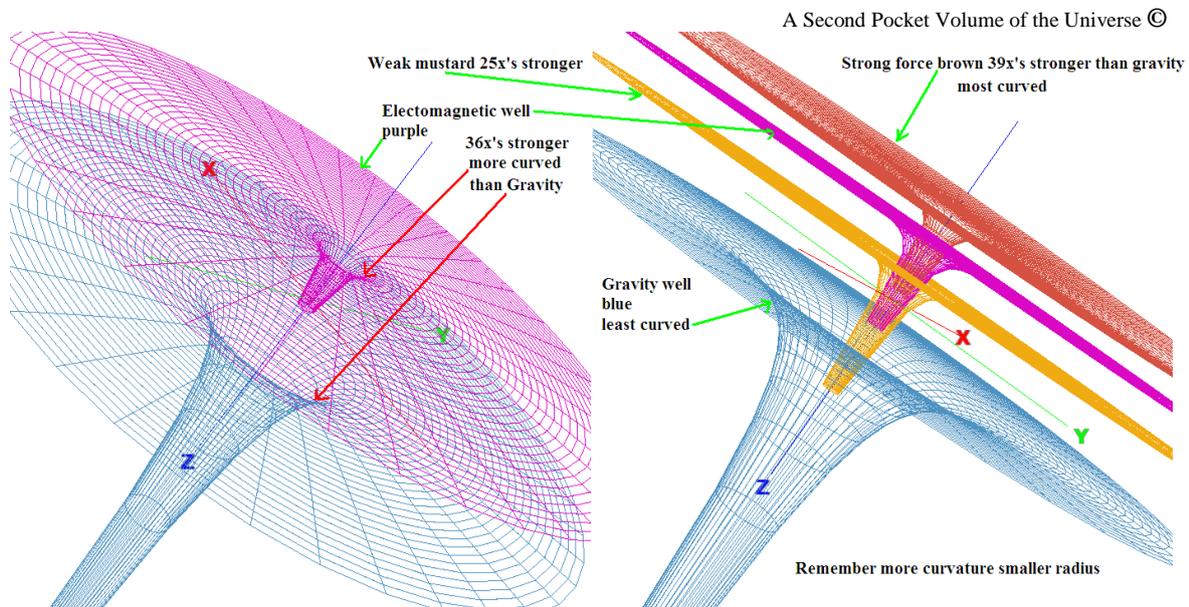
You can also see that the loop sizes (diameters) are smaller than the relevant forces, e.g. the Weak loop diameter is about half the size of a Proton, and the Strong loop diameter is thousands of times smaller. I do not think that these distances that these forces are applied across are a coincidence, but they reflect the distances (scales) at which these forces are actually applied. E.g. the strong force does not have a long distance effect; the EM has a longer effect and Gravity the greatest effect over distance, even though Gravity is the weakest.

[Note: - Energy and Matter share 'Secondary ²Space'. Energy has large 'Secondary ²Volumes' and is extremely low in ²density (they pass through each other very easily) matter has small 'Secondary ²Volumes'. Atoms that form bonds are sharing some of their 'Secondary ²Space'. There is a point (not mathematical) at which the boundary of energy and matter meet; electrons are near this boundary, they can wrap around the nucleus].

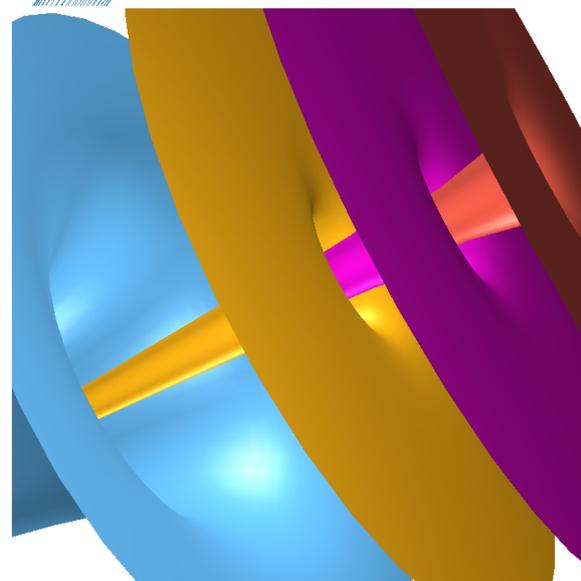
25th June 2013

The net effect of all of these small quantum 'APE' curvatures create the overall gross curvature of ³space, similar to Einstein type space curvature. I enclose a graphic below so you may better see this. Note: - remember that this is not to real scales as they would be too small to see, they are similar to 'me and Electra' scales, but the principle is the same.





The above two wells are Gravity and the Weak 250x's stronger so you can see that the weak is more curved than Gravity smaller radius more curved



The remainder are Gravity Weak EM and Strong wells 1, 25, 36, 39x's stronger The real wells are 10^{25} , 10^{36} , and 10^{39} x's stronger and therefore smaller you could not see them if I tried to keep them to scale, but the principle is the same

End 25th June 2013

45. Asymmetrical Universe, the Ultimate Perpetual Motion Machine

The Universe is the ultimate perpetual motion machine, because it is asymmetrical in the number of its sub units, and therefore no possibility of any symmetry, and therefore no stable dynamic equilibrium between its parts is possible. If it were symmetrical in its parts you could end up with a situation where the parts would be distributed equally in this symmetry and the Universe would stop. (Stop in a dynamic sense).

46. Symmetry

If you perceive that everything or anything in 'Reality' can be perfectly symmetrical (in the mathematical sense) then you create problems. Let us look at some examples. Let us assume in simple terms that everything could be symmetrical in reality. Let us look at unicellular organisms. In theory one cell would divide into 2, creating 2 new cells exactly the same as the original, etc. Each one the same (symmetrical), there would be no problem.

Now if you look at multicellular organisms. In theory one cell would divide into 2, both equal to each other (symmetrical); then it would divide into 4, again equal to each other, then 8 and 16 etc. All equal to each other.

Now if all were equal to each other, why would one or more decide to differentiate into a head, spinal chord or heart?

If they were all equal, they would equally want to be the head, so a dilemma is created, in theory at least. But if in 'Reality' at least in theory, they were not equal in some way from the beginning, then, there is no dilemma which cell is to become a head, spinal chord or heart, because there is a natural asymmetry to start with.

I know things are not this simple, but even when you have apparent symmetry; the process of creating further symmetry creates an asymmetry in the process, so symmetry is always broken at the lower levels.

47. Pictures of two 'APES' passing through each other in the 'Secondary ²Volume'

They can do this in various ways.

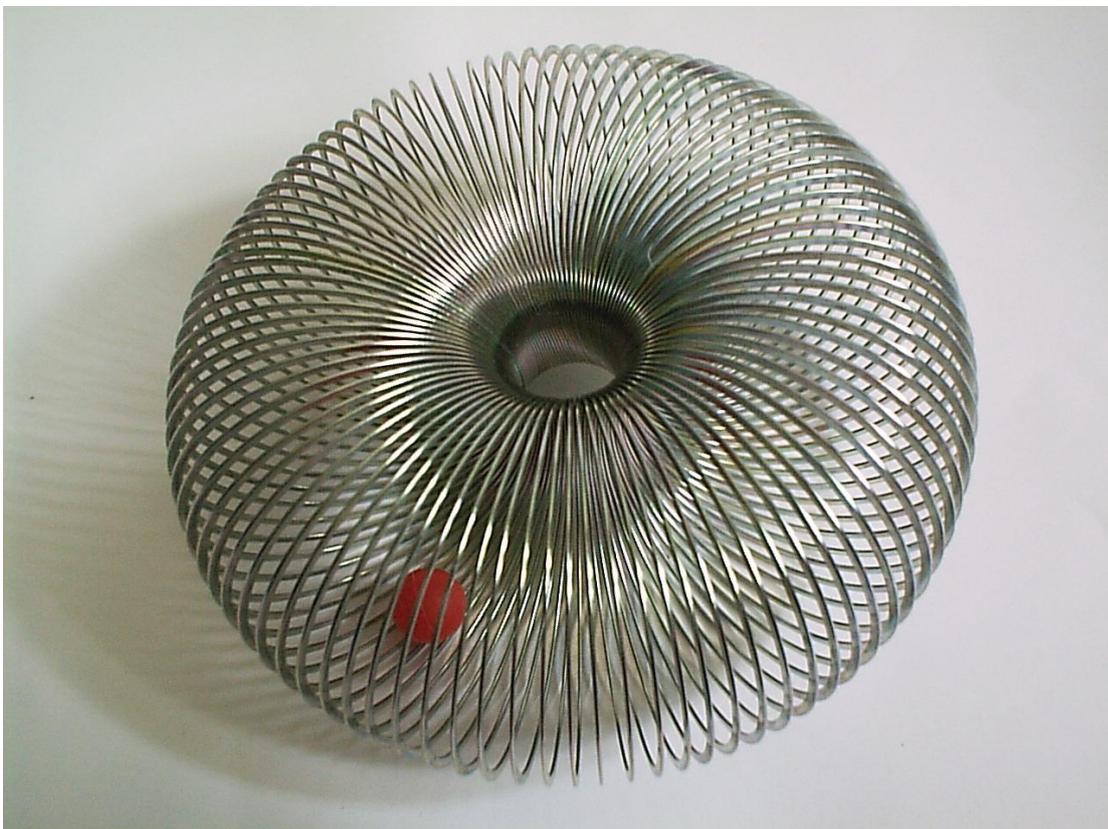






When 'APES' pass through each other they do not combine, they only combine when they trap themselves in special combinations. (Triplet example).

48. Picture of complex APES



The picture above represents either a contracted 'APE' inside an expanding 'APE', vice versa, even any phase difference in their expanding and contracting, or a triplet inside an 'APE'. Remember they are not to scale, but just represents the structures, (one of many)



The picture above shows one 'APE' inside the other (there could be many inside each other), but they are not linked, they are free to move in and out of each other (energy like). They only link when they are knotted in such a way like the triplet configuration, then they are not free to move away from each other (matter like).

49. Concepts Required

Concepts.

There are some basic concepts that are relevant and important to my model.

1. The concept that there is a distinction between 'Reality' and abstraction. This may seem an obvious concept, but it is often forgotten or overlooked when one is looking at complex problems. Following from this there is an "essence" of 'Reality' that is different from anything that is abstract.
2. The concept that you must distinguish between concepts which relate to 'Reality' from concepts that do not relate to 'Reality'. Although concepts are in themselves abstract (other than in the constructs of the mind) they may represent 'Real' things or they may represent abstract things. E.g. The concept of an ant is 'Real', but the concept of a pink elephant with yellow spots is abstract.
3. The concept that All 'Real' dimensions that relate to 'Reality' are all interconnected and dependent on each other. In the abstract they mainly appear independent.
4. The concept that all the models that represent or try and represent 'Reality' are only representations of 'Reality' and are not in themselves 'Real'. Any model that represents 'Reality' that does not contain all the dimensions of 'Reality' is in fact abstract and may not truly represent 'Reality'.
5. The concept that you cannot use the concept of infinity in the same model if the concept represents more than one meaning for this concept of infinity. As this concept maybe quite complex let me use another example. You cannot say something like "I have eaten all the sweets, and there are some that I have left and have not eaten". You should see that there is an obvious contradiction, but not just a contradiction, but that it is erroneous. The same applies to infinity.

6. The concept that you cannot divide the distance between two objects indefinitely and assume that they will not meet, at some point they will meet. This is a very important concept and cannot be understood or believed unless you understand the model of 'Reality' which includes the concept of the interdependence of the 'Real' dimensions and the concept of the 'Inversion of Space'.
7. The concept that by dividing something into two equal halves continually there will come a point (not a mathematical point) when the ³space of each of the two halves will be greater than the ³space of the original half, or that the ³space of the one half will be greater than the ³space of the whole. Again this is a difficult concept to accept, but it is the concept of the 'Inversion of ³Space'. First you must understand the concept before you understand the mechanism.
8. The concept of an additional dimension of "in and out". This again is a difficult concept and is a complex movement of the interrelationship of the 'Real' dimensions. You can understand the concept of in and out like a balloon inflating and deflating. This in itself is not a dimension. You can accept that you can move along the dimension of length and the dimension of width or height, but with this added dimension you can be moving outwards while moving forwards or moving inwards while moving forwards. Effectively on very small scales you can be moving forwards and backwards at the same time, you need to see the details of the model to see the mechanism.
9. The concept that everything in the universe can be explained by one and only one basic subunit. This unit is a real complex of interrelated 'Real' dimensions. All the dimensions are present at all scales; none are curled up or disappear at larger scales. Only the inter relationship of the dimensions changes with scale. You have to understand the relationship between 'Real' and abstract dimensions to see the significance.
10. The concept that everything that exists, i.e. the essence of existence, exists all of the time, past present and future, and nothing leaves this universe or enters this universe, or needs to do so. So there are no real parallel universes outside of this universe. If you want to think of parallel universes then they are inside this universe and not independent.
11. The concept that 'Real' space is constructed through and in time. Time is just a construct of space, at the lowest level time goes forwards backwards; left right, up down, 'in out'. The overall ³time (global time we experience) always goes forwards as this is just a constant progressive change at the large scales. Subdividing global time to smaller and smaller scales does not give you the true nature of time, i.e. time at small scales is not the same time at large scales, they have different meanings.
12. The concept that you can construct opposites from one basic unit. Using this concept the model does not suffer from any theoretical imbalances of opposites. E.g. Questions like "What if there were more positive charges than negative charges at the beginning of the universe" do not apply. What does apply is how are positive and negative charges created and can they be out of balance?
13. The concept of mutually exclusive concepts. This concept means that if one concept is true then there is another concept that is false if it states something that will contradict or make the first concept false, at the same time if the second concept is true it will conclude that the first is false. The two concepts exclude each other from the same universe (or domain). This does not conclude that either is actually true in reality, both may be false.
14. The concept that new characteristics or laws are created by the same basic building blocks in increased complexity of structures, that are not inherent in the simplified basic building blocks. E.g. You can conclude that a wall is merely a load of bricks in lines one on top of each other, and that from a single brick and its properties you could deduce the properties of the wall. If on the other hand you create a room with your bricks (the new complex structure is now the room) the room has additional properties that are not inherent in the brick, i.e. you could not deduce the size of the windows or their positions by looking at the properties of the brick. The room can have many windows in different positions and as an example the brick cannot tell you how many windows the room is going to have.
15. The concept that the simplest answer is not always correct, and that the most complex need not be correct either. Things can be over simplified and end up complex or inaccurate. Sometimes starting with something more complex can end up simpler or more accurate. In other words the solution to any

problem should be as complex as is required, but no more so. (This last sentence is a variation to something I believe Einstein said).

50. Other Notes

Another way of looking at it. The dimensions of 'Reality' are all interconnected and none are independent. The 'Dimensions' are 'Existence', Time, length, width, height, density, speed (I will elucidate later section 27 Is Speed another Dimension?)

That is 7 'Real' dimensions that create 7 Dimensional volumes of Existence. Irrespective of the scale, all dimensions 'Exist' all the ³time.

This last ³time I refer to as Global time which is normally what is considered independent time. As stated earlier, there is no independent time. It is just an amalgamated gross of all the times of its component parts. Normally the background time relative to the observer.

If we redefine dimension to include the following: - A dimension, irrespective of the scale is a function of the dimensions of its constituent parts.

So in simplistic terms a line is just the sum of its points along it. In Euclidean geometry this would be an infinite sum of points between its ends. I will show you that this is not the case for a good model of 'Reality', i.e. the 'Real' Universe.

The simplest model is in fact more complex than points in space, which only produce additional problems that do not need to exist. E.g. If your model allows an infinite number of points between any two points, then you get into the absurd situation of having multiple infinities, each one being a subset of the other.

In a line AD, with points along it A, B,C, and D. AB BC and CD will all have an infinite number of points between them, but they may not be equidistant. Also, AD has an infinite number of points between AD. Logically if AD has an infinite number of points, then AB AC BC and CD must have a fraction of this amount and therefore they cannot be an infinite number, otherwise AD would be a multiple of infinity of points (totally absurd).

This problem can easily be resolved by taking into consideration the distance between points, i.e. the scale. (Then points at different scales will be dealt differently).

So that if you say there is an infinite number between AD then there is always a finite number between all other points on the same scale. Even though this still sounds a little absurd to say half of infinity, it is not illogical like 2 x's infinity.

In pure mathematics you can prove that a stone will never hit a wall if you keep halving the distance (between the stone and the wall). This is where I disagree, not that the mathematics is wrong, but that the model is wrong, and you cannot infinitely sub divide a distance. At some point the stone will hit the wall.

Again this at first sounds absurd (especially to a mathematician, or a physicist), this is because they are using an inappropriate model that makes it absurd.

Solving any problem, you must first understand the system or the question, otherwise you can introduce dilemmas. E.g. The simple answer to a problem like "What came first the chicken or the egg?" becomes hard, or even impossible for some. There is only one true definitive answer to this question, when you understand the question fully; there are absolutely no dilemmas in the answer. (See section 21). When you see the solution to this and questions like it, you will be able to see how my model can make sense.

All you have to do is explain everything with one model, such that there are no dilemmas possible. With my model I can also put into context "the mustard seed is greater than the kingdom of Heaven". You must understand the meaning of words, not only as you understand them, but also as others misunderstand or interpret them. This does not mean that the words do not have definitive meanings, but that everyone interprets these slightly differently within each's experiences. This does not matter in most cases, as it does not cause any dilemmas in each mind, but it becomes a problem when very complex or even apparently very simple problems are attempted to be resolved. The obvious fact that exact definitions of each word and similar meanings must be understood is mostly overlooked. As

stated earlier; you must understand the question or problem, failure to do so will lead to an inappropriate answer.

51. Previous Notes

Older notes

A Pépés Universe

All Particular Entities Propagating in Empty Space

Particulate Energies Participating

APES

Alternating Particulate Energy Spaces

All Purpose Entity Spaces

The Restricted Model (incorporating the known Universe)

Time is of the essence, or more precisely 3 Times the essence (3 Levels of Time)

Time is a measure of change (our ³Time, top level), is just the accumulative aggregate Time (3) of its constituent parts.

The component parts have their own Times ('Secondary ²Time' (2))

But ultimately Time ('Primary ¹Time' (1)) is a measure of Existence, to which the other 2 Times measure the change of, i.e. movement with respect to itself, 'Secondary ²Time', and movements with respect to each other, 'Tertiary (or Global) ³Time'.

In other words there is "NO ⁰Time" if there is no Existence of something to measure against.

Space and No Space. (Null space).

Space ('Real Space', 'Exists') as in the Universe, is different from "NO Space" (NULL ⁰Space, nothing 'Exists' in it).

Euclidean or Cartesian Space (is a 3D Null ⁰space framework).

Our Universe exists in this Null space, as 'Real' Existences of its sub units, which are finite surfaces enclosing finite volumes. These enclosed volumes are different to the Null space outside, and they have a finite 'Primary ¹Density' (i.e. The missing 5th Dimension).

The Shape of the 'Real Space' Units.

They are all the same, and all their 'Primary ¹Dimensions' are fixed. They are interlocked (they have no choice) but form a higher topological shape which is also fixed. For ease of understanding I will call this topological shape **A Primary Entity Shape** ('APES') of 'Real Space'.

It has 5 fixed 'Primary ¹Dimensions' - 3 Spatial, 1 ¹Time ('Existence'), 1 ¹Density (of 'Real Space'). [When you add 'Secondary ²Time', and ¹Speed you have 7 Dimensions, ('Secondary ²Time' is the relative changes of the previous 5, and ¹Speed affects the rate of those changes].

What is this Primary Topological Shape or shape that the 'Primary shapes' create?

It is a Torus of finite fixed core diameter (2 ¹Dimensions), finite fixed core length (1 Dimension), finite Time ('Primary ¹Time' 1, (I.e. it Exists), another Dimension). There is no such thing as partial 'Primary ¹Time', it either 'Exists' or it does not, and finally a finite fixed Density ('Primary ¹Density' of Space itself. The 5th Dimension).

How can you create anything if everything is fixed?

Simply by using 'Secondary ²Time'.

You Rotate (like a smoke ring rotates its core), Turn (like a wheel), and Spin (like a coin flicked) the Torus, so that all points on the surface of the Torus move at a constant fixed finite ¹speed relative to the background 3D ⁰framework.

You have now created in ²Time (2) a 'Secondary ²Volume' of space in this Euclidean or Cartesian ⁰Space.

Now you have 'Secondary ²Dimensions' of Space (I.e. The dimensions of the 'Secondary ²Time' encapsulated spherical ²dimensions.)

If you keep the 'Primaries' constant and speed constant, you will get constant 'Secondary ²Dimensions' of each 'APE', i.e. Fixed 3D, Time, & Density but these 'Secondary ²Dimensions' are different to their 'primaries', because they are spread in time in a different 3D ²volume.

Therefore the density of space is now (if we ignore time for the moment)

'Primary ¹Volume'/'Secondary ²Volume' x 'Primary ¹Density'.

We have created a different entity of space.

Now what? Add one more variable.

The curvature of 'Primary/Secondary Space' can be changed in 'Secondary ²Time' also. (This can be a fixed rate of change (if nothing interferes with it), I like fixing things).

What happens is that you get a coiled torus expanding and contracting in 3D Null ⁰space, with the following theoretical properties: –

It can only expand to its maximum 'Primary Length' (therefore max. fixed 'Secondary ²Volume' and min. ²Density)

It can only contract to its minimum ²volume (max. curvature), i.e. Greater than its 'Primary ¹Volume', max. ²Density, (NO infinite densities possible).

In other words it is a 5 Dimensional spring expanding and contracting in 3D null space, around an imaginary 'Secondary center' outside its 'Primary ¹Volume'.

All its 'Secondary ²Dimensions' now have wave functions, length like all the others is no longer constant, but is fixed between its max. and its min. possible lengths, similarly with Density.

What other properties does this 'APE' have?

If we ignore spin, to see things more clearly, we see that it can act like a miniscule vacuum Hoover (smoke ring), but it twists as well, therefore it has Chirality.

NOTE: - Just turning like a wheel either clockwise or anticlockwise is the same thing viewed from the other side, but rotating at the same time gives rise to clockwise suction or anticlockwise suction (pull), the same with pushing out the other side.

BUT as the 'APE' expands to its max. it can flip over (without changing direction) and a clockwise suction becomes anticlockwise suction from the other side (fluctuating Chirality).

Let us fix some more things

The amount of energy/matter equivalence for the 'APE' can be fixed. Therefore the maximum and the minimum forces the 'APE' has is fixed (never leaves the 'APE').

Note: - The force of pull and push is proportional to its cross sectional area.

It wants to expand and contract in as much null space as it can, therefore it will push other 'APES' away from it, but still keep in touch with them, because it is always pulling them back again.

VERY IMPORTANT NOTE: - The position of this 'APE' cannot be predicted as a ⁰point in Euclidean space (it is a 5D volume, and exists at multiple ¹points simultaneously changing in time). If you place something in its path, it can curl around it to show its energy.

A probability can be predicted as to where about it is from an imaginary null point at its center, but that probability has a finite max. (No infinite probabilities).

Before there was Light there was darkness.

The majority of intergalactic space can be composed of free 'APES' (dark energy spaces) pushing each other apart. If there was nothing else, we would end up with a uniform foam of 'APES' in the entire known Universe (only darkness).

The ones at the center would be more compressed than those of the outside, but a dynamic equilibrium would be reached.

Let us start creating the rest of the Universe.

We can create triplets of these 'APES' simply by interlocking their topologies in the following manner:-

Difficult to describe (see diagram 41), but basically all that is happening is that as one 'APE' passes through another 'APE', a third 'APE' passes through them in such a fashion that they all catch and lock each other's tail loops, so that they cannot escape.

This has the following effect: - the expansion of each 'APE' is restricted; its 'Secondary²Volume' (cluster) decreases, increasing its 'Secondary²Density' and its pulling and pushing power (forces). The newly formed clusters will aggregate together pulling the larger weaker single 'APES' through them, and out the other side. [A Flow is created, the basis for fields].

A gravitational gradient will be formed between these two forms.

Note: - Gravity is just the net cumulative aggregate effect of all these forces acting in all directions (both inward towards the center and outwards away from the center (through the surface of a 'Secondary sphere', which is 4 x's the cross sectional area, i.e. the force is 1/4 through the surface. If you could align them like a magnet, then the force would be 4 x's greater at the poles).

Properties of these clusters.

They can combine as 2 clockwise and 1 anticlockwise, or 2 anticlockwise and 1 clockwise. We have Chirality again.

Note: - These clusters can combine again to form higher structures, energies, light, and finally matter. Just look at the patterns, you can replace clockwise, anticlockwise with 2up 1down, 2down 1up, or spin.

VERY IMPORTANT NOTE: - You also get 'Inversion of³Space', the more 'Primary¹Space' that is locked, the smaller the 'Secondary²Volume' is. Looking at it in the other direction as you split things into smaller and smaller bits you will reach a point that the parts (individually) occupy a greater³volume than the whole. In other words you cannot keep splitting things into smaller and smaller parts infinitely. There is a minimum size that 'Real space' can occupy in Euclidean space.

What is magnetism?

It too is a pushing and a pulling force (also twisting), but of greater magnitude than gravity. I believe magnetism is just an aligned form of gravity, cluster 'APES' aligned in one direction.

By way of example only, to show the power of the model.

If I were the Grand Original Designer I would (and could) create a Universe that was perfect; self-perpetuating and self-maintaining for all Time, without interference from me, such that it was complete, no extra pieces left over, and none could escape and get lost; no extra parallel Universes, because I have made the perfect ONE.

If I needed extra in the first instance then they would have been part of the package and the total would be ONE total Universe (complete set again). No extra Universes required! (The only confusion will be in the minds of humans when they come to think about it).

Because it is only ONE; One Needs Everything. It can be considered as one complete complex (but simple in design) structure; All connected in some way, such that Nothing can escape (I am too omnipotent to allow such a thing to happen). All is connected directly or indirectly to all else; but for the sake of humans pondering this problem I will allow them to consider parts as free structures of the whole.

How do I build such a structure?

I start with Absolutely Nothing 0 (zero).

Everything that I create will be positive from my perspective, i.e. it ‘Exists’; there will be nothing that is negative. (No negatives).

No new parts would be needed, to be added at a later time or taken away. Nothing would or could leave or enter this Universe. I need only create **ONE** type of sub unit, and all sub units would be equal (I have the power and ability to do this). The whole Universe would be self-perpetuating for all Time.

For it to be self-perpetuating it must be asymmetrical in number of sub units, otherwise it is theoretically possible to form an apparent static or dynamic equilibrium in ‘Secondary Space’.

Therefore the known Universe could be made up of a prime number of ‘APES’ in the region of 10^{85} therefore ‘Primary Time’ (‘Existance’) is proportional to the volume of space being observed, to a maximum, fixed at this limit.

Let us say for computation that the total number was 5.28×10^{84}

If each had a ‘Primary core length’ of 2.52×10^{-2} m

‘Primary core radius’ of 7.14×10^{-36} m

‘Primary Density’ of 1.11×10^{41} kg/m³ min. ‘Secondary ²Density’ of 1.66×10^{-24} kg/m³

it would have a ‘Primary ¹Volume’ of 4.04×10^{-72} m³ max. ‘Secondary ²Volume’ of 2.7×10^{-07} m³

and a mass/energy equivalence of 4.49×10^{-31} kg

then the total ‘Primary ¹Volume’ of the universe would be less than that of the Earth 2.13×10^{13} m³

and a total mass of the Universe would be 2.37×10^{54} kg with ³Density of 1.11×10^{41} kg/m³

I.e. the total Universe could contract to this min. only (no infinite density, or singularity).

Then the maximum

‘Secondary ²Volume’ would be 1.43×10^{78} m³, and a min. ‘Secondary ²Density’ 1.66×10^{-24} kg/m³

(This is Greater than the known Universe).

16th May 2013 These last two are really Tertiary. End 16th May 2013.

Look at the cross sectional area of the ‘Secondary ²Volume’ of each ‘APE’ in relation to the forces of Gravity, EM, Weak and Strong Nuclear forces.

Enter data for loop sizes (This will not help the readers).

(I will include with the maths if I write the next book).

52. The whole Universe is a “soup” of “vacuum pumps” of various sizes

Other prior notes.

The whole Universe is a “soup” of “vacuum cleaners” (vacuum pumps) of various sizes, all created from the same single component, one, and **only one ‘Primary sub-unit’** type (throughout all dimensions of Time and Space).

These vacuum pumps are basically loops of space (5D ‘Primary Spaces’, volumes) of fixed energy, such that their power is proportional to the cross-sectional area of each “vacuum cleaner” loop.

My model is based on **one axiom**.

That the Universe is one whole, indivisible into any equal number of its ‘Primary sub-units’, i.e. it is only divisible by a prime number of its parts to give the sub-unit itself.

[In the unrestricted model the ‘Primary Units’ are all constant, and create the ‘APE’, which is the ‘Primary unit’ in the restricted model].

In the restricted model (one level up), the whole is created by one and only one ‘Primary Volume’ sub-unit type (the ‘APE’, which is also called the ‘Primary Unit’), throughout all dimensions of Time and Space.

([Therefore you must be clear to which model you are referring to when you refer to ‘Primary Units’ of Space which are always the bottom level. To avoid confusion the Un-restricted model refers to

level 0 as the bottom level; and in the restricted model refers to level 1 as the bottom level. So; 'Primary units' in the restricted model are in fact 'Secondary units' in the unrestricted model]).

Therefore The Conservation Law is the **conservation of space itself** ('Primary ¹Space', 5D 'Primary Spaces', volumes), (not 4 or 3D).

It is "**the perfect self-perpetual motion machine**" (includes all of its parts).

No new sub-units are ever created nor destroyed, leave or enter this Universe, throughout all of Time and Space.

[Note: - So no adding things later allowed if they can't be explained by the properties of the one].

In the **restricted model**.

[It shows the boundary condition].

It follows from the above that the Universe is in fact **asymmetrical** in total (number of sub units).

I.e. No theoretical possible static equilibrium state possible, it will be seen that even a dynamic equilibrium is also not possible (again due to its asymmetry).

One constructs the Universe from the basic units up, each level creates new variables (due to the nature of construction) thereby the dimensions increase in complexity, but they are the same basic dimensions, but at a higher level. (We only think of them as simpler).

Unlike current thinking, that there are hidden dimensions, more complex, as you go down the scales.

It is in fact the other way around; they get simpler as you go down the scale. Until you reach the **One constant unit**, with unity, in all dimensions fixed.

The model can be constructed in our convenient 3D, (Euclidean, Cartesian, Galileo model), but with the following proviso. Primary ¹Space is not continuous in 3D; one has to define **NULL Space** (No space) from '**Real Space**' (**Existance**'). Also "a point" in a mathematical sense is only a reference point, that does not and cannot exist in its own right. These types of points are not independent of space.

One must define a **5D point** ('minpoynt') meaning the smallest possible 5D volume that can exist (i.e. the one sub-unit, that cannot be destroyed/created/leave or enter the Universe).

What then follows is the theoretical impossibility of a singularity with infinite density. (No 'Primary ¹Space' may occupy the same ¹space as another 'Primary ¹Space').

You can re-define a '**(5D) singularity**' ('minpoynt') meaning the smallest theoretical point (5D) that the whole Universe can occupy in 3D space. ['Primary ¹spaces' cannot occupy the same 'Primary ¹Spaces'].

Infinity must also be sub divided into two distinct and separate meanings (not to be confused between each other). Namely **Infinity of a process** (because the Universe is "the perfect self-perpetual motion machine"), it will go on forever. (E.g. Around and around a cycle, no end).

The second infinity. The **Infinity of numbers** must be re-defined such that paradoxes disappear. In other words you cannot have any Universe, that says there is an infinite number of any unit (if that unit can be sub-divided). E.g. It is not possible that This Universe has an infinite number of elephants, (it goes on forever), and this would conclude that there must be 4 x infinity elephant legs (each has 4 legs).

The two terms of infinity are not congruous; the first infinity is not really infinity, but ¼ of infinity.

You can only say there is an infinite number of sub-units, but these sub-units will always create a Universe that has less than infinite numbers of anything else one tried to observe. (I will show later that you do not need infinite numbers of sub-units to create the Whole Universe and beyond, that can incorporate a big bang - big crunch scenario).

The **definitions of dimensions** must also be re-defined as follows: - all dimensions are inextricably linked and no dimension can exist on its own or together without all existing together all the time (we will re-define and clarify Time).

Where we measure any one dimension, we are just conveniently ignoring the existence & effect of the others.

Each dimension we measure is the sum net aggregate of the dimensions of its sub-units, or complex of sub-units. E.g. length on a macroscopic level is the net aggregate of the lengths of its sub-units at the lower level, and so on down, until you reach the one fixed length. (Applies to all the dimensions).

Time has to be re-defined to include all real times.

We think of time as a measure of change. E.g. how long does an elephant live for?

Without going into too much detail, the answers will vary, but in the end, the answers will be finite, i.e. it will come into existence at some point in our time, and cease to exist at some later date. What we are actually measuring is the change in the existence of the observed event. This time is relative, and is what I term Global **Time** or '**Tertiary** ³**Time**'. [Normal time (seconds)], but for us to measure this time, the observed event must exist in the first place, before we start timing it. After we have stopped timing it, it will continue to exist, until at some point it too will cease to exist (like the elephant).

In the One Universe everything exists (its sub-units) never created nor destroyed.

It follows that although anything can appear to be created and destroyed that we observe, the constituents that created say the elephant, were already in existence before the elephant, and similarly were still there when the elephant ceased to exist. (Think of the number of atoms before and after existence, the totals can be the same, but the structures created and destroyed will be different). (The same applies to atoms, and electrons and positrons annihilating each other), the electrons may appear to suddenly exist then annihilate with a positron, but the constituents were there before, and after annihilation. All one needs to know is how the electrons are constructed, deconstructed, and then reconstructed again as they appear to come back, or reconstructed into whatever is created by the particular circumstance.

Back to Time.

There is a fundamental '**Primary** ¹**Time**', which is the **measure of Existence itself**, prior to any change at the lowest level. I.e. does this sub-unit exist or not?

'Primary ¹Time' (Existence itself) can have only one of two values, **1** = unit 'Exists' and will always 'Exist', **0** = the unit does not 'Exist', and never will 'Exist'. (A Conservation law).

It follows that any observation must include a 'Primary ¹Time' that is **positive**. If no 'Primary ¹Time', then there is no Existence, and there is nothing there to measure.

It also follows from the axiom that not only is 'Primary ¹Time' fixed for each and every sub-unit, but that the Total 'Primary ¹Time' for the whole Universe is **fixed**. [No Boundary]. This also applies to all other dimensions.

All 'Primary sub-units' and **Total 'Primary dimensions'** are all **fixed forever**.

We have not finished with time yet, as there is a '**Secondary** ²**Time**' also, but it will be clearer if we discuss the so far allusive 5th Dimension first.

The **5th Dimension**. Simply the dimension of the '**Density of Space**' itself.

If we construct an apparent 3D volume in our normal 3D model of space, e.g. a cube.

It looks like a cube, and we say it is 3D, we can move it and add ³Time, but it is not real, it is a representation, it has no substance. There is nothing to distinguish the inner volume of space of the cube from the outer volume of the cube. It could just as well represent a solid cube empty space outside, or an empty cube, and everything else solid outside.

To distinguish the difference between it firstly Existing at all, I created 'Primary ¹Time', so we can say that the cube 'Exists', but this does not say that the cube has anything in it, it could be a 6-faces of a cube, that looks like a cube and is empty inside and outside the cube.

To again distinguish between something being there, i.e. not empty space, and being there with empty space inside, we need to say something like ... if there is something there, we will give it a value of 1, if nothing there, we will give it a value of 0, Normally we would arbitrarily add something that appeared unrelated called mass to represent something in that space, (I.e. we give it a density), but from the one axiom, everything in the Universe is (must be) created from its sub-units. Therefore it must be an attribute of this basic unit, this I term the '**Primary** ¹**Density of Space**' itself. Again **unity** fixed (same old story nothing is created or destroyed).

By now, you are saying if everything is fixed forever, where is there any possibility of change?

This is the point at which you must understand the **structure of space** itself, and how it is constructed (level by level, or layer by layer).

Let us assume for the moment, in the restricted model, that these sub-units (the unrestricted Primary units, level 0) have no choice, but to construct themselves into what follows.

Long fixed loops, think of say a necklace of beads (the beads will be the sub-units), but remember they are not like these beads. We are just getting our representation of the volume of the total necklace for the moment. All the sub-units will be used up making these loops, and no one sub-unit (beads) left over once we have constructed the One Universe. We now have a fixed yet again number of **'Secondary sub-units'** (level 1) of space, (remember they are all constructed of a fixed number of **'Primary units'**, which are themselves fixed in length etc.).

Now let us measure the dimension of Length (one dimension). If we measure **'Primary Length'** (Level 0) and say that it is simply the sum of all the individual lengths, we get a simple length of the loop mid circumference (fixed length), but if we now measure the distance between two points in Euclid space, this is not it's primary length, it is different, a **'Secondary Length'** (Level up is like adding an additional dimension to length). The maximum length we can measure in this case, is the loop diameter, if the loop is circular, or it can be a multitude of different lengths if we can distort the loop, (you have guessed it, I want everything as simple as possible, so let's say all **'Primary sub-units'** must act the same in the same circumstances (it actually has to follow, all are equal). The loop will have to be a perfect circle, at this stage. Therefore **'Secondary Length'** is the diameter of the loop, the same would apply to **'Secondary Width'** (Level up is like adding an additional dimension to width), which is also the diameter. (You will see at this stage that the height is still the **'Primary height'**). You guessed again I want it to be equal to the others. To achieve this the loop must change, so that you cannot distinguish its secondary length, height, width. [Theoretically there are a few ways to proceed, but the end result will be similar, (you will see it change later)].

This is achieved by the so far elusive **'Secondary ²Time'** (Level up is like adding an additional dimension to Time). This time it is a measure of the **change of the Existence of the 'Primary Loop'**. This time is **cyclic** (another loop Level up).

If we start simply by **spinning** the loop (like you would a coin on a table). You will apparently see a fuzzy sphere. This is the **'Secondary Unit of space'** (**changing in 'Secondary ²Time'**). You might start getting impatient and say what is making this thing spin (be patient and we will fix it with another constant).

This **'Secondary Unit'** now has different measurements of its dimensions, but has now also gained an additional quality in 5D space (the total volume enclosed), is in fact not the simple sum of the volumes of its **'Primary ¹Volumes'**, but a complex volume of 3 components. Firstly, the volume and density of the **'Primary Loop'**, second, the volume of the shell that the **'Primary Loop'** encompasses during its spin, and third, the enclosed empty volume inside.

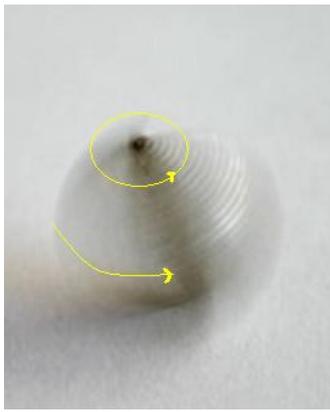
[An important note: - to remember later, is that at all Times at **'Primary'**, **'Secondary'** and **'Tertiary'** levels ..., there is always a hole or volume inside (of the **'APE'**) of empty NULL space. When I complete the structure, it will be inevitable].

Also note: - now that the **'Secondary ²Density'** of space itself has **changed**. It can now be, the shell density (**'Secondary Shell'**) or the total overall density of the sphere (which includes the empty volume) (**'Primary Shell'**).

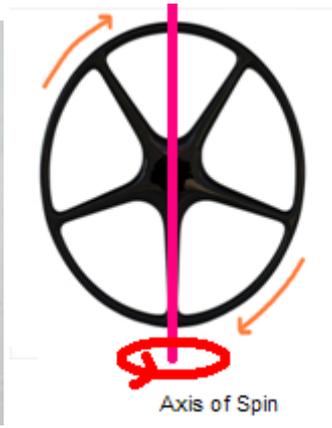
You can have partial secondary existence when the ²time slice is smaller than the total cycle, but note, nothing is destroyed or created yet again (you are just not observing the rest of the cycle).

(Because we want everything to be the same, whichever way we look at it, we must introduce a few more changes).

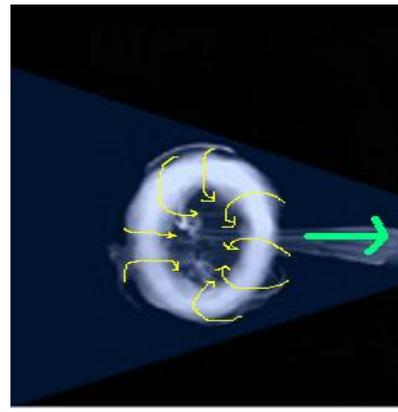
This is the basic **'Secondary unit'** (volume of space, Level two if you like), but as it is, it is not symmetrical, i.e. if you analyse it, it is not symmetrical. Guessed again, I want everything to be equal. When you spin a coin it will have a pole, so a point at the equator will appear to travel further in 3D space than the pole. So to eliminate and equalise this, and make all points on the loop travel the same, one must **Turn** the loop like you would a steering wheel. Then all points on the outside move the same apparent distance in 3D space while spinning and turning at the same time, but this still does not complete the picture, because if you look at the outer points of the loop, and the inner points of the loop, the outer points travel further than the inner. To equalise this discrepancy one has to **Roll** the loop around its core **'Primary diameter'** (imagine a smoke ring moving through the air).



Spin - Spinning



Turn - Turning



Roll - Rolling

Adding all these together, the ‘Secondary ²Volume’ is now symmetrical in all its movements in ‘Secondary ²Time’.

Using these movements in ‘Secondary ²Time’, we have added 3 more variables of spin ,turn, and roll, but in addition we have also made all the movements of the ‘Primary units’ constant, i.e. they all have the same speed and travel through the same 3D distance (with respect of the ‘Primary units’).

We can now add at this stage another constant that did not exist before, namely that all ‘Primary units’ travel at a constant **fixed ¹speed** (another dimension if you like) in space (this will not violate the speed of light later, as I will demonstrate).

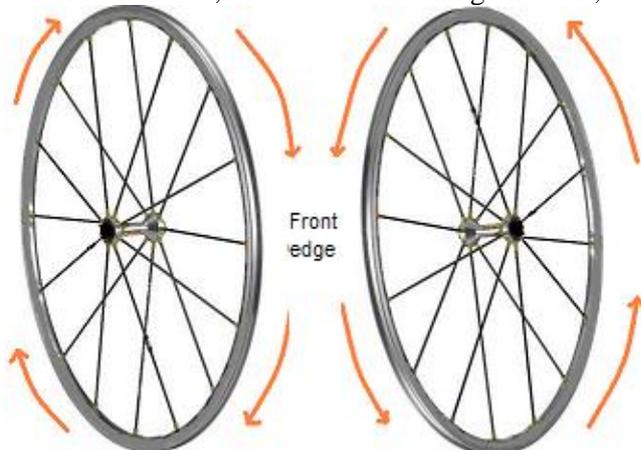


When it moves fast (faster than the speed of light, I will explain later) it looks like a sphere, as above.

We are still in total constancy whichever way we look. But although it is constant in itself, it can look different to different observers.

To demonstrate the point if you look at (observe) a wheel from one side, and it is turning clockwise, is it actually changing the way it is turning, when you go and observe it from the other side, and you see it going anti-clockwise?

The answer is NO; the wheel did nothing different, only your observation of it changed.



view.

It only looks different from your point of

view. In the macroscopic world we distinguish clock wise and anti-clockwise, because there is always something that distinguishes the two sides, and therefore there is a difference between the two, but we

must try and do this at the sub-atomic level as well. If there is no difference between the two, then they are one and the same thing.

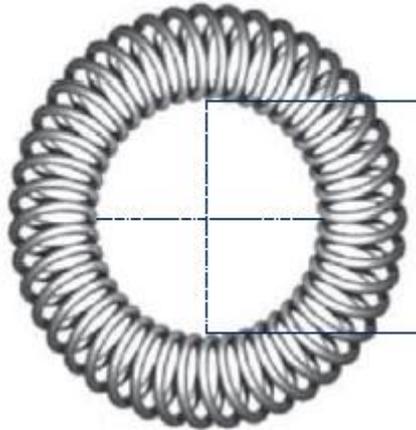
After the next stage you will start to appreciate the real elegance of the model, so far all we have been doing is clarifying notions that already exist and making a better model.

We need yet again to add another characteristic (another dimension if you like) to build the next stage, this is the **curvature of space itself**. What does this mean?

(Section 72 “Curvature of space”).

Well we have a loop, and we have been making it spin, turn, and roll. This is actually achieved by some sort of curvature. The actual individual ‘Primary sub-units’ impart this curvature into the loop, but it simplifies to just look at the overall effect on the loop. (The curvature itself must be more than one dimensional; otherwise you would only get a ring, not a shell).

The loop itself ends up as a coiled loop, (again for constancy) it is a fixed curvature across the whole loop, and ends up looking something like a slinky joined to itself, (remember the dimensions are not of the same ratios, only for visualisation purposes).

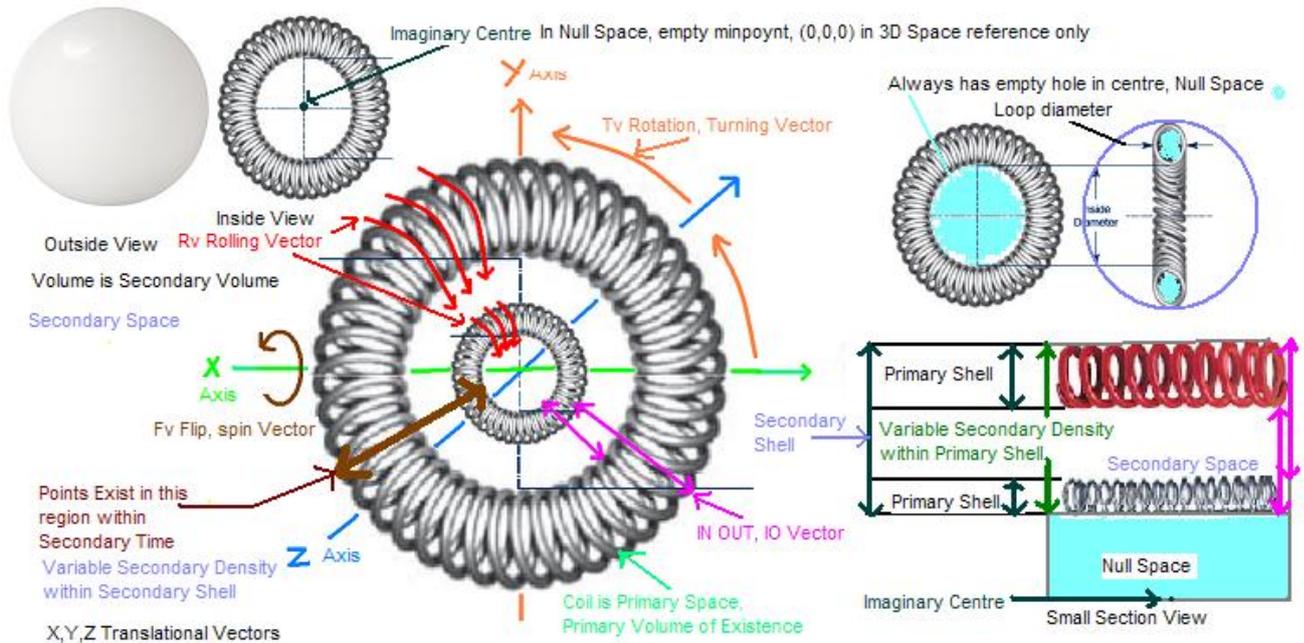


PICTURE slinky joined (See also section 41).

Now everything is going to change and I will show how this changes everything to a completely new level that will eventually explain all. NO other model I have ever come across or heard of has this new property.

The following movement is added, namely the coil will unwind, reach its maximum (circle) continue spinning, turning, and rolling, then start to coil again, getting tighter and tighter, until it reaches a minimum (the smallest space it can possibly occupy), still carry on spinning, turning, and rolling, it will start to uncoil again, and so on.

[Note: - It never stops, or makes any sudden changes of direction; I like things to be constant].



(You need to see it in motion to really appreciate it).

You will note now that the 'Secondary ²Volume' has acquired a most important characteristic. Namely that it has acquired **wave characteristics** (in its dimensions) that never existed before, and that these wave characteristics are confined to the 'Secondary ²Volume', but also all the 'Secondary ²Dimensions' have acquired wave characteristics, and are also confined (so they have a built in **maximum** and a **minimum** value, therefore no possibility of infinities or zero values here).

Another important note: - is to recognise what is happening to the 5th Dimension, also with wave characteristics, but it has more profound effects than the others, and will help explain energy/matter and all the forces.

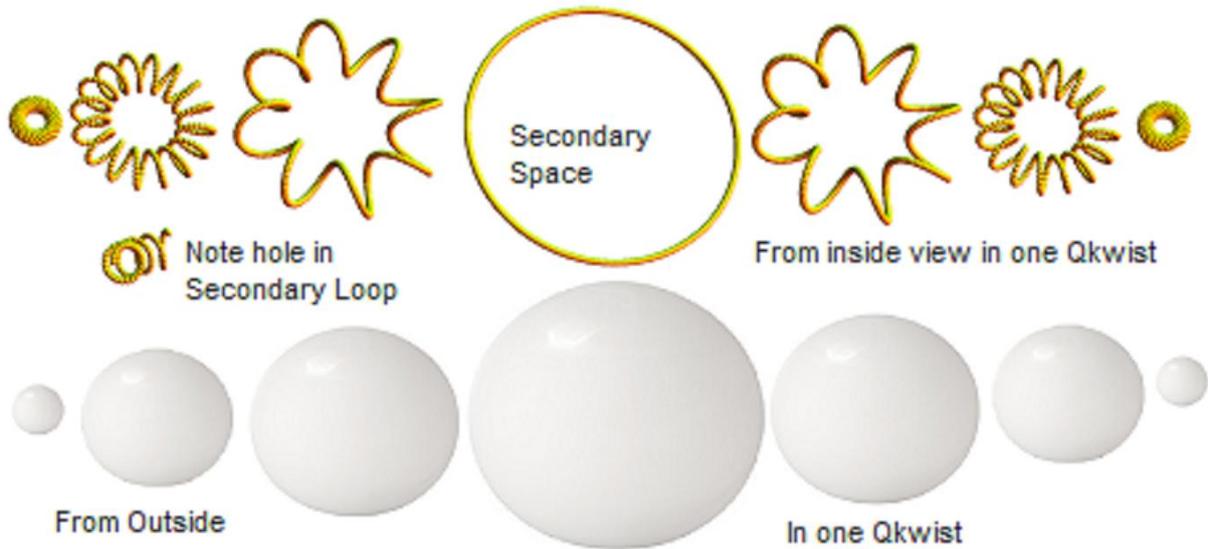
But before we go there, lets clarify what we have so far, a 'Secondary ²Volume' of space has wave characteristics in all its dimensions and all points on/in move at a constant speed. It can be described as being at multiple ¹points in space simultaneously, around an imaginary ⁰point at their center, but their existence is fixed between a minimum and a maximum value (no infinite or zero probability values when you go looking for it).

(Also note that its 'Primary sub-units' are still fixed).



It goes from a small ²volume to a big ²volume then back again, wave characteristics, in all of its 'Secondary ²Dimensions'. (These are not to scale). E.g. ²Length is a wave function between the minimum diameter of the 'Secondary ²Volume' and the maximum diameter of the 'Secondary ²Volume' (no more, no less).

Note: - From this point up the levels (scales) no dimension is fixed (I.e. is not a scalar in the conventional way, it is only scalar because we make it scalar by ignoring its fine detailed existence). In other words normal dimensions are abstract simplifications of measurement.



Now we have clarified a little, we need to look at it a little closer, with respect to my mention of clockwise anti-clockwise motions, unless you have an exceptionally high visual spatial IQ, you probably didn't realise that the total movements introduced so far has resulted in a 'Secondary Volume' that twists one way half of the time, and then twists in the opposite direction the other half, with respect to any observer.

Which means it is "in itself" its own opposite, half of the time. (This also means there will be no need to worry about balancing opposites, like positive and negatives, baryons and leptons, spins and the like, as they automatically sort themselves out, as the structures are created and destroyed in the conventional way, but never change in my model).

In other words it will appear to twist space away from you in a clockwise direction until it fully expands then it will twist space towards you in a clockwise direction.....????

The opposite is true observed from the other side, (but to really see this phenomenon you would have to move with it relative to its face).

(So no adding things later allowed if they can't be explained by the properties of the one).

Let us now add Energy which may be summed as its momentum ('complex angular momentum') ($^1\text{mass} \times ^1\text{speed}$? This speed is not the normal speed at the higher levels but around an imaginary $^0\text{center}$)

If this is fixed (around an imaginary $^0\text{center}$, it is in fact its Potential Energy, relative to an observer that is stationary with respect to the center).

If the observer is not stationary relative to the center then this is its Kinetic Energy.

[Note: - it always had a Kinetic Energy relative to its own center, its Potential Energy].

Imagine a wheel going around very fast on ice. There is hardly any friction, so the wheel spins many times and only moves forwards slightly. The outer rim of the wheel has travelled a large distance in relation to its center or leading edge. I.e. the speed of the outer rim is much faster than the speed of the wheel moving forwards. The 'APE' is similar to this, so it can travel in a complex movement at a $^1\text{speed } c^2$ around an imaginary center (its Potential Energy which is in fact Kinetic Energy around the center), such that its translational $^3\text{speed}$ (normal Kinetic Energy) is always limited, as measured from this imaginary center or its quasi leading edge. So when it combines with other 'APES' to construct light photons, it is this same principle that limits light to the $^3\text{speed}$ of c , a terminal translational velocity in a medium of flowing 'APES'.

We said earlier that this unit twists space away from you then towards you, but what it is actually doing is twisting space away from itself and towards itself, and as space is really filled with units of itself, it is in fact twisting other units of itself away from itself and other units of itself towards itself.

Although the previous sentence was a mouth full, it is the beginnings of the mechanism of Gravity. Gravity is merely the net force created by these units. (The flow of these units in and out of each other in all directions).

I'll show later how the model is built to increase these forces to explain Gravity, EM, Weak and Strong Forces as a function of the one force. 16th May 2013. See section 44 'Magnitude of forces as a function of the curvature of space'. End 16th May 2013.

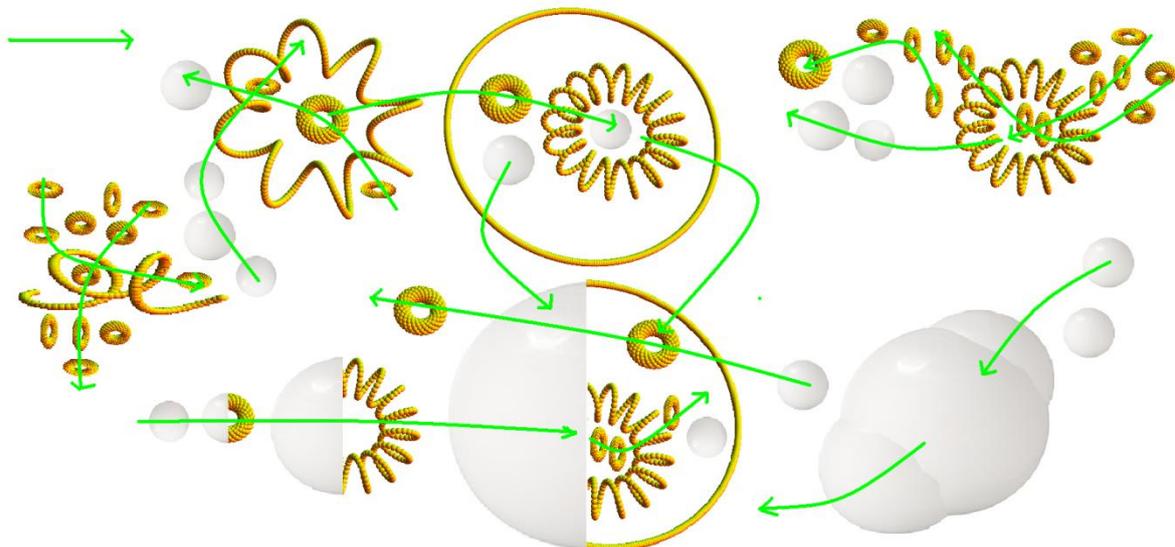
If this was all that there was, it would create an amorphous mix of pushing and pulling units in all directions, they all have the same strength proportional to their cross sectional area of their loops. You can think of this as Dark Energy. You will note that when they are at their minimum 'Secondary ²Volume' their force is greatest (both pull and push, I am ignoring twist at the moment), and weakest at their maximum ²volume. (The force is proportional to their cross sectional area).

Let us not look at the details as to how this is done, but you can see, if we could fix or restrict the expansion of some of these units, then these units will have a greater pulling and pushing power than the rest. In this way the ones with the greater power will clump together pushing the weaker ones away from them. If you could restrict the expansion even further for different units then you can create a gradient of powers, the smallest most powerful being at the center and the weaker ones pushed to the outskirts. If you noticed, the smaller ones are the ones with the most concentrated 'Secondary ²Density', thus clumping closer together creating smaller 'Tertiary ³space' i.e. ³mass, therefore the force of Gravity tends towards the center of mass.

[The more dense and the greater number that are clumped together will create a greater mass].

What is actually happening is that there is a boundary that is set up such that there is a flow of units in and out across this boundary and that the net force appears to be inwards towards the center of mass, but nothing ever stays at the center, it is always pushed out. It is a dynamic state nearly in equilibrium, but never so. Mass can increase pulling things tighter together, but so does the pushing force, forcing the weaker units always out again. This is the basic mechanism of Gravity.

You can think of it a little bit like Osmotic pressure across a semi-permeable membrane. If you had a ball of this membrane (filled with a solution of sugar, immersed in water. The sugar would be like the concentrated mass particles and the water the weaker (let us say dark energy units). Water would move across this membrane in both directions, but predominantly into the ball, when the ball got to its maximum it would not form a static state of equilibrium but a dynamic state of equilibrium where water molecules would enter the ball and exit the ball in equal numbers. Obviously Gravity does not have such a well-defined barrier, but particles are the nearest thing to it, either individually or as a group.



A schematic diagram showing possible flows of 'APEs' travelling through each other as they contract

to the imaginary centers (not to scale), for clarity I have not made any touch, but in the 'Real' world they are all in contact and there are many more (a mixed soup), I have also shown the flow (on the whole) from the small to the large (because it is easier to visualise), but the 'Real' Flow is from the large to the small and back to the large again, as in Gravity Flow pulling the weaker larger ones to its imaginary center, then pushing them back out again.

[I have also ignored the twisting flow, which is a spiraling helix, clockwise and ant-clockwise flow in both directions, i.e. there are 4 different flows].

53. All Dimensions

I am not happy with the beginning of this section (from my old notes) but I include it anyway.

WARNING: - This chapter is not easy reading in parts, so read with caution; skip the bits with {T+L+W+H+D}.

April 2013 I am a bit upset with myself as I have just realised after reading my book that I had originally added a new paragraph here to better explain the {T+L+W+H+D} problem.

Unfortunately in my laziness I just added the section directly instead of writing notes first, and somewhere along the line I must have overwritten my eBook with the adjustments and they are now gone! Anyway I will just summarise it here again without making further adjustments. (I am assuming it has not accidentally embedded somewhere else in the book, if so I apologise).

It was basically clarifying the different aspects of Time and space, originally I made a mental note that normal Global time would be denoted with a lower case t and 'Primary and Secondary Time' with a capital T.

I didn't originally want to put too many notations as it would end up like garbled mathematics but realised that some notation was necessary to alleviate some confusion.

Time just relates to the different aspects of this quantized space.

I will in future denote 'Primary Time' with the prefixed superscript 1T , 'Secondary Time' as 2T and 'Tertiary Time' as 3T , 3t or just t. With respect to {T+L+W+H+D} which relates to a quantum of space it should now read $\{{}^1T+{}^1L+{}^1W+{}^1H+{}^1D\}$ which means all 'Primary 1 dimensions' but for better clarity $\{{}^1T+L+W+H+D\}$ will signify the same thing or ${}^1\{T+L+W+H+D\}$.

Once you get used to the notation $\{{}^1T+..\}$ will mean to include the rest of the dimensions at that level i.e. $\{{}^1T+{}^1L+{}^1W+{}^1H+{}^1D\}$ or just simply ${}^1\{\}$.

For 'Secondary 2 dimensions' you get ${}^2\{\}$ for short, meaning the effect of 'Secondary 2 Time' on the 'Primary 1 dimensions' or 2T on $\{{}^1T+{}^1L+{}^1W+{}^1H+{}^1D\}$ which would result in $\{{}^2T+{}^2L+{}^2W+{}^2H+{}^2D\}$.

Once you have read this section you will see that 'Secondary 2 Time' includes aspects of 'Primary 1 Time' and 'Tertiary 3 Time' includes 'Secondary 2 Time' or ${}^3T = {}^2\{\} + {}^2\{\} + {}^2\{\} + {}^2\{\} + {}^2\{\} + ..$

I will only put in the prefixed superscript the first time you come across it. End of addition April 2013.

All dimensions are linked together, and cannot in practice, 'Exist' on their own.

Also, they cannot 'Exist' together with any of the other dimensions missing (otherwise they become abstract measurements).

We can only conceptualise the existence of each dimension on its own, or together with others.

Therefore each model is only a concept (abstract), until the final model explains all Existence.

Every time we talk about 1, 2, 3 or 4 dimensions we are conveniently (or not knowingly) ignoring the existence (and implications) of the missing dimensions.

I believe the Existence of the whole of the universe is constant, and can only have a maximum and a minimum, of all the dimensions together.

The model of the universe is just one complex surface (volume). ['ASpace'].

This surface I believe can be explained by units of 'APES' as defined later ('Alternating Particulate Energy Surfaces').

Ultimately this surface of the universe has units of constant dimensions (at the lowest level).

I.e. all dimensions are quantized.

(The dimensions relate to these units individually, which together form the dimensions we know and measure).

I will describe how I believe the surface is made up. (I use surface in its loosest sense).

Each dimension is defined by its measurement of something.

This means you are comparing it to something else, i.e. it is relative.

Dimensions (that we normally talk about) are the sum of the accumulated dimensions of the individual space units (at a lower scale or level). They are built up by the sub units themselves.

I will talk about the dimensions one by one, and build the ³ dimensions we know.

I will take Time first, (although this is considered the fourth dimension).

Time is a measure of the change of things, but ultimately it is a measure of Existence. ['Existance'].

If there was no time, (T=0), there would be no Existence (of anything).

If time ¹T=1 then there is Existence, (of something).

If Time =1, then there would be the Existence of a unit (of space). [A quantized space].

This unit (of Time) cannot 'Exist' on its own, and have no other dimensions, it could not be compared to the existence of a second unit. (Remember all dimensions exist together).

The dimension of Length.

We have to add another unit to define (build) a second dimension (at the higher level).

These units are joined (in the simplest form) by one connection. {T+L}

We can now define Length as the comparison of one unit to the other, 2 units next to each other form the dimension of Length (at the higher level).

[When I say add, join, or connection, I mean them to be a form of all en-compassing inextricable link of the intrinsic dimensions together in one unit].

The dimension of Width.

We have to add another unit to define (build) and measure a third dimension (at the higher level).

These units are joined by two connections. {T+L+W}

We can now define Width as the comparison of the units at right angles to Length, 3 units next to each other (in a plane will define the dimensions of length and width at the higher level).

The dimension of Height.

We have to add another unit to define (build) and measure a fourth dimension (at the higher level).

These units are joined by 3 connections. {T+L+W+H}

We can now define Height as the comparison of the units at right angles to the plane of the other 3, 4 units next to each other (normal 3D model, at the higher level).

The dimension of Density. (I believe is the missing 5th dimension).

This dimension is the existence of a second unit in the same 3D⁰ space that we normally talk about.

We have to add another unit to define (build) and measure a fifth dimension. (Note: - each unit has to have all the intrinsic dimensions within it to start with, so there is a basic dimension of density to compare with or build upon).

These units are joined by 4 connections. {T+L+W+H+D}

We can now define Density as the comparison of the density of the space occupied by the additional unit verses the density of the space occupied by the remaining units, 5 units not next to each other in the normal 3D sense, but in a 5D model.

These units are not different units each one of Time, Length, Width, Height, and Density.

They are the same units together (each unit has all dimensions together).

¹{T+L+W+H+D} = the basic unit, but multiple basic units together form the higher dimensions.

Add an additional 'Secondary²Time' variable (or dimension), this is the cycle that each basic unit goes through, i.e. the change of the shape of the basic unit where all 'Primary¹dimensions' $\{T+L+W+H+D\}$ still stay constant, but create 'Secondary²Dimensions' of ²Length, ²Width, ²Height and ²Density i.e. $\{^2T+^2L+^2W+^2H+^2D\}$ or simply $\{^2\}$. It is these secondary units or 'APEs' that create the ³dimensions we measure, and because each one is constantly changing in this 'Secondary²Time' is why every measurement is Time dependent, and Time is directly linked to Space. All these 'Secondary²Times' put together is what creates our sense of Global Time at the higher level. [A third ³Time if you like].

So as an example: -

When we measure a ³Length of something real, we measure $^2\{T+L+W+H+D\} + ^2\{T+L+W+H+D\} + ^2\{T+L+W+H+D\} + \text{etc.}$ and we only measure all the effects of 'Secondary²Time' of all the ²L's of each basic unit of space to get the total ³Length, we ignore the significance of all the other dimensions to create this length. So when we cut this ³length into two, we expect it to be two equal ³lengths that add up to the original ³length, and do not consider that the effect of cutting it into two will affect the length of the two halves such that the two halves maybe greater than the original ³length. [I.e. Abstract ⁰lengths don't vary, but 'Real' ³lengths can, the significance of this is only at very small scales].

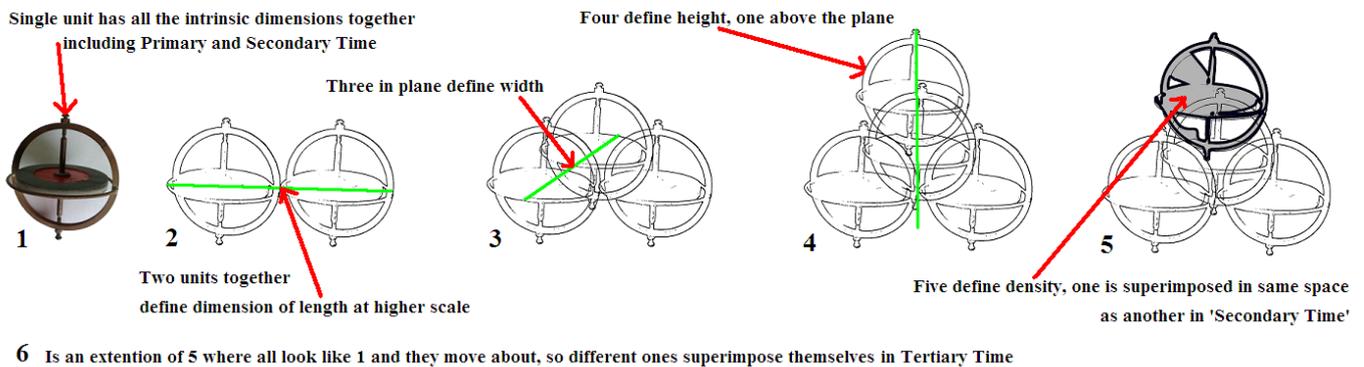
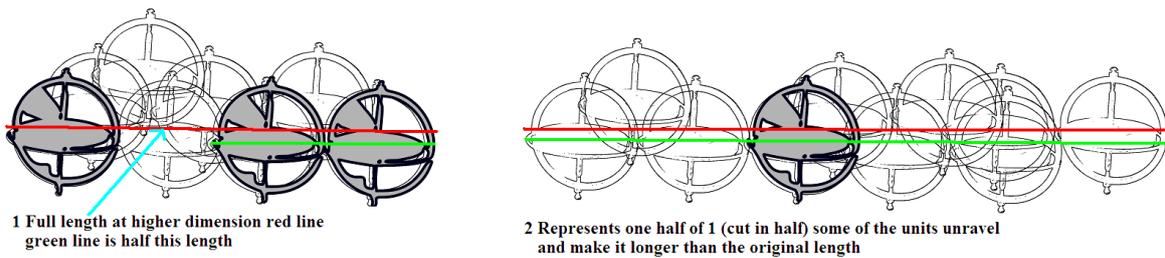


Diagram above is a simplification of these basic units $1 = ^1\{T+L+W+H+D\}$ plus 'Secondary²Time'; $2 = ^2\{T+L+W+H+D\} + ^2\{T+L+W+H+D\}$ the two ²L's measure length at a higher level etc.

[Note; - in 'Tertiary³time' they all look like unit 1 with all the 'Primary and Secondary Dimensions' and they move about creating the ³density of space at the higher level, plus all the other dimensions]. (Really need another little video here).



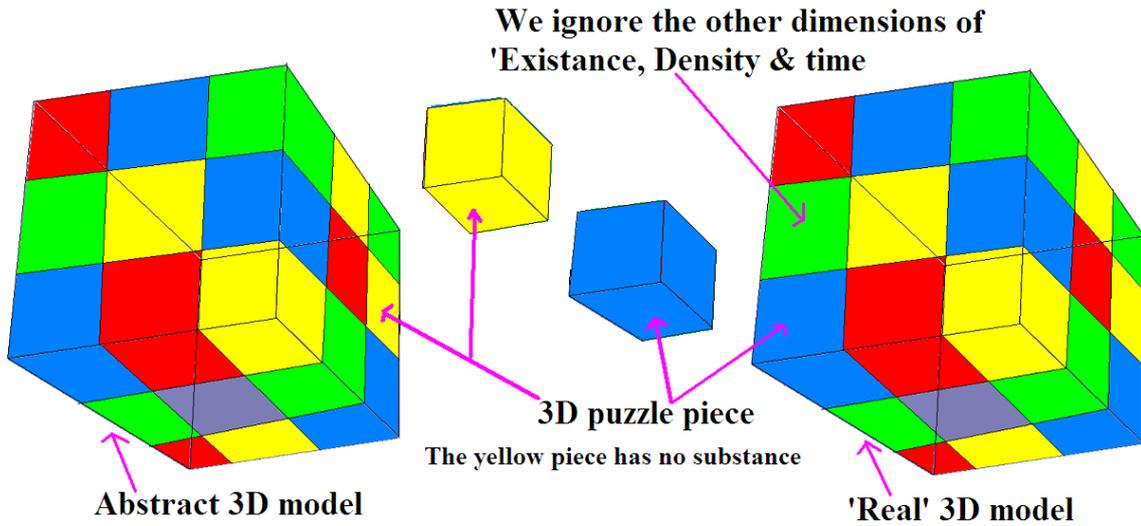
If you look at just ³length you can see from the simplified picture above that ³length can vary dependent on how many units overlap in 3D⁰space, so half of one ³length can become more than the original ³length.

Going back to the solving of problems, in my first book. It appears that no one that has read my book has quite grasped what I am saying.

In this respect I have failed. This is because I was not controversial enough. So now I will have to be more specific and therefore less flexible with my answer.

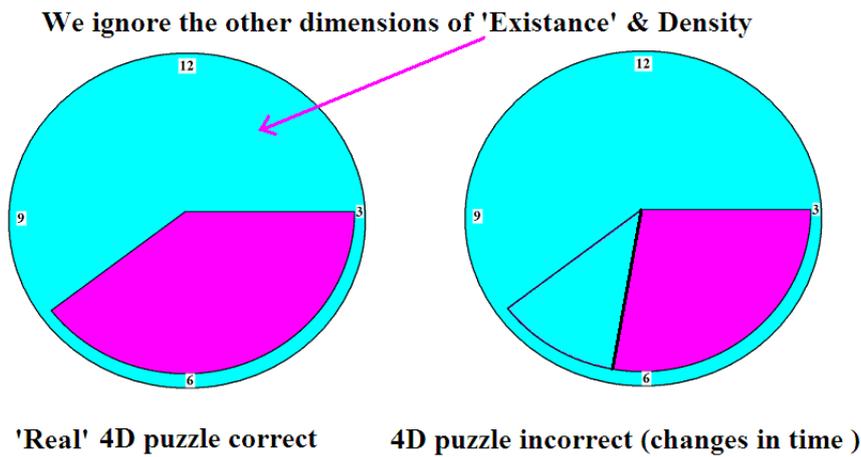
Our space (the world we live in) is not a Three Dimensional space, or a Four Dimension space, nor in fact a Five Dimensional space, but at least a Five Dimensional space.

What is new you say, mathematicians have been saying this for years.

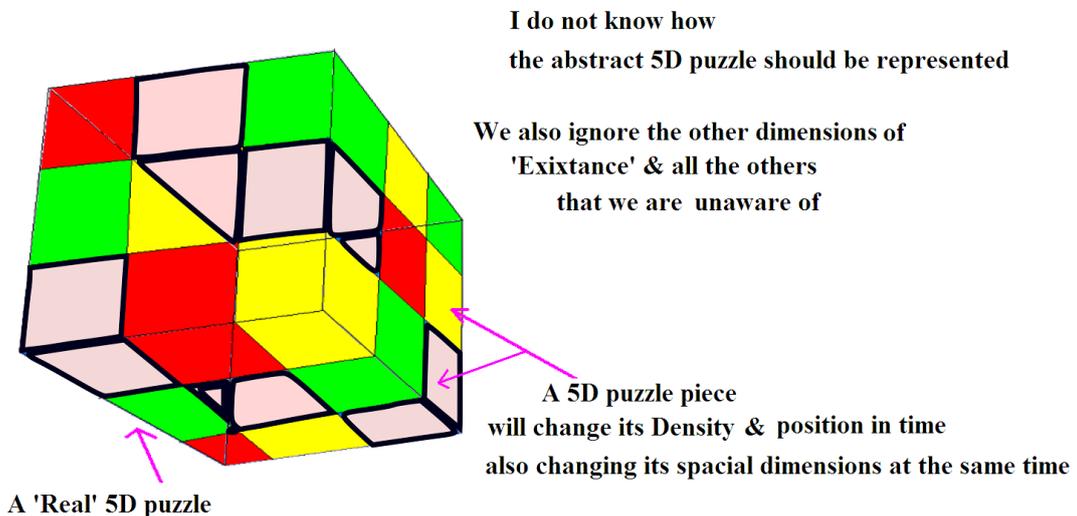


A 4D puzzle would be a model that would change with time, i.e. it would only be correct at certain time intervals and incorrect at others (or more precisely the correct answer would be changing all the time).

[For those who find this slightly confusing, imagine a 3D model revolving, and is only correctly done when the orientation is at the correct angle, or a clock at a specific time].



A 5D model would be a model that not only changed with time, but also in density, i.e. 2 or more pieces could occupy the same 3D space.



It is this last model that I wish to explain a little further.

As I said earlier a 2D model is only a concept, and we can imagine things existing in 2D.

Now if we lived in a 2D world and we didn't believe that it carried on to infinity, we could walk to the edges and maybe fall off, or walk around the edges. If we wanted to modify our model so that it didn't have any edges, so that we could walk for ever and not find or fall off the edge. We would bend the surface so all the edges touched each other, and disappeared. When you do this, you would end up with a sphere. What we did was bend the surface into another dimension. Nothing existing in the 2D model would appear or disappear in this additional dimension.

Now imagine that we live in a 3D world, can we bend this surface (more correctly a volume) so that it can have no edges. I believe we can.

If you imagine a 5D model with 5D pieces, that can be reflected onto a 3D⁰ plane.

Each piece of space is a 5D piece of space.

Each piece can occupy the same 3D³ volume.

To achieve this, the 5D piece occupies a certain ¹volume (constant), of a certain length (constant), with no edges, moves at a certain constant ¹speed (travels a constant distance in the same time), and can change the density of 3D space in time, merely by changing its curvature.

This shape can be a spiral torus, that spins, revolves and turns, and (most importantly) as the curvature changes it expands and contracts in 3D space. [This is in fact a dimension that no one has ever mentioned before, or considered, in other words we do not only go forwards and backwards, up and down, left to right, but we also go 'IN and OUT' (which varies the missing 5th Dimension in 'Secondary²Space' and ultimately in 'Tertiary³Space')].

What I call a 'Super Elastic Band' or 'APE' ('Alternating Particulate Energy').

If one could stand on the surface of this APE and look up, over a period of ²time (one cycle), one would be looking in all directions, so that the inside and outside of space would be one and the same space.

There is no such thing as something moving in a straight line, no imaginary point on this surface can move in a straight line. A straight line is only a summation of all the movements of this imaginary point to another imaginary point in 3D space. In other words a particle only appears to move in a straight line, because we are not looking at it in enough detail. (The total group of units that create the particle move in an apparent straight line, but the individual units do not).

These units occupy space with time, and create space with different densities, and volumes. All of space, energy and matter, are differing amounts of these units joined loosely or tightly together. Gravity is just the by-product of these units passing through each other.

These units can pass through each other in 3D³ space. They expand and contract in 3D space, merely by changing their curvature, depending on the other pieces in their environment or proximity, 'locked' or 'unlocked' (by their topology). The more they are 'locked', the less they expand and contract.

This means in a certain volume of 3D³ space you can have varying densities of space occupying the same ³volume. Energy can occupy the same ³space as matter; both are just varying densities of space.

Note: - I believe Energy has always an associated Mass of the pieces of space one is measuring (Pure Energy is just a concept that ignores this association).

'Real' space itself also has an associated Mass (of these units of space). [Quantized space section 29].

The Mass I am talking about may not quite have the same meaning as normal Mass.

These units can be considered as 5D bubbles of space, each is exactly the same, with the same properties, they form structures on different levels, the more units that are added the more complex the structures that are created, but certain patterns are reflected in these structures.

A little bit like Fractals, but these units are not true Fractals, as they have a minimum basic unit, and this basic unit is in fact varying with time. This basic unit of space has a cyclic pattern that it follows.

However much I try and describe this unit, one cannot see it unless one sees a moving model.

I have described the simplest model that I can; that I think can describe the Universe.

If you find this too difficult, then you can simplify the model by saying matter is such that it occupies space not as points but volumes of space (bands) of density 1.

All particles are multiples of these bands, 'locked' together.

The volume of these particles increases with density, but not proportional to the number of units added, 'locked'.

The smaller the particle the smaller the ³volume gets, but there is an 'inversion of (³space)' the size (³volume) when the units are not 'locked', i.e. the smallest particle (in mass) has a larger ³volume than a particle that is bigger (in mass) but smaller in ³volume.

It is with this 'inversion' that I believe one can explain energy. Energy is just 'uncoupled' ('unlocked') Matter.

Energy of a certain Mass occupies a ³volume of space far greater than Matter of the same Mass.

Free Energy expands the volume of 3D space; 'locked' Energy (Matter) decreases the volume of 3D space.

The total Mass of the Universe is constant (Mass of total Free Energy + Mass of total Potential Energy ('locked' Energy or Matter).

As these Energies pass through each other (the 'Flow') they cause Gravity. Gravity is just the pulling and pushing effects of these units at the same time. We only appear to experience the pulling forces of Matter ('locked' Energy), not the pushing forces of Free Energy.

This means as Gravity increases inside Matter (as particles of matter occupy a smaller volume of space), matter joining together. This volume of space has a higher potential Energy ('locked' Energy).

As Mass increases the particles start to lock down and the density increases, the ³volume of 3D space occupied decreases, the potential Energy increases.

There comes a point when the potential Energy is such that it unlocks the Free Energy (that occupies a greater volume of space). Infinite density does not occur, and cannot occur due to the character of the bands. A BIG BANG occurs. Eventually the process repeats. No Energy can exist on its own, it is always connected to another unit of Energy.

What I am saying is the ratio of Energy (Free Energy) and Matter ('locked Energy') varies with the expansion and contraction of the universe, and it is in fact this variation that causes the expansion and contraction of the universe in the first place.

54. Some other problems explained

Refraction is the deflection (of light) due to change in density of 'ASpace'. Macroscopically slows down in denser material and increases in speed going out to a lesser density. (Also section 56 "Change of direction in denser medium").

[Note: - At the lowest level it does not change speed throughout its path].

To simplify things imagine 3 flat pieces of paper (let us say 10cm wide each) they have the same width. Now if you pleat one of them (so it has ridges) and place that one between the other two, you will notice if you stand back from a distance (so you can't see the ridges clearly, [in effect going up a scale]) you will see that the middle one looks narrower than the ones either side (it actually occupies a shorter distance from left to right). If you recalibrated your scales and said that the papers either side were 1 unit each (they were 10cm) you could call it one decimeter, then the middle section could easily look like (and be from a distance) half a decimeter.

Now imagine a little ant running across the papers from left to right at a constant speed (from the ant's point of view), from your point of view it would look like it ran across the first decimeter quickly, then slowed down across the middle one (half the speed) and finally speeded up again across the last one (full speed again).

What really happened was that the ant did not change its speed across all the paper from left to right, it kept a constant speed and travelled the same distances across all the paper (in the middle one it had to go up and down the ridges, which you could not see or were aware of). This is similar to light travelling from one density to another, it does not change speed at the lowest level of travel (like the ant).

Now imagine a different example to explain the deflection.

Imagine you are in a boat and you are rowing along with one oar either side of your boat and that your oars are fixed together so they have to move together at the same speed (you have to pull them together and not independent to each other).

Now imagine that to your right there is a band of denser material in the water (let us say thick custard, so that it does not easily mix with the water).

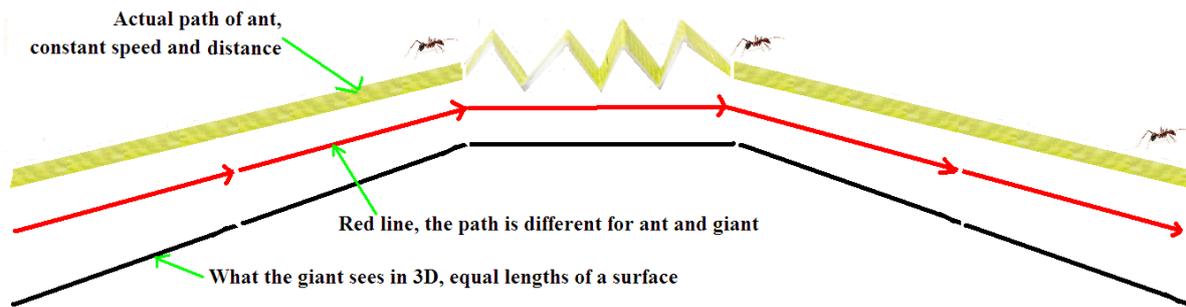
You keep pulling at your oars, when your right oar goes into the custard there will be resistance on the right side and none on the left, so your boat will travel further on the left side than on the right side, and so bend in towards the custard.

Once your boat enters the custard (at a different angle, not the same direction you were going in the water) you then keep on going straight (but at a slower speed, you haven't got any stronger, it's harder to row in custard because it is denser).

You then reach the other side of the custard and your right oar enters the water once more, the left oar is still in the custard and there is still resistance on the left side this time so your boat will lean towards the custard (the left) once you leave the custard you will keep going straight again, putting you back in the direction you were first going before you entered the custard.

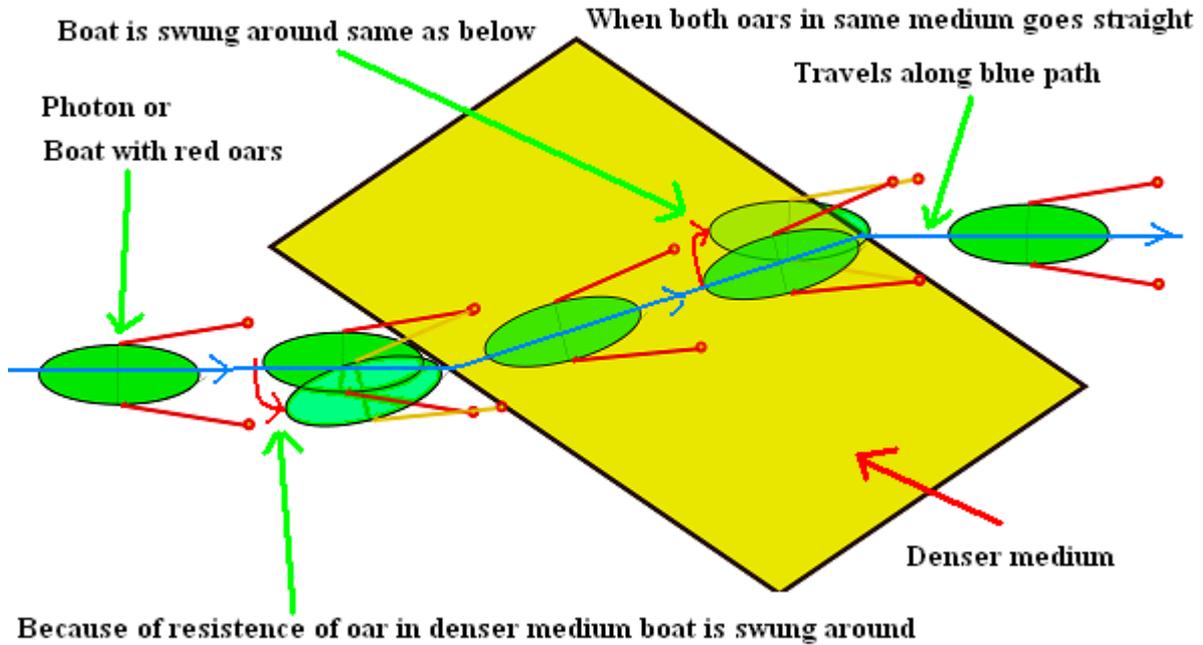
This is similar to light being deflected into the denser material and deflecting again on exiting. [The angles on entering and exiting will only be the same if the boundaries are parallel and the material is the same density throughout].

55. Ant seems to travel at different speeds



The ant travels across the three pieces of paper in the same time intervals, so appears to travel slower across the middle pleated piece of paper, but in fact did not change its speed (it travelled the same distance in the same time, the middle section just looks shorter from a distance).

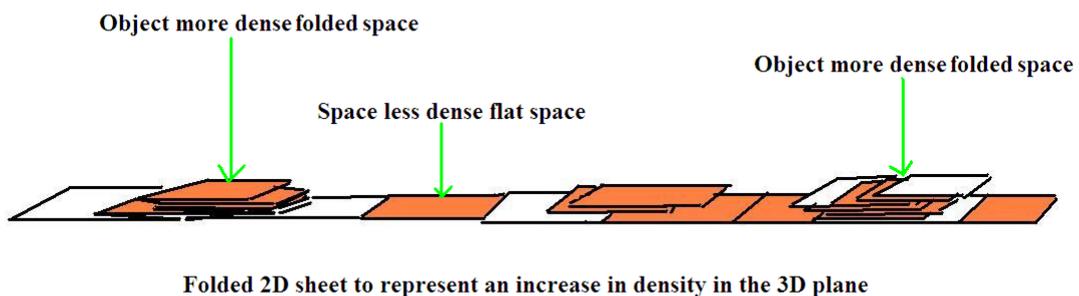
56. Change of direction in denser medium



As a boat (or photon of light) reaches a denser medium it meets with resistance on one side (the red oars in the case of the boat), so moves into the direction of the medium, on exiting the other side the resistance is on the opposite side so accelerates back into the original direction, prior to entry (on the side with least resistance).

Now the example above with the ant, although the ant travelled up and down in our example, it could have been left and right instead and achieved the same effect. There are also other options that the ant could have travelled along, for example if you consider that there were obstacles in its way, it could have gone backwards to the left or right, or backwards and down to the left or right, or backwards and up, to the left and right. All these options and many more is like it is travelling over hilly terrain, it can even go half way up a hill and turn right back in the opposite direction, before going forward again. In a static terrain it would not make sense for it to back track and then go forward again in a straight line, but if the terrain was moving all the time, it would be like the hill that was in front of him, (that he backtracked) had moved to the side or become flat ground, so he could go straight forward again without hindrance.

Another simplified example. When I explained the ant travelling on a pleated piece of paper it is similar to compressing space into a smaller area thereby simulating an increase in density of the space, but the ant is 3D moving on a 2D surface. How can we give an example that is more 3D in nature? If you double back the paper repeatedly in different places it will look more like you are increasing the density of space in those areas, more like objects. It will be harder for the ant to travel across these areas.



This is still 2D in nature but if we make holes in the paper i.e. perforate it before we bend it backwards etc. as before, then this will look more like 3D after the bending. Now the ant can travel through 3D objects and space (by moving through the holes as well (i.e. travel in 3D from one level of 2D plane to another level in 2D plane).

Now go one stage further and imagine the ant was also made from a small piece of perforated paper molded into the shape of the ant. Now you can say one space is travelling through another space (3D through 3D). Again imagine the whole of the original paper was made from individual small pieces of perforated paper and you can see that different pieces of paper can slide (move) over each other to make any shape or density you like.

We experience space at our level with the holes in it, but at the lowest level only the paper exists and not the holes, so if you compress space (the paper equivalent in our example) you get (and experience) a smaller volume of space (but the same amount of paper). The holes that don't exist as such just add up to nothing. When you spread the bits of paper and create a bigger volume (expanding Universe) you are just adding more holes in the total ³volume but not increasing the amount of paper (the actual 'Real' space).

[I may have created a bit of confusion in that I am using the word 'space' to have two meanings, when I say 'Real' space I mean 'Existence' of something in that space which is distinguishable from empty ⁰space. Some people will only recognise space as being totally empty, so they expect me to use a different word so as not to be confused, but I feel that if I create too many different words this would make it even harder to read].

The 'APE' travels in a similar way to the ant, except there is one more distinction between the path of the ant and the 'APE', this is that it not only travels up and down, left and right, forwards and backwards, but that it does all these at the same time as well as going up and down, left and right, forwards and backwards. This last sentence can only be explained by the fact that 'Reality' ('Existence') cannot be represented as independent points at lower scales.

To understand this a little better, let us replace the ant with a puffer fish. It can blow itself up, like a balloon with spikes on the outside. Now imagine the puffer fish is going forwards and its spines are about to hit you, it then decides to puff itself up. The spines would go into you (and it would hurt) as you would expect. But imagine the puffer fish was deflating itself as it moved forward, it could in theory not touch you with its spines as it shrunk. Now imagine the puffer fish that was about to spike you, going away from you (i.e. backwards) and then decides to puff up. This time although it is going backwards it can still stick its spines into you (ouch). This is just the forwards and backwards motion, but it equally applies to all the other motions.

So you can see from this that the 'APE' can equally be going forwards in one respect while going backwards, or going backwards in one respect while going forward. It does all the other options as well at the same time! This is only achieved by the 'IN and OUT dimension' that exists in addition to the other space dimensions, and can only exist if you look at 'Reality' ('Existence') as clustered ¹points (dependent on each other) creating enclosing volumes of space in time. ['APES', 'ASpace'].

Refraction is the deflection (of light) due to change in density of 'ASpace'. Macroscopically slows down in denser material and increases in speed going out to a lesser density.

[Note: - At the lowest level it does not change speed throughout its path, like the ant].

57. Another way to look at the 'APEs'

They can be considered as bounded surfaces that contract around an imaginary center. The surfaces act like permeable membranes absorbing and expelling other 'APEs' through them. As they contract, the surface increases in density and power as it twists the other 'APEs' across the surface.

Some people may ask "What are these 'APEs' made of?" but at this juncture it is relatively speaking not relevant. I have postulated that these entities actually exist, but at the moment it is still an abstract structure that has not been verified, so why do I persist in creating a structure that may not exist. The

reason being is that it can describe what is happening in reality far better than all the other models put together, with fewer dilemmas, it even describes mechanisms that the other models cannot do. E.g. The mechanisms of Gravity, wave particle duality, refraction....

Why do I say it is not relevant what the 'APE' is made of?

It is similar to a giant looking at all the small buildings that we have, and coming to the conclusion that although there are similarities between buildings there is no common building block, which the others are constructed from. I come along and say to the giant that they are all made from bricks; he was unaware that bricks even existed, but if he accepts their existence he can explain how all the buildings are constructed from bricks. Asking a question like "What are the bricks made of?" is relatively speaking not relevant, because he can still explain the structure of all the buildings without knowing their structure, but more importantly what is the point of asking what the bricks are made of if he cannot even accept their existence in the first place. Once he accepts the existence of the bricks, then the question "What are the bricks made of?" becomes another challenge to solve. I have some ideas on the fine structure of the 'APE', but I will leave that for another time, once my model has been looked at with more scrutiny.

58. Perception

Space as we know it, is fuzzy. Things are not rigid as in solid spheres or surfaces. They appear to be fuzzy on the edges. Because they are fuzzy on the edges, they can appear to share the same spaces with each other in what we normally call Time. Also e.g. electrons seem to be in or at different points in space at the same Time until we observe them. They can also appear to share the same space at the same Time (2 electrons in similar orbits, around the nucleus of the atom).

Our brains normally smooth out any irregularities (or missing bits), and create smooth surfaces or edges or uniform contours (or colours). E.g. smooth flat table top, or clear pictures on a TV or monitor screen. The table top is not smooth at the molecular or atomic level, nor is the picture on the TV/monitor smooth and coloured throughout, if you look at individual pixels on the screen, or go to an even lower scale.

In other words our brains smooth things out at higher scales, so as to better see the overall picture. Stars and Galaxies can become distinct objects in the sky, the moon looks like one distinct object, but it is not, it is "fuzzy" on the edges.

All objects at whatever scale you go down to will not have a distinct edge or surface using our normal Time. We use probabilities to locate things (e.g. electrons). Time is relative, but what is this Time?

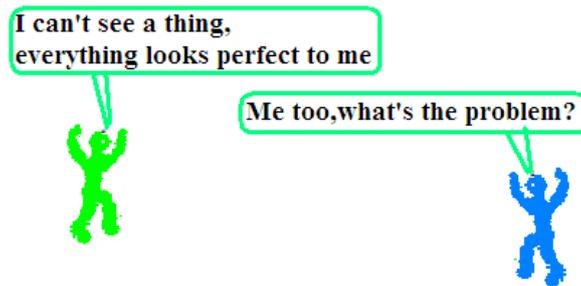
It is merely a measure of real change of space (or the object in space). But what is space? and what is a real object?

Objects are merely a cluster of smaller objects put together, until you go down the scales until you reach the size of atoms, and objects become a mix of particles and waves. Particles are merely compacted waves in space. Which means everything is essentially waves in different proportions, compacted either as particles, or apparently free to move through space (as waves). So what is space?

⁰Space (itself) in 'Reality' does not actually 'Exist', but is a background to better understand our world (Universe) a Null Space that we place things (waves and particles or objects) in. A point on its own does not actually exist (it has no dimensions) it merely is a reference point at which something may exist. The same goes for a line (although it has one dimension) nothing exists along all its length, it is merely an infinite number of points between two points.

Take an object (particle or wave) and look at any apparent smooth edge e.g. the edge of a smooth perfect crystal or metal. When you go down the scales to atomic levels, the crystal lattice will appear and there will be atoms along this line at varying distances with spaces in between them. The line is broken, it does not have things existing at all points, it no longer is a true line that exists in its own right, but again becomes a reference at which things may exist along it. The same argument goes for flat surfaces (2 dimensions, but no depth). Nothing has a smooth flat surface at atomic levels.

[Although the same is true for 3 dimensions, it is harder to accept, but all 3D apparent smooth objects have holes in them (nothing is solid through and through)].



In any event one needs to add a dimension called 'Existence', in which things objects, particles, and waves 'Exist' at. How can one measure 'Existence'?

There are instances of existence e.g. an elephant, atom, electron, photon (they all exist). We need to find the smallest piece of Existence that all the others are created from (lowest common denominator). This is always a "complex volume" by which I mean an enclosed surface, which is different from Null Space. If everything in space was simple 3D objects then a sphere would be an enclosed volume (no edges). This of course is not the case; a 3D object is a mix of Existences, a mix of complex volumes.

Here we must add or clarify the dimension called Density (Density is not normally classified as a dimension), but something must be defined to distinguish the enclosed 'Real Volume' of Existence from the Null Space outside of it.

[Normal ³Density we normally know is a function of the ¹'Density of Space' in Time].

Going back to Time, time is a measure of something. This something I believe is a measure of change of Existence or Existences of these finite volumes of 'Real Space' (and their densities). In other words Time is not an independent thing, but is relative to the volume of Existence that applies to it, i.e. it is inextricably linked to the other dimensions. If one redefines the dimensions as measures of Existence, then all dimensions are a function of its constituent parts, e.g. a length then becomes a function of the lengths of its parts, but is dependent on all its other dimensions. Time then becomes a function of the Times of its component parts also.

Each part has its own Existence, time, density, length, width, and height. This is 6 dimensions [7 when you add Speed], 'Existence' and Time ('Secondary ²Time') are two different dimensions. If one could stop Time (freeze frame), then 'Existence' would still be there, as would density and the other dimensions of space.

If one analyses Potential and Kinetic Energy and realises that they are a function of one and the same thing; they are merely a relative change, one where there appears to be no movement relative to the observer (Potential) and the other a movement relative to the observer (Kinetic). If one merely solves the riddle "What would happen if an unstoppable force met an immovable object?" it would become clear that Potential Energy is merely one where the overall Kinetic Energy appears to cancel itself out and therefore appears stationary relative to the observer.

April 2013.

A little more on our perception.

Green is an object at a different scale. What?

You say another absurdity.

An object is defined by its scale and its boundary which is also defined by its scale.

So a car is only a car because on our scale we see it as an object with this shape at this scale with those properties of a car. If we go down the scales to microscopic levels and look at a small portion of the car, let us say the wheel, it is no longer a car but a section of a wheel or maybe just a bit of rubber. Lower still to molecular levels it is just a group of molecules. Looking at it from the opposite perspective you do not say a car is a bit of a planet, although it is part of the planet.

So in effect real objects are defined by their appropriate scale, abstract objects are not, these are defined in our mental picture of the abstract objects. So in our abstract mental picture, because of the scales we perceive, we see, let us say the colour orange as an attribute of the car or object and not as an object or a part of the object, this is because it is at a completely different scale to the car. The real car creates a mental picture of the car in our minds (our perception). The real photons that are coming from the car also create a mental picture of orange in our minds (our perception again). The two are conceptually the same they are entities at different scales but when we perceive them in the same mental picture we call one an object and the other an attribute of the object.

The other senses of sound, smell, heat etc. are all the same conceptually also. This at first also sounds absurd like some of the other absurdities I have brought to mind.

But as an example let us imagine a car (an object) that is wet. Normally the car would be considered the object and wet (the water) an attribute of the car and not a part of the car.

If you look at the water that is on the car at the molecular level we see them as objects (water molecules) and not as an attribute. Now if the water evaporates the car is still the car and the water is still the water (molecules) both objects, but at different scales. The photons that create the orange colour can be considered the same as the water molecules but yet again at a different scale again.

If on the other hand the water on the car was considered part of the car then this is similar to the colour orange being a part of the car and not an attribute of it, just like the wheels. The whole car is actually made of the attributes of all of its constituent parts, it is our mind that takes all these bits together then separates the different levels into its abstract nature.

This is similar to what it does with time and it abstractly separates it from space and density. The mind thinks in abstract terms relating it to reality, it does this in time and extrapolates backwards to define things that exclude time. One needs time to actually do this process of thinking and ultimately time is not separate, it is just excluded by our minds because it only needs to see what is relevant to us (it), and as most things (objects) don't change much in time we make them timeless and only consider our time (what is relevant to us and changing in similar times to us).

This I believe is another evolutionary thing again like seeing (considering) only what is relevant at our scale, we only need to consider the times that are relevant at our scales and speeds. No need to consider for evolutionary survival the speeds or times of molecules, electrons or light travelling through different densities. Just need to know if that lion is coming in our direction and at what speed? (Remember smooth filling objects analogy). End addition April 2013.

59. If all else fails

If you find that the definitions confuse you, then forget all the definitions and just remember that everything 'Real' is made up of very small moving elastic bands (spinning very fast) creating different sizes and different combinations, moving through each other. If it is not made from these, then it is not 'Real', it is just Abstract.

There is nothing in the model that does not allow for theoretical Ghosts or Spirits (they would be ethereal complexes with very low densities) and could co-exist in the same ³spaces we live in at the same ³time (they do not have to leave this Universe). This does not of course mean that because they can theoretically 'Exist' in my model, that it is proof that they exist. Also remember the sum is always greater than its parts. So you can add higher complex notions, the higher up the scales you go. E.g. emotions although ultimately are directly linked to the basic units of the Universe within ourselves, new complex patterns emerge in the complexes (of these basic units) that are not in the basic units themselves.

Another example, there is no pattern (you can see) in a brick that will make a specific building, you cannot look at a brick and see how it will create a building. Only the design of the building will show you the pattern that the bricks have made to create it. The different patterns themselves create the buildings (and the patterns themselves can be thought of as entities in their own right at higher levels, they are more than just the bricks).

To continue with the significance of my model. If you had a normal drawing of a building (in the conventional sense); you could not tell from the drawing whether it was an abstract building or a building that actually existed.

In my model you would be able to tell whether it was representing an abstract building (to be built or not) from a representation of an actual building, that actually existed in reality. You could say to someone “get me this brick please” and they could actually bring you back the real brick that you referred to in the drawing. In the conventional drawing you would not know one brick from another or whether there was such a brick to bring back. Although the example I have just quoted is a macroscopic example and is not much use in everyday use (unless that specific brick had something hidden in it that was precious to you). The model becomes more significant at lower scales and at subatomic scales, when you represent things that ‘Exist’ and don’t ‘Exist’ in the same drawing, thereby knowing what is ‘Real’ and how it can react with other ‘Real’ things.

60. Photo electric effect and speed of light

From my first book; photo electric effect and speed of light.

First I thought I would explain the photo-electric effect. For those who have not heard of this (and I apologise to physicists) briefly, it is when you shine light on a metal, some electrons are knocked off. The problem here is that light (waves) act as photons (particles) in this experiment; that appear to have mass.

The problem is that in some experiments light acts like waves, and in others it acts like particles. This leads me to believe that there is a dilemma in the definition of light. Is light a wave or a particle?

The answer would be simplified if light was obviously both. How can it be both?

By definition, if we say it is both.

At this point I created the ‘APE’. (APE is the first 3 letters of my initial and name) (no coincidence!)

I defined it as ‘Alternating Particular (or Particulate) Energy’ (‘APE’), such that this entity alternated between an entity that had particulate characteristics and an entity that had wave characteristics. This ‘APE’ therefore could mimic a particle, or it could mimic a wave.

How could it do so?

I won’t go into details at this stage, as to how this may be achieved, or as to how I arrived at this. But to me there was something being missed in the space time continuum, of the aforementioned dimensions (we talk about 4 dimensions, 3 for space and 1 for time).

If in the sub atomic level and string theory you could have up to 9 or even 10 dimensions, then it seemed odd to me that some of these dimensions did not manifest themselves at a higher or macroscopic level.

I came to the conclusion that at least another dimension was obviously being missed at the atomic level if not at the macroscopic level.

I came to this conclusion because I found it difficult to accept that there was 9 or 10 dimensions.

If one normally makes an assumption, and that assumption is incorrect, one can normally justify that assumption by making (at least) another assumption (to cancel or reinforce the previously incorrect one).

All the above assumptions would be incorrect, and if the first assumption was used to explain something, then the second, would be used to counter the inadequacy of the first, and further assumptions may compound or complicate the reality of the situation.

In other words, if we have made a fundamental error in one of our assumptions in our universe, then we may need 9 or 10 mathematical dimensions to explain things.

But if we correct this false assumption, then maybe we only need 6, 7 or 8 dimensions to explain things.

Six dimensions I can handle, maybe even seven. At this point, if I was a mathematician, I could possibly solve the problem.

So I have decided that the solution is to add the missing 5th dimension (not to be confused with the one in Dr WHO, although this may be related, don't think about this yet!)

At present people think of matter and energy, and they exist in space.

The concept of space as 3 dimensions can exist as a concept, but like the problem 2, cannot exist in our universe on its own.

The reason is that our universe is not empty space, but occupied by matter and energy. (Matter and Energy are part of space). [Space is made up of Matter and Energy].

If matter and energy were made of the same thing ('APES') and were interconvertable (I will explain later how) then the laws of the conservation of matter and the conservation of energy would become the conservation of 'APES'.

[You can also see it as the conservation of 'Real Space', in the 5 dimensional sense.] Matter and energy are interconvertable.

$E = mc^2$ (sorry I put in a formula).

I conclude that the missing 5th dimension is the dimension of density (mass per unit volume) the density of 'APES' (which is the same as saying the density of matter and energy that occupies our universe of space).

This density is not of matter and energy as two separate things, but of one entity ('APES').

['APES' can also be thought of as bits of space; that have dimensions. Empty space, on the other hand, cannot and does not exist without 'APES', and on its own cannot have dimensions, it would not exist.]

Now we come to the crunch! What is matter and what is energy, if they are the same thing?

I have defined them as 'APES', (at this point I should explain energy a little bit. We think of energy in many forms e.g. potential, kinetic, light, heat, x-rays etc. I will use the term energy in two forms. 1. The Energy component of the 'APE', which will, I hope, explain some forms of energy (potential, kinetic) and 2. Other forms of energy).

[Energy is a measure of the ability or power to do work. For work to be done, then there must exist an entity for it to do work upon. Also Energy needs a carrier to work through, or transfer energy. Pure Energy is again a concept that cannot exist on its own in our universe].

For matter and energy to be different they must be differing amounts or combinations of 'APES'.

If matter increases with density the more mass per unit volume it has. Then the more the mass, the more the 'APES' it must have. Going in the opposite direction of density we will reach our current zero density of matter. ??? but then we come to energy (which I say is still 'APES' (but fewer of).

If I make a statement at this stage, and define low density is more energy in character, and high density is more matter in character. **

Let us go back to the photo-electric effect, in which we are (I believe) at the border of wave (energy) light and particle (energy) electron (an electron has a mass).

If we say that light is 'APES', (low density),

and electrons are ‘APES’, (high density).

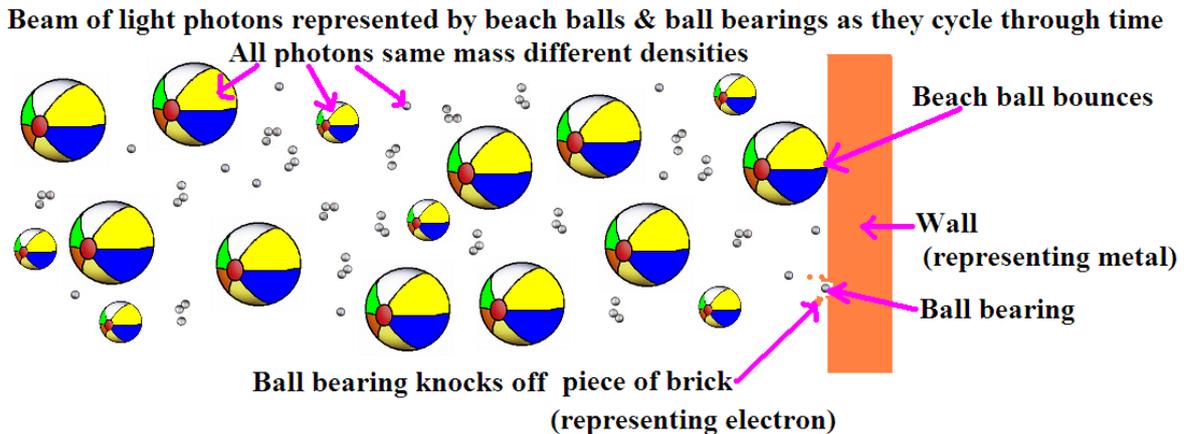
Then how could a low density entity have sufficient force to knock off an electron? (higher density).

The answer must be that the ‘APE’ changes its density with time, (I have now linked time with this fundamental entity). ****Time is a measure of change between two or more entities**** we will come back to time later.

If light waves alternate between low density energy (wave characteristics) and high density (particulate characteristics) then at the point of impact on the surface of the metal there would be a distribution of waves and particles hitting the surface of the metal. The waves would not knock off electrons, but the particles would.

This would be similar to beach balls of a certain mass, and ball bearings of the same mass, thrown onto a wall. The beach balls would not knock any chips off, but the ball bearings would.

Even if you reduced the total energy of the beam, i.e. fewer entities, the effect would still be there, and be expected.



If light was just wave energy, and you reduce the energy of the beam of light, you would expect the photo-electric effect to go away, but it does not. Therefore I do not believe that light is just waves. I therefore conclude that Light is both energy and particulate, alternating in time and space.

Note the change in density could be of two kinds.

1. It occupies the same volume of space (I have at present disregarded this option).

[This option is still valid, but a little more difficult to explain].

or

2. It occupies a differing volume of space (this is the example I have used above, i.e. beach balls and ball bearings).

Let us stop and think for a moment.

If everything is made of ‘APES’, let us define a few more characteristics of these ‘APES’.

Let us look at one ‘APE’.

It must have substance (mass), i.e. different from empty space.

[It also has its own Energy component (this does not leave the ‘APE’, like normal energy)].

We have said light is made of ‘APES’ and that it alternates from lower to higher density.

It would therefore be occupying and alternating between a larger volume and a smaller volume of space.

Now if this ‘APE’ is occupying a different volume in space with time, what time difference is there between the two extremes?

I propose that this is linked to the speed of light c . (Let us say for the time being that this is an overall speed of expansion and contraction, so that we don’t get bogged down at this stage as to whether it is a constant speed or an increasing {accelerating} and decreasing {decelerating} speed).

If we look at one point on the surface of the ‘APE’, It would occupy space from one point to another point in space at the speed of c as it expands its volume, then return at the speed of c (in the opposite direction) as it contracts its volume.

Therefore it would be occupying space at the speed of light (also un-occupying space at the speed of light).

The 'APE' therefore moves into space by occupying space adjacent to it (even when it is stationary).

If we now propel this 'APE' through space (by giving it a velocity in a specific direction) (let us not look at the details as to how this is done at this stage, but suffice to say we have given it energy) (remember energy is 'APES').

The 'APE' or 'APES' would travel through space, always expanding into it at the speed of light, and back again, as long as the speed of propulsion was less than the speed (of expansion) of light.

Once you reach the speed of light, you would not be able to go any faster, because it would mean that the 'APE' would have to jump space (and time) to a point further and faster than it could expand into it.

It is limited to its own speed of expansion, and therefore propulsion through space. Each 'APE' added would still have the same limiting speed; they would all expand at the same rate, i.e. the speed of light c .

(The speeds are not additive, if they are linked together in such a way as they are more or less in synchronization).

[Note: - these 'APES' may move faster than light, and that the limiting speed is the speed of propulsion through space].

If many of these 'APES' eventually create mass (matter), then one 'APE' must have a degree of mass (the definition of mass here may have a different meaning to the normal use of mass, see the meaning of words)?

The 'APE' would (I believe) therefore have some form of finite mass.

Next we have the electron which is particulate (has mass) which appears to have a certain energy level around a nucleus of the atom.

If, as I have stated, that energy and matter (mass) is made of one and the same entity, then the electron must surely be a higher density of 'APES', adding another 'APE' or 'APES' would be equivalent to adding more energy.

This would agree with quantum theory that energy is quantized. Assuming at this stage that you cannot add part 'APES'.

If we were to propel an electron to nearly the speed of light, adding more energy (from 'APES'), and using the previous section limiting the speed to the speed c , one could keep on adding energy ('APES'), but all one would achieve would be the increase in the number of 'APES' [when you reach the limiting speed of expansion, the additional 'APES' would change their characteristics from energy to matter] and as 'APES' have a finite mass, you would increase the mass of the electron but not the speed.

This I believe is also in accord with current physics.

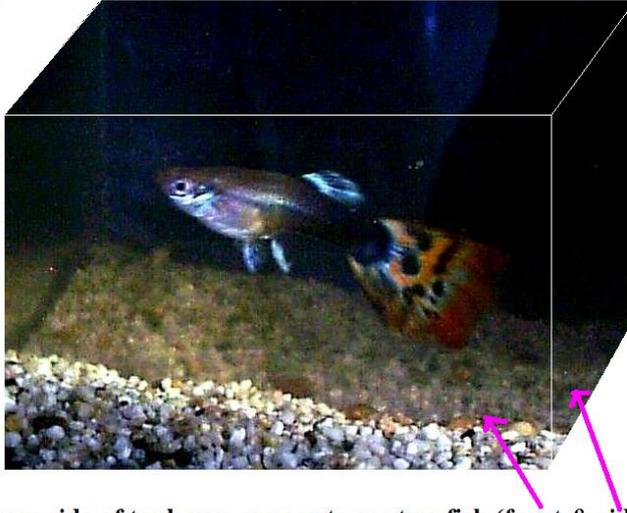
Remember we are trying to solve the puzzle of everything, and to do so we need to find the pieces. If we are working with the wrong pieces, we will never solve it correctly. This is like using two dimensional pieces of a jig-saw puzzle to solve a three dimensional puzzle. You can convince yourself by creating a cube, with the faces made of your pieces, and it will look like you have solved the puzzle, but you have missed the inside volume (which you now cannot see). You need three dimensional pieces to solve it correctly, creating the inside as well.

It also seems wrong that you are trying to explain at least a 5 dimensional problem (I think it as at least 6 dimensions, but I do not want to talk about the 6th dimension yet) with basically a 2 or 3 dimensional tool.

This brings to mind the fish in the fish tank. If one looks at it from the corner (edge of the tank), you will apparently see one fish from the front surface of the tank, and another from the other. If you tried explaining a fish to someone by taking a photograph, you would be seeing the same fish, but you would be viewing it from basically a 2 dimensional view of the front, or side. You cannot fully understand a fish from this view, because you are using the wrong number of dimensions, even if you

view it from the top of the tank, and see that it is only one fish, you could not appreciate it unless you viewed it in 4 dimensions, as it moved through time and space. Those of you who have been paying attention will say correctly that we should view it in 5 dimensions, so that we can understand the density of its internal organs and shape, this way we will understand its buoyancy and how it swims etc.

**To fully understand a fish you have to view it in at least 5 Dimensions
(to include changing densities as it swims)**



**If you look from side of tank you appear to see two fish (front & side)
(viewed from a corner you actually appear to see three fish)**

(For those who might be interested: - the fish is a giant female guppy that I bred back in 1999, females don't normally have colour. This has nothing to do with the book).

61. Mass, Inertia, Momentum

Mass is a measurement of inertia which is a resistance to a pull or push on the object. This is scale specific with reference to Density; in respect of how much of the space is 'knotted Density' (more characteristic of matter) or 'unknotted Density' (more characteristic of energy), i.e. Proportional to the ratio of 'Knotted space' units/'Unknotted space' units. 'Knotted Density' has more Inertia because it resists energy more (because it is more Dense per overall unit volume and therefore more powerful). 'Unknotted Density' is less Dense per overall volume so has less Inertia (because 'unknotted space' units can more easily pass through each other, therefore offer less resistance and are weaker). Momentum is how much inertia the object has in a specific direction? Which is proportional to the Mass and the speed of the object?

[As I mentioned elsewhere this speed refers to the speed around an imaginary center, this then being its 'complex angular momentum'. If the speed referred to is a translation speed with reference to this center then it is the usual momentum].

All movements are merely displacements of 'ASpace'?

Note: - In other sections I use 'linked/unlinked' or 'coupled/uncoupled' space to mean the same as 'knotted/unknotted space'.

['Knotted/unknotted' is a more correct term, but has another meaning in mathematics. My 'knotted space loops' are simple and can be made and undone without breaking the loop. 2012: - The nearest thing in knot theory would be the unknot and in link theory the unlink]. ^

Incongruent?

62. More on Density

³Density is the mass per unit ³volume, which is also the ‘Densal state’.

Note: - you can have the same ³density composed by different ‘Densal states’.

‘Densal state’ is the ‘Densal distribution’ and ‘Densal composition’ of a ³volume of ‘ASpace’.

‘Densal distribution’ is the positions or spacings of the ‘Densal compositions’ in the ³volume of ‘ASpace’.

‘Densal composition’ is the differing amounts of different densities in the ³volume of the ‘ASpace’.

Let us look at some examples. A gas is the easiest to explain.

Let us assume a simplified example where the ‘Densal composition’ of a ³volume of hydrogen gas is composed of hydrogen gas molecules plus the energy density of the spaces between them.

At a standard temperature and pressure the distance between the molecules will be on average the same.

If we had a volume of 1 dm³, it would have a density of $6.022 \times 10^{23} \times 2 / 24$.

The significant figure is the relative mass of a hydrogen gas molecule which is 2.

Now if the same ³volume of gas was helium it would have a ‘Densal composition’ of $6.022 \times 10^{23} \times 4 / 24$ which would be twice the ³density, because the relative mass of helium is 4.

Now if you had heavy hydrogen the ‘Densal composition’ would be $6.022 \times 10^{23} \times 4 / 24$, which is similar to the ³density of helium, but it has a different ‘Densal composition’. (The Heavy Hydrogen gas molecule is not the same as the Helium gas atom). The relative mass of the heavy hydrogen gas molecule is also 4.

We could have also obtained a similar ³density by changing the temperature or the pressure or both of all the samples so they all ended up with the same ³density, but each sample had a different ‘Densal composition’ and therefore a different ‘Densal state’.

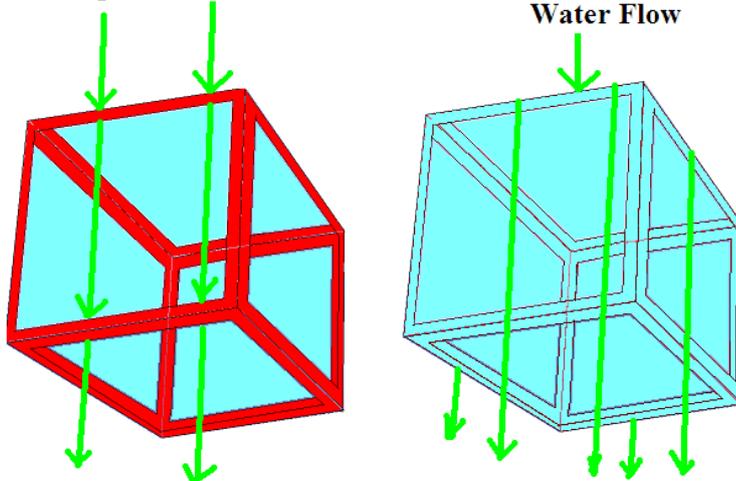
Why all the fuss, you may ask yourself. What this means is that two metals of the same ³density will not have the same Flow of energy in them, but will have different Flows of energy in them.

If you did not fully get this, imagine an empty box with all the corners or edges reinforced with a heavy metal (the box is empty), and a second box that was full of a light material (the box is full). From the outside both boxes look alike, they both have the same ³volume and both have the same weight (mass). Their ³densities are mass/volume which would be the same, indistinguishable from the outside, but they are both completely different from the inside and have different properties. If you open the boxes you can pour water into the empty one but not the full one, the Flow will be different.

Both boxes same density i.e. mass/volume

Red edges much more dense than blue

Water Flow



Water Flows through empty box

Water Flows over solid box

63. Dark Flow

Dark energy ('APES') flows through everything like a powerful river or powerful wind. If you place something in it, large or small, it will merely follow the current, there will be no resistance, and both large and small objects will flow at the same speed. Unless the speed of the objects is similar to the speed of the current, they will appear to accelerate at the same rate, trying to match the speed of the current. You may think that the current should push the larger object more than the smaller one, which it does, but the smaller one needs less to push it, so neither is a match to the current. Each object also creates its own current, pulling and pushing, this pull/push is proportional to its mass so each mass cancels its own pull/push so the net effect is to follow the strongest current.

The density of an 'APE' is so small that you cannot feel it, but when billions flow through something you can feel its affect. Gravity is the net effect of this force. Even light is heavy in comparison to an 'APE'.

Light has its limit because it creates a resistance to this flow, you may think of it something as similar to a terminal velocity of an object in air, due to its resistance against the air molecules. Light also has a pull/push flow and this equals the flow push against it, therefore it cannot go faster. All energy has the same properties, pulling and pushing but free energy tends to push more than pulls because it expands more than energy in a solid which tends to expand less and in compact form, i.e. in a solid it pulls more than pushes. The actual intrinsic energy of the 'APE' is the same so its total push is equal to its total pull, so how does this effect take place?

It pushes less dense 'APES' out away, and more dense 'APES' inward; and because less dense 'APES' have a greater volume they move away into a larger volume around the more dense 'APES'. The more dense 'APES' have a smaller volume therefore can move inwards towards the centers of gravity of the solid. In this way it is merely a displacement of 'APES' inwards and outwards of different densities.

Note: - the same 'APE' undergoes this cycle of expansion and contraction.

So as it travels towards the center of gravity, it expands and contracts less. Or put another way, the energy density at the center of gravity of an object is greater than the energy density at the edges of the object, the density of the material appears to be the same throughout, but if taken in totality is in fact temporarily denser at the center (due to the energy), but it is so small, the difference is not detected.

64. Energy and Quanta

Another example to explain Energy and quanta.

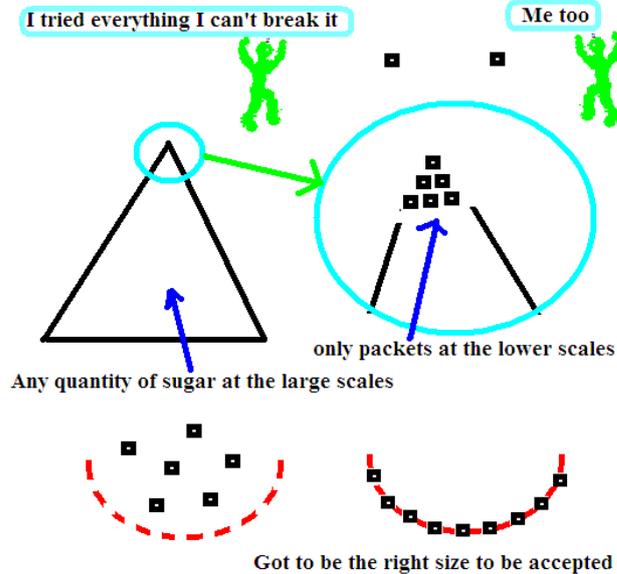
If you imagine that energy is like sugar (granulated), and you can measure the amount of energy by the amount of sugar in a balance (by weight).

If you measure energy at macroscopic levels it appears that you can have any amount of energy in a continuous range, because the grains or granules are so small that you cannot distinguish the relative difference.

If on the other hand you go down to atomic levels you will see that it comes in packets, you either have a granule of sugar or you don't.

You cannot get a hammer and smash the granules, it is the nature of the sugar (energy); it comes in packets. These packets are called quanta, they can come in different sizes and as an example an electron around an atom can only accept the right amount of energy to move to a higher orbital, if it is too small or too large the energy will not be accepted.

You can imagine an electron and energy like a sieve and sugar. If the granules are too small they will simply fall straight through the holes in the sieve, if they are too big they will not fit into the holes, but when they are the right size, they will wedge into the holes and the sieve will accept them and become one (electron with more energy). Similarly when they release energy they release the whole packet (granule).



65. Big Bang Big Crunch

(See also section 33 “What is the true origin of the Universe?”).

My explanation of the Big Bang Big Crunch using my model is as follows: -

Energy pushes things (‘ASpace’) outwards; Matter pulls things (‘ASpace’) inwards. So at the point (not actual physical point) of the big bang scenario, there was more energy than matter, so the universe expands. As the universe expands and creates matter and losses energy, the universe will stop expanding when the ratio of matter to energy is in favour of matter, which will pull back the universe towards a big crunch scenario.

Note: - Energy and Matter pull and push all the time, but in the case of Energy there is a bias to push more than pull, and in the case of Matter there is a bias to pull more than push (Gravity).

We notice the pull of gravity, but not the push, it pulls matter towards it and energy away from it. It is a form of displacement. Think of a sponge absorbing water. If the sponge was matter and contracted under gravity it would squeeze out the water (the Energy). This is a continuous process; effectively matter pulls in denser energy and pushes out less dense energy. The majority of the flow of energy is the same energy that changes its density as it flows in and out of matter. So things appear to be pulled in by gravity to the imaginary center of mass, but this same energy is pushed back out in less dense form. Note this is the same process of black holes where light is pulled in due to its density but energies are pushed out that are less dense than light. Also in black holes another process occurs whereby matter and light are disassembled into less dense energy and so can escape pushing outwards.

66. Chaos, Order, Disorder and Entropy

Chaos, Order, Disorder and Entropy. My explanation of these things are scale specific, by this I mean that they are dependent on the scale and the entities that one is looking at.

For example what is more ordered: -

1. A line of marbles equidistant from each other stacked on top of a similar line of marbles also equidistant from each other, or
2. Some marbles clumped together a few more marbles not equidistant from each other, then another clump of marbles?

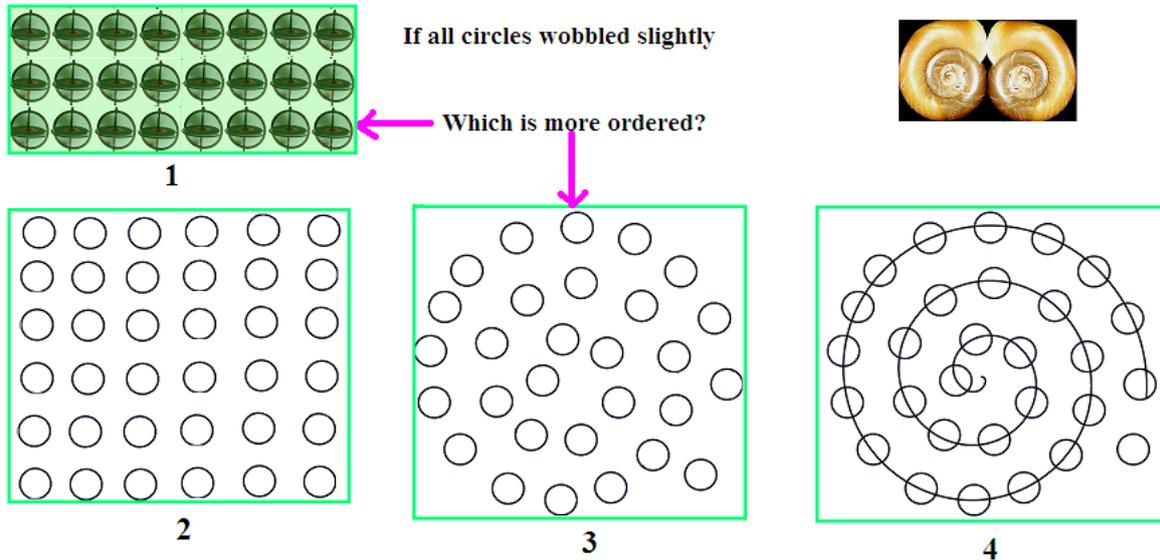
At first you should conclude that the orderly first set of marbles are the most ordered, but if I told you that at a higher scale the two clumps of marbles represented two objects that where the same and each

set was ordered in a particular symmetrical pattern, you could conclude that it is these clumps that are ordered and if broken would turn to disorder.

You should be able to see that Entropy or disorder at the higher scales that we live in, tend to disorder because we see things in respect to the representation of the second set of marbles.

If at a lower scale the marbles are trying to reorganise themselves to the uniform distribution of equidistant marbles, then this will appear to be a tendency towards order not disorder.

In summary order at one scale is disorder at another (and vice versa), which also depends on the structures that one is looking at.



If you did not see 4 you would naturally assume 1 or 2 was more ordered than 3 but if I told you that circles in 3 were critical structural components of a snail at a different scale then you would say 3 was more ordered than 1

Things at our scale tend to disorder but at the lowest level everything is tending to order 3 = 4

Near a big bang scenario things may have looked chaotic, but from this disorder came the stars, planets etc. this is a tendency to order, also life itself is growing and ordered therefore this is also a tendency towards order. Both these two previous examples have mechanisms to order things from more (apparent) disordered things.

If on the other hand you drop something, deliberately break something or just leave it to natural phenomena, then there is a tendency to disorder or Entropy. Some people will try and argue by saying things like life although is ordered, disorders things to get to this level, but overall it is still a tendency to disorder. This I believe to be because they do not see that at the lower level other things are tending to order themselves as in the first example of the marbles.

In the 'Real' world ('Existence') there are several layers of order and disorder happening all at the same time. So as one level orders the other level disorders and vice versa so everything balances.

Time is also something that people confuse because we are told that time appears to have a flow forwards and that the laws of physics allows that time could go backwards, because we can move forwards in space and backwards in space, why can we not go backwards in time?

The simple answer is that we do go backwards in time, but not in the way that you think. This last statement is only true if you think of time in a specific way.

Time is also scale specific as was order and disorder. In other words time has a different meaning at small scales and a different meaning at the larger scales that we live in. At the level we live in, time goes forwards because it is the sum aggregate times of the smaller scales (chaotic), new structures are perceived as time going forwards.

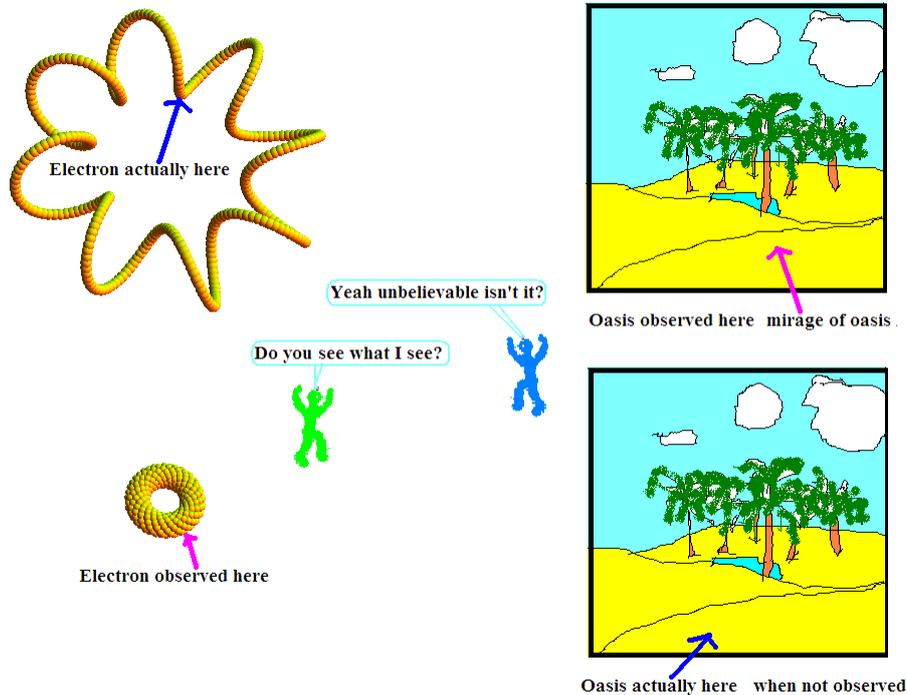
[Because the new structures at the lower level are created in such a way that they always create different structures at the higher level, the higher level structures always appear to go forwards. For the higher level structures to go backwards, all the lower level structures would have to reverse in synchronisation in the opposite direction, which is not possible due to the dynamic nature of these lower structures].

Also in the comparison of time and space you are comparing two different concepts that are not linked, similar to the unstoppable force and immovable object. If you think of space and time as linked and constructs of each other, then space and time are changing in unison with each other and are constructed. Time and space at this low level (and scale) all go forwards backwards, up down, left right, and 'in out'. [See constructs to understand the last bit]. Time and space is relative but only forwards relative at the higher scales.

67. Illusion and 'Ellusion'

Illusion. A normal illusion is when you see or are led to believe something that isn't there, like a mirage it appears to be somewhere when first observed, until you find where it really is, by observing it in its physical form in its true position. E.g. A mirage of an oasis in the desert is displaced from its true position.

'Ellusion'. Electron illusion, the electron appears when observed at a point in its physical form, but was actually elsewhere before being observed. This is the opposite to normal illusion. This occurs because it is not a point source until it is observed. It is a complex 'minimal volume' when not observed.



Note: - the electron when observed is not a real point source, but is reduced to a much smaller complex 'minimal volume'. We summarise it as a point source, but cannot do this when not observed.

The electron spin is not a spin but I believe it is a difference of phase in space of the electron. By this I mean that two electrons can occupy the same volume of 'Secondary Space' with the same energy. The electrons are out of phase space, not in the sense of waves where the amplitudes are out of phase so one wave can cancel the other. The electrons are synchronised so that they share the same ³space at the same time.

The charge of the electron is what is spinning or the cause of the spin.

(May need pictures of possibilities).

Probability density of the electrons is merely the time distribution of the electron at those positions, taking into account the wave characteristics of the electron.

Do electrons get bigger with more energy around the atom?

The problem here is that it depends on how you view energy, if you consider that the electron is strongest when it is at the lowest level and that you need a lot of energy to dislodge it from the atom, then you will say it has less energy the higher the level it goes, because you need less energy to dislodge it from the atom.

If on the other hand you consider that the electron is weakest when it is at the lowest level and that you need to add energy to it to make it stronger so that it can go further up the levels, then you will say it has more energy the higher the level it goes. In this second view the electron does get bigger with more energy.

Do electrons get smaller with more energy in translational KE?

Here we have another problem, adding energy should make the electron bigger (from previous answer), but when in motion you can only add so much energy, after a certain point adding more energy will make the energy contract into matter, so the electron will start to shrink. You have to consider the 'Inversion of Space' with the ratio of energy to matter. So the answer is eventually yes they do get smaller with more energy in translational KE.

16th May 2013. If you carry on adding energy that converts to matter it will again find a point that it starts to get bigger.

End 16th May 2013.

68. Consciousness

My thoughts on this subject were not mentioned in my first book, but they are an extension of perception (section 58).

Maybe they could be a subject of a small book on their own.

Emotions govern the states of the mind, and there are many states of the mind.

These are normally in balance and work together, but at the extremes you can have psychotic episodes (nothing to do with the rest of the book).

When I was younger, I thought that I could work everything out if I were truly logical (what I later called 'absolute logic') but if one thinks logically what is the purpose of emotions?

Emotions do not seem logical, but there must be a reason for them. If there is a reason for them, then it should be logical for them to be in existence, using my 'absolute logic'.

Therefore emotions are needed in the 'absolute logic', so that we can be logical with them.

This at first seems confusing, until you can work out the purpose of emotions.

Using 'simplified complex logic' "what could the possible reasons be for emotions?"

I came to the conclusion that if we were built to use logic only without emotions, our minds would come to a grinding halt whenever they could not work out any problem and make a decision, then take the relevant action, therefore like a computer, it would have a program crash.

This would be a completely useless mechanism to have, and have no useful or beneficial advantage in nature; in fact it would be totally disadvantageous to have a seizure every time we could not find the answer to any and every problem we came across. In addition to this how would you reset your mind after every seizure?

Also if you could reset your mind, you would naturally be no more logical than before you had the seizure, therefore you would go back into a failed state again.

In evolutionary terms, logic would have evolved slowly, therefore would have been incomplete at earlier stages and would not have functioned well, reinforcing the above statements.

This means that you would not have survived if you only relied on your logic (which would never be absolute).

So I came to the conclusion that, the purpose of emotions is for survival, for when you cannot think logically the emotions take over the mind and make decisions instinctively, i.e. with processes which do not need to have a logical reason to make a decision and act on it.

If you don't understand something or you don't know the answer, you may get angry (an emotion), if you are in a dangerous situation and are not sure what the best thing to do, you will get frightened (another emotion) etc. I am sure you can think of examples for the other emotions.

You will go into an automatic mode that is either built into your genetic makeup for survival, or you have built up reflexes in your experience that works for you to survive or avoid unwanted outcomes. Some of these reactions will be common to everyone, others will be specific to individuals.

So for example; - if a child had a mini tantrum (emotionally driven) when they did not get what they wanted; the parent normally gives in (for whatever reason). Then this would be the first thing that the child would do (even if it was initially inappropriate and illogical).

The mind builds up its own logic, in a haphazard way as it gains information (and experience) and in a hierarchical way. The more dilemmas that it creates (or the lack of adequate information to take a reasonable action) the more likely it will turn to emotions to solve certain problems.

If over time too many dilemmas are created and become too great for them to function appropriately (this is subjective) they may go into a breakdown, so that they can reframe their information and start again; they reassess their belief systems.

Therefore Emotions are a logical function of the brain, although they seem in themselves illogical.

This I believe is the reason that emotions are important to memory retention and retrieval, it serves as a gateway to bypass emotions when required or appears to be beneficial (for historical reasons).

E.g. Before you had this information (so that you could make a logical decision or take reasonable action, through memory and retrieval) you would have gone into an emotional state, but if you found a solution that worked, your mind would replace and recall this information when this relevant emotion was about to be activated, thereby giving you the option to take a different action, (that does not need to be emotional). If in the example of the tantrum child, the child realises that this becomes inappropriate, disadvantageous and no longer works; the parent eventually stood their ground and explained to the child that it was more likely to get a good result if they just say "please". Then this emotional realisation with a good outcome would result in the mind replacing that emotion with the new information of "please". This will then be the new response in place of the tantrum "please, please, please" until they get what they want. They will only revert to a tantrum (the emotional state) if they don't get what they want (because of lack of information), instinctively it assumes that the parent may revert to giving in.

I believe Consciousness is the recollection and memory of the past few moments in time of your surroundings (your perception of reality) plus the manipulation of that information (as a holistic process).

Individual processes on their own are not conscious of themselves.

Multiple processes concurrently are also not conscious of themselves.

Even interacting processes (concurrently) are not conscious of themselves.

If two processes are the same, running at the same time like mirrors, is still not conscious of itself.

[I use the term mirrors, to convey that the processes are the same (like a duplicate process) and they are running at the same time].

I believe it is only when one process is mirroring another together and a third process is comparing the two, and possibly varying one, then, and only then it can be aware of itself and become conscious.

I believe it is a double process like a mirror, where one mirror is constructed and recalled from memory of the previous moment's reality (perceived as happening now), and the second mirror is a representation of that reality (a moment earlier) where the mind (another third process) compares the

difference between the two or predicts or varies this mirrored reality to predict what may happen next, then checks to see if it was correct with the first mirror. The total process is over a small time period (a feedback loop) so it becomes aware of itself doing the process, and becomes conscious finally of itself (eventually self-consciousness).

I believe Memories are just recalling past events that are stored, and placing them into this loop to become aware of them again, in contrast to the current reality (the first mirror). They are memories because they are placed in the second mirror process, which is different from the first mirror of reality. This way our mind can differentiate between a reality and a memory. I believe it can become a hallucination if it gets mixed up with the first mirror, which is perceived as reality.

Conscious Thinking then becomes an extension of this consciousness process where the mind can vary the second mirror as much as it likes, so it can vary it into unrealistic events and possibilities.

Other unconscious thinking can take effect, but it is not put into this mirror feedback loop, so it is unconscious of the fact that it is doing this. I used some of my unconscious thinking to solve the wave/particle photo electric mechanism back in 1998 which was the basis of my model.

Consciousness (or awareness of what is happening, at a higher level) or thinking consciously which is an extension of this awareness is I believe this third process of comparing reality with other options (in this second mirror process). This can be extended into total abstraction.

The brain has two halves and gets input into these two parts to create your mind or thoughts and consciousness.

When you say “I am in two minds to do something” means you cannot make up your mind of the choice before you. This does not mean each half has different thoughts and the third process makes the conscious decision. Each half has different aspects of reality that make up the first mirror process, and each half has different aspects of the second mirror process and the third process must have different aspects that reside in both halves.

You can actually cut the main connection between the two halves of the brain, and if you keep certain inputs to the two halves separate you will get two separate first mirror processes, where one half will not know what the other half is doing or thinking. In this respect I believe you can have two different consciousnesses in each half of your brain (maybe part consciousness). I also believe that if I am correct, that any animal that can solve complex puzzles also has consciousness (beyond just being aware of what is happening).

Solving problems is not just making a choice between two options or even a string of choices. If there are only two options then it can just be like a complex reflex action, you either do it or not, not conscious decision making.

We may think that we are conscious of these types of choices before the event but our mind just makes us aware of it after the event. (I believe this kind of choice is made by our unconscious mind). Animals can just react in the above manner and appear to be conscious of what they are doing.

Real consciousness is when there is at least three options and one has to make a decision between these, (it cannot be like a straight forward reflex action).

Therefore some sort of consciousness starts at this level, and extends and increases the more the mind extends this process into an imaginary future with all the options it wants or can imagine.

If one (the mind) does not make any comparisons with what is happening in the real world then consciousness diminishes.

Obviously the mind does make comparisons all the time, but you can see the concept I am trying to make with an example.

Imagine you decide with a friend to go to a destination because you both want to see something at that destination, you are both eager to get to this destination and you both start to walk there (both of you know the way).

Now imagine that each one of you have just one of these mirror images (processes) of reality in your mind. If nothing unexpected happens along your walk then you would both arrive at your destination

and be hardly aware of your walk, because there was hardly any difference between your experiences (in these mirror images) and the third process of consciousness that compared your two experiences had nothing to do (you were not made conscious of any of the events on your journey, because there was hardly any difference between the two mirrors).

(I am sure you have gone places and not remembered your journey, even if it is in the office or home).

If on the other hand one of you stopped to look at a shop window you would immediately say to yourself “what are they looking at?” and then say to the other person “what are you looking at?” You have just become conscious of this event because it is a different reality to yours (your mirror has just become different to theirs; they stopped and you didn’t).

This process just happens all the time in your own mind (your mind just changes this second mirror image that was represented by your friend), so you are conscious of your thoughts.

[Even if you don’t change this second mirror process, the outside world changes one moment to the next, so there is always a slight change between the two mirrors, so you can still be aware].

Abstract conscious thinking is when the first mirror is ignored completely and a complete new world is created in this second mirror from bits of past memories or past thoughts (past thoughts can be stored like memories, and recalled like memories, but are distinct from real memories (of reality), and I believe are stored differently). If there is an error in the storage of past thoughts as opposed to past memories, then one may think that these things actually happened.

Dreaming is in this category, where the world of dreaming is in this second mirror, but it is detached totally from the first mirror. It can be as real as one wants it to be, but it is not real, one can vary it as much as one wants and it will feel like reality, because it does not compare itself to the first mirror.

When you awake and compare it to reality (the first mirror), you then realise that it was a dream. It only seems to be real while you are dreaming, so you do not know it is reality or not, but when you are awake you know you are awake and you are not in a dream, i.e. you can only tell it is not a dream when you are awake.

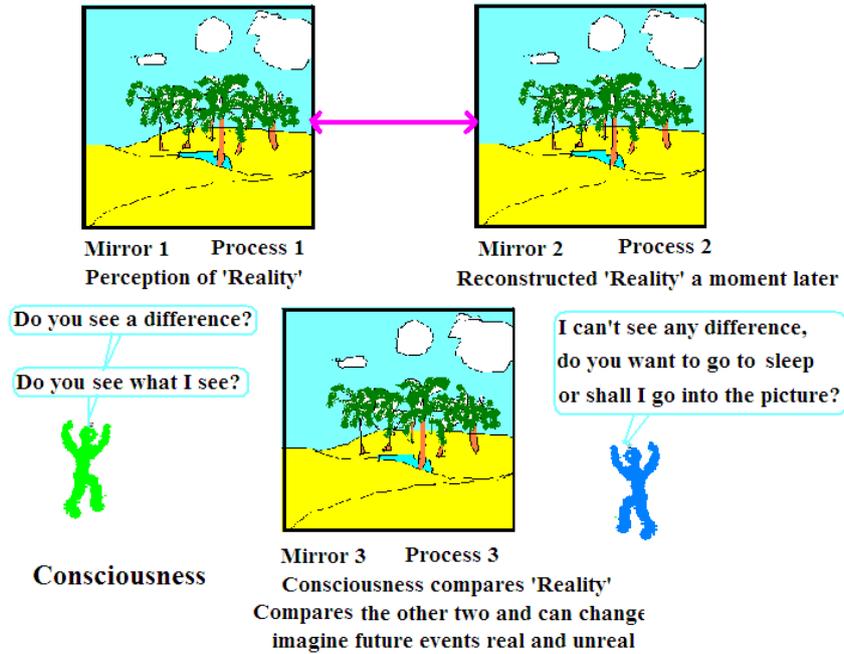
People and scientists make the mistake that because you do not know if a dream is real or not, then how do you know you are not in a dream while you are awake?

Simply by knowing the previous argument and logic, you can know if you are dreaming (using simplified complex logic section 5).

Namely if you only think it is real and have any uncertainty, then it is a dream.

When you are awake you know you are awake, there is no uncertainty (except in the minds that do not follow the logic).

I have personally followed this logic in my dreams, and have in the past consciously controlled the dreams (knowing it was a dream while I was doing it), unfortunately dreaming has its own functions to follow, and eventually takes control back, so you cannot control all of your dreams.



You can however control your conscious thinking (on the most part), so think about my model of the Universe and ‘Reality’, and maybe you too will think there is merit in a lot of what I have said.

I hope in the future, if I obtain sufficient funds and help, to make a small film so people can visualise what is happening.

More notes: -

Listen, Think about, Remember. Close? - History Muse

Feel, See, Multiple Spirituality – Religion

“H Thea”, (Greek) - view scenery – God (“O Theos”, Greek for God). “H Thea” is feminine of “O Theos” (masculine), as explained by my father when I was a child. What you see around you, the view, the scenery, the world, the Universe, is just another word for God. You can interpret it however it makes sense to you. It can have multiple meanings.

Occasionally my father would give me riddles, but to my distress, would not tell me the answer. I remember asking him “Why don’t you just tell me the answer? then I would be so much the wiser, and I can spend my time solving something we don’t know the answer to”. He replied “If I just told you the answer, you would not appreciate the true significance, and you may forget”. If you solve the riddles for yourself, you definitely appreciate them, and you are less likely to forget.

Memories (and states of mind) are linked to emotions (as stated earlier) so it makes sense if you are emotionally challenged to solve a problem that you are more likely to remember it, (you may get annoyed at not being able to solve it, then get elated that you finally do (both are emotions).

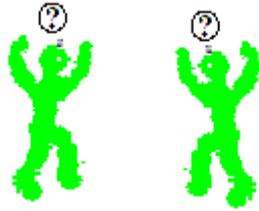
The realization of the way things may really be, can lead to super consciousness, where you see everything at the same time making sense. You extrapolate not only what you see (the first mirror), but include everything you know into one big picture of reality (into the second mirror).

Before this, your mind is in fragments, that you cannot put together (too many contradictions, or insufficient information), so your consciousness moves from one state (fragment) to another. You are only aware of one aspect of reality at a time, (you may be annoyed at something that happened at home, maybe thinking of something at work that needs to be done, or just looking at your hobby (looking at flowers in the fields)... You do not think and are conscious of all of them at the same time and how they all fit into one reality (at least I do not most of the time, but about once every ten years I go into this super mind set where things fall into place).

I believe in the 'CORE' (Conservation Of 'Reality' 'Exists') concept.

And

'IDIOTICs': - I Deal (delve) In (into) Opposing Things In Concepts. So when you put 'IDIOTICs' together and use 'simplified complex logic' then they must end up making sense. Or put another way if you put two (or any number of) idiots together and they don't make sense to each other, then they will both (or all) remain idiots.



69. Conclusion Probability, Possibility and Inevitability

My model essentially comes from completely solving the riddle or puzzle "What would happen if an unstoppable force met an immovable object?"

In conclusion it is the ability of small bits of space to turn themselves inside out while twisting and turning themselves and other bits of space in the process as they expand and contract around an imaginary center. These spaces can nest inside each other and form further complex spaces. They are like little receptacles that can house more space in them, so when they pack more space within them they increase the density of the space. If it is loosely packed it is more energy in nature, but when it is closely packed and knotted it is more matter in nature.

Energy because it is loosely packed can pass through other energy and matter.

[More wave characteristic.]

Matter because it is closely packed and knotted will allow energy to pass through it but NOT other matter. [More particle characteristic.] Matter repels matter.

16th May 2013. Note: - Neither particles (as solid objects) nor waves (as wave energy) actually exist in this Universe. All of space (the Universe) is composed of something else that mimics both these characteristics at different scales and compositions. We misinterpret these and simplify things as particles and waves to create our laws of nature, with all the paradoxes that this misinterpretation brings. End 16th May 2013.

Everything else then seems to fit into place, putting natural limits on everything that is created from this.

Probability, Possibility and Inevitability.

Probability is a measurement of something happening or not, its likelihood.

If the probability is zero then it will never happen, any measurement above this becomes a possibility, i.e. it may happen or it may not. If the probability is 100% then it will always happen.

Now when we ask questions like what is the likelihood that life was accidental, then the answer appears to depend on probabilities and possibilities, but I believe that this gives the wrong impression. The reason I say this is because certain things have to happen even though they seem improbable.

Let me give an example, suppose I have a dice and it has big indentations for the numbers, but unbeknown to you, on the side that has the one dot the indentation has a sticky substance in it, otherwise the dice is perfectly balanced and the probability of throwing any number is one in six. Now if I throw it once there is no guarantee that I will through a six. If I continue to throw it on a clean surface and I throw it six times, the probabilities are the same so I should get at least one six, but it is not inevitable that I do. Now if I throw it sixty times the probability is still the same, (for every

throw) the probability is that I should get ten sixes, but it is not inevitable to say that I will get at least ten sixes.

If you look at the previous example and extrapolate only using probabilities, you could be led to believe that you could really throw the dice and be unlucky and only get 2 sixes in the 60 throws you made.

You would be told although it is unlikely to get this result it is still possible.

Ok this is pure maths, so when you look at more complex matters you are led to believe that the likelihood of something complex happening is trillions to one, and it is amazing that more complex things like life ever occurred in such odds against it ever happening.

Now take a closer look at the previous example and this time, still unbeknown to you, you throw it on a surface that is not completely clean, let us say it has some dust particles on it.

Now do the same experiment as before.

The pure probabilities would be exactly the same, and the mathematics will give you the same explanations. Namely: - You may only get 2 sixes and be unlucky, and it is amazing that the odds are against complex life ever happening, but what would be the reality of you actually throwing more than ten sixes in sixty be?

If and when you do, they (the mathematicians/scientist) will give the same explanation and say you were lucky, but the real answer is that it will be inevitable.

The reason I say it will be inevitable is that as soon as you throw the very first six, particles of dust will stick to the indentation and will change the odds of you throwing another six in your favour, because the one is opposite to six and will now be very slightly heavier on the side of the one, making it more likely to land on this side and give you a second six. The more sixes you get the more dust that sticks to the indentation so further increasing your chance of getting even more sixes. In other words the dice becomes loaded just by throwing it.

I say that in the real world, complexity begets more complexity and it is inevitable because the dice is loaded like the dice above, and once something happens then the odds are increased for the next thing to happen and so on.

In normal probabilities it is the opposite, as once something happens it is less likely to happen again. What are the chances of getting 10 sixes in a row? Not likely! But if the dice gets more loaded the more you throw it, it will be inevitable.

Life has to happen because of the environment it is in, we are just ignorant of the exact mechanisms that created life in the first place.

Let me give another example. If I get some molecules that are hydrophilic at one end and hydrophobic at the other, (this means they like to mix in water at one end and not at the other end). Let me just say that we put a load of them on the surface of some water; they will create a thin film on top. If everything was random (purely chance), what are the chances of them creating little cell membranes enclosing a small volume of water?

If we look at probabilities only, then they are not likely to form such structures. But if you give it a shake, it would appear to be adding more randomness because you are shaking the mixture and making it less likely to happen. What actually happens is that some of these molecules will form cell membranes with a small volume of water in them. Why did this happen if the odds were against it happening in the first place?

The answer is that it was inevitable because of the nature of the molecules and the nature of the water plus the nature of you shaking the mixture. Why did I even give you this example if it was likely that it would happen?

The reason is that scientists know the nature of these molecules and water and they will say that it is not totally random so the odds were in favour of this happening. I say it is exactly the same type of thing that happened with life, when you are ignorant of the circumstances you use unlikely

probabilities and you get an incorrect answer. When you understand the process it becomes inevitable and not improbable.

What is more relevant to the outcome is the time that it takes to get that outcome. So if you ask can I throw two sixes in a row? The real answer is always yes, as long as you give enough time for it to happen.

Pure probabilities will say it is possible but improbable that you will never throw two sixes in a row, but there is still a probability that you could never throw two sixes in a row.

The difference between the two is that there will always be a time when you can throw two sixes in a row verses there may be a possibility that you will never throw two sixes in a row. I believe the creation of life falls into the first category and not the second.

Therefore life had to happen when the conditions became available, and they had to become available at some ³time because of the nature of the universe.

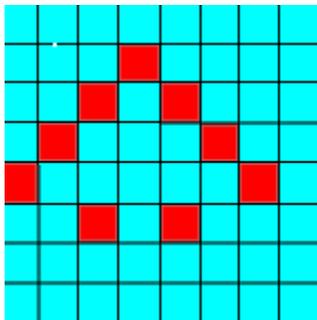
70. Models of Reality. How you might create one

Models of reality.

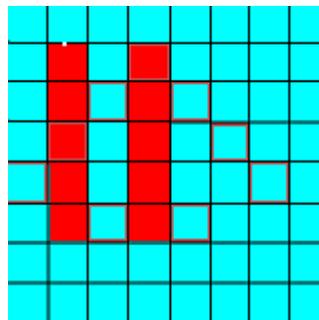
As stated earlier your model must conceptually distinguish between a conceptual model that does not exist, from a model that can exist, i.e. represents the real world or something in it.

Let us build some models.

E.g. I can conceptually have a model that represents a flat world that is made of a fixed number of squares of different colours and that any image on this world can be created by the different positions of the squares.



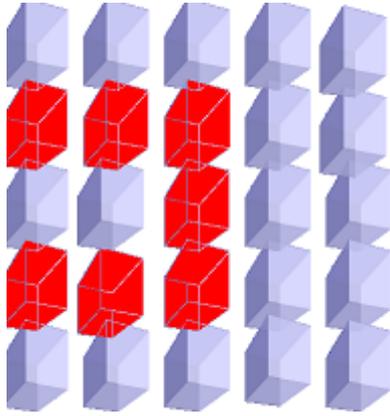
2D world 1.



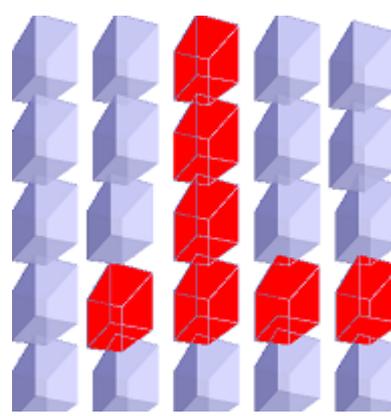
2D world 2.

This world does not actually exist in the real universe, other than in the conceptual model, in our minds or on paper or some other medium in which we wish to represent it. This does not mean we cannot create a real physical model to represent this world model. The model exists, but the world that it represents does not exist.

E.g.2. I can conceptually have a model that represents a 3 D world, that is made of a fixed number of little cubes of different colours, and that any coloured (object) in this world can be created by the different positions of the cubes.



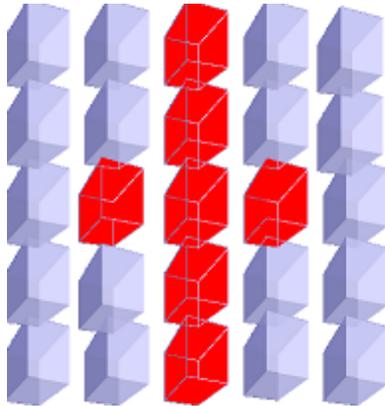
3D world 1.



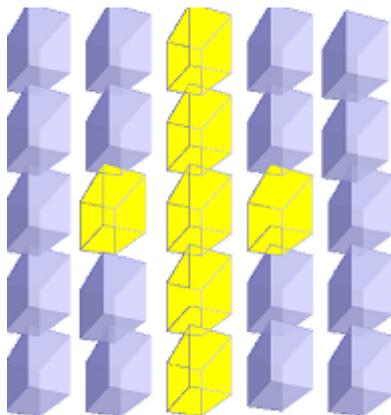
3D world 2.

In this example we are trying to represent real objects, like a 3D cube puzzle, but although conceptually it represents the real world (in part, like a 3D block puzzle); it does not distinguish between one that does not exist; each cube is represented equally whether it exists or not.

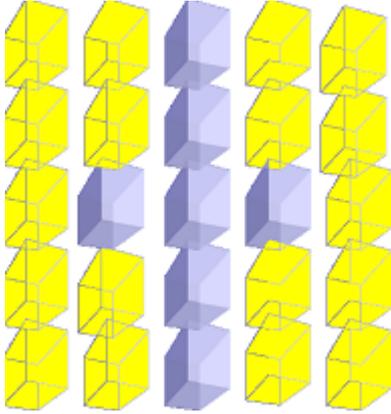
E.g. 3. The same model as above can be represented again by a fixed number of cubes, but this time if one distinguishes between what cube is 'Real', i.e. it exists; from a cube that is not real (abstract), i.e. does not exist. Then the model is subtly different, but drastically has a different meaning.



3D world 3. Is an abstract red cross.



3D world 4. In this example only the solid yellow cross inside exists.



3D world 5. The whole world exists; everything is ‘Real’ except the grey cross inside is void and does not exist.

Note: - Although I have represented the abstract and the ‘Real’ worlds with different coloured cubes (for you to see better); there is no difference in coordinate systems between the red, yellow or grey cubes.

Our current models fall between examples 3 and 4 or a combination of these.

They are all represented by 0 points in 0 space and 3 time, and objects or events are placed in them arbitrarily.

These models are inadequate and unrealistic. Although one can represent ‘Real’ events in these models, the models are too simplistic in their initial states, to represent detailed ‘Real’ events at any scale. [You need the structure of space that creates these events in space; then you can see how the structures relate to each other in this space].

Let us start with simple examples and work our way up.

E.g. 1. A car moves from point A to point B (along a road) at a certain speed in a straight line.



We can do the maths and get a perfectly acceptable answer.

E.g. 2. An electron moves from point A to B (along a wire) at a certain speed in a straight line.



We do the maths again and we can get an acceptable answer (but does the electron go in a straight line)?

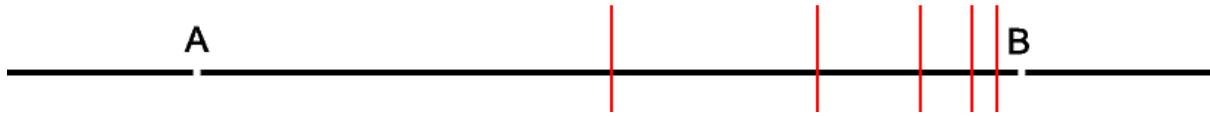
In both examples above we reduced the objects to a 0 point, before we did the calculation. This is ok for simplicity, but is this what actually happens?

The answer is NO. The car or the electron is never a fixed 0 point in 0 space (or 3 time). Irrespective of any point on the car we choose, it never travels in a perfect mathematical straight line (conceptually) at the detailed level. Take the wheel for example, it is rotating. At the atomic level every atom is vibrating forwards/backwards/up/down/side/to side, so the real path is never a straight line (only the imaginary averaged 0 point moves in an imaginary straight line).

An electron has a probability function of its 0 point position, so as it moves forward along the line, it also never travels in a straight line.

The point of the above example is that it is too simplistic, and that all objects or events cannot be represented realistically with just 0 points, without introducing unnecessary complications to the model.

For example our simplistic model says conceptually that if one throws a ball at the wall from point A to point B; we can conceptually half the distance an infinite number of times and the ball will never hit the wall.



The space (distance) gets smaller and smaller the nearer we get to B but will never reach B

We appear not to be able to test this concept in reality (experimentally), because as we get to smaller and smaller scales and times, we do not have the technical ability to prove this (or disprove this), and when the ball bounces off the wall we say the concept held true up to the point we could measure it.

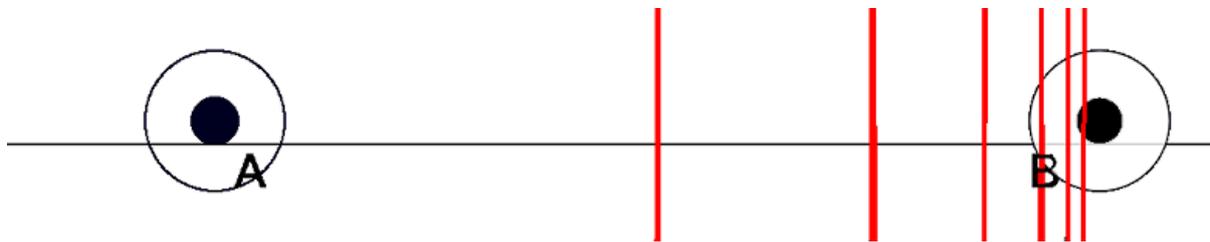
[We can prove it mathematically in theory using an incorrect model of ‘Reality’.]

This is where I totally disagree. If we change our model to more truly represent the ‘Real’ world, then the following will be true: - If you throw a ball at a wall from point A to point B; you cannot conceptually half the distance an infinite number of times, the ball will always hit the wall (if nothing stops it).

At first mathematicians, physicists, followed by at least 99.9% of the rest of the population will say this is not possible. This is because they have not thought of the model in which this becomes true. They are mentally fixed in their current models of the universe.

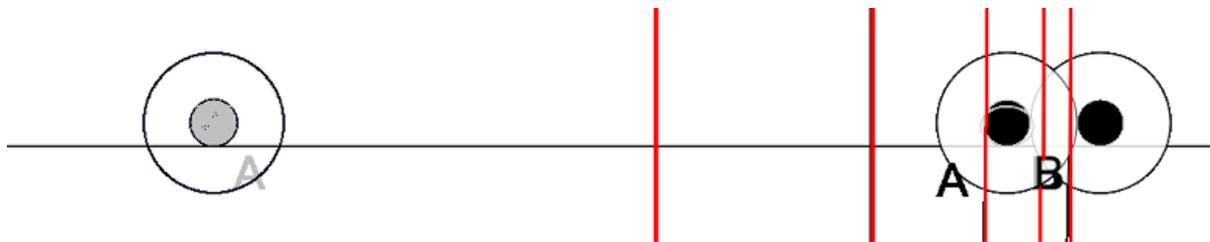
For those who are intelligent enough not to be arrogant, and are willing to listen, before they conclude the impossibility.

Imagine the following simplistic 2D model.

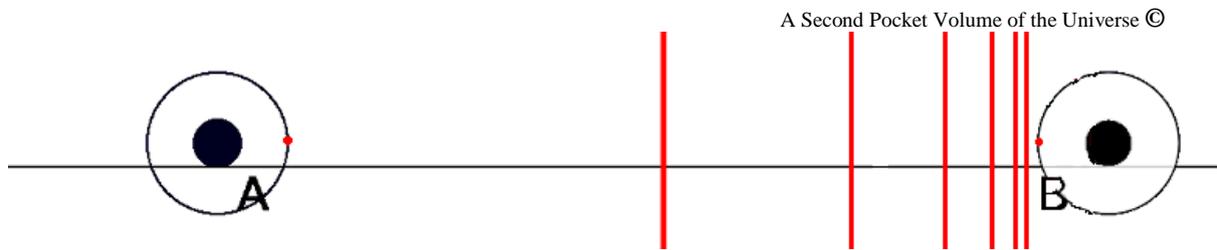


Objects of existence are represented by circles and not abstract ⁰points.

If you half the distance between A and B, you will find that at some point (long before infinity) that object A will hit object B, therefore there will be an interaction, before A got to B.



Some mathematicians/physicists and others will still be unconvinced because they will say I picked the points inside the objects. If I had picked points A and B on the leading circumference as below, then their original hypothesis will still hold true.

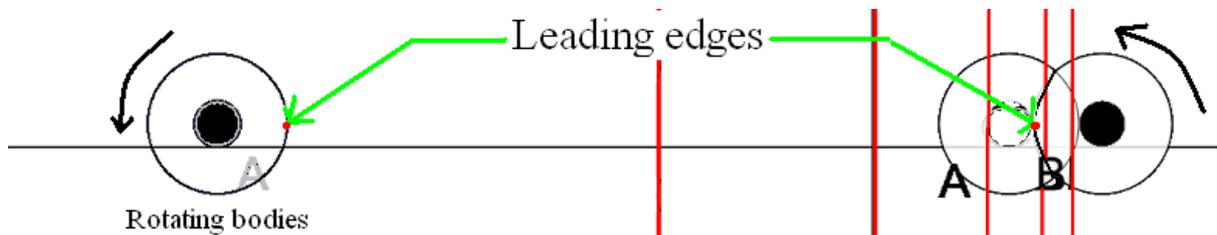


Unfortunately they have gone back to their over simplistic models again.

I can pick these points and still have a model that proves that the two objects will hit before infinity. If one adds time to the above model, and say that the objects rotate constantly, then the path of A to B will average a straight line, but will in fact be a sine wave, and that the point A' can hit B or B' before point A reaches B or any point on object B.

Missing picture

Again a few die hards will say let ⁰point A & ⁰point B, be the leading edge of the object and not an actual 'Real' ¹point on the circle.



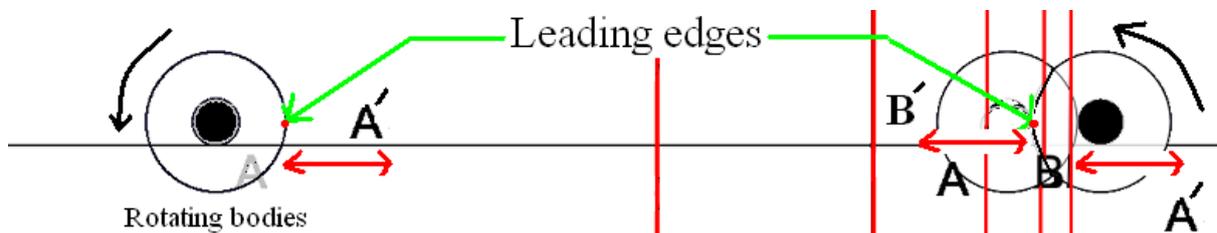
Then their hypothesis will hold true.

What they are doing is similar to the chicken and the egg dilemma, where they are changing the problem.

Some of you have guessed it (using simplified complex logic). This can also be proved not to be the case (true), if one uses a more realistic model.

Imagine that object A and object B not only rotated, but also moved forwards and backwards in ³time (it doesn't have to rotate at all if you wish). Therefore every movement of object A towards object B has a corresponding forwards and backwards component (movement A' to A'), even when stationary around point A (and a similar one for B).

In this model you not only have to conceptually half the distance, but you must compute the position of the forwards and backwards motion of the movements.

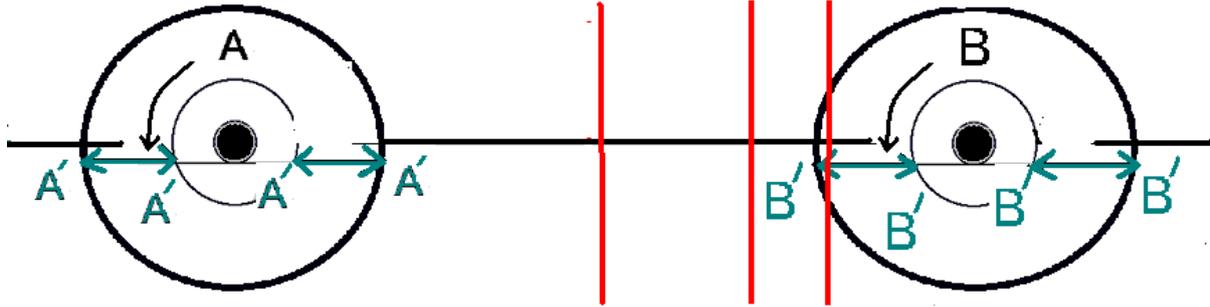


Reaction again, before infinity; even when stationary beyond a certain point along the line.

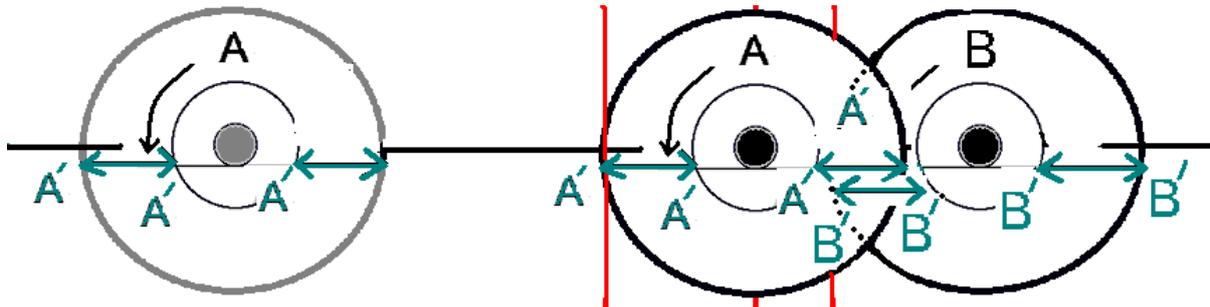
Some mathematicians/physicists may think I am playing with models, I am picking my ¹points to prove my model, but they will always be able to prove their hypothesis if they take their own chosen (abstract) ⁰points and not mine.

I chose simplistic 2D models to prove to the rest, that these are models that prove my hypothesis, before going onto more realistic 7D models.

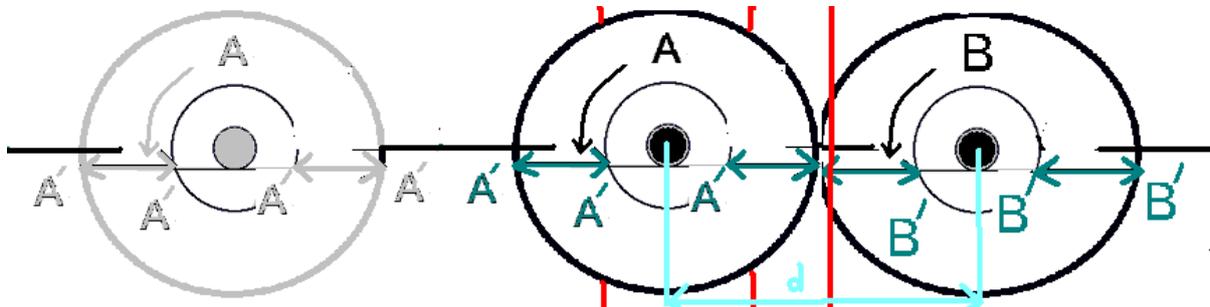
But for the die hard mathematicians/physicists and a few others. Imagine the 2D model was as below and that the objects were circles that increased and decreased in size in t^2 time.



Now it does not matter which points you choose or which scale you use; object A will always react (I.e. touch) object B long before infinity, because the leading edge is A' and B'.



Any movement towards or closer (shorter) than d will have a reaction irrespective of points picked on object A or B.



You CANNOT half the distance between any two 1^{st} points indefinitely on a 'Real' object without it touching or reacting.

Now the mathematicians/physicists have to concede that an appropriate model can be chosen such that the above becomes true, by representing objects and events as higher dimensional objects and events; and that points only become reference points to the objects, or 0^{th} points are simplifying the objects when details are not required for the computation.

So Newton's mechanics and gravity are just a simplification at a higher level (ignoring the details of the mechanisms) that gives rise to the equations.

Einstein's space time is again a simplification of gravity (ignoring the details of the mechanisms) that gives rise to gravity etc.

Maxwell's equations (and fields) are again a simplification of the detailed mechanisms of 'Reality' (ignoring the details of the mechanisms of EM, weak, strong forces etc.) that create these fields.

Quantum mechanics and probabilities are a complex solution of possible existences? of quanta/light/matter etc. (because it does not know of any prior detailed mechanisms of gravity, EM, weak, strong forces).

All other models do something similar to the above. Dark/energy/matter, antimatter, positives/negatives, ups/downs, lefts/rights, clockwise/anticlockwise; all have their models, but NONE have a common theme linking all the above together (from subatomic to cosmological scales).

Before I give one such model I need to explain conceptually exclusive models (section 9). In other words one can have many different concepts, but certain concepts cannot be held true or valid (I.e. are false, or invalid) if another is held to be true or vice versa.

I will show you what I mean by solving the following puzzle "What would happen if an unstoppable force met an immovable object?"

To solve any problem, one must first fully understand the question (or the problem).

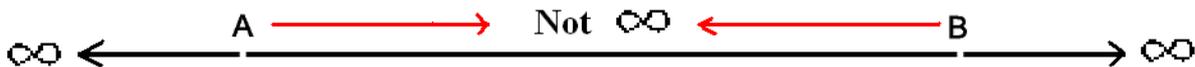
Which means: - there can be NO dilemmas in one's mind (towards a solution) (or any objections from anyone who also fully understands the problem).

To fully understand the question one must understand the meaning(s) of all the words within the problem.

Which means understanding the concepts of the words first. The question above has 3 possible answers, one is true, and the other 2 are false. The real solution to the problem is understanding which one is true and why it is true, and understanding why the other 2 solutions are false).

See section 21 for the answer.

Going back to the model, we need to eliminate any dilemmas that may arise from mutually exclusive concepts. E.g. In the previous simplified 3D (2D + T) model, there is no possibility of infinite divisions (without a reaction) of length. You cannot go beyond a certain scale without changing all the criteria of the model. You must limit or make finite the small scales, but what about infinity in the other direction if you move away from A or B in the opposite direction?

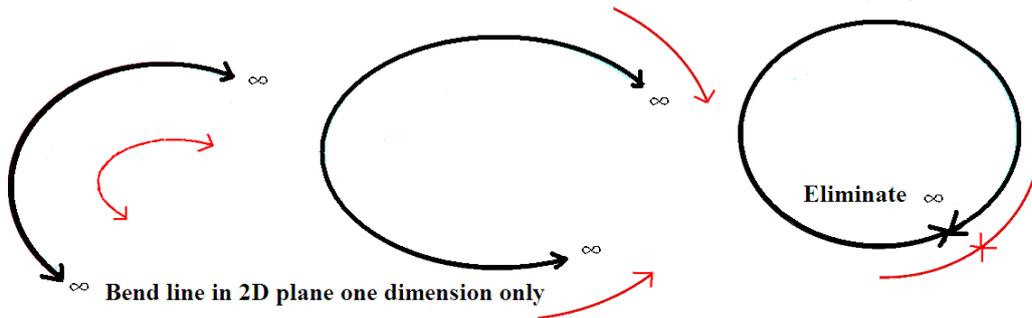


To eliminate infinity in these directions, let us look at all the dimensions one by one and start with the simplest models.

Remember all are concepts at this stage.

Conceptually: - No dimension. A⁰ point has no dimensions therefore there is no infinity to express.

One dimension. A line can be infinitely long in either direction. The solution for a line is to join the two ends so that it forms a circle, i.e. we are joining the two opposite infinities together. [In a higher dimension one up]. Now if you were a being living on this line (obviously this can never be true, but we are just using our imaginations), you could travel along it in any direction and never come to an end,



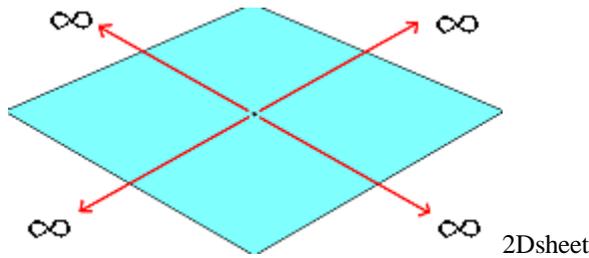
Now the line will always have a finite length and infinity will have two meanings, one true and the other false.

The first infinity has to do with measuring a length, and in this case there is no infinity of length (you always end up at a beginning irrespective of where the beginning is).

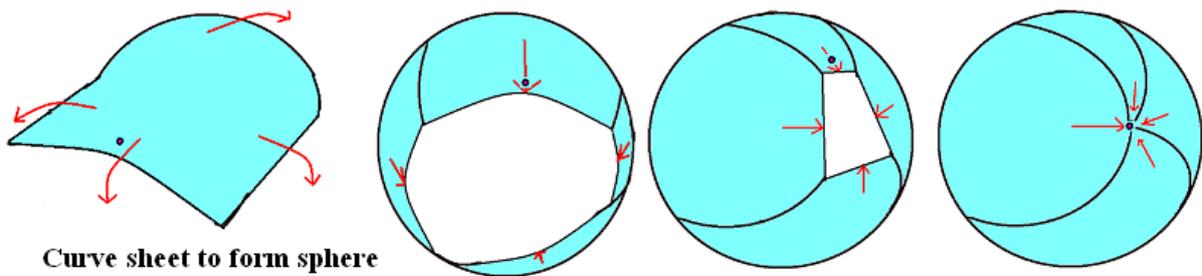
The second meaning is to do with measuring the process of moving along this length, i.e. you can travel along the length in any direction, “will you come to the end?”

The answer is NO, so you can travel to infinity without falling off the end.

Two dimensions. Is a plane, like a flat sheet of paper. You can move in 4 directions to infinity.



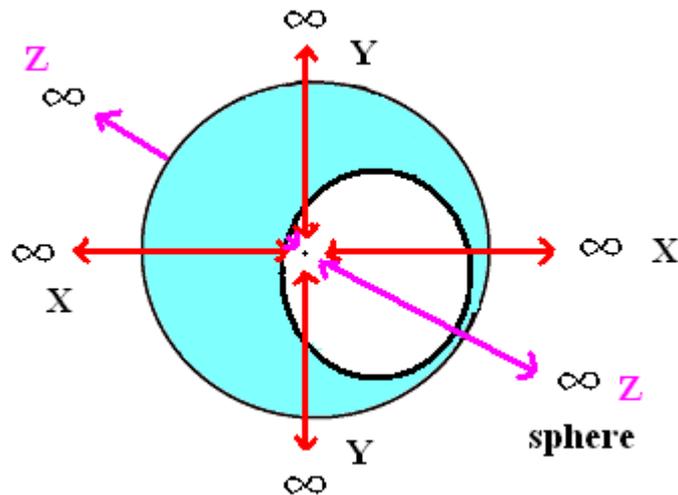
The normal solution to this is to join all 4 directions together. Again this can be done by curving them until they meet, and close the hole. [In a higher dimension one up].



Add curves in 2 dimensions.

Now all measurements of length (in both directions) are finite as before, no infinite lengths; and yet you can travel to infinity in any direction and not come to an end. (Remember you are only travelling on the surface of the sphere).

Three dimensions.



Here it becomes easier if we cut the sphere into 2 (I only took a slice off).

It is at this point that everybody gets stuck. For reference we will call this 'Stage Three'.

We need to do something similar to the previous 2 examples, models, i.e. join the infinities.
All 3 dimensions (6 directions) move to the center to infinity going down the scales (INWARDS).
All 3 dimensions (6 directions) move to infinity away from the surface (OUTWARDS).

In the first example we put in one curve (joined the ends of each direction).
[In a higher dimension one up].

In the second example we put in 2 curves (joined the ends of 2 dimensions).
[In a higher dimension one up].

Now it is logical that we need 3 curves (joining the ends of 3 dimensions).
[In a higher dimension one up].
How do we do this?

(Just to remind you this is where everyone got stuck).
We need to go back to the beginning again, and see what we missed.

I said all these models were concepts, and did not necessarily represent any reality. I initially said we need to distinguish between concepts that are just concepts and concepts that may represent 'Reality'.

So what is 'Real'?

We can just define what is 'Real' by saying that anything that exists is 'Real'. (Sounds a bit obvious, but our model must specify existence).

If we constructed all the previous models as 'Real' models in our universe, we would represent them in all the dimensions of 'Reality', but would just ignore the ones that were not relevant to our model.

E.g. The sheet of paper would represent our 2D model (before we curled it), but in 'Reality' it had the 3rd dimension of thickness of the paper, which we conveniently ignored. It also had the 4th dimension of time (which we also ignored). And believe it or not it had the 5th 6th and 7th dimensions, which we ignored or were completely unaware of or ignorant of.

At this point you do not have to concede how many dimensions there are in 'Reality', but that however many there are; we do ignore them to create our respective models. What is important is that any final model that represents 'Reality' must have all the dimensions required to represent such a 'Reality'.

So let us add one of the missing dimensions of 'Reality', the dimension of existence to all the above models and progress from there.

Previous 0 dimension.

So in our first model of points, each point will either 'exist' or not exist. So any point of reference will represent a conceptual ⁰point where there is no existence of anything, or a conceptual ¹point where something 'exists' at that point. [⁰Point, ¹Point].

Previous 1 dimension.

A line is now either an infinite number of points between 2 points A and B.

A An infinite number of points between A and B, too small to see B

(Simplistic unreal current model of 'Reality'), (see infinity and scales).

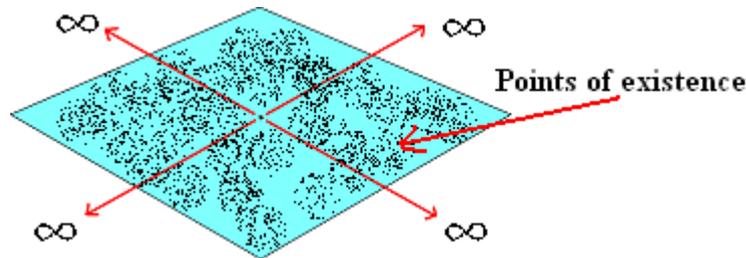
Or a finite number of points along A and B that either 'exist', or not.

A A finite number of points between A and B B

So 'Reality' may only be certain ¹points that 'exist' along A and B and the remaining other ⁰points along A and B don't exist (as 'Real' points). So a straight line in a 'Real' world may be ¹points separated by ⁰spaces (the number of spaces is not determined at this stage).

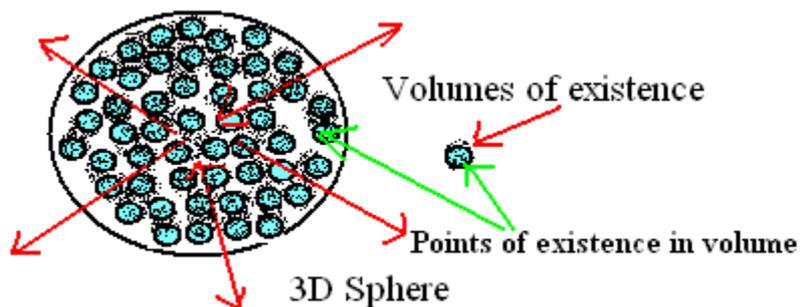
Previous 2 dimensions.

Using the logic before; a plane is ¹points of existence on the plane with ⁰holes (empty areas) in some places on the plane.



Previous 3 dimensions.

Again a solid now becomes ¹points of existence within the ¹volume, with ⁰volumes of space that are empty.



Up till now I have deliberately left out the dimension of ³time.

This should not be confused with the dimension of existence.

Existence merely expresses the fact that something ‘exists’, and is, in itself irrespective of ³time; you may say that this is absurd because how can anything exist if there is no time. This is perfectly true in ‘Reality’, but is in effect incorrect. The reason that it is incorrect is that we are still talking in the conceptual abstract sense of our models. If we use ‘Reality’ there is no length if there is no time or any other dimension if there is no time.

Once you understand time, you will realise not only do the other dimensions not exist, but that Time itself cannot exist if either or any of the other dimensions are missing.

So what is Time?

In a simplistic sense we can just define what time is, and it is merely a measure of the change of something.

So if there is no change there is NO time.

Time is a measure of the change of existence or something that ‘exists’; it is not independent of existence (or space).

So let us go back to our models once again and this time add Time.

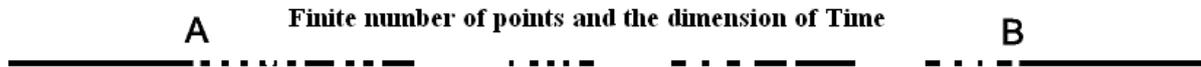
Previous 0 dimension.

So ¹points either ‘exist’, and just ‘exist’ and nothing changes, or they ‘exist’ and they change in Time. Being 0 dimension means they have nowhere to go, so time does not exist at this level.

Previous 1 dimension.

So a line AB exists as ¹points on that line and Time will be a measure of any change along that line.

Here Time has a meaning because ¹points can move closer together or further apart from each other in the line grouping together or not.

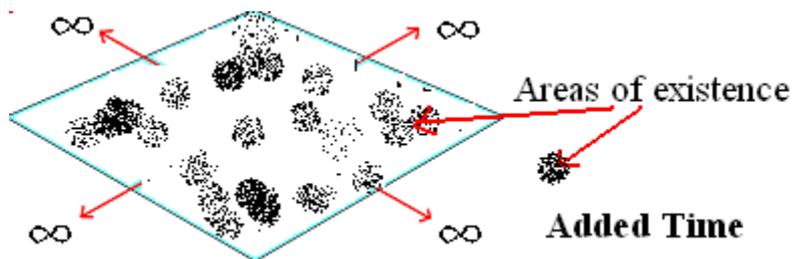


How can we measure Time?

This can be left till later for the moment, but it is important that there is Time as well as length.

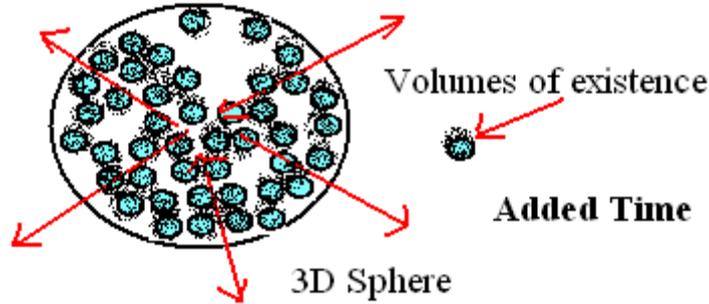
Previous 2 dimensions.

So as before,



Time is also relevant as we measure relative existence of areas moving together or apart in the plane.

Previous 3 dimensions.
So



The same is true for 3D³ volumes, ²volumes of existence move in Time in the 3D³ volume.

This was the point at which everyone became stuck earlier, where we needed to add 3 curves to join the ends. Previous 'Stage Three'.

This last model is in fact a conceptual 5D model, because it has the dimensions of Existence, length, breath, height and Time.

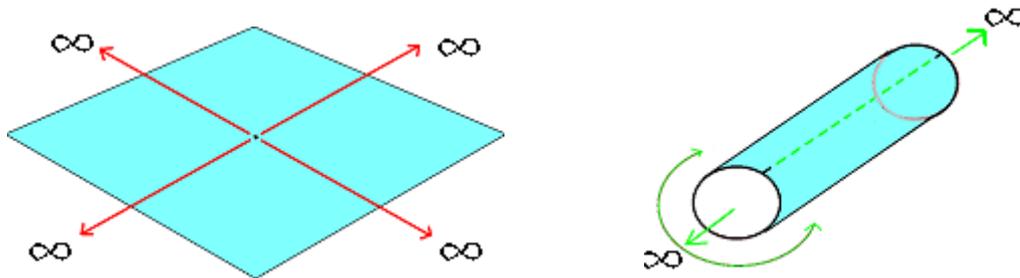
Can we now curve this model (and join all the infinities)?

Not quite. So let us go back again to see if we could have curved the previous models in a different way.

Previous 0 dimension. No curvature involved (same as before).

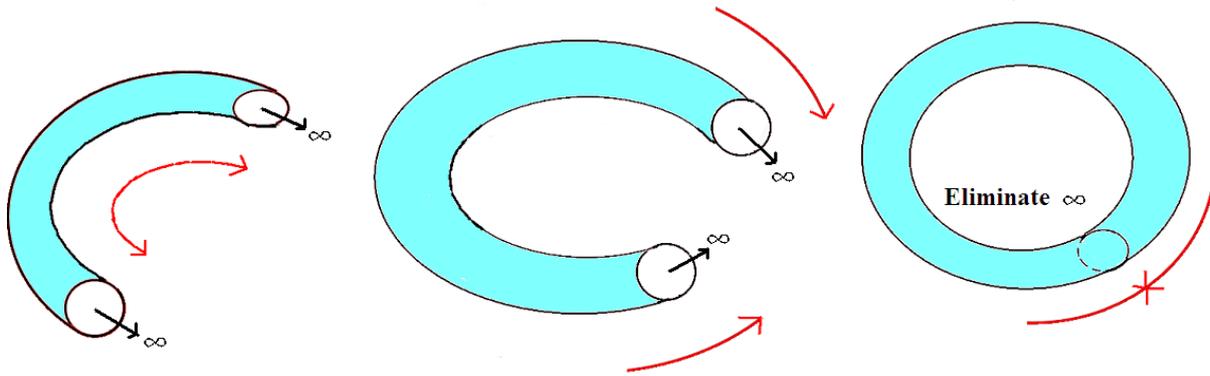
Previous 1 dimension. 1 curve: - No options, apart from this one (join ends to form a circle).

Previous 2 dimensions. 2 curves: - You can actually curve the sheet into 2 different 3D models, so that both dimensions are joined and you can travel in any direction to infinity and not come to an end.



So this time instead of joining both dimensions together (at the same time, to get a sphere), join one at a time, so you first get a tube, so you can go to infinity in one dimension but not the other.

Now join the ends of the tube together by adding the 2nd curve, (instead of rounding off the ends, which we effectively did the first time around (which just terminates the infinity), which does not join the ends together properly and creates a topological sphere again), thus this time truly bending the 2nd dimension back on itself that truly joins the two infinities together (similar to the line curve).

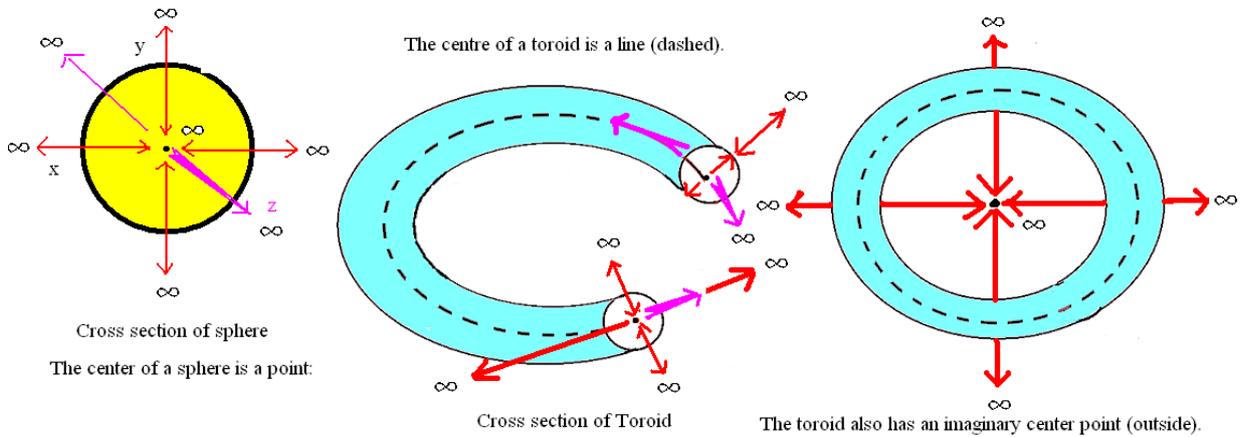


So now you can travel anywhere in any direction on this surface and never reach the end.
 [Note: - This is the true bending of 2 dimensions into 3 dimensions such that you join the two separate infinities together, not just terminating them into a sphere.]

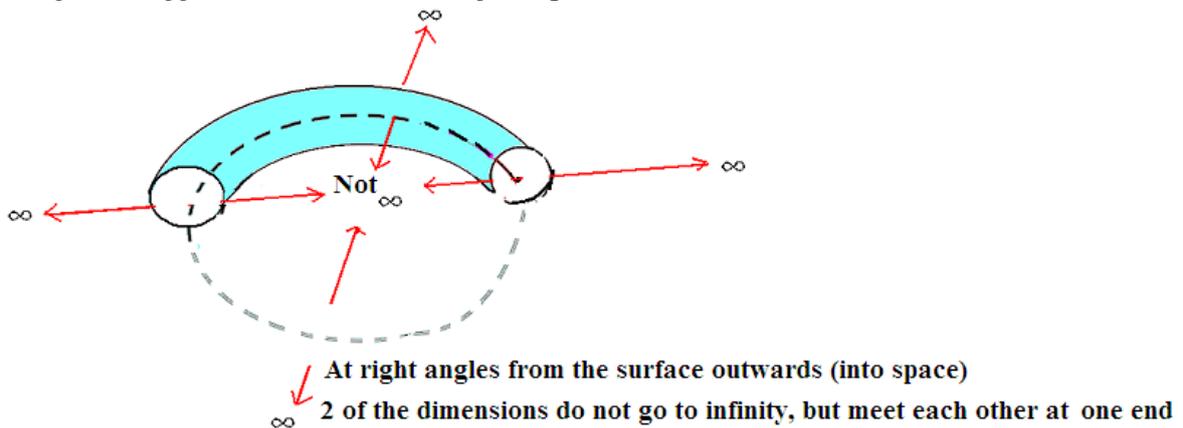
16th May 2013. [This terminating into a sphere I believe is one mistake that has led to many theoretical errors.] End 16th May 2013.

So if we now take this torus instead of the sphere as our true 3D model 'Stage Three'. We get; and it depends how you calculate directions, but there now appears to be at least 8 directions one can travel along. The normal 6 as in the sphere but there is another 2 directions, as before we travel away from the center. But in this case there are two centers, one imaginary at the center outside the torus and another which is the real center at the core of the toroid. This center is actually a curved line so that it is already curved and joined to itself. (We have achieved joining one of the 3 dimensions to itself and eliminated the infinities).

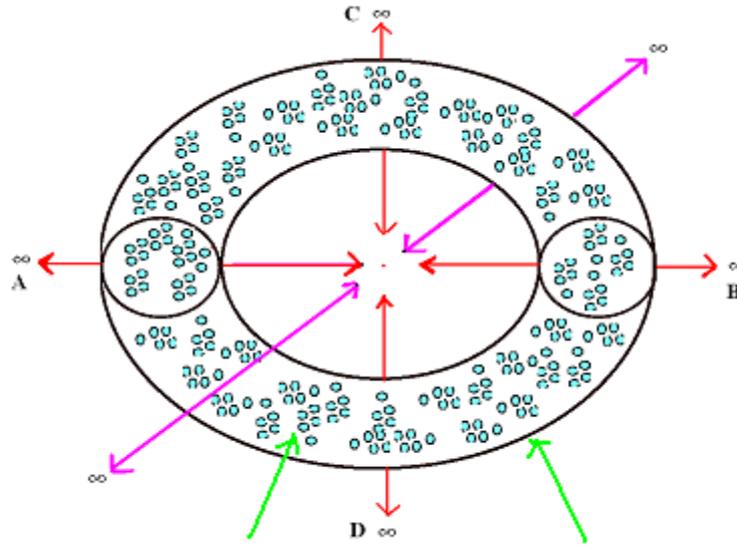
So now how can we join the other 2 dimensions?



You may have noticed that one side of both remaining dimensions actually does not go to infinity, but joins to the other side along the same dimension. It leaves the surface like the sphere, on one side but ends up at the opposite side of the surface joining itself.



Now let us look at the 3D volumes of existence with volumes of non-existence, as at 'Stage Three'. So now adding Time means we can measure the relative change in the ²volumes of existence within this total toroid ³volume.



3D volumes of existence in a 3D Toroid

So as before we need to curve this space such that A joins with B, and C joins with D. (The purple line will be joined later as it does not go out from the surface in the same way).

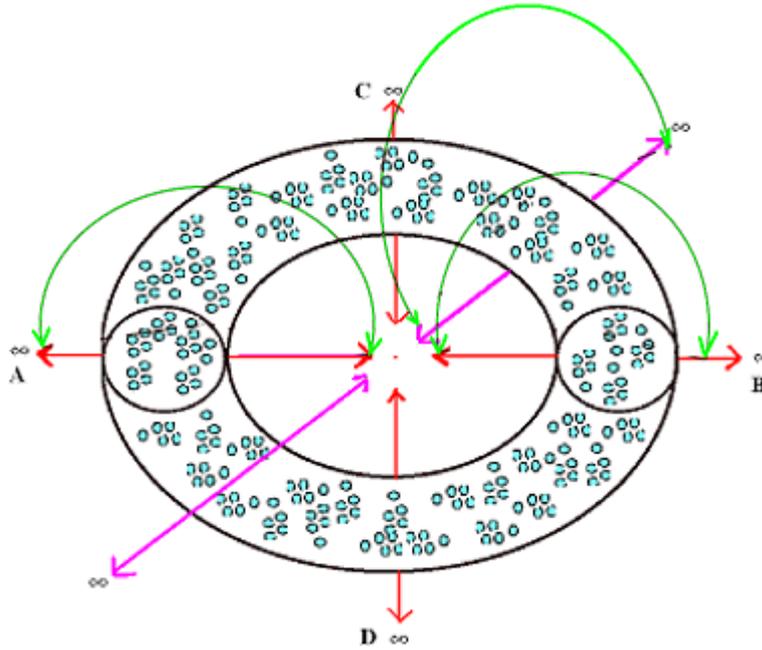
This would be similar to joining the two infinities that go in opposite directions along one dimension into outer space (you take off and leave the surface in two rockets from the opposite sides of the earth into outer space in opposite directions and eventually end up on the opposite side of the earth when you land, and not because the earth has spun).

So once we have done this we need to add the dimension of Time and as before curve Time.

What does that mean?

As Time is merely a measure of change, it merely needs to measure a change such that at the end it comes back to the beginning, i.e. it is cyclic like all the other dimensions.

You may have noticed that if space was just 3D like a sphere, all you would need is to join A to B etc.as above but in the toroidal world you would take off from the surface in your rocket on opposite sides of the toroid which would be A and A', or B and B' therefore we need to join A to the imaginary center and B to the imaginary center etc.(A' is the opposite surface of A). [The same for C and D].
The green curves.

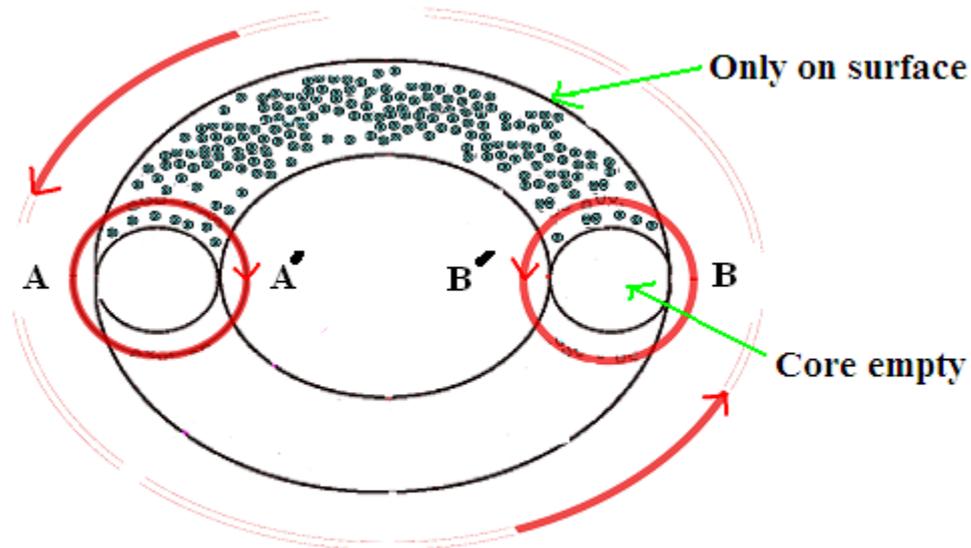


(The green lines are time curves of space)

[Note: - Only Time can bend the 3 dimensions of space].

Because things get complicated we need to look at each stage separately.
(I.e. simplify the explanation).

If we go back to the 2D model with existence, and add Time which needs to be cyclic, i.e. make it come back to the beginning.



2D Areas of existence moving in Time Red arrows

This can be achieved by rotating the surface in Time, so A goes to A' and back to A; and B goes to B' and back to B, both continuing in the same direction; time going forwards. Time going in the other direction would be the reverse. [Doing this over the whole surface also joins C and D].

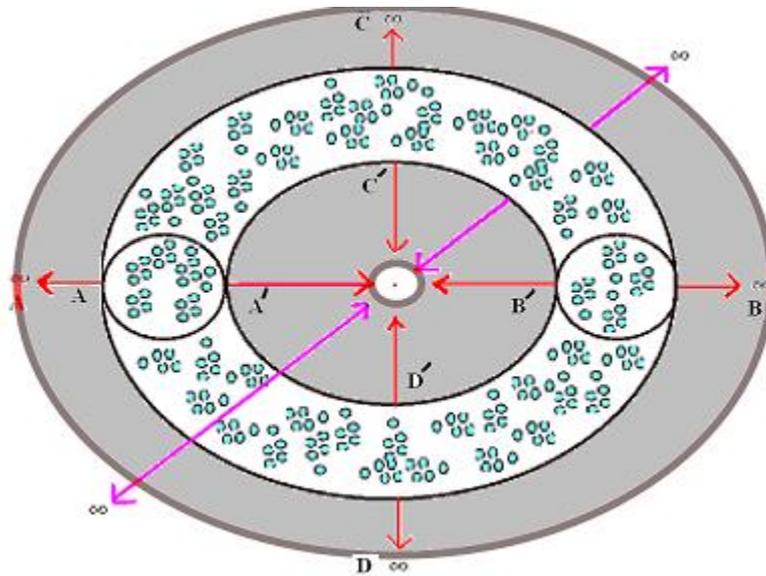
Note: - you are measuring Time in one dimension. The surface is only moving in one direction.

We could have moved in the other plane, i.e. A moves to B and back to A; B to A to B in a clockwise direction, forwards in time or anti clockwise, backwards in time. Both end up at the same beginning.

[Note: - It looks like a 2D world has 2 components for time, 1 for each dimension. Remember the 2D world is only on the surface of the toroid, nothing exists in the core].

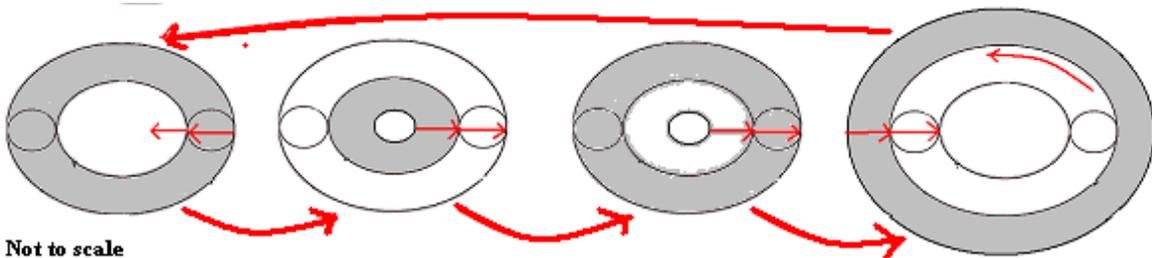
Things now look complicated, but we need to move (curve) the surface one more time in the last plane, and again in Time, (in the 3rd dimension, which is above and below the surface).

If we just left our model as in 'Stage Three'. i.e. moving A' to B' towards each other, whether A is on the inside or outside of the toroid. It would eventually touch, close the hole and still expand outwards to infinity in the other direction (the grey area).



We can avoid this by curving space and Time in such a way that it expands in one direction and it shrinks in another, or it can expand and shrink at the same Time, i.e. distort space.

E.g. The doughnut gets bigger and smaller in a cyclic manner.



Not to scale

As it expands and shrinks the volume stays the same

The (grey) volume of existence can stay the same; just the hole gets smaller and bigger. One time cycle. (The picture does not keep the grey volume the same, use your imagination until I change it).

Note: - The surface is moving as before at the same time.

So, before we complicate things even further. Let us simplify things first.

Up until now I have been talking about ²volumes of existence in time, and have been talking about the overall ³volume of space and Time. (If you prefer 'the big picture').

I have not mentioned what the nature or fine structure of these ²volumes may take.

We just said they were ¹points or lines of ¹points with ⁰spaces, areas with ⁰spaces or ²volumes with ⁰spaces.

Points in all the previous models have been assumed (because that is the common assumption) to be independent of each other. But as expressed before; no point can 'exist' on its own without the other (ignored) dimensions in any 'Real' model.

Therefore points are not independent, they need the other dimensions; so a minimum of 2¹ points are required for a 1 dimensional existence. The shortest line AB where A is touching B. beyond this point to 2D 3D etc. it requires multiple¹ points to refer to² volumes of space (as⁰ points are dimensionless and are only references, the scale will determine the number you need, so it is not helpful (even confusing) to try and define² volumes in terms of fixed multiple¹ points (joined together). It is more helpful if we define existences as² volumes of the minimum² volume in which anything may exist.

So a³ point volume can be defined ('minpoynt') that is not a true mathematical⁰ point, but a finite small² volume ('minimal volume' or quantized space). So if we take our real 2D sheet model; the smallest area could be the size of one 'full stop' (period in USA). No smaller area can exist on this sheet. It must be a 'full stop' or bigger. (Technically on a 2D world it would a 'minimal area'. I have used a full stop just to explain the concept not to actually represent any real minimal volume).

Note: - from our previous models a 3D³ volume need not be spherical but could be any shape that can be curved back to its original starting shape in Time.

To save time, and you can look at many options if you wish, let us assume the 'minimal volume' and a shape of any existence is a toroid or that the dependence of¹ points are such that they join to create a toroid.

Now let us go back to the last model and bend the last dimensions back on themselves in Time.

You may have noticed: -
 1D needs 1 curve
 2D needs 2 curves
 3D needs 3 curves
 Does 4D need 4 curves?

In a way you can imagine Time as having 4 variables each one measuring the time for each cycle of the surface/volume back to its original position (relative to the positions of the rest of the surface/volume around each dimension).

But it is simpler to think of² Time as one cycle (and that each of the 4 variables are constant and in phase).

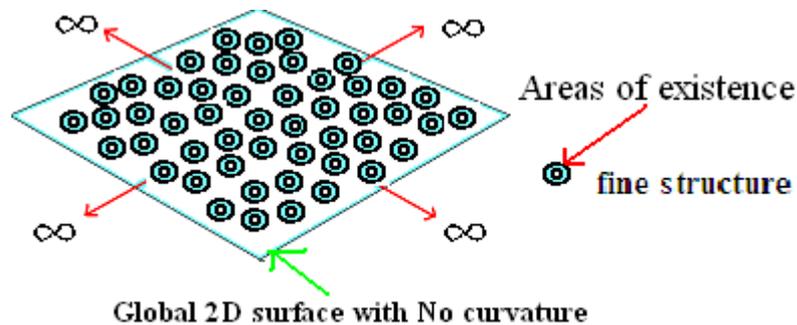
We have assumed in all the other dimensions that the curves are smooth and constant (perfect circles, spheres or toroids). [This does not need to be the case].

Now finally if we go back to each model and think of the fine structure of the surface/volume.

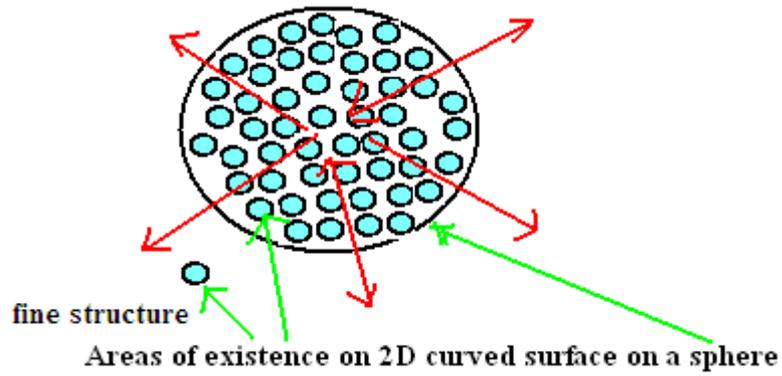
0 dimension. No structure. (No change).

1 dimension. Can only be a dash (two or more¹ points next to each other). A - - - - B

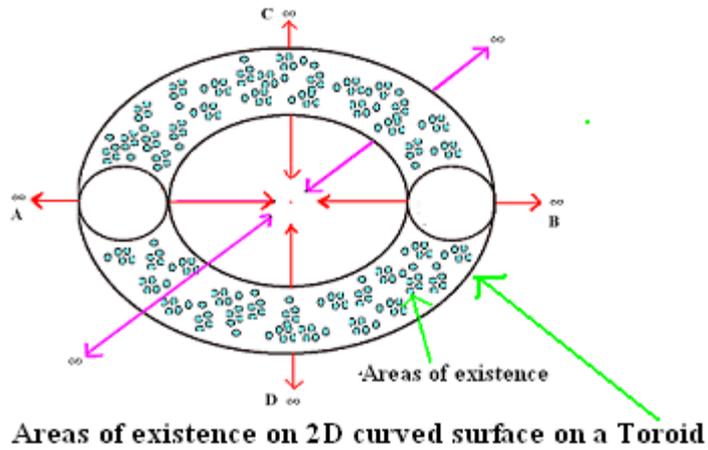
2 dimensions. Can be any 2 D shape, but to keep in line with the toroid, let us assume existence can only be circles O. Then all the global surface has to be constructed with Os.



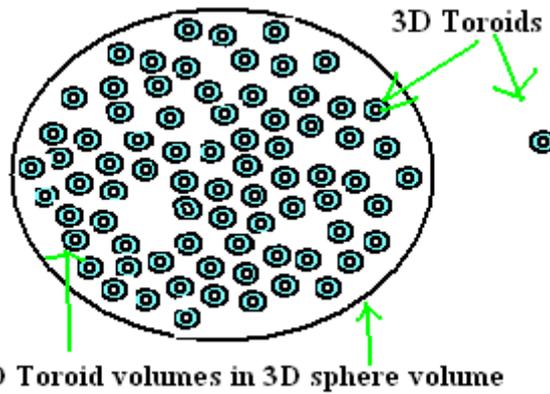
No curve 2D sheet.



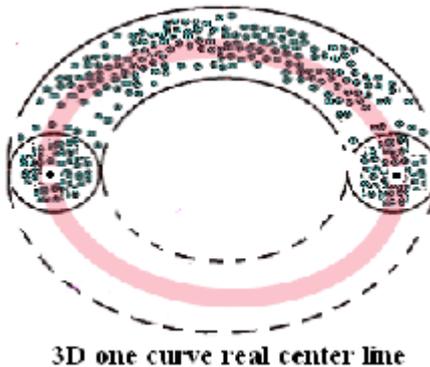
Option1 curved 2D to produce sphere [not true bending of 2D so we can ignore this one]
 Should be Os not discs on surface



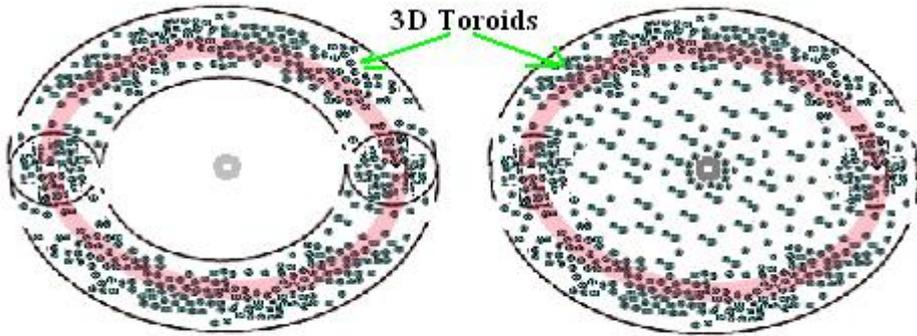
Option2 curved 2D to produce toroid (true bending of 2D).



No curve 3D sphere. [Not true bending of 2D so we can ignore this one also]

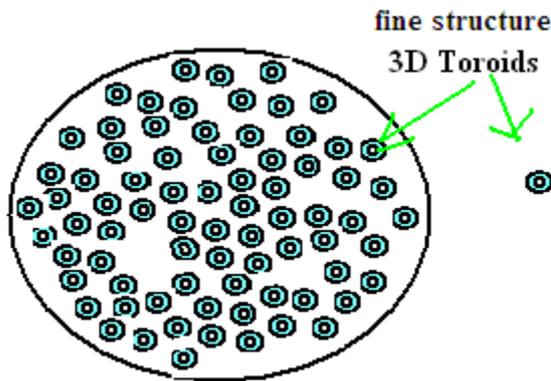


True 3D toroid: - (one curve) real center.



3D one curve can look like a sphere with a hole at the center

Please Note: - If we expand/contract in ³time the second 3D model (above), it can look like the first 3D sphere with a tiny ⁰hole in the middle. (The elusive center of gravity is actually empty).

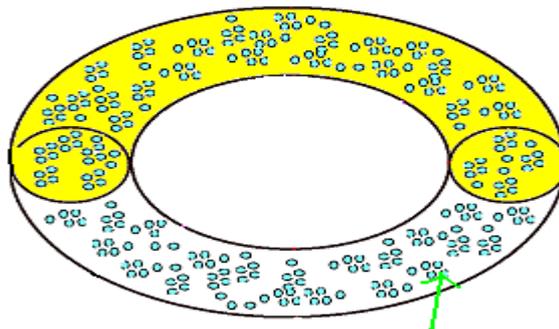


4D Toroids moving in 3D sphere volume

Option 1 in 4D: - Toroid moving volumes in 3D sphere (no curve). [Again not true bending of 2D so we can ignore this one as well].

(You really need a little video here, but just imagine for now that the toroids move).

The volume of the toroid is the same contracted or expanded.



4D Toroid moving volumes in 3D Toroid

Option 2 in 4D: - Toroid moving volumes in 3D Toroid (one curve).

I mentioned bending the last 2 dimensions, but did not join all the dimensions together. Before I do that let us go back to Existence.

What is existence?

In our model it is anything that exists or may exist. But generally something is said to ‘Exist’ and it is normally confused with Time because most things exist for a specific length of ³time. I.e. lifespan of a man, elephant, insect, bacterium, even planets, stars, or atoms and electrons have a lifespan. So it is not surprising that we confuse the two.

So why am I differentiating between the two?

As I said before something has to exist to measure the change of that existence, beginning and end of the thing you are measuring.

This second existence referred to, is only a temporary existence of the specified subject that one is measuring. E.g. The elephant, although the elephant did not exist before a certain ³time, then existed for a ³time, and then ceased to exist.

The constituents of the elephant existed before during and after the elephant.

(See section 28 "Further explanation of the concept of 'Primary Existence'").

The essence of existence (i.e. the dimensions) 'exists' before during and after any object or event that we may specify. In other words: - all the universe and everything in it, is made of these (in our case toroid volumes) of existence.

So even an electron/positron annihilation that appears to annihilate each other and then reappear, i.e. exist, not exist, then exist, are no different to the elephant in concept, i.e. the constituents of the structure of the electron (and the positron) existed before during and after.

So even light, dark energy etc. must have this fine structure associated with its existence at the lowest level. We will come back to this later.

But let us look at light for the moment. It has existence and occupies a volume of space. Light is said to be massless in the conventional way, so if it consists of volumes of space, and everything consists of the same thing, how can anything have a mass?

Logically it can't.

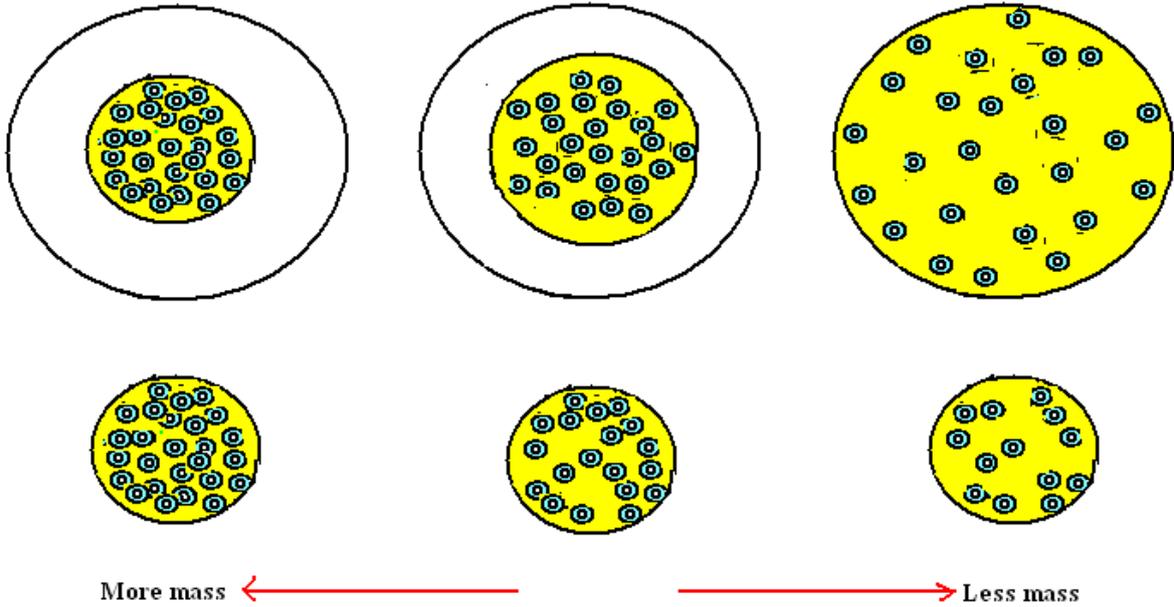
So, let us go back to our conceptual models again.

All our models have no mass; there is no difference conceptually between ¹points, areas or volumes that distinguishes one area or volume being greater or lesser in mass than any other area or volume. So to construct a realistic model of the universe we need to add another dimension that specifically specifies a dimension that can give rise to volumes that will have different masses to other volumes in our model.

At present we arbitrarily add objects into our simplistic 3D models and arbitrarily add mass to specify different objects.

If we look at the fine structure of our last 4D models, the volume is created by smaller ²volumes of existence, and these ²volumes are all constant, constant ²volume, constant ²time (cycle) although it moves in the larger space the units are all constant in themselves. So how can we add mass?

We can add another constant the ¹Density of Existence itself or Primary Existence. Then the more ¹volumes of existence near each other will increase the overall ²Density of the area they occupy and the greater the mass of that ²volume.

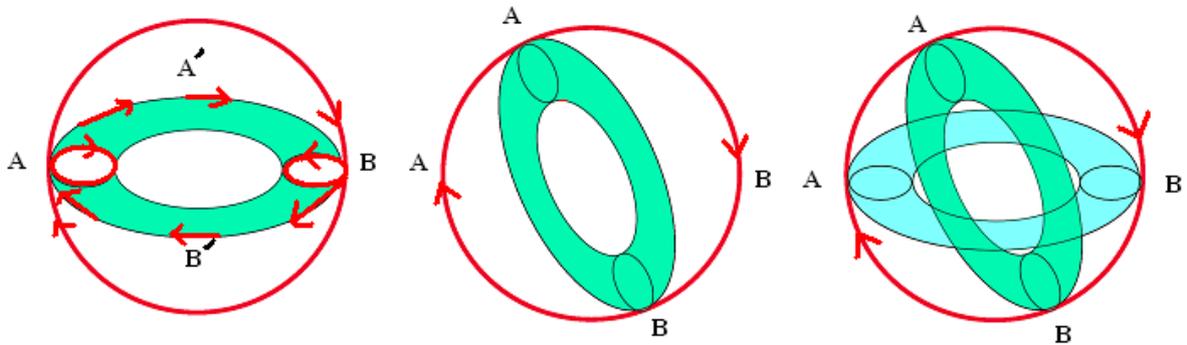


More mass ← ————— → Less mass
 The Toroids actually expand to fill all the yellow volume, unlike normal density

In the first row the 3D ³volumes and ³density changes, but the 5D densities are the same.
 In the second row the 3D ³volumes are the same but the 5D densities are different.

Why have I added Density when I still haven't joined the previous dimensions properly?

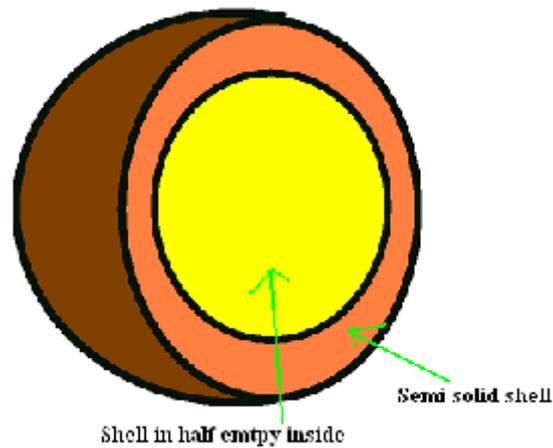
The 3rd curve of the toroid is different to the other two, because it goes above and below the plane.
 The first 2 were within the volume



The 3rd curve goes above and below the plane A goes to B, B to A

The 3rd goes above and below the plane, and it is helpful to add the dimension of density because it makes the joins more understandable.

Therefore a new ²volume of existence is created, which is created in ²Time above and below the 'Primary Existence'. Over one ²Time cycle a shell is created, like a nut shell with the center missing.



Cut in half it is empty inside.
Semi solid created in one ²Time cycle. ['Qkwist'].

One can eliminate the solid toroid, and think of the shell as one, but this will complicate things later. So now we have a 'Primary ¹Volume' of the toroid of fixed ¹volume and ¹density, which creates a 'Secondary ²Volume' of existence of a shell.

You may have noticed I am using multiple dimensions to join the curves together, this is because none are independent, and it is difficult to describe individually as the model gets more complex.

So now I have introduced the dimension of density, how can you join the lowest density to the highest density such that they are cyclically joined like the previous dimensions?

(Remember we curved all the other dimensions so that whatever direction we travelled we never came to an end, so we must do it to this dimension as well).

In other words we must be able to go from a high density to a low density and back to a high density again (without going to any infinity in any one direction).

On the large scale I will show you how this is done using the concept of the 'Inversion of ³Space'. (See section 32 "Clarification of the 'Inversion of ³Space'").

But for now let me describe the fine structure of density first. [The quantized density].

The volume of the 'Primary Existence' and 'Primary ¹Density' is constant.
But the ²volume of the 'Secondary ²Volume' of existence is different both in volume and density.

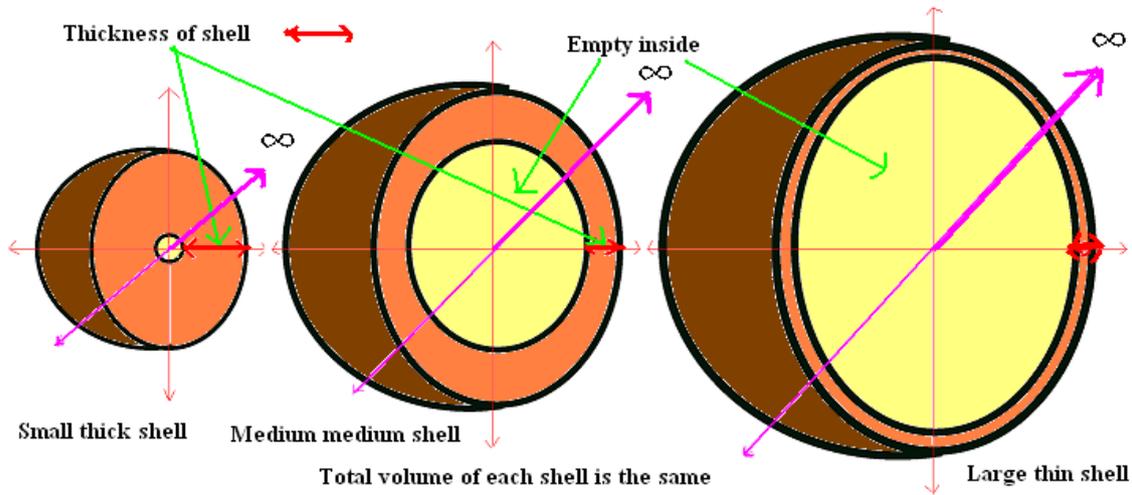
The 'Secondary ²Volume' of existence can be thought of as two volumes, one of the primary over ²time creating the shell volume, which would also be constant but not the same as the primary, and the same is true of the 'Secondary ²Density'.

Points of reference in this shell will be in the form of a probability function, i.e. sometimes the toroid will be exactly at that point and at others it will not.

The second volume of existence could be thought of as the whole ²volume enclosed by the shell, although conceptually the inner ⁰volume has no density or existence as such, (but is defined by the existence of the shell).

We looked at the expansion and contraction of the toroid in model 4 where the ⁰hole gets smaller and the toroid outer circle gets smaller as it contracts, then the ⁰hole inside gets larger as the outer circle gets larger, while the ¹volume of Existence stayed the same.

Now if we combine this movement with our shell model, you will see that another dimension is created along the line from the imaginary center to infinity outwards.



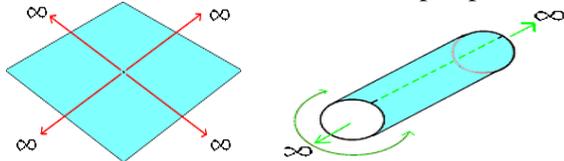
In this example we have the dimension of 'IN and OUT', i.e. inwards towards an imaginary center and outwards towards infinity again.

But note that what has happened is that the 'Primary ¹Volume' of existence creates in ²Time a 'Secondary ²Volume' of existence that also has wave functions for its dimensions. E.g. If we measure the normal 3D dimensions of length, breath and height. The existence of space varies between a minimum and a maximum ²volume, as does its overall ²density over ²Time.

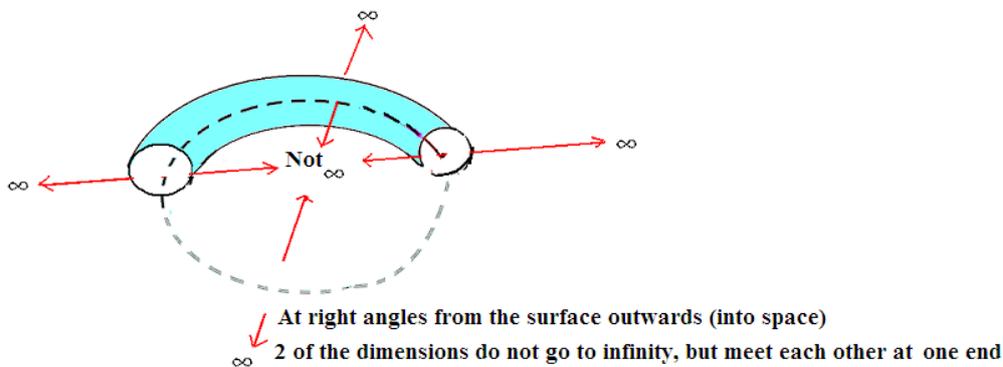
But how can we create the expansion and contraction of this 'Secondary ²Volume'?

We need to curve space in one more direction like all the other models where we viewed them conceptually from a higher dimension than the one that we were portraying (so that we could bend them back on themselves and eliminate infinity).

We saw the 2D model from the 3D perspective, (a higher dimension).



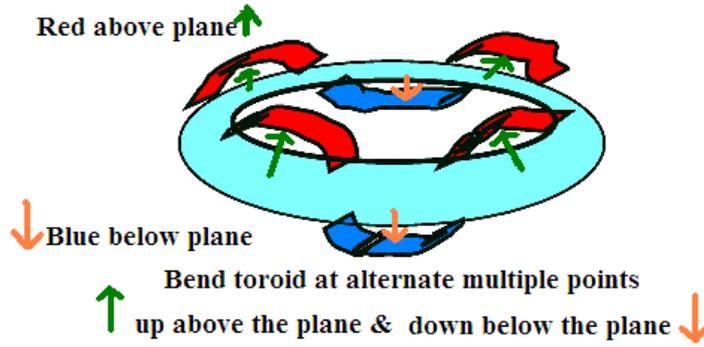
But because it is difficult to look at the latest model from a higher dimension, just imagine that you just need to curve the center core dimension of the toroid into another plane.



Initially I curved and joined together in the 2D plane.

Now imagine curving this above and below the plane, i.e. put a slight curve at each part of the ring. What you end up with is a slinky type toroid.

Bending the toroid into a higher dimension

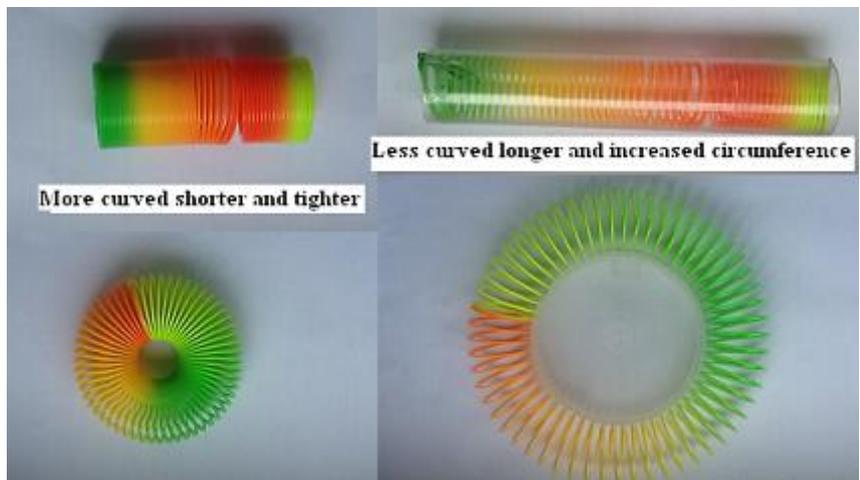


Less curvature larger ring (circle); more curvature smaller ring (circle)

Depending on how much curvature you put in this axis makes the slinky tighter and the outer circle shrinks.

(Note: - spin this slinky toroid also creates the shell.)

Unless you have a visual spatial IQ which is extremely high, it will be difficult for you to visualise. But imagine a real slinky, if you expand it, the coil gets less curved and longer, so if the ends were joined the circle would be greater.



Put all the previous models together and you get a model that has ²volumes of existence that increase and decrease in secondary size and ²density in ²Time.

On the larger scale as I stated earlier we need to curve the last dimension mentioned which is ³density. How can you move from a low to a high ³density, in either direction and end up at the other end such that there is no infinity?

This is done with the concept of the 'Inversion of ³Space'. In other words as you get smaller and smaller you will get to a point where going any smaller you will end up getting larger and larger.

This again at first sounds absurd as did going to smaller and smaller scales the ball will never touch the wall.

So far everything has been abstract and we have not tried to represent anything in our model, so I could try and represent the earth and describe the mechanism of gravity, but this would require a few more concepts, so lets represent something lighter, like light.

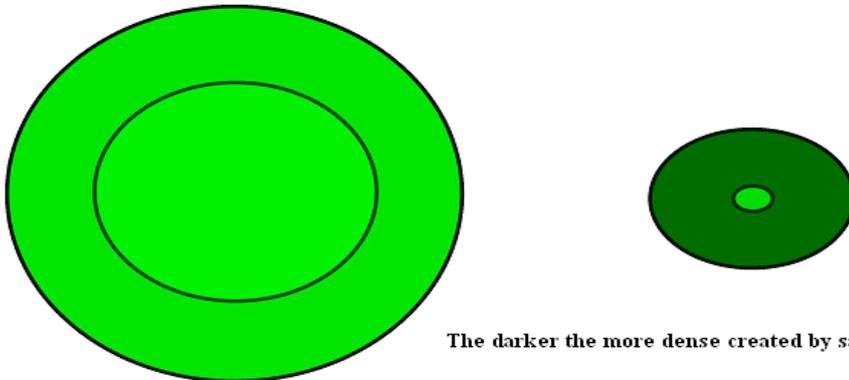
Light has a structure, as a ²volume of existence.

In my model it is created from Dark energy "First there was Darkness, and then there was Light", but let us not digress yet.

For simplicity of the concept let us assume that light is just one such toroid in space/time/density. It will have a wave function increasing and decreasing in size over ²time like a little balloon. It increases its 'Secondary ²Density' as it shrinks and decreases its ²density as it expands. It has a finite mass (although it is extremely small) but it still acts as a wave.

[Note: - Just as a side line this is the basic mechanism for wave/particle duality].

Imagine you could lock the 'Secondary ²Volume' when it was at a minimum (by restricting its expansion), you would end up with 2 ²volumes of existence, one large less ²dense, and one small more ²dense.



The darker the more dense created by same toroid

But note that although these look different they are both created by the same primary toroid.

Now imagine that while one toroid is expanding another one gets inside its inner space, now remember the toroid is coiled and has in fact always got a ⁰hole in the middle (and at most times it has another space along the core of the secondary toroid, ignore this space for the moment).



Smaller inner toroid inside the larger outer toroid.

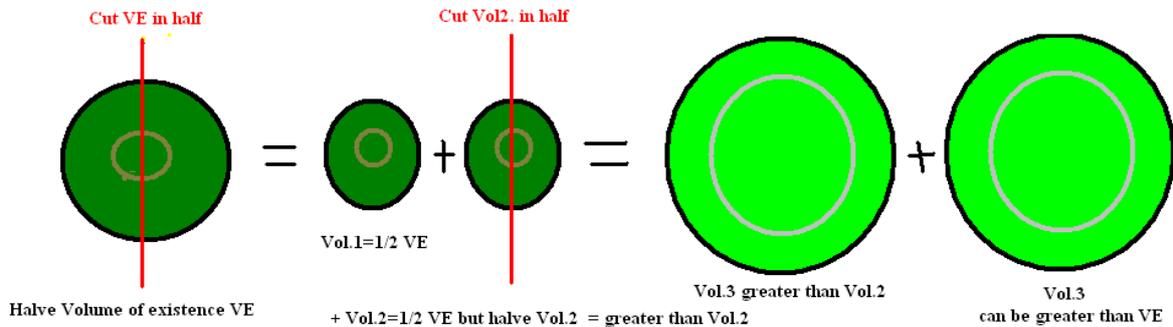
(The outer toroid is distorted so you can better see what has happened).

You can see from this example the mass will be twice that of the single, and there will also be a corresponding ‘Secondary ²Density’ change.

16th May 2013. Technically this is a Tertiary. End 16th May 2013.

I will show how this can be done in detail later, but for the moment you should be able to see that if the toroid is thin and long, you can get many nested toroids inside each other, such that they appear to occupy the same or similar size ‘Secondary ²Volumes’. Just assume for now that the more toroids you link together the more the expansion of the toroid is restricted. So the mass increases with the corresponding density change. I will show how I can easily nest 1 million of such toroids later, but for now let us just assume that a large number will create a heavy object like a proton or neutron of the nucleus of the atom. Continue to create the rest of the Universe with these atoms.

Now if you look at the large scale, you will have a ³volume of existence consisting of multiple existences of ‘Primary ¹Volumes’ occupying ‘Secondary ²Volumes’ that create a fixed ‘Tertiary ³Volume’. Now cut the original ‘Tertiary ³Volume’ into two, and continue cutting each piece into two, i.e. cut the whole into smaller and smaller pieces, as long as you do not cut up any nested toroids the ‘Tertiary ³Volume’ will get smaller and smaller, as you would expect, but when you get to very small scales and cut that ‘Tertiary ³Volume’ into two the toroids will stop being nested and new ‘Secondary ²Volumes’ will be created that are both larger than the original ³volume you cut into two.



$${}^3\text{Volume of existence.} = {}^3\text{Vol.1} + {}^3\text{Vol.2} \quad {}^3\text{Vol.2} = {}^2\text{Vol.3} + {}^2\text{Vol.3} \quad {}^2\text{Vol.3} > {}^3\text{Vol.2}$$

Notice the ‘³density of space’ decreases at the same ³time.

16th May 2013. A bit long winded but: - A ‘Primary ¹Volume’ a quantum ‘APE’ is represented as ¹{ }

A ‘Secondary ²Volume’ a quantum ‘APE’ is represented as ²{ } or ²{3} = 3 unknotted ‘APE’s
²{,} or ²{,3} = 3 knotted ‘APE’s

A ‘Tertiary ³Volume’ is the net aggregate of ‘Secondary ²Volumes’ represented as ³{ }

Inside the ³{ } may look like ³{²{,3}.100 + ²{40}} = 100 triplets and 40 singlets.

Split above into 2 halves you get 2(³{²{,3}.50 + ²{20}}) = ³{²{,3}.50 + ²{20}} + ³{²{,3}. 50 + ²{20}}

Split again you get 4(³{²{,3}.25 + ²{10}})

the last split splits/unknots one of the triplets so you get 8(³{²{,3}.12 + ²{5}}) + ³{3}

The ²volume of the triplets is less than the ²volume of the singlets so the volume increases by ³{3}

End 16th May 2013.

[Note: - in passing again, this is the basic mechanism of black holes and how dark energy is recycled and escapes a black hole. Light is too heavy but dark energy is not, (completely different event horizons)].

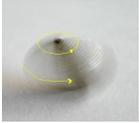
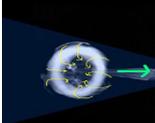
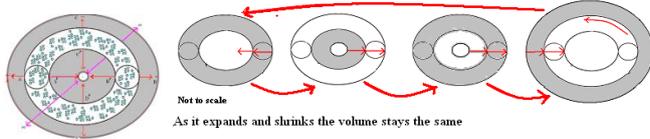
This is also one end of the large ³density curve. There is no such thing as infinite density, ³space unravels at very high densities of black holes and expands back out again, pushing the universe outwards as it goes.

This is not only the concept of space inversion but also the beginnings of the mechanism for ‘³Space Inversion’.

The actual mechanism can now be revealed with the mechanism for gravity.

Let us look at a single 'Primary ¹Volume' and a 'Secondary ²Volume' that it creates. Let us assume also for simplicity that this is the structure of dark energy. To visualise and understand things better we will look at each movement on its own (without looking at the details of the toroid structure).

Not in any particular order.

- Movement 1.  Turns like a wheel.
- Movement 2.  Spins like a ring flicked on a table.
- Movement 3.  Rolls inwards towards its center like a smoke ring travelling forwards.
- Movement 4.  It expands and contracts around an imaginary ⁰center.
Not to scale
As it expands and shrinks the volume stays the same

Note: - it always has a ⁰hole in the middle.

Movement 3 acts like a vacuum cleaner (Hoover) sucking from one side of the toroid to the other side (other toroids).

But if you combine movement 4 it acts like a vacuum pump.

Combined with movement 1 you get a twisting pump, either clockwise or anti clockwise twist.

Combine all 4 movements and you get a vacuum pump twisting space itself as it pumps in all directions, i.e. it sucks towards an imaginary ⁰center, and pushes away from this imaginary ⁰center at the same time.

This is the basic mechanism of gravity pulling and pushing at the same time, but on its own there is no gravity gradient as all dark energy is the same (at this point (juncture)).

If now we restrict some of these toroids from expanding, then the smaller pumps will have a greater pushing and pulling power and a gradient will be created.

Why will it have more power?

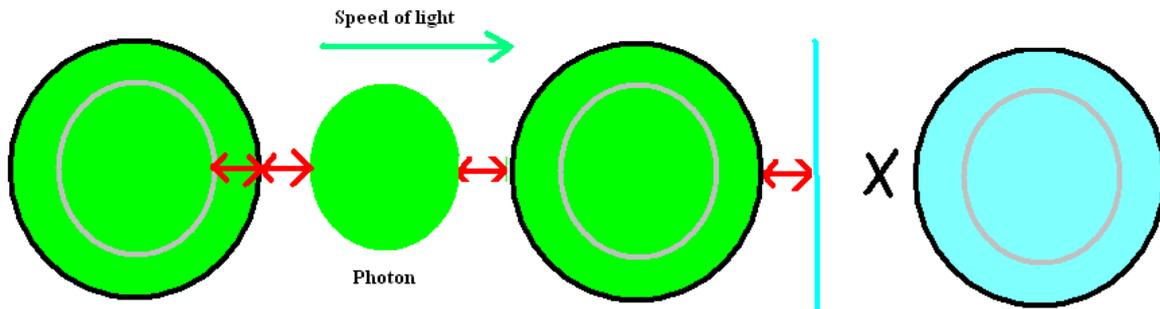
As with all the other dimensions, we tried to make constant, we can make the primary energy/mass a constant.

Let us assume once more that there is another dimension, I don't like calling this a dimension because it is too controversial. So let us say it is a variable for the time being and that this is the speed of the surface of the toroid.

Let us assume once more that the speed of any point on the surface of the toroid is constant and the same as any other point on the surface with reference to the background null space, and that this speed is at least the speed of light c . (Originally I knew it was at least twice the speed of light, but now believe it to be probably nearer c^2 , if not c^2 itself, not being a mathematician I cannot ascertain this at present).

I know another absurdity from the physicists, but just consider this, if light is a complex of dark energy which is moving around imaginary ⁰centers (a cluster), then the ³speed of light is just the terminal velocity of light as a cluster in a background of dark energy. It cannot go faster than it can be propelled either by itself or by other energies all of which are made of the same basic stuff.

Or put another way light expands and contracts around a ⁰point and therefore expands and contracts as it moves forward, therefore it cannot move forwards faster than it can expand and contract into the next space.



A photons travels through space by expanding into it therefore it cannot jump into a space further than it can expand; the blue line

E.g. If it was 1 dimensional, it would spend ½ its time moving backwards and ½ its time moving forwards when at ⁰point A (stationary).

Therefore to move A to point B at the ³speed of c, the trailing edge D would have to move at 2c, to travel to B and back to C (twice the distance of light, one cycle).

Therefore greater than twice the speed for higher dimensions.

Anyway back to the model; the exact speed at this point is not so important, but just to say it is fixed, therefore the energy associated with the toroid is fixed and the force is proportional to the x sectional area of the hole (that this energy is applied to). So as the hole gets smaller the force per unit area increases, so the more dense the object is the greater the pulling and pushing force.

These toroidal pumps pull other toroids through them, they contract as they pull through and expand as they come out again in the other direction, because they do not have an orientation as such, the pull is in all directions evenly.

There are fields created by the movement of dark energy through massive objects to the imaginary ⁰center, shrinking as they go to the center and expanding as they escape outwards.

The flow is in both directions inwards and outwards at the same time, and the force of gravity is merely the difference between the overall pulling and pushing gradients, at the appropriate distance the pull push will be equal and beyond this point the push will be greater than the pull and the objects will push themselves apart.

Inter galactic ³spaces are mainly dark energy/matter and they push galaxies apart.

There will never be a point where the universe expands beyond a certain point, because once fully expanded, they will have no choice but to pull each other together again. Creating a cyclic bending of large scale ³space expanding and contracting a Big Bang type of scenario and Big Crunch type of scenario, except that you cannot get a density greater than the ¹density of the original primary toroids. No primary toroids can occupy the same primary ¹space of other primary toroids.

You may have noticed that the whole universe can expand from a small ‘Secondary ²Volume’ to a very large ‘Secondary ²Volume’, without any new ‘Primary ¹Volumes’ being created, nor destroyed.

Note: - Strictly speaking a ‘Secondary ²Volume’ relates to one basic (quantum) unit of space, and multiple secondary units within the same space is a tertiary unit of ³space. This tertiary ³space is the space we live in. [³Space].

Beyond this point I did have some extra diagrams where I tried to show bending of the dimensions, but I even find them difficult to follow, so I will not confuse my readers any further.

April 2013.

[Note: - although I simplified light to be spherical earlier on in this section and also in my explanation of wave particle duality in another section this was done to simplify the concepts. The structure of

light is not spherical but more like a triplet rotating around one of its axis, so it looks more like a wheel with a protrusion on one side. Therefore optical rotation can take place, but could not do so if it was totally spherical.] End addition April 2013.

71. Time Travel. More about Time

Time travel. More about time.

I think I need to explain time a little more, and time travel.

Before I talk about ³time travel which is a Global time travel let me talk about time in general. I said earlier that time is just the measure of change of something.

If there is no change then there is no time.

Can this actually be true?

Now we normally think of objects as being timeless and they exist in ³time. By this I mean that we think of objects as complete without adding a ³time variable to them e.g. If I say think of a box, you do not think box of duration 6 minutes or box of duration 2 years. We qualify the box to suit the criteria at a later stage.

Now if, as I have said before that time is the change of something and this something was a box in the loft or attic, then if this box did not change then it would not have any time, time would stand still for the box.

If we leave the box and return the following year (assuming no one has gone into the loft or attic) the box will still be there and look exactly the same. As far as the box is concerned time has stood still. This would be the case if the box had no internal structure and there was no change throughout the year while we were away. We know that Global ³time carries on because we have lived this past year but we have been constantly changing, whereas the box seems to not have changed, but we say the box is one year older.

Now the box is one year older but not because we are one year older, but because the box is one year older in its own right. This is because it has an internal structure at a lower level that keeps on changing, but changing in a way that we are unaware of, so we perceive it as unchanging (apart from its slow deterioration over ³time). (We also have this internal structure at a lower level but we only notice the macroscopic changes).

In summary our ³time (our perceived ³time, Tertiary ³Time, Global ³time) is the ³time in our immediate surroundings in our localised ³volume of space, and this ³time is similar to others in similar ³volumes of space around us, because we all move at similar or comparable ³speeds. If our ³speeds were drastically different then and only then will our ³times start to differ significantly.

Time in the “now” is sensed differently by different people in the same sense that “speed” is sensed differently by different people. The “now” does exist i.e. it is ‘Existance’. Because we sense ³time differently dependent on our ³speed does not mean the “now” does not exist for everyone.

This is similar to a set of racing drivers going around a circuit at different ³speeds, just because you sense some drivers going faster or slower relative to yourself and they also sense you and other drivers differently gives you the impression that their “now” ³time is different to yours. Just because ³time travels differently for different observers does not mean ³time past present and future are all distinguishable and all exist simultaneously.

Some drivers are not in the past and you are in the present and some drivers are in the future; all of you are in the present in the now i.e. you all exist simultaneously but move through ³time differently. Just because you do not see them does not mean they do not exist. For example we look at the stars and think they exist in the “now” but what we see is the light that was emitted by the stars maybe billions of years ago in the “now” i.e. what you see in the now is the light not the stars. The actual stars that were there have moved on and they exist in the “now” in a position and in a condition that they have come to take i.e. their essence of ‘Existance’ still exists somewhere out in space.

‘Secondary ²Time’(which is at a lower level) can be measured in three ways.

1. From the surface of the 'Primary Surface' point of view on a 3D background in which one 'kqwist' is one cycle moving at c^2 .
 2. From a shell point of view (the quantum of space the 'APE'), in which one cycle is measured as the distance travelled along a circle in the plane in 2D space, this gives a different distance and speed.
 3. From the imaginary ⁰centre point inside the 'APE', this gives a different ³speed. These are the abstract ⁰points that we normally use (where we are unaware of the structure, or we are simplifying things). So when this ⁰point is stationary in relation to us we say the object is stationary. When it moves in relation to us we say the object is in motion. These ⁰points are also used to denote that gravity is stronger the greater the mass surrounding these ⁰points are. These ⁰points are no different to the other imaginary ⁰points, but the actual gravity is created by the structure and movement of the real ¹points surrounding these ⁰points. The same is true for the curvature of space that is created by the structures surrounding these imaginary ⁰points. Anyway back to time, this is also created around these ⁰points by you guessed it, the structure that is created.
- Let us now go back to time travel.

Example one.

Imagine you have 10 ballerinas at one end of a room. They all spin in one direction and travel across the room to the other side.

Although each ballerina has her own time, as a group they have a global ³time which flows forwards as they go from one side to the other.

I.e. they travel forwards in ³time from left to right in our example.

Now to go back in time they would have to all reverse their spin and go backwards the way they came.

Once they get there they have travelled back in time.

Everything has gone back to the same position it was in the beginning, and they can now travel forwards again in ³time once more.

Example two.

Now imagine the same thing again forwards in ³time, but this time they do not go backwards to the beginning by spinning in the opposite direction, but they keep the same spin and still end up on the left side where they started.

Have they gone back in time?

The answer strictly speaking is no, because although they seem to have gone back to the beginning, the conditions are not the same as it was the first time around. I.e. they are all spinning the wrong way around. If they could all simultaneously start to spin the other way around when they got to the beginning then they too would have gone back in time.

Again they could then start travelling forwards in ³time once more.

[Note: - This type of time travel is slightly different].

Example three.

Now imagine the same thing once again, but this time only the first five travel backwards to the left, and the remainder do something different (let us just say they stay to the right and carry on spinning as usual).

Now have the first 5 travelled back in time?

The answer is that the first four have travelled back in time, but the fifth has not. The reason for this is that the first four have returned to the exact conditions they were in in the past, so they have travelled back in time. But the fifth has not returned to the same conditions that it was in in the past. The sixth ballerina is missing; it has travelled to a different past.

In other words time travel can be localised (as in the first four) but the rest of time continues forwards.

Now in example one. Global ³Time has travelled backwards to the past.

In example two. Global ³Time has travelled forwards to the past.

In example three. Some of Global ³Time has gone backwards (localised) and some has gone forwards.

Now you should be able to see from these simple examples (above) of Time travel, that there are other combinations.

You should also note that at no time did any ballerinas go back and meet themselves. But if you look at example three, one of the last five ballerinas could have gone back to the past of the first four (or five if you like). So it would be possible to go back in time to someone else's past.

Again in the example above, this would only be possible if the first five travelled back in time first.

Now what is the likely hood of any of the above ever happening?

The answer is extremely unlikely, even with just 10 ballerinas it is unlikely to happen. So imagine that every atom in your body had to return to the past (you should see that this is unlikely to happen).

So am I saying that Time travel is not possible?

The answer once again is not as I have portrayed above. All the options are not possible because of the nature of the 'Real Space' units and Global ³Time always moves forwards, even though individual ²time units can go backwards and forwards.

But there is another option for Global ³Time travel.

The forth option for Global ³Time travel is relative Global ³Time travel.

In this option you have to imagine the faster you move the slower Global ³Time becomes for you (it would be like spinning on the spot) therefore you stay roughly in the same position from left to right.

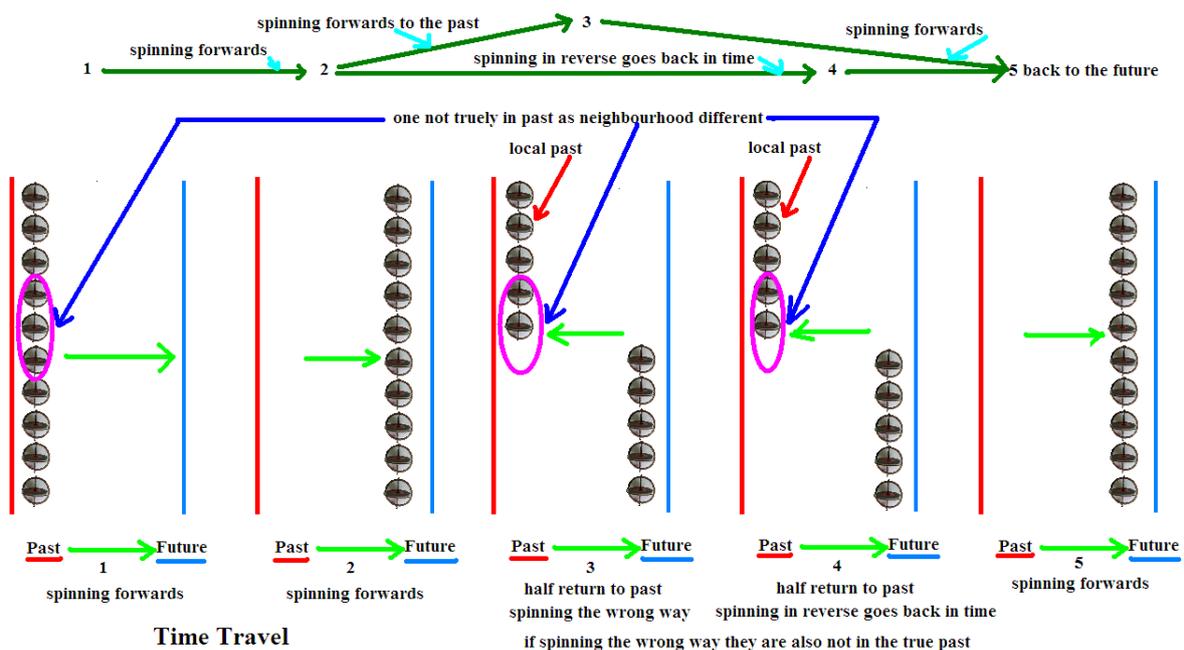
Let us say three ballerinas decide to travel faster. The remaining ballerinas would carry on moving to the right (into the future). If the three catch up to them, the seven have travelled further into the future.

Now imagine what the seven ballerinas see, they see that they have travelled back to the past of the three ballerinas.

So what this means is that you can travel forwards into someone else's past (the seven ballerinas travelled into the past of the three), or you can travel into the future (the three ballerinas travelled into the future of the seven).

What this ultimately means is that you can only travel forwards in ³time into someone else's past or future, and your ³time is always localised and moves forwards at different rates dependent on your ³speed. So unfortunately you can travel backwards and forwards in Global ³Time, but you will not get any younger (that sounds like bad news). On the bright side it may be possible to reverse the signs of ageing by attempting something like option one or option two (although I have already said this is not possible, it refers to the large scale) on the very small scale ²time can and does go backwards, so if you restrict ³time to parts of your body then this may be possible.

I hope the last sentence did not confuse you.



(Sorry I used 5 and 5 instead of 7 and 3, the same principle applies). (This is a 2D representation of time travel).

More Time travel. When we looked at the ant moving in a denser medium (the pleated paper, more gravitational pull) it would appear to us that time slows down, the ant moves slower to us. This time is time at our level, not time at the ant's level.

If we see the ant moving slower does the ant conversely see us moving faster?

If time is cyclic measured by 'qkwists', do 'qkwists' go around slower the faster we move translationally? Thereby our ³time slows down the faster we go, relative to the earth where ³time will continue to advance quicker.

Sometimes I wonder if I was more mathematical would I have solved the problems of the Universe more completely, or would I have just spouted a load of formulas at everyone, and not considered the 'Reality' model?

72. Curvature of space

The curvature of space can be demonstrated by looking at a simplified 2D world.

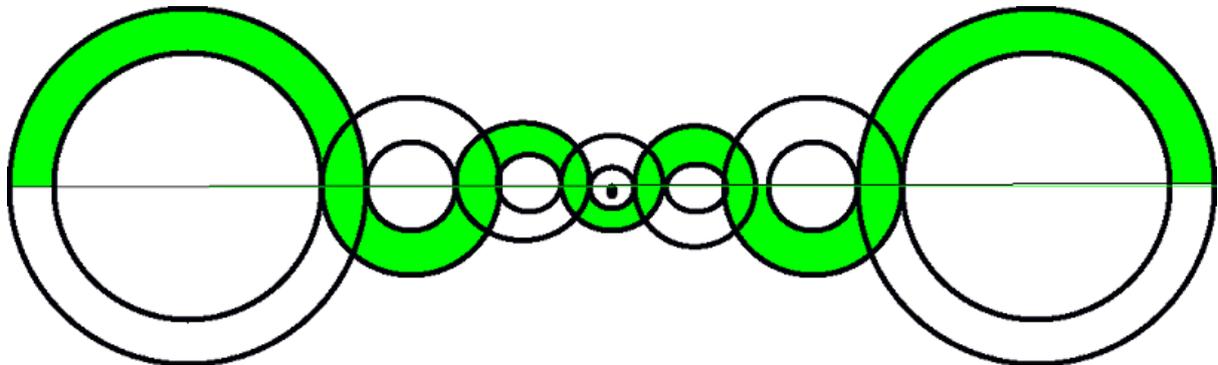
If you have a straight line there is no curvature. If you bend it a bit; then you start to curve it.

If you continue to bend it, i.e. increase the curvature, you will eventually form a circle.

You can increase the curvature even further (on the same scale) by creating a smaller tighter circle.

Note: - A circle is a circle at different scales, but the curvature varies if you specify the scale.

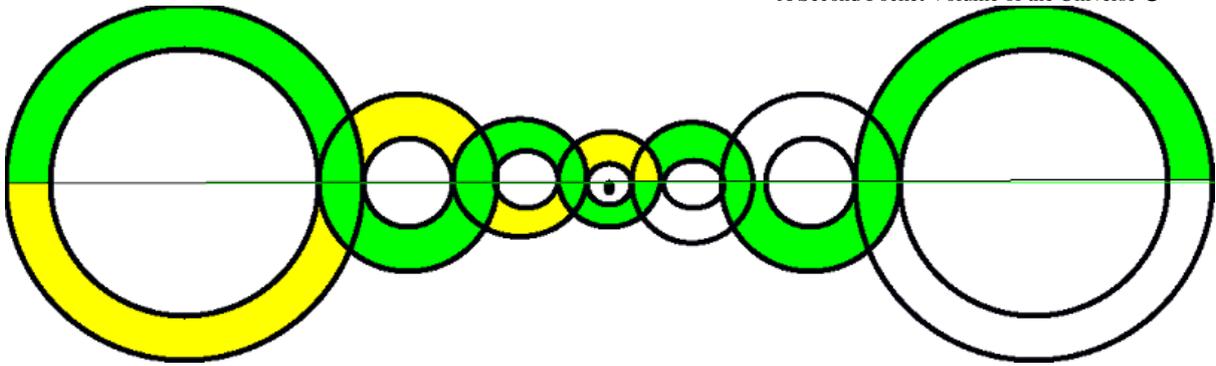
Now if you follow the path that is drawn by the green perimeter of the circles in the diagram below; you will notice that as you go towards the ⁰center the curvature increases, and as you go away from the ⁰center the curvature decreases. As you can see the curvature increases as the circles get smaller; which is similar to the mass increasing as the 'density of space' increases.



Now imagine you are travelling along the outside of these circles towards the smaller circles, this is equivalent to you falling down a gravity well towards the mass at the ⁰center (the smaller circles greatest curvature, greatest density greatest mass).

Now if you were a unit of dark energy space, you would be squeezed (and pulled) towards this ⁰center, then you would expand as you moved away from this ⁰center, as the curvature got less towards the right.

Now the 'Apes' do something similar in a 7D world where they shrink towards the ⁰center of mass; they do not stay there, but come back out again like the 2D world above, but they do not need to travel to the other side like above, but can come back the way they went in (dark energy can pass through dark energy with no problems). If you look at the path in yellow perimeter below, you can see that it goes in (the green path) then turns around (because it is empty in the middle) then follows the yellow path, or it can carry on with the green path.



Note: - In a 3D or 4D world you can think of them like reducing bubbles, so the bubbles shrink towards the ⁰center, falling inside each other, then expand again engulfing other bubbles on the way out. You will obviously see that they can move in all directions towards the ⁰center and out to the surface.

You could probably see this better with a sphere cut in half (diagram below), the bubbles could follow the yellow or green paths to the ⁰center and out again, or some may not make it to the ⁰center but retrace like the blue. (A more realistic picture of a gravity well).

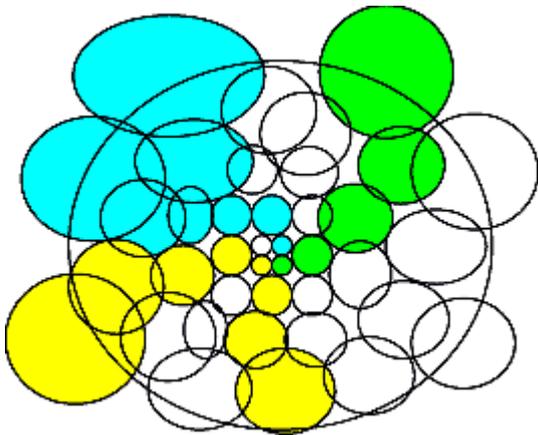


Diagram. Note: - the center has the greatest curvature with the smaller circles, the further away you are the bigger the circles get.

Also note that this not only happens inside objects, but extends outwards from the center to as far as the gravitational field extends.

[The dark energy field will have a slightly lower density the further away from the center of mass].

The above is a 2D simplification of the 5D model.

Note again that this is a further simplification as ‘APES’ twist and turn as they increase and decrease their densities.

{If I get sufficient funds I hope to create a short video in the future to demonstrate this better}.

73. Where did things start becoming more abstract

Reality again 8th May 2013

I created a web site to sell my eBook so I can make some money to promote my model of the Universe.

Unfortunately the people that would be interested in this subject, mainly those that want to know more about Gravity and Quantum physics are the people that have been led to believe that ‘Reality’ as such

does not exist at the quantum level. Everything in their eyes is possible and is created from empty space as an endless process of infinite possibilities.

In this respect I can't sell them my idea because it is contrary to their basic belief system.

I say to the layman and to the quantum world that they have made an error in their conclusions. Using simple complex logic (explained in my eBook) they have made an error.

This error stems from two basic assumptions the 'Uncertainty Principle' and 'Schrödinger's cat.' Effectively saying, the same thing: - "Reality does not exist, until you observe it".

This is actually false for the following reason and logic (although they say you can't reason at the quantum level).

This stems from the fact that you can't know the position of a particle and its momentum at the same time. Although this fact is true, they conclude that because you cannot ever measure what is real (particles) means nothing can be real.

The true conclusion should be that 'Reality' is not made from particles and that 'Reality' still exists. Their model of "Reality" is wrong, so that their conclusion should be that this model of reality can't exist, not that the real "Reality" does not exist.

Particles, Waves and just ⁰points in space (with quantum fluctuations) is not a good representation of "Reality".

This is why I created a model based on "Reality" so that there is no paradox between "Reality" and the quantum world. You can use quantum mechanics, QED, QCD and any other quantum combinations in conjunction with the macroscopic world in which both are "Real". All you need to do is to redefine your entities to something that is more real.

Therefore what you measure is not just ⁰points in space with momentum (which they have proved you can't measure) but volumes of "ASpace" with momentum. Which; in principle you can measure, and therefore can be "Real".

Another way of looking at the logic is as follows (again in their logic, "Reality" defies logic).

They say that there is an infinite number of possibilities and multiple Universes: then I ask the question "is there a possibility that in one of these possibilities there is a "Real" world in which everything is present and needs no other entities to create our Universe?" If their answer is "no" then I claim that there is not an infinite number of possibilities because they exclude mine.

So there is only a finite number of realities, even though they will claim that this is a big number.

If they concede that mine is only one such possibility then I say that 'there must also be a possibility that there is a world similar to the one I claim but with one entity short to complete this world' I.e. this one entity lives in another parallel universe (which they believe in).

In the same manner I can repeat the process creating universes with 2, 3, 4 etc. entities missing (the entities living in the parallel universe or universes).

As you can see eventually I will have nearly created an infinite number of Universes with bits missing in each that reside in parallel universes. (This is what the quantum world believes).

Now I say to the reader what is more likely One 'Real' Universe that is complete and needs no other entities, or multiple universes all incomplete needing bits from other universes to make them complete?

To the quantum world I say 'work out all the possibilities and work out the probability (amplitudes²) of all these universes and you should come to the conclusion that the most probable is the one that is most complete i.e. the one with everything in it; that explains everything.

Any other answer with bits missing from the real answer will have a greater probability of being wrong. E.g. a universe with only 100 atoms in it will be totally inadequate to explain our Universe, a universe with 10²⁰ atoms in it will be better but still inadequate, a universe with 10⁸⁰ atoms better still,

so you should be able to see a Universe with a prime number of 'APE's with 10^{85} entities in it could well be the best so far.

End 8th May 2013.

I think the flaw in the logic of quantum mechanics; I believe stems from the wave nature of light where if photons were merely particles then you would not get diffraction patterns when light goes through two slits. Unfortunately I believe that no one solved the particle wave problem completely at that time, i.e. incorporating structures. Coupled with the uncertainty principle, which is based on 0 points in space, you end up going down the road of quantum probabilities with no "Real" model, and things appear to be in two places at once until you observe them.

If you realise that particles as solid objects (in the mathematical sense) don't actually exist as such, and that waves are a simplification of the overall movements of the structures below, which cannot be represented as 0 points, but are clusters. Then you realise that sub atomic structures are always at more than one point, not just two places at once but many places at once.

These structures are dynamic, so the uncertainty principle applies but for a slightly different reason.

As an example if you did not know the nature of water, and you thought water molecules were particles and you set up an experiment with two slits and observed the waves as they came out the other side of the slits. You would see interference patterns in the water waves. You could come to the conclusion that water molecules go through both slits and interfere with each other as waves. We know this is not true, so why believe that photons do?

The reason is that nobody has fully understood the nature of photons, they are neither waves (just waves) nor are they particles (as solid objects). They are dependent cluster points, that can be considered solid, but as a group they have wave characteristics. So when they pass through two slits they do not behave like normal particles, they pass through the slits and react with both the slit and other photons to create interference patterns.

The same is true of a wave in the wheat field when the wind is blowing. You do not say that each head of wheat is a wave, but the whole field acts like a wave, because the wheat carries the wave characteristics.

The same is true of the photons they carry and interact in such a way that they appear to be waves. (But unlike the wheat head that does not move in the field the photon carries a wave packet with it).

[In effect I am trying to find a "Real" model that will translate $E = mc^2$ with "Real" structured units of energy, so if when stationary in the macroscopic world a dark energy 'APE' can literally qkwist around an imaginary 0 center at an equivalent complex angular momentum of mc^2 then E is mc^2 its potential energy: where its macroscopic momentum is still zero with respect of this 0 center. If this energy is proportional to the force that is created in the cross sectional area that it is aligned to, then all the forces are created by applying this energy to varying cross sectional areas that are created by these 'APEs'. One can think of c^2 as a surface area which the mass is applied across on a higher level on or within a sphere, enough said].

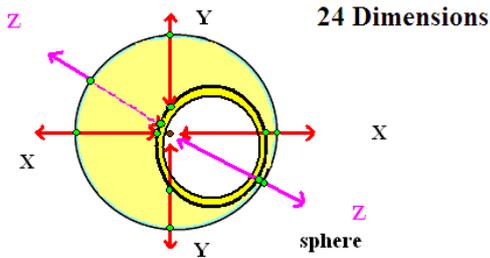
19th May 2013.

I have just quickly reviewed String Theory & M theory lectures from Leonard Susskind Stanford University on iTunes U released 2010-2011. It seems that I am going to have to learn some more mathematics or get some serious mathematician to help me specify my model more completely.

I think my unrestricted model of the universe (which this eBook does not cover) is more like some form of string theory but much more sophisticated than any other string theory. All current string theories only have one time dimension and the rest are space dimensions (they still seem to have many paradoxes).

My theory has 3 levels of Time and using their interpretation of dimensions mine has at least 24 'Real' dimensions (I will explain in a bit).

- **imaginary abstract⁰Point at center**
24 compound movements in translation



- **'Real'¹Points exist in shell**
12 real movements when stationary
12 'Real' dimensions

These dimensions are there all the time at all scales but are more significant at lower scales. These movements can be imagined as vibrations in all directions around this imaginary center⁰point. So as an example if you look at the atomic scale of the atom and look at just one dimension; it may appear to jump 100% from left to 100% right of this⁰point. Now if we go up a scale to molecular levels (macromolecular) all the atoms in this molecule are still jumping about but the whole molecule now only jumps a few % from left to right of its imaginary center⁰point. Again as we go into even higher levels these jumps or vibrations will be fractions of 1% shifts which you will not detect at these higher scales. The Uncertainty Principle is explained in my model by these additional dimensions which live at 'Real'¹points outside these imaginary⁰points. This is why you cannot extrapolate into the macroscopic world Shrodinger's cat (it is either dead or alive irrespective of whether you observe it). The uncertainty only applies to scales below the 'APE' where you are not measuring 'Real' entities but abstractions.

They have one string theory that has 26 dimensions in which they have no clue as to any 'Real' model into which these space dimensions can exist. They use what they call 'compactification of dimensions' to hide these dimensions. Now although I have not seen the mathematics behind this model (not that I would understand it at the moment, even if I had) they classify a dimension as a degree of freedom in space that the particle can travel in space time. Using my model I interpret this as giving these properties of the whole quantum to the imaginary center⁰Point (as if it is a particle). Particles as such do not exist. These properties belong to the whole quantum 'APE' which exists as 'Real'¹Points and these¹Points move in 'Real' space in 12 different directions in²Time when stationary around this imaginary⁰Point. When it moves in any of the macroscopic directions in the normal 3D of⁰space in³Time it creates 12 more variables (1 for each dimension) i.e. it has a component shift in all these 12 dimensions therefore it will have 24 dimensions in which to move. If you add the additional missing 5th Dimension plus other variables in my model everything is 'Real' and there are no hidden dimensions.

These dimensions are explained by the dimension I call the 'In and Out' dimensions independent of movement in normal 3D⁰space. All these dimensions they give to their imaginary⁰Point so this whole affair of additional hidden dimensions then becomes totally abstract (it was always abstract to start with as soon as you summed the properties of objects to point particles, which do not exist).

It gets even more bazaar with branes.

They seem to use different 'metrics' for different types of space (I will have to study to learn the notation), but they all seem to have a positive space component and a negative time component. My instincts tell me that this negative time component is just the contraction of space in translational motion which in my model will again be explained by the 'In Out' dimensions and²Time e.g. Lorentz transformations.

[In addition I will have to explain the force of Gravity using my model which is proportional to the cross sectional area of the 'APE' which is proportional to lp^2 which is also an area. lp which is a length is proportional to my radius of the 'APE' the 'Real' length of the 'APE' is its circumference. In their model strings can be any length (total length L) and can break and join using the coupling constant g .

In my restricted model the actual strings are not broken but form links and overlaps to create larger structures. The mass is proportional to the number of 'APE's.

Also black hole Entropy in my model is not on the horizon of the sphere but proportional to the cross sectional area of the black hole which is proportional to the sum total of the cross sectional areas of the 'APE's inside the black hole which is embedded in the black hole.

End 19th May 2013.

28th May 2013 **77** Addendum extras.

74. Extra Intrigue

Extra intrigue.

For those who like a bit of extra intrigue. It has no real relevance, so this chapter is just for those who like to read.

When I first thought of the mechanism of wave particle duality, which was the basis for all the other mechanisms of the universe (basically it was the same mechanism extended); I was first excited with the solution, then after trying to explain things to people on the Internet I got very intimidated by something a physics student said.

At the time I did not realise his mistake but after I explained my model and explanation of the nature and mechanism of how light can be a particle and a wave at the same time, his response was "why are you even bothering? you are just explaining wave particle duality, and Einstein has already done that".

I first thought "what is wave particle duality?" obviously it was what I had just explained. Never mind, I thought to myself. I am just ignorant of what is already known, but consoled myself with having thought of the solution to the mechanism independently.

Because I was not in the field of physics or mathematics I thought I would just leave it at that. Unfortunately I was perturbed by the fact that all this information was already known but it was not common knowledge.

I continued to think about my model and explained the expansion and contraction of the universe with it, without adding anything extra (thinking this is obviously also known, I should have studied more at school).

I then went on to explain the mechanism of gravity with this same model (again thinking this is also known in the academic world, it must be a bit more complicated and that is why the general public don't know the details).

Having then gone onto finding a link between all the forces as a function of this model and not being able to reconcile what was generally portrayed on the TV about this subject, I started to rethink what was going on?

If all this is already known, why do I keep getting the impression that the academic world does not know how these forces are linked and that the mechanism of gravity seems to elude them?

I initially came to the conclusion that things were not as simple as I had portrayed them, and that you needed a lot of mathematical knowledge to understand the details of gravity etc.; back to more self-intimidation for not learning or understanding this complicated mathematics.

Then I thought maybe they are using a slightly different model to me, then it dawned on me that they were not fully explaining any mechanisms, what they were doing is explaining the phenomena and the formulas that predict these phenomena.

The world can be explained using mathematics, but it is not created by mathematics; they seem to be using mathematics to extrapolate into the 'Real' world that actually exists, and not using the 'Real' world to extrapolate backwards into mathematics.

Anyway because of my intimidation I thought to myself: - I will make a website and put it on the internet, if my model has any merit then someone in the know will pick up on it.

I also thought maybe I should just contact someone like Stephen Hawking he would definitely know, so although I wrote him an email, when I got to his website it clearly said he did not want to receive

people's new theories (which I could fully understand, he obviously has not got the time every time someone comes up with what they may think is new).

Back to the drawing board.

I then started to think if my model is on the right tracks, then there could be higher ethereal structures, pathways and patterns.

If there is, then maybe I could subconsciously send a signal to the world to send me a sign that I am on the right tract.

At first this may sound unscientific, because if I were to be sent a sign it could not be substantiated. As far as I was concerned it was an experiment I was doing, but for it to have any validity it must be a sign that was relevant to me, and was not just a coincidence.

It could not be something that I could directly or indirectly influence in the normal ways. So for example I could not tell anyone about it, and then they tell someone else (maybe I didn't know them) who would then say to me "that's a brilliant idea, you should do more about it".

Having said that, it could not be something that I could put significance to that was just my ego; finding links that were not there. For example I see a TV program that says something that has similarity to my model (I could erroneously think this was a sign).

The sign would have to be completely unexpected but have great significance to me; it did not have to be a consciously direct message from any one. For example if someone had an accident and hit my car, then after their ravings said "I was on my way to give a lecture on wave particle duality how can I get there I am going to be late, can you give me a lift?" Then something like this would be significant to me because there is no way that I could have known or influenced this event. The probabilities of this sort of thing happening is so unlikely that it would have to be a sign.

Obviously I did not want any accidents to occur, but whatever happened had to be just as unlikely. I was not to predict any outcome, but just leave it to any powers that may be.

Where is all this going? You say to yourself, get to the point.

I have to give you some more background information otherwise you may not think it as significant as I did.

Facts: - I hardly do any reading; I don't read books as a general rule. To put this in perspective I have been married for over 20 years and my wife has only bought me 2 books, both of which I have not fully read.

The first book I was glad to receive because I had read it once when I was younger and I enjoyed it. (My wife wanted me to do more reading, so I thought why not start with something I knew I would enjoy). I specifically gave my wife instructions not to buy me books after this first one because I was fussy about what I wanted to read.

My wife on the other hand has read thousands of books, I did not want to exaggerate so I just asked her if I was exaggerating, her reply was "I have got over 200 books on my kindle and I have only got 3 that I have not read yet", it happens to be Thursday today and they will be read before the end of the week! I sometimes think if I could read as fast as her I would be a genius in a week

Anyway back to what happened. I thought how long do I have to wait?

It has to be a reasonable amount of time, as I don't know what is going to happen, when and how.

I put my book on the Internet in 1999. Waited and nothing happened, so I forgot about it.

Although I do not make a big fuss about birthdays, my actual birth date is very significant to me.

So on my birthday on 2nd May 2002 my wife hands me a present.

It is a book, NO! I am disappointed; she knows I don't like books. So after upsetting her (I told her she shouldn't have wasted the money, I know I am not very tactful). Any way she says to me that she just happened to be looking in the bookshop and because I was always talking about the universe etc. this book just happened to get her attention and she thought I might be interested in it, and as my birthday was coming soon she thought she would chance buying it for me, she thought I would be pleased to read what other people were saying.

The book was "The Universe in a Nutshell" by Stephen Hawking. I knew it was going to be a long read (I read very slowly), but it was a good choice if I was going to pick a book. I picked it up and flicked through the book to get an overall impression of its contents. Then in my unusual manner I went straight to the Foreword. My normal reading used to be that I would read everything from front to back, and I mean everything, when it was first printed and reprinted and by which publisher etc. to the end of the book with the price on the cover (I did this because I did not want to miss anything

significant, because I did not know what may be significant, and there was going to be no way I was going to waste my time reading something twice, because I was so slow reading. If I was going to read then it should be something new).

Having got to the Foreword I didn't want to read that either, I thought most books said preface, I wanted to go straight to the book, so I turned the page; it said Foreword so I went forwards, and without reading the foreword my attention went to the bottom of the page and I read "May 2nd, 2001" followed by Stephen Hawking.

Now I thought to myself what are the chances that I wrote a book "A pocket volume of the Universe" put it on the Internet in 1999, and asked for a sign, and on my birthday 2nd May 2002 my wife buys me a book (which she doesn't normally buy) and unbeknown to her Stephen Hawking wrote his Foreword one year earlier to the day 2nd May 2001 about a similar subject, that is less than three years after I wrote my book.

Is this a significant sign or not?

What are the chances of that happening?

You could say well Stephen Hawking is bound to write about a similar subject, because that is the kind of stuff he writes, but why was it not titled about Time or titled about the Big Bang or black holes or singularities?

The odds are in my favour so this in itself is not significant.

But why did my wife buy me a book? Well you might say I liked the subject and she happened to be in the bookshop when she saw the book, so that is not significant in itself either.

She could have bought me a book any time in the previous 3 years about the subject I was interested in, but she didn't (and would it have been written on the 2nd May?). Ok it was special and it was my birthday, again nothing too extreme about that either.

So why did Stephen Hawking write his Forward on 2nd May 2001? (only he knows). He could have written it on any of the other 364 days of the year.

Ok yet again you say this is also not extreme.

So then why did I skip tradition or habit and read Foreword 2nd May 2001

Stephen Hawking on 2nd May 2002?

Individually each coincidence is just a coincidence, but what are the real odds of all of them all happening when I asked for a sign after I wrote my book, and he wrote his book less than 1½ years after mine?

Intriguing I thought.

It would have been less intriguing if he wrote his book first.

Are there powers beyond our current scientific understanding that can influence events?

75. Extra information

2012: - Instead of rewriting my book or certain sections, I thought I would add a few bits of information that I have looked up in Wikipedia after writing my book for comparisons. I will update this section from time to time so it will be easier for me to add additions. I will only rewrite a section if I find that there is a substantial benefit to its understanding.

My model may sound something like loop quantum gravity (I may have called it this) but what I can make out it is nothing like the standard loop quantum gravity  (if there is one).

The more I check on the Internet to see which models mine is close to, the more I realise that my model is actually substantially different. There are lots of models that reflect one or more aspects of mine (which was one of the objectives anyway) but none that I can find to say they are similar to, which include sufficient aspects to mine.

I think I have to grade them according to what I am going to call granularity (in which the model is only useful above a certain scale where the granules form the minpoynts (minimal volumes) where you cannot extrapolate into.

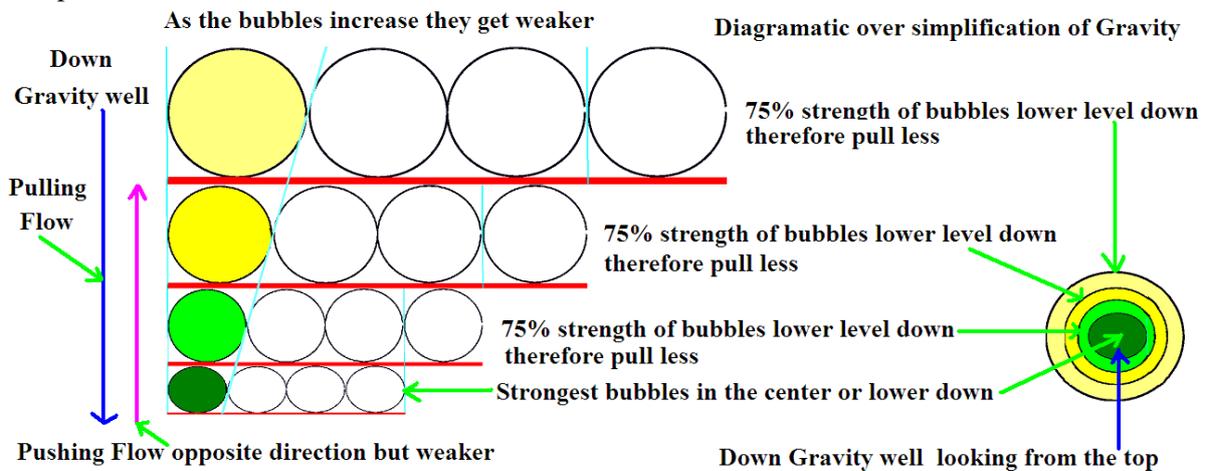
E.g. General relativity with respect to gravity is a macroscopic theory where space time is smoothly curved, and below a certain scale the true space fails to be smooth due to its granularity. In other words you can average out the effects of gravity (and get a smooth curve) at the higher scales but not below the minpoynt.

I mentioned string theory before; it has too many loose ends.

All field theories are an averaged out potential or strength of the Flow at all ⁰points in the field. (The net effect of all the ‘APEs’ flowing).

Why does gravity pull (accelerate) all objects the same?

To simplify the concept I am proposing, let us eliminate some of the dimensions, so we only consider the up and down forces.



In the diagram above the difference of the pulling and pushing forces are exaggerated but the difference is due to the very slight difference of the inner and outer surface areas. In the gravity well above; I have only shown 4 bubbles and have not overlapped them for clarity, but in the ‘Real’ world there would be trillions; all embedded one inside each other up or down the well.

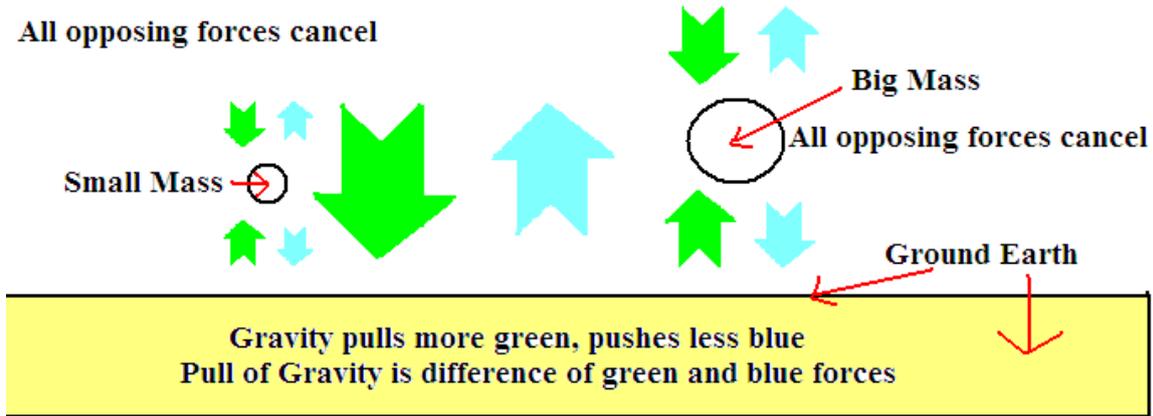
Imagine the ground to be flat and remember I said everything is pulled and pushed, also imagine that there is no air to interfere with our experiment. Because of the mass of the earth (its density) there will be a massive force generated in the down direction by the more dense ‘APEs’ and a lesser force generated in the up direction by the less dense ‘APEs’. Now if we place a small object above the ground and drop it, it will accelerate because it too will pull and push in both directions up and down on both the top and bottom surface equally, but for the same reasons as the earth the pull will be greater than the push. What will happen is that it will be pulled to the ground, because of the greater pull of the earth. The same effect will happen to an object of greater mass, the only difference will be that the more massive object will pull and push with greater force than the less massive one. So you may ask why are they falling at the same ³speed?

The answer is that they are both pushing and pulling with the same strength above and below in opposite directions up and down; so however hard it pulls or pushes it always cancels itself out therefore only the pulling force of the earth is relevant.

Simplified model of Gravity with only up and down dimensions

Both objects pulled with the same force

All opposing forces cancel



Pull of Gravity on the opposite side of the Earth

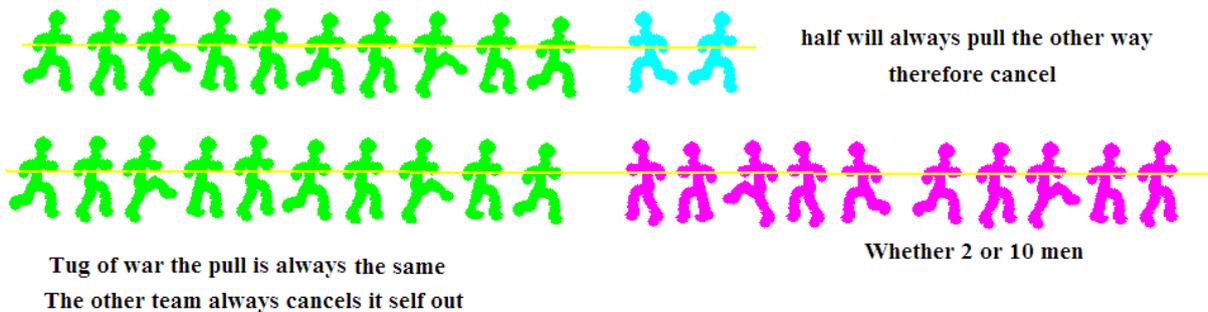
[Note: - The size of the arrows only indicates the strength of the force per unit volume or area. The actual total force is the same (i.e. balanced) for pull and push but are both distributed differently in 'ASpace'.]

Think of it as a tug of war if the earth was 100 men pulling, and the less massive object was two men, one was pulling in the opposite direction of the men and the other pulling in the same direction as the men. The effort of the two men would cancel out. Now do the same with ten men against the 100. Five would pull against the 100 and five would pull with the 100. Again the effort of the ten men would cancel out, leaving again only the strength of the 100. Only if one of the objects has a relative mass that is greater than the earth then there will be a difference because the earth will move upwards to meet it.

Another example could be something similar to a slide, a light object will slide to the bottom of the slide and have little friction, a heavier object will slide to the bottom of the slide with more friction. If the friction was proportional to the weight (mass) of the object then they would both reach the bottom of the slide together. The speed of the slide would only be determined by the slope of the slide and not on the mass of the objects.

In real terms a gravity gradient is set up between all objects (the slope of the slide) but unless the object is massive enough it will always be in favour of the predominant mass.

Ultimately objects keep falling because they are being pulled and pushed and only stop when the pull is equal to the push.



[Note: - the green men only represent half the pulling force, the remainder (not shown) will be pulling in the opposite direction like the other teams].

One would imagine that if the more massive object was 10 x's the mass of the less massive object then it would pull 10 x's more towards the earth. In theory this is what happens but you would not notice it unless the earth had no gravity. What you should be comparing is the relative difference between the earth and let us say the 1kg object and the earth and let us say the 10kg object.

To do this imagine the tug of war example. Let us simplify it a bit and say the earth is 10^{24} kg therefore it will pull the 1kg 10^{24} x's more towards it than the 1kg will pull the earth towards the 1kg object. To put this in perspective imagine there was no atmosphere around the earth to cause any interference with our experiment and there was no moon either. Now if we drop the 1kg from the distance of the moon by the time it hits the earth the 1kg would have pulled the earth towards it by less than one millionth of the width of an atom (not surprising). Now if we repeat the experiment with an object that is one million kg then by the time this hits the earth it would have pulled the earth towards it by about one tenth the width of an atom. So you should be able to see that although the one million kg object is pulling one million times more than the 1kg object the differences are so small you cannot practically measure them.

If you use shorter distances then the difference gets even smaller.

Don't read beyond this point unless you can understand it! Just go to the last paragraph.

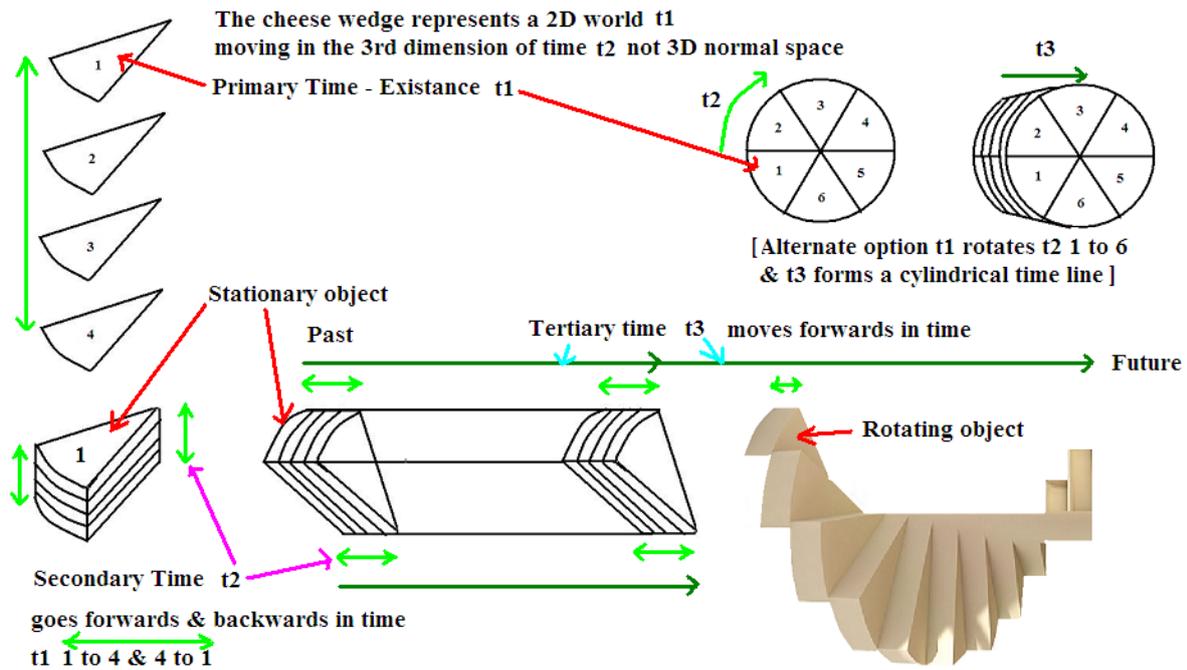
Now think of light in this same gravitational situation, but this time light is shone upwards against gravity. Think of the light as a packet carrying a standing wave within the packet. The leading edge will always travel at the speed of light. The pull of the ground is slightly greater than the push, so the packet will be pulled backwards towards the ground (stretched) making the wave length greater, light travelling down to the ground will be pulled towards the ground so will be squashed making it shorter in the upward direction therefore the wave length of the standing wave will shorter. Shorter wave length higher frequency.

Looking at space time, which is predominately 4D you have world lines for particles, world sheets for strings and world volumes for branes[^] (using simple complex logic says branes don't have sufficient brains to make sense). In my model you would have to include the dimension of density and the equivalent world volume would be complex with a hole in it and expanding and contracting in time. You would also have to represent density in this complex world volume to represent the differing 'Secondary²Densities', maybe using colour density within the volume. The time that is used in space time is what I call 'Tertiary³Time.' If you used 'Secondary²Time' for just one 'APE' you would just get a 'Secondary Shell Volume' where 1/2 was back in time when it was stationary around its imaginary⁰center. I am not sure how you would represent it travelling forwards in time with a time line when it spends some of its 'Existance' moving backwards in time. Maybe again you could use a colour density in the world volume of its time line. Because the rules change at different scales you may be able to think of them as spheres at higher scales and only consider their surfaces and ignoring their inner structure.

Let us imagine a 2D world of 'Existance' which I will represent as a section of a circle. This is what exists at the 'Primary Level' t1. Now in 'Secondary²Time t2' it goes forwards and backwards in time t2 (I am ignoring the other variables at the moment). This will now look like a cheese wedge that has been created in²time t2. It looks like a 3D spatial object but it is in fact a 2D object and the added dimension of time. It is still 3D but not the normal 3D. Now if we look at the time line of this object (the cheese wedge) in 'Tertiary³time t3' it will look like a long section of a cylinder. This³time line (t3) is when the object appears to be stationary. While Global³time for all of 'Existance' and 'Tertiary³time' is going forwards 'Secondary²Time' t2 for each piece of 'Primary¹Time t1' is still going forwards and backwards at the local level. Now if the object was to rotate around its narrow end; then the 'Tertiary³time' line t3 would look like a spiral staircase.

[Another option is if the 'Primary¹Time t1' rotated around in a circle during 'Secondary²Time t2' and 'Tertiary³time t3 will create a cylindrical timeline].

April 2013 P.S. t1 t2 t3 has been superceded with ¹T,²T and ³T or ³t.



In the above example I have simplified it by not using the 3rd spatial dimension or the dimension of Density which exists in my model. In my model complex multidimensional spaces exist for localised quantized 'Existence' and complex multidimensional spaces exist at the Global level as well.

The other thing I looked up was manifolds¹, but these again use ⁰points and normally don't go beyond 4 dimensions, and if I have understood it correctly then they are an extension of a 3 sphere (which I have concluded is not the true bending of 2D into 3D to eliminate infinities). If you represent my model then it would probably be a 5D + manifold but an extension of a complex toroid type.

Having read my own book, I have come to realise that it is not as easy to understand as I had hoped. Obviously because I wrote it, it all makes sense to me, but other people reading it will not all fill in the gaps and jump to the same conclusions as me. For example if I were to pick the most important aspect of my model that is not contained in any other model then it would probably be the concept and the mechanism of the 'Inversion of ³Space'. The 'APE' is the volume of space that can make this so. It may not be clear that 'Real' volumes are what I am referring to, and not abstract ⁰volumes like 3D volumes. 'Real' volumes are always greater than 5 dimensional. This is how I can explain a mechanism of Gravity that no one else can (as well as all the other things that are all related to the same model).

My original book had no pictures except at the end.

If you think some of my pictures actually confuse the issue please let me know and I may modify them.

If you think I should expand or contract some sections also let me know and I will consider rewriting them.

Many Thanks and I hope you found some of my thoughts interesting or amusing.

Mr. Andrew A Pépés.

76. History

April 2013.

History is what has happened in the past.

I am always complaining or mentioning that people or societies do not learn from the past.

This is not something new and has been said before many times.

Unfortunately although said by many people and myself, I and many others who know about this phrase still do not pay enough attention or learn from the past such that they do not repeat the same mistakes made by past people, societies, or events and improve on those mistakes.

Why is this?

Well firstly I think it is an extension of growing up similar to teenagers who think they know better than their parents and all that went before, which is a natural extension of their ego during this time period of growing up. (Some people do know better than their parents but this is a minority).

Then I think it is a consequence of the society that people grow up in and the education system that does not try and rectify this.

Thirdly it is the individual in question and their individual character and the environment that they find themselves in (which obviously includes the society as mentioned before).

Forth is that the information is not always readily available, hidden or erroneous (again which includes the previous two).

Now in my particular case I was a bit lazy when it came to education, I came to the conclusion "what is the point in learning something that is not really relevant or learning something that keeps changing and will have no relevance?" Especially in regards to myself and my immediate environment, or in the future as far as I could tell. Unfortunately I did not know or predict future events correctly, this was because I did not know sufficient information at the time my mind made this mistake.

The conclusion I came to was that what was important to learn was facts that did not change (which included history in general). Again I was innocent of the fact that things were not always recorded factually or were known correctly. So I grew up placing in my mind everything I thought was important (in my early days I remembered everything anyway, but I did not accept everything as unchanging). Once I thought something was correct and unchanging I put it rock solid in my memory, so as a simple example if I knew and believed that two plus two equals four then this was remembered and never challenged again.

As far as I was concerned I did not need to know or remember how or when I came to the conclusion that this was so as it was fact and unchanging. Again I was wrong in my thinking, yet again due to my ignorance and ego thinking I was right in my conclusions.

By now you must be thinking what has this to do with the general content of this book?

Be patient I have nearly finished. My brother on the other hand (earlier in his mental development) came to a different conclusion, namely he added the proviso I must remember how I came to this conclusion. In this way if he ever had to challenge any facts stored in his memory he could retrace how he came to the conclusion and maybe spot any mistake in his logic thereby correct any errors. In my case I would have to rethink my logic that got me to my conclusions and as I could not remember how I got there I would not be sure that I was using the same processes.

Now to the crunch; history repeats itself in many ways and this includes concepts of science and thoughts from past people. So science facts and knowledge keeps going backwards and forwards as new knowledge has supposed to have been acquired (it is acquired) but a lot of this supposed new knowledge has already been said by someone else in the past (probably in a slightly different manner) with some erroneous conclusions and as such has been dismissed and forgotten.

Now if we were to remember this past and remember why we dismissed this or the other idea then we would progress faster in our new knowledge because we could cross reference all new information with this past knowledge then old ideas could be resurrected with this corrected knowledge and not have to wait for a new person to come up with a similar idea many years later from scratch.

In my case I was taught that there was no background aether (light waves don't need it) but I have come to the conclusion that although there is no aether as predicted in the past there is an aether that is different than that of the supposed aether of the past. The aether of the past I believe was a static aether that should produce a form of drag on moving bodies, this was never found so the aether was concluded not to be there.

In solving the riddle "What would happen if an immovable object met an unstoppable force?" I concluded that there is no such thing as an immovable object which would initially support the no aether conclusion, but by using simple complex logic I came to the conclusion that there could be an

aether that was continuously moving, therefore it could exist and still be undetected by moving bodies moving through it, because you would need to look for something different to disprove its existence based on the characteristics of the new aether with respect to moving bodies. Do I still call it aether, ether or some other name to distinguish it from the old aether. If I give it a new name and try to explain it then people who do not know the true nature of the old aether would merely dismiss my new aether and just say I am describing an old theory of aether that has already been dismissed. This is why I have tried to keep as much current terminology as I can and tried to modify it with a slightly new meaning attached to it, my brother on the other hand says I should refrain from using words like Energy when I am trying to explain my subatomic structures of the Universe, as Energy has a specific meaning and does not apply in the same way at this level. My argument is that Energy is derived by these sub atomic structures so it is valid to use some form of energy to describe them. What do you think?

77. Addendum extras

27th November 2013 A little more on Time and Existance.

For those who still find it hard to understand my concept of Time and Existance.

Imagine you are going to do a series of experiments in which you are going to go into a room and stand in the middle of it.

You are going to measure the time you spend standing still in the middle of the room (with your clock), then you go back outside again.

In the first experiment you go into the room get ready then start your clock and measure 10 seconds, then leave the room.

Now you can state that you existed for 10 seconds in that room at that precise position in the middle of the room.

You now repeat the above experiment but this time you time yourself for 1 second.

Now you can state that you existed for 1 second in that room at that precise position in the middle of the room.

You again repeat the experiment but this time you time yourself for 0 seconds.

What can you know state?

DO NOT ANSWER THIS QUESTION YET, otherwise you will fall into the same trap as Zeno, who could not tell the difference between a grain of sand and a heap of sand! and you may not be able to follow the correct logic.

Using the previous logic you should state that you existed for 0 seconds in that room at that precise position in the middle of the room.

Now does it follow that you actually ceased to exist at that point in space? AGAIN DO NOT ANSWER YET.

It would at first appear that you do not exist! because you existed for 0 time, and it is true that you existed for 0 time because you were not there for 0 seconds. The conclusion you may come to is that for that 0 second you did not exist, but do not conclude this until you do some more experiments because your logic in your previous experiments concluded you existed for any variable of time why is 0 any different? AGAIN DO NOT ANSWER, you assumed a special significance to your 0.

Now let us do a few more experiments, but this time you are going to stand in the middle of the room and not go in and out.

You get ready then start your clock and measure 10 seconds.

Now you can state that you existed for 10 seconds in that room at that precise position in the middle of the room.

You get ready again then start your clock and measure 1 second.

Now you can state that you existed for 1 second in that room at that precise position in the middle of the room.

You finally get ready then start your clock and measure 0 seconds.

Now you can state that you existed for 0 seconds in that room at that precise position in the middle of the room.

Did you actually cease to exist at that 0 time? You can now attempt to answer this but you cannot conclude before you listen to the following experiment.

Now imagine that someone else was doing the same experiment while you were doing yours and they were also timing you, but they were using their clock that was more accurate than yours (yours was actually faulty and was exactly one second behind theirs). No real problem as the results would look the same to you (10 seconds is 10 seconds, 1 second is 1 second, and 0 second is 0 second). The other person would measure the same thing except that you started your clock exactly 1 second after theirs. Now he concludes that you existed for 10 seconds on his clock at that position in space.

Now if you insist that your 0 time is special and that you ceased to exist at your 0 time then you must have ceased to exist at his 1 second point in time, they will not agree with you, because they were measuring your existence 1 second before you.

They may say you didn't exist at their 0 time.

What makes 0 special? What about negative times? Can you exist for negative times?

Let me answer this question. Did you exist 10 seconds before you started your experiment?

YES YOU DID because you got ready for it before you stated timing yourself. Maybe you were very quick in the very first experiments where you went in and out of the room therefore you may not have existed at that point in space in the middle of the room, but in the second set of experiments you did not move from the spot while performing all of the experiments.

You did not cease to exist between one experiment and the next.

Let us say you were very fast, but at -1 second by your clock when the other person started measuring you; you started to exist for them. Therefore you can exist for negative time by your clock, and if you can exist for -1 seconds maybe you were there at -10 seconds also, so you existed at -10 seconds also.

Now if you existed at negative times and positive times at that point in space why is 0 still special?
DO NOT ANSWER YET.

[Note: Not all negative and positive times have to exist.]

What is the significance of 0? What if it was not only you and this other person measuring your time at this spot but 10 or 100 people measuring you? Let us say 10 people with clocks all 1 second apart from one to the next so they each had a 0 second for every second of you 10 seconds.

Would you cease to exist 10 times at the end of each of your seconds?

Of course you would not, time is relative but existence is not, that is why you must measure existence and existence and time differently. Time has many variables and you have to distinguish the differences.

As another example if you use the naïve logic of Zeno and assume you do not exist at 0 time then the following logic would be true.

You are get in your car and travel at 10 miles an hour.

You state you exist travelling at 10 miles an hour.

You are get in your car and travel at 1 mile an hour.

You state you exist travelling at 1 mile an hour.

You are get in your car put the brakes on and travel at 0 miles an hour.

You state you do not exist because you are travelling at 0 miles an hour.

You made the point that 0 has special significance.

You may argue that 0 was only measuring speed and not your existence, my answer is 0 was only measuring ³Time and not your existence. You need to understand Time better (⁰Time, ¹Time, ²Time and ³Time).

Zero should only have special significance for the variable in question i.e. it is relative, as is infinity which should also be quantified when and where it can and cannot be used in 'Reality'.

25th June 2013 graphic added to section 44 'Magnitude of forces as a function of the curvature of space.'

23rd June 2013

Further to section 26 'The Relevance of Time to Space.'

I just saw a program on Parallel Universes so I thought I would add a small section here.

People and scientists that believe in parallel Universes are the ones that cannot resolve the riddle of "What came first the chicken or the egg?" paradox. Why do I say this?

Am I saying there are no parallel Universes?

Again in my usual way it all depends on what you mean by parallel Universes. Before I answer this I must state that these people probably believe in option 2 of Time in section 26, in which they believe in multiple existences of Time, you can even believe in this option and still not believe in multiple Universes. But if you believe in the more probable option 1 of Time then there is only one "Existance". If there is only one "Existance" then there is no possibility of multiple Universes where every event that has a possible alternative will create another parallel Universe. Because like Time in option 2, every single atom for every fraction of a second will create a parallel Universe, and this will repeat exponentially for every fraction of a second for all of ³Time.

All these possibilities are all possible but for only one existence as in option 1 but these options are not parallel but are sequential i.e. every time the one Universe cycles back to the beginning it can take one of these different possibilities and must cycle back again to take another option; therefore there appears to be an infinite number of cycles of the Universe and at each cycle a slightly different evolution will occur. In this way there will be a ³Time that you will reappear in another cycle of the Universe and make a different choice to the one at this ³Time in this cycle of the Universe.

In all these cycles there is still only one "Existance" and one "Real" Universe.

Now back to the original question, does that mean there are no parallel Universes?

If you are talking about let us say spirits or ghosts and they live in a parallel Universe that does not normally interact with us or in a way that we do not notice; then I say yes this can exist in a simplistic way because it exists in the same ³space as us but at a different density of ³space. If one thinks of this whole ³space as one Universe then it is not really a separate parallel Universe but just another aspect of the same one Universe.

Another note is "Can there be multiple existences of oneself in the one Universe?"

The answer yet again is it depends on how big our Universe is. The larger the Universe is the more likely that there will be copies of you elsewhere in this Universe. By larger I do not mean larger in the sense that the Universe is expanding, but larger in the sense of how big "Existance" is to start with. In this case the probabilities increases because there are more possibilities with increase in numbers of units. Unfortunately although they are exact copies of you (and you can also have similar copies that are not exactly like you) all these copies are not you. This is similar to absolute twins that where exact copies of themselves, although you cannot distinguish between them at any level (even at the atomic level) they are two separate distinct existences and are not the same you.

End 23rd June 2013.

15th June 2013

The following sentence is deliberately confusing so that you can think about what I mean by the meaning of words in my eBook.

The point of points is to distinguish between points so different points mean different things, get the point?

By creating layers and different points you can have multiple dimensions in the same diagram.

By saying a ¹point is different from a ⁰point. Let us define a ¹point as a dimension or dimensions that have the essence of 'Reality' built into them. At this point we do not have to define exactly what this essence is other than to say that if anything has this ¹point missing means the things we are displaying are abstract and are not real.

The 'point must be multidimensional in its own right because if any dimension that is required to create 'Reality' is missing then this 'point is also abstract. As we build our dimensions from these 'points we add attributes at the higher levels to complement these hidden dimensions within these 'points. Reality (our reality) is always multiple 'points that create 7 dimensional volumes (or however many dimensions are required to create reality).

I call these 'points, points of 'Existance' (Different from Existence which has 'points of 'Existance' within it and ⁰points).

Let me build with these 'points. Our world (Universe, space) consists of 'points and ⁰points within volumes of space (existence). First let me add what I consider the missing 5th dimension which is the density of space itself. I.e. the 'point has a density whereas the ⁰point does not. I will come back to density in a minute. So an abstract line can be a string of ⁰points in a line (abstract one dimension) and superimposed on one of these ⁰points you can have a 'point, so a one dimensional 'Real' 'point is created (the 'point on its own is at least a dimension in itself, the dimension of 'Existance'). A few more superimposed 'points lying along this line creates a two dimensional 'real line' (one dimension for the 'points themselves and another dimension because they are lined up within a straight line). You will see that these 'points need not be continuous along the line to exist. If they are close together then the line is more dense at this portion of the line and less dense if the 'points are further apart. If nothing changes along this line then there is no time. If there is a change along this line then there is a dimension of time (I will come back to time, as there are different times to consider). This line is already 4 dimensional. It has the one space dimension, the dimension of density, one dimension of time and the dimension of 'Existance', remember 'Existance' incorporates anything else that it needs to create reality.). If there are 'points at right angles to this line then this is a 5 dimensional surface, and any above the surface is a 6 dimensional volume. When you start to move these 'points you get ? dimensional volumes. Why the ?

This is because time at this low level is different to time at our level. Each space dimension has its own time component. Imagine there was only the normal one dimensional line. Think of just one 'point along the one dimensional line it can go forwards or backwards in time along the line. Now if there was another dimension at right angles to this I.e. the 2 D plane and there were other 'points on this surface but not on the line. These 'points do not have to move with the 'point on the line, so there would be no time for these 'points, but there would still be time on the one D line. These 'points on the surface need 2 dimensions of time to move on the surface (one for each dimension of space) and as you go to the normal 3 D you need 3 dimensions of time. All 3 dimensions of time put together create what I call Secondary ²Time. Our normal time I call Tertiary time or ³Time (sometimes I call it 'Global time'). ³Time is not independent of space but it is an intrinsic part of space created by all the ²Times put together. This is because space itself is quantised and each quantum of space has its own ²Time. Primary ¹Time is 'Existance'. This is actually the quantum itself existing (the 'APE'). I call it the 'APE' to distinguish it from other quanta, because it has characteristics that no other quanta possess. This ¹Time is time before anything changes, you can think of it as zero time I.e. ³Time not moving. It is not the absence of time which I call 'null time or ⁰Time' which is abstract and nothing can exist in it. If no time (⁰Time) then it does not exist, if zero ³Time then it exists and has not moved yet (like freeze frame). You cannot actually freeze time like this because ²Time never stops, so ³Time which is composed of all the times together never stops either (moves forward in the usual way).

All the current models of the Universe and all the laws of physics are currently based on ⁰points in various dimensions on abstract planes, branes manifolds etc. at different scales, don't worry about the names but I believe they are all based on the sphere in different higher dimensions using metrics and fields.

Unfortunately I believe that this causes more problems than are required because it is based on the fact that three dimensional objects are spheres so they consider the surface of a sphere as a two dimensional flat surface on the sphere. (When I say flat it means that any imaginary being that lived on the surface would not know that the surface was curved and would not know the existence of the third dimension above and below them). In my model (explained in another section of my eBook) the sphere is not the fundamental 3 D object but the toroid is. The sphere is at a higher level and is a 7 dimensional object.

What does this mean?

It means that 0 points are given abstract characteristics trying to explain 'Reality' when they should be explaining the underlying structures of 'Reality'. In a way they are but because they are abstract they have no bounds, so their characteristics are extrapolated into abstract higher dimensions and extrapolated into absurdities. This is why I believe that all physical laws eventually break down at some scale or other because scale is relevant to all physical laws. Time at our scale does not act in the same way as time at the lowest scales, the same with density that has a different characteristic at different levels, the same is true for all the dimensions of space as they are all intrinsically linked together.

All levels need to be more clearly defined so that each law can have its natural limits built in. Let us take Newton's law of Gravity as an example. Instead of saying it is incorrect because Einstein was more correct. Newton's assumptions were incorrect because he said something to the effect that there was an 'instantaneous action at a distance' and he did not consider relativity at high speeds. What we should do is to say that instantaneous action at a distance is not defined at all levels in his laws of Gravity and that they hold true at certain levels and up to certain speeds. This means you do not need to know the details of this so called instantaneous action at a distance for his laws to be true within their boundaries. Instantaneous action at a distance is not truly instantaneous but it does not matter at his level, This is partly done already and people know its limitations, but this should also be done with Einstein's curved spacetime where he does not specify the structure that creates this curvature and subsequent Gravity i.e. it does not hold true below a certain level.

Where laws do not apply outside their limits they should not be used to extrapolate into other levels that do not apply to them. e.g. Newton's laws at or near the speed of light (this is already done) but also Einstein's curved spacetime should also be defined in the same way as well (not just Einstein but all Laws should). As explained in another section of my eBook Einstein's curved spacetime is a global curvature where he does not specify the means that this structure takes at the detailed level.

Coming back to 0 points and the mathematics that goes with them. Let me take Lorentz transformations as an example; as length decreases with increased velocity along the axis. The mathematics just calculates this new length but does not specify how it works. In my model the actual length of the APE actually decreases in length as a structure. Let us say it is moving along on the z axis. It is moving in the medium of other APEs. I think of the medium as having similar characteristics of custard before you cook it, at a certain consistency. If you move slowly in it, it is easy to move through it, the faster you go the harder it becomes. If you hit it with a hammer it is like a solid rock. Anyway as the APE moves along this axis it is compressed against the medium it is traveling through and shrinks in size lengthways and I believe in the x and y plane as well increasing its density as it goes, it does not have to decrease the x and y planes by the same amount so that it looks more like a squashed balloon, the x and y planes are the same relative to themselves. As you increase the speed you are adding more energy to it (more APEs, as APEs are the constituents of energy) in this way you increase the mass which then increases the density even further because of the structure thereby shrinking it even further still. There comes a point where you cannot increase the density any further and it will act like the custard where you can hit it with the hammer and it will not penetrate it. The pushing force will equal the resistive force, think of it a bit like terminal velocity in air. All this is achieved by the structure and the nature of the APEs themselves. As stated in another section of my eBook the mathematics does not specify the nature of 'Reality' but the nature of 'Reality' specifies the mathematics.

So something like $E = mc^2 + pc$ can be interpreted as two different types of momentum at different levels. The first term is merely the internal complex angular momentum when the APE or APEs are stationary, its Potential energy (this is not an abstract higher dimensional quantity, but actual rotations in space around the 0 points the 1 points around them at the low level). The second term is merely the momentum of the APEs when they are moving along the z axis at the higher level (this term will include the movements in the x and y planes also around the 0 point).

As stated I am not a mathematician so I cannot translate the relevant mathematics from my model to the relativistic models that we have at present.

My model can start with something like the following in non relativistic terms

$E_0^2\{1\} = m \cdot {}^1v + m \cdot {}^2v = mc^2$ when stationary.

The ${}^2\{1\}$ denotes 1 secondary quantum 1 APE.

${}^1v = c - {}^2v$ therefore when 2v theoretically is zero ${}^1v = c$. Thereby making mc^2 .

By the way the 2v can never become zero because of the structure of the APE and the minimal value is what causes the vacuum energy of space when everything appears to be stationary.

I.e. the dimension of In and Out around the 0 point, 2v fluctuates (the 1 points) in the x, y and z planes around the 0 point, this is when the APE is stationary at 0 point I.e. it is not really stationary in real terms.

Both terms are internal momentum terms at this low level, to include the normal momentum term pc which is a level higher up, you would probably add pc to it, something like

$E_0^2\{1\} = m \cdot {}^1v + m \cdot {}^2v + pc$ when moving in let us say the z axis, but I do not know how to calculate the pc terms such that it incorporates the additional APEs (that are required to create the pc term) and proper velocities with respect to each other and different observers.

I will leave that to the mathematicians once they understand the concepts of my model.

Another note I see the gamma function of relativity as just one of the shrinking coefficients of the actual structure of the space itself (the APEs). i.e. things are put back to 'Reality' and cease to be just abstract.

End 15th June 2013.

28th May 2013

If you like you can think of 1 points as being in a different dimension to 0 points. So the movements of 1 points are dimensions of space that you do not see that effect the 0 points at these higher dimensions of space. In other words when stationary at 0 point it has what first appears as 6 dimensions, one dimension for above the point, one below the point and similarly one for each front and back and left and right. The reason that there are 6 dimensions and not just the normal 3 is that the object at 0 point can go up and down at the same time, the same for the others as well, but when you realise that the structure of this space has two points above and two points below and again the same for the other options you end up with 12 dimensions when stationary.

Then as before when this 0 point moves translationally in any direction (let us say the z axis) you have to add the translational component to each of the 12 so making 24 dimensions? This does not incorporate all the dimensions of Time and density, which not being a mathematician I do not as yet know how to express mathematically.

End 28th May 2013

78. Glossary

This Glossary was composed by me and I have used my words to define the words, so they will not correspond exactly to any dictionary definition. Hopefully they are not too distinct from the real meanings.

Some words or phrases in this Glossary I have created myself, to explain some of the concepts that I have created or thought about, so they will be in no dictionary at all (for the time being).

A specific list of these words or phrases is listed at the end of the Glossary.

Abstract

Abstract means it does not exist in the 'Real' world. Also denoted with the prefixed superscript ⁰

'APE'

An 'APE' is a Unit of 'Primary Existence' (a 'Primary ¹Space') that undergoes 'TwistingSpiralation' to create a 'minpoynt' of 'Secondary Existence' in one 'Qkwist'. (This is the smallest complete unit of Existence; containing all the dimensions). This is the basic unit of everything. (A quantum of space).

An 'APE' is a complex of dependent ¹points, consisting of enclosed fixed 'minimal surfaces' that create 'complex minimal volumes'.

'APEs'

'APEs' refers to multiple Singular 'APEs', a complex of 'APEs' (coupled 'APEs'), or a mixture of both. These can 'Exist' in 'minpoynts' ('minimal volumes').

'ASpace' or 'Real Space'

An 'ASpace' is a Space which can contain all other forms of space. [⁰Space, ¹Space, ²Space, ³Space]. 'Reality' and the Universe lives in 'ASpace'. It has multiple dimensions greater than 5, I refer to 7 Dimensions that exist at all scales, but their measurement is different at different scales.

Chirality

Chirality is the distinction between left and right mirror images of the same object that cannot be superimposed one on top of the other. E.g. your left hand and your right hand are not the same. [Molecules and space can have the same properties].

'Complex angular momentum'

Momentum is normally $p = m v$. The 'APE' has a complex momentum, because of all the TwistingSpiralation, In and Out wave movements. It is conserved and its momentum is its equivalent mass x its ¹speed (which is a complex vector of its velocity v). If we assume that ¹points on the surface could move at $\approx c^2$ (relative to an imaginary ⁰origin), then the momentum $p \approx m c^2 \approx E$. Energy (it does not change the limiting ³speed of light c which is a macroscopic translational speed in space).

'Complex minimal volumes'

'Complex minimal volumes' are volumes with greater than 5 dimensions that can embed themselves in 3D space or 'ASpace'.

Dark Energy

Dark Energy is constructed from 'APEs'; the greatest concentration (with the least amount of normal matter) is in Intergalactic space which mainly pushes the Galaxies apart.

'Densal Composition'

'Densal composition' is the differing amounts of different densities in the ³volume of the 'ASpace'.

'Densal Distribution'

'Densal distribution' is the positions or spacing of the 'Densal compositions' in the ³volume of 'ASpace'.

'Densal State'

'Densal state' is the 'Densal distribution' and 'Densal composition' of a ³volume of 'ASpace'.

Density or 'Tertiary ³Density', ³D

Density normally refers to mass per unit ³volume. See 'Primary/Secondary/Tertiary Density'.

Energy & Matter

Energy & Matter are constructs of 'APEs' and consist of 'minpoynts' that contain ¹Points that 'Exist' and ⁰Points that do not 'Exist'. Matter is predominantly constructs of coupled 'APEs' whereas Energy is predominantly constructs of looser 'APEs'. The ratios in 'Secondary ²Space' determines the Energy/Matter components of that Space. ('ASpace').

EM Field

An **EM Field** is a measurement of the flow of 'APEs' (both free and linked) in 'Secondary/Tertiary Space'. It is the net effect of both a pulling and a pushing Force in an aligned and concentrated form. (A form of concentrated and aligned Gravity). In which the North (one pole) twists space in one direction and the South (other pole) twists in the other. It decreases with distance in a ratio that is related to the surface area $1/r^2$. Because it involves coupled 'Apes' that form charged particles these too pull and push twisting in opposite directions. It's the coupled 'Apes' that concentrate the Force and it is their structure that aligns it.

Ether

The original Ether was a background medium through which light propagates and everything else moves through. This ether was considered motionless and would have offered some resistance. The Ether although was (so called) proved not necessary because it could not be detected and was not required, does not mean it does not Exist in some form or another. The Ether does not exist as originally portrayed, but exists and offers no resistance, because it is the driving force behind motion, not the hindrance force, i.e. it displaces space (other 'APEs'), it does exist as the Dark Energy ('APEs') flowing through each other in the background and is the basis of fields.

exist

To **exist** refers to transitory existence which is Normally ³Time dependent. Different from 'Exist' (Capital E, which refers to 'Existance'), which is not Normally Time dependent.

'Exist' (Capital E, has a specific meaning)

Exist (Capital E) something Exists if it occupies a ¹Point that has some property that can be measured above zero at that Point. Displays some form of Existance (of reality). The essence of Existence. It is eternal.

'Existance'

'**Existance**' refers to something or anything that 'Exists'. It must contain ¹Points that 'Exist', and must contain all the dimensions. 'Existance' (Capital E) is not ³time (Normal ³Time) dependent. Contains the essence of Existence.

Existence

Existence refers to transitory existence which is Global ³Time dependent.

Fields

Fields are merely the direction/Flow/strength of the movement of 'APEs' through these spaces or points in space.

Flow

Flow is the movement of 'APEs' through each other at different densities that hold structures together. (Imagine Trillions of little vacuum cleaners (the old fashion types that sucked at one end and blew out the other), they would line up and form structures held together by the flow of air through them). ['APEs' differ from vacuum cleaners in that they would twist the air one way or the other and would come in lots of different sizes with different powers, and would be the opposite of what you would think, the smaller ones are the ones that have the most power, and the larger ones are the weaker].

Gravitational Field

A **Gravitational Field** is a measurement of the flow of 'APEs' (mainly free) in 'Secondary/Tertiary Space'. It is the net effect of both a pulling and a pushing Force (which is twisting space (composed of other 'APEs') in an unaligned amorphous mix in all directions away and towards an imaginary ⁰center of mass. It decreases with distance in a ratio that is related to the surface area of a sphere.

The boundary is the point at which the net pulling force equals the net pushing force. Matter tends to pull (towards an imaginary ⁰center), Energy tends to push (away from this ⁰center, [and away from its own maximum density of energy]).

'IN and OUT dimension'

'**IN and OUT dimension**' is a separate and different dimension and is only noticeable at a low level or scale where you can move inwards or outwards while at the same time be moving forwards or backwards or in any one of the other dimensions simultaneously.

'Inversion of ³Space'

'**Inversion of ³Space**' is the concept that at some point the division of the (3D) ³volume of a space (not Null ⁰Space, but actual ³space, 'ASpace') increases the (3D) ³volume and not decreases the ³volume. In other words you cannot indefinitely keep halving 'Real space' ('ASpace'); it starts to occupy larger (3D) ³volumes of space, i.e. it inverts its properties. One half ³volume can easily be greater than the original whole (³volume). It does not have to be halves, any space that gets greater when split. Conversely putting larger volumes together to get smaller volumes also applies, and is just the reverse process. The process applies to 'Secondary/Tertiary Volumes' which our Universe is a part of.

Kinetic Energy

Kinetic Energy is the Energy of the space ('ASpace') that moves with reference to the observer.

Light or Photons

Light or Photons are constructs of 'Scotinons' ('APEs').

'Minpoynt' ('minimal volume')

A 'minpoynt' (Volume) is a cluster of Points that can either 'Exist' or not 'Exist' within the 'minpoynt', the cluster of points must also satisfy the following:-

A 'minpoynt' is a 'minimal volume' which includes all dimensions together. This may itself include other 'minpoynts' (of a different scale).

A 'minpoynt' can be of any size ('minimal Volume'), so its scale must be defined.

A 'minpoynt' includes Points but can never be a ⁰Point.

A 'minpoynt' can either have Existence or not have Existence, or have only some part of Existence within it.

A 'minpoynt' is a small volume within the scale one is looking at.

No Existence or Null ⁰Space, ⁰Space

No Existence or Null ⁰Space is a space where No points 'Exist' in this space. It is an 'ASpace' where everything is zero. (A 3D Null ⁰space).

Normal ³Time or Global ³Time also 'Tertiary ³Time', ³T or ³t

Normal ³Time I call Global ³Time or 'Tertiary ³Time'. It is an amalgamated 'Primary and Secondary Time', at its fundamental level composed of 'Qkwists'.

No Time

No Time is the relative Time, the difference between events that are equal. No Time difference. Events 'Exist'.

Null ⁰Space, ⁰Space

Null ⁰Space is abstract ⁰space, it does not 'Exist'. No 'Existence'.

Null Time, ⁰T

Null ⁰Time is No ⁰Time at all. Abstract ⁰Time, does not 'Exist', other than a concept. With reference to all the space, or 'ASpace'. An 'ASpace' that is a Null ⁰Space also has a Null ⁰Time.

Point, ⁰Point

A Point is a mathematical point that has zero dimensions and is only a reference to a point or within a 'minpoynt' that may or may not have anything that 'Exists' at that Point.

'¹Point Exists', ¹Point

So a '¹Point 'Exists' if it has something that can be measured at that Point, i.e. it is part of a cluster of ¹points that form a 'Primary dimension' of 'Existence'.

Null ⁰Point or ⁰Point does not Exist, ⁰Point

A ⁰Point does not 'Exist' if it has nothing that can be measured at that Point (other than zero); it is just a reference (Null ⁰point), i.e. it does not form part of the cluster of ¹Points that forms the 'Primary Existence', but it can exist (small e) as a reference ⁰point in a 'secondary space'.

Potential Energy

Potential Energy refers to the Energy stored in the 'APE' or 'APEs' (coupled or otherwise) or the Energy of the space ('ASpace') where the Kinetic Energy (macroscopic) is zero with reference to the observer.

'Primary ¹Density', ¹D

'Primary ¹Density' is the fixed maximum ¹Density of ¹Points that 'Exist', that the sum of create 'Existence'. No wave characteristics.

'Primary Existence' ('Existence')

'Primary Existence' ('Existence') is a volume in which all Points within it 'Exist', and the total displays all dimensions. (The total is fixed).

'Primary Point', ¹Point

A 'Primary ¹Point' is any point that refers to a ¹point on or in the 'Primary Existence'.

'Primary Shell'

A 'Primary Shell' is the volume in which the 'Ape' expands and contracts within, and excludes the non-existing 'minpoynt' at its center. Not all Points 'Exist' in the shell at the same Time, but all 'Primary ¹Points' 'Exist' in this shell at the same ¹Time. It is created in 'Secondary ²Time', and exists in 'Secondary space'. It has wave characteristics.

‘Primary¹Space’,¹Space

A ‘Primary¹Space’ is a space or ‘ASpace’ which only contains ‘Primary Existance’; it contains at least one primary ‘APE’. It also refers to the total space of ‘Primary Existance’. It is not created. It just ‘Exists’. It can only change its overall shape.

‘Primary¹Time’,¹T

‘Primary¹Time’ is the essence of Existence. ‘Existance’ itself. Constant. It ‘Exists’. It is not a true Time (as a duration) it does not change, it is eternal. It is the basis for time to ‘Exist’ and can be measured by the amount of space it occupies. It is a structure (‘ASpace’) that changes in ‘Secondary and Tertiary Time’.

‘Primary¹Volume’,¹Volume

The ‘Primary¹Volume’ refers to the volume of the ‘Primary Space’ of the ‘APE’, or any amount of the ‘Primary¹Space’ to the maximum of the total ‘Primary¹Volume’ of the Universe (Known or Unknown).

‘Qkwist’

‘Qkwist’ or ‘TwistingSpiralationQkwist’ is one ‘TwistingSpiralation’ of any ¹Point on the ‘APE’ creating one cycle (not circular) back to its original ¹Point with reference to an imaginary center ⁰Point. [It is the equivalent fractal for Time].

‘Real’ or ‘Reality’

‘Real’ or ‘Reality’ means it has existence as in the real world we live in (I can feel, see, hear etc.), it is not abstract.

‘Real³Space’

‘Real³Space’ has ‘Existance’. It is an ‘ASpace’.

Refraction

Refraction is the deflection (of light) due to change in density of ‘ASpace’. Macroscopically slows down in denser material and increases in speed going out to a lesser density. [At the lowest level it does not change speed throughout its path].

‘Scodionon’ (plural ‘Scodina’)

A ‘Scodionon’ (plural ‘Scodina’) is anything that is Dark e.g. Dark Energy or Dark matter. An ‘APE’ is a ‘Scodionon’. From the Greek word for dark or darkness.

‘Secondary Density’,²D

‘Secondary Density’ – ‘APEs’ occupy ‘Secondary Space’ with ‘Qkwists’ and create ‘Primary/Secondary Shells’ of varying ‘Secondary²Densities’. It has wave characteristics.

‘Secondary Existence’

‘Secondary Existence’ is a Volume in which something ‘Exists’ within this volume and displays all dimensions, ‘minpoynt’ (Volumes) that ‘Exist’ and ‘minpoynt’ (Volumes) that do not ‘Exist’. ¹Points that ‘Exist’ and ⁰Points that do not ‘Exist’ within it. It incorporates ‘Primary Existence’.

‘Secondary Shell’ or ‘Secondary²Volume’,²Volume

A ‘Secondary Shell’ is the ²volume in which the ‘APE’ expands and contracts within, it includes the ‘Primary Shell’, and a non-Existing ‘minpoynt’ at its imaginary center. (It may itself be within a ‘minpoynt’). It is created in ‘Secondary²Time’, and it ‘Exists’ in ‘Secondary Space’. It has wave characteristics.

‘Secondary²Space’,²Space

A ‘Secondary²Space’ is any Space or ‘ASpace’ that may or may not contain a ‘Primary¹Space’. If it contains a ‘Primary¹Space’ it must also contain at least part of a ‘Primary Shell’ and a ‘Secondary Shell’, and will be created (in part) by ‘Secondary²Time’, and ‘Tertiary³Time’. Therefore it will have ‘Secondary Existence’. If it does not contain a ‘Primary¹Space’ it does not contain a ‘Secondary Existence’.

‘Secondary²Time’,²T (‘Qkwists’)

‘Secondary²Time’ is the change of ‘Existance’ of an ‘Ape’ in one ‘Qkwist’, cycles of ‘APEs’ (1 cycle, minimum ‘secondary²time’). It changes the ‘Secondary Structure’ of the ‘APE’ during ‘TwistingSpiralation’. It has a directional component with reference to other ‘Qkwists’. In ‘Secondary²Time’, ‘Primary and Secondary Shells’ are created. Multiple ‘Qkwists’ create ‘Secondary²Density’.

Singularity

A Singularity is a ⁰point source that normally refers to the ⁰center of a black hole, with infinite density. This is an abstract ⁰point that does not Exist.

‘Singularity 5D, 6D or 7D’

A ‘5D, 6D or 7D Singularity’ is a ‘minpoynt’ (‘minimal volume’) that has the maximum theoretical ¹density of ‘Existance’, and cannot be exceeded. It can never be infinite, even in theory.

Space

⁰Space is the normal Cartesian or Euclidian Space. On its own it is a 3D Null ⁰space. This is the macroscopic background space that 'Real' space embeds in.

Speed

Speed is a movement with no particular direction in space.

Stationary

Stationary implies that it does not move from the same position. This only applies at the macroscopic scales with reference to other macroscopic scale reference points. At the lowest level and scales nothing is stationary. Being absolutely stationary is only an abstract notion and does not exist in reality.

Strong and Weak Nuclear Forces

Strong and Weak Nuclear Forces these are merely the same Force behind Gravity /EM again that is concentrated by further coupling of these 'Apes' into smaller structures. Again related to the cross sectional area of the 'Apes', that create these tight Structures.

'Tertiary ³Density', ³D (Normal Density)

'Tertiary ³Density' is the net sum aggregate of all the 'Primary/Secondary Densities' in the total space or 'ASpace'.

'Tertiary ³Time', ³T, ³t or Global ³Time (Normal ³Time)

'Tertiary ³Time' or Global ³Time is the net aggregate Time of all the 'Primary and Secondary Times' within the Space (volume) or 'ASpace'. It is always positive, i.e. it appears to go forward. [Theoretically you could say while the Universe is expanding it is going forward, and when the Universe is contracting it is going backwards, but it is still positive, as the Primary components are always positive]. ³Time we normally measure.

Total Energy

Total Energy is the sum of the Residual Potential Energy plus the Kinetic Energy.

$T_E = {}_RPE + KE = 1$ (constant). The PE is a complex of angular momenta around an imaginary ⁰center, and KE is a translational vector of this ⁰center.

Max. KE < max. PE, i.e. PE never (zero) 0. KE is never 1.

'Transitory Existence'

Transitory existence is existence that changes with respect to ³time, i.e. it comes into existence then ceases to exist over a period of ³Time (normal ³Time).

'TwistingSpiralation'

'TwistingSpiralation' is the process in which the 'Primary Existence' of the 'Ape' translates its change, (within 'Secondary Existence'). It incorporates a twisting motion, a rotating motion, a turning motion, and an expanding and contracting motion around an imaginary center ⁰point. Any ¹Point on the 'Ape' 'Exists' on and within the 'Secondary Shell' with every 'Qkwist'.

'TwistingSpiralationQkwist' or 'Qkwist'

'TwistingSpiralationQkwist' is one 'TwistingSpiralation' of any ¹Point on the 'APE' creating one cycle (not circular) back to its original ¹Point with reference to an imaginary center ⁰Point. [It is the equivalent fractal for Time].

Velocity

Velocity is a speed with a direction.

Waves

Waves are a particular movement of clusters of points (packets) (surfaces or volumes) that have wave like properties (characteristics). E.g. 'APEs' and Photons. It is also the movement of amalgamated objects (or packets) that move on mass at larger scales. E.g. water, sand and wheat fields.

List of words or phrases that I have created and defined to help clarify my model.

APE, ¹APE, ²APE
 APES
 ASpace (Real Space)
 Complex Angular Momentum
 Densal State.
 Densal Distribution.
 Densal Composition.
 Primary, Secondary, and Tertiary Densities, ¹D, ²D, ³D
 exist this word actually exists but I refer to it specifically as 'Transitory existence'
 Exist (refers to Existance)
 Existance (Primary Existence)
 Inversion of ³Space
 Minpoynt (minimal volume)
 No Existence (Null ⁰Space), ⁰Space
 Null, Primary, Secondary, and Tertiary Time, ⁰T, ¹T, ²T, ³T
 Null ⁰Point, ¹Point Exists, ⁰Point does not Exist, Primary ¹Point, ⁰Point, ¹Point
 Primary, and Secondary Shell
 Primary, and Secondary Space, ¹Space, ²Space
 Primary, and Secondary Volume, ¹Volume, ²Volume
 Qkwist (TwistingSpiralationQkwist)
 Scodinon (Scodina)
 Secondary Existence
 Simplified Complex Logic
 Singularity 5D 6D 7D.., ⁰Singularity, ¹Singularity
 Transitory Existence
 TwistingSpiralation.

^ The term Universal Science I found on Wikipedia on the internet.

79. Scales

In my first book I had the following table that referred to scales, each page has the content of the things that would fit on that scale (page) each page represents lengths 1000 times longer or shorter than the next or previous page, if the page was a cube (the book was 10cm x10cm), then the volume would represent 10^9 times the previous pages' volume, the size of a speck just visible on a grain of sand. It could fit in your pocket, "A pocket volume of the Universe".

Distances.

Each page, vertical column is 1000 x's the length of the previous page.

Each horizontal line is equal to the same distance, but different units are used.

Page No.	Picture on page	Pico-metre	Angstrom unit	Nano-metre	Micro-metre	Milli-Metre	Centi-metre	Metres	Kilo-metres	Light seconds	Light year
-1											
0											
1	String Theory? below	1E-16	1E-18	1E-19	1E-22	1E-25	1E-26	1E-28	1E-31	3.33E-37	
2	Empty Space	1E-13	1E-15	1E-16	1E-19	1E-22	1E-23	1E-25	1E-28	3.33E-34	1.08E-44
3	Universe contacts into	1E-10	1E-12	1E-13	1E-16	1E-19	1E-20	1E-22	1E-25	3.33E-31	1.08E-38
4	Thickness of APE?	1E-07	1E-09	1E-10	1E-13	1E-16	1E-17	1E-19	1E-22	3.33E-28	1.08E-35
5		0.0001	0.000001	1E-07	1E-10	1E-13	1E-14	1E-16	1E-19	3.33E-25	1.08E-32
6	Proton, Nucleus, e, Gamma rays	0.1	0.001	0.0001	1E-07	1E-10	1E-11	1E-13	1E-16	3.33E-22	1.08E-29
7	X-rays, H atom, Gamma rays	100	1	0.1	0.0001	1E-07	1E-08	1E-10	1E-13	3.33E-19	1.08E-26
8	X-ray, UV, Macromolecules, Virus	100000	1000	100	0.1	0.0001	0.00001	1E-07	1E-10	3.33E-16	1.08E-23
9	Photon, Bacteria, cells, protozoan	1E+08	1000000	100000	100	0.1	1.00E-02	0.0001	1E-07	3.33E-13	1.08E-20
10	My Book, Decimal. Ant, Thumb	1E+11	1E+09	1E+08	100000	100	10	0.1	0.0001	3.33E-10	1.08E-17
11	Man, Tree, House, Aeroplane	1E+14	1E+12	1E+11	1E+08	100000	10000	100	0.1	3.33E-07	1.08E-14
12	Mount Everest, Ht of Aeroplane	1E+17	1E+15	1E+14	1E+11	1E+08	10000000	100000	100	0.000333	1.08E-11
13	Moon, Earth, 3.8 To Moon	1E+20	1E+18	1E+17	1E+14	1E+11	1E+10	1E+08	100000	0.333333	1.08E-08
14	Sun, 1.5 To Sun	1E+23	1E+21	1E+20	1E+17	1E+14	1E+13	1E+11	1E+08	333.3333	1.08E-05
15	Solar System	1E+26	1E+24	1E+23	1E+20	1E+17	1E+16	1E+14	1E+11	333333.3	0.01083
16	To nearest Star	1E+29	1E+27	1E+26	1E+23	1E+20	1E+19	1E+17	1E+14	3.33E+08	10.82954
17	1/10 Milky Way	1E+32	1E+30	1E+29	1E+26	1E+23	1E+22	1E+20	1E+17	3.33E+11	10829.54
18	Size of our Galaxy	1E+35	1E+33	1E+32	1E+29	1E+26	1E+25	1E+23	1E+20	3.33E+14	10829543
19	Edge of Universe	1E+38	1E+36	1E+35	1E+32	1E+29	1E+28	1E+26	1E+23	3.33E+17	1.08E+10
20	Empty space	1E+41	1E+39	1E+38	1E+35	1E+32	1E+31	1E+29	1E+26	3.33E+20	1.08E+13
	Universe expands into				micron						

Although I originally put the 'APE' on page 4, (I only had 20 pages, page 10 the middle being us at the actual size 10cm x 10cm), I didn't know its real size (I still don't really know it). I now would put it on page 9 or 10 for the 'secondary volume', and below page 1 for the 'primary volume' (-1 on the page of Planck Length).

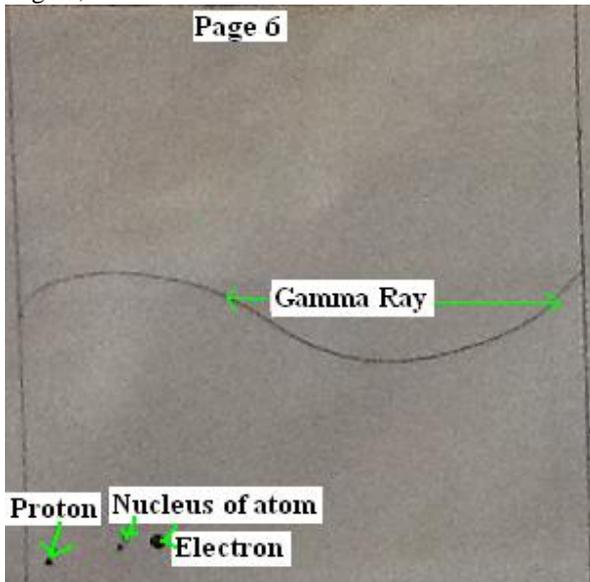
The first 5 pages (plus page 0) would be empty under current knowledge, e.g. page 5 would be 1 tenth the size of a Proton; you could put the electron as a point source on this page if you wish.

[Dark Energy would live on these pages, the constructs of the vacuum energy of space].

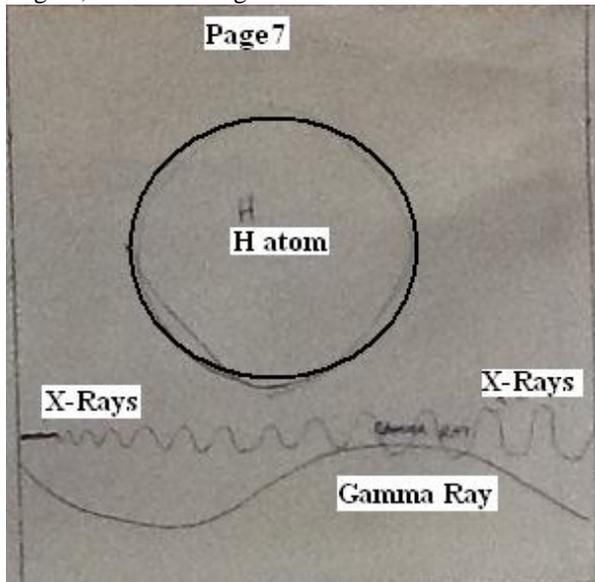
So I will display my original sketches of each of the pages starting with page 6.

There are no fancy pictures on these pages but just the magnitude of the sizes of things, so you can get an overall sense of the scales.

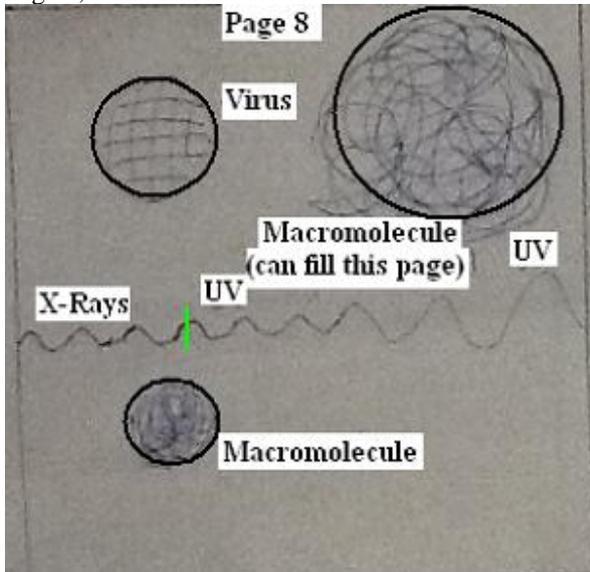
Page 6; 10cm = 0.1 Pico-metre



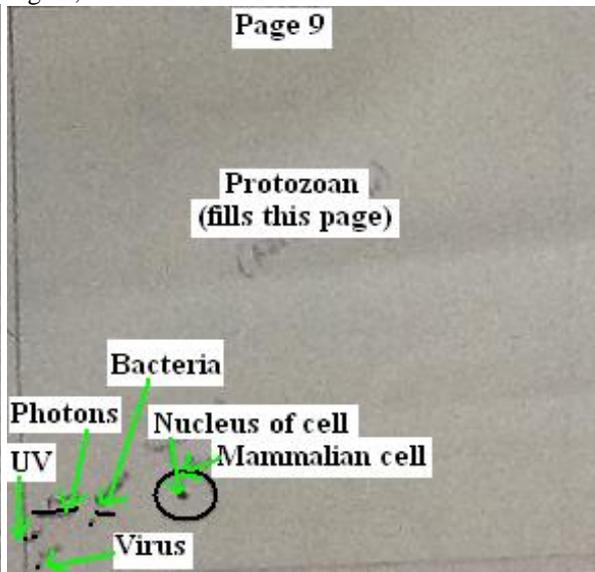
Page 7; 10cm = 1 Angstrom 10^{-10} metre



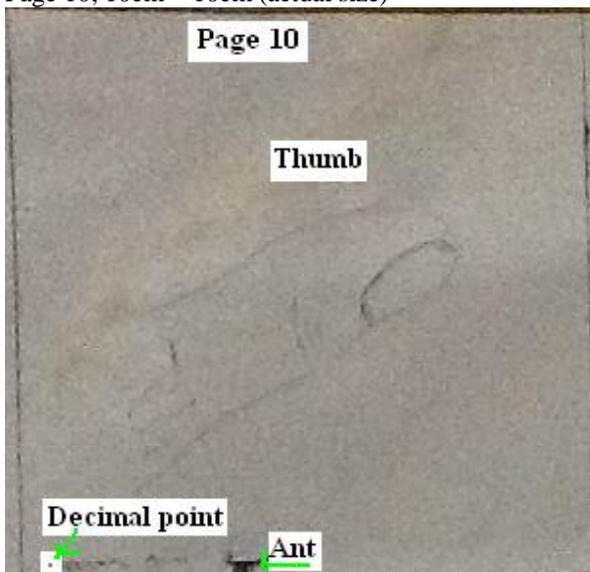
Page 8; 10cm = 100 nano-metres



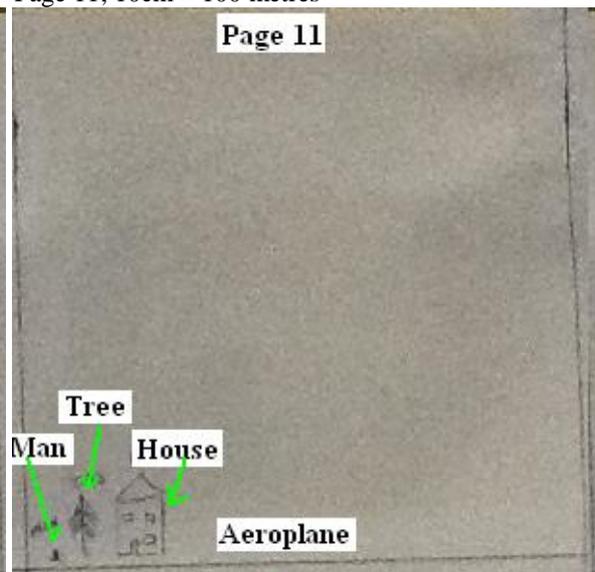
Page 9; 10cm = 0.1 milli-metre



Page 10; 10cm = 10cm (actual size)

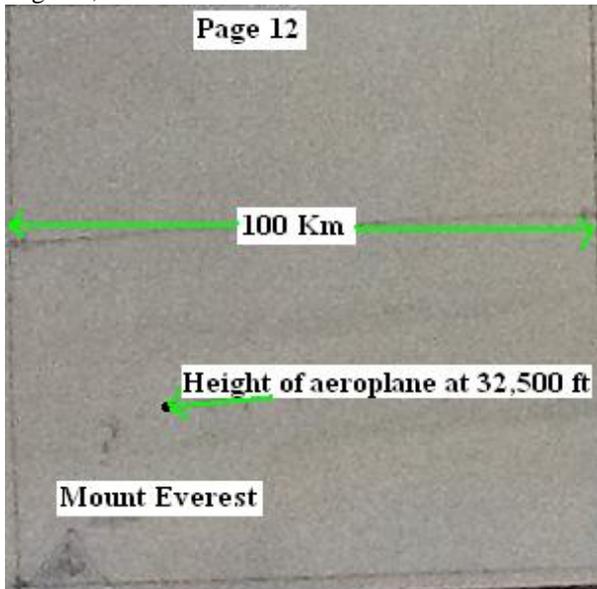


Page 11; 10cm = 100 metres

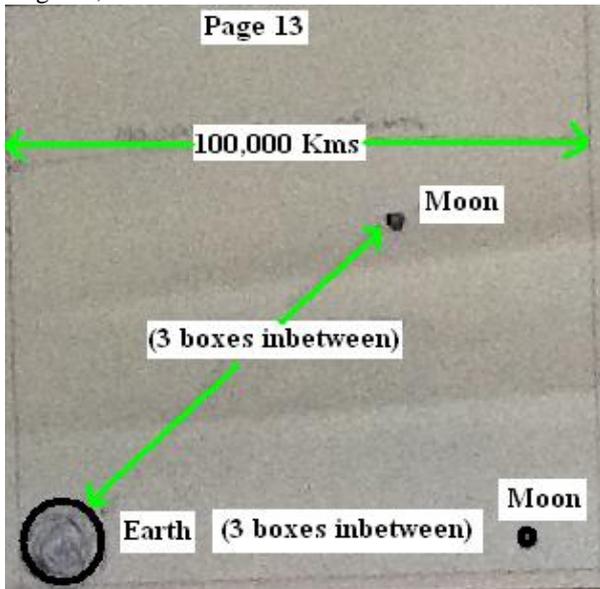


Page 10; would be the volume of your pocket 10cm x 10cm a "pocket volume of the Universe".

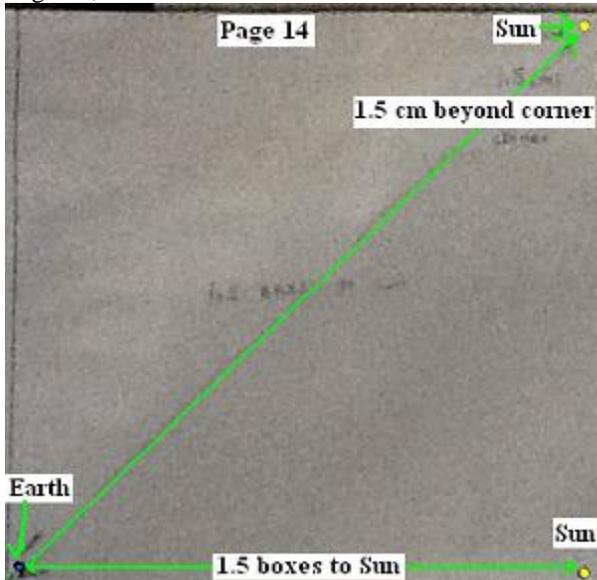
Page 12; 10cm = 100 Km



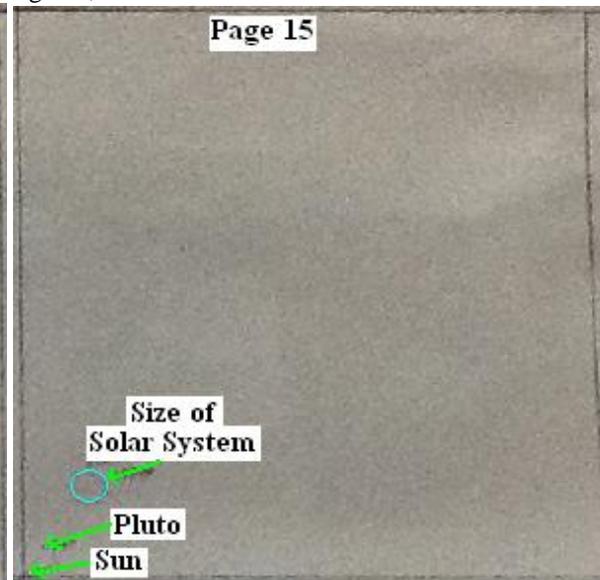
Page 13; 10cm = 10⁵ metres



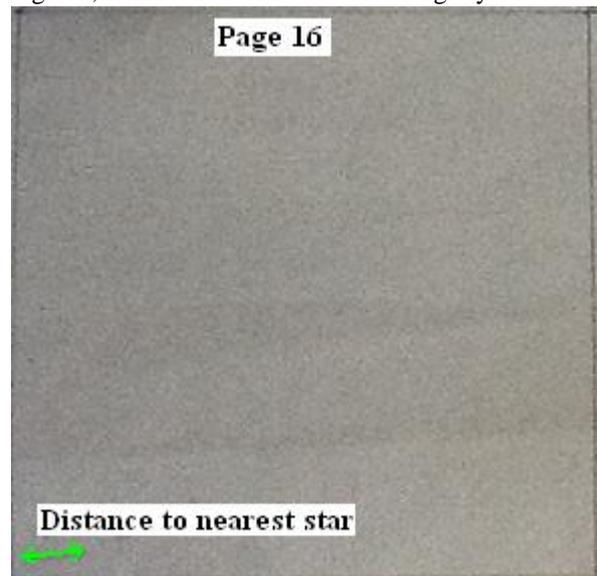
Page 14; 10cm = 10⁸ Km



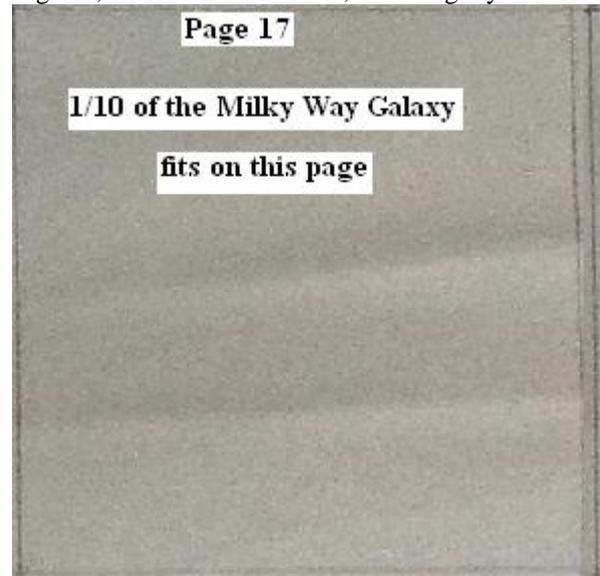
Page 15; 10cm = 10¹¹ Km



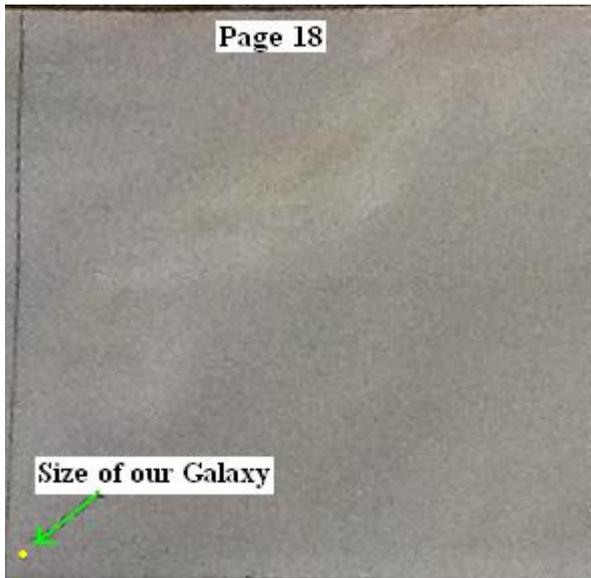
Page 16; 10cm = 10¹⁴ Km = 10.82954 light years



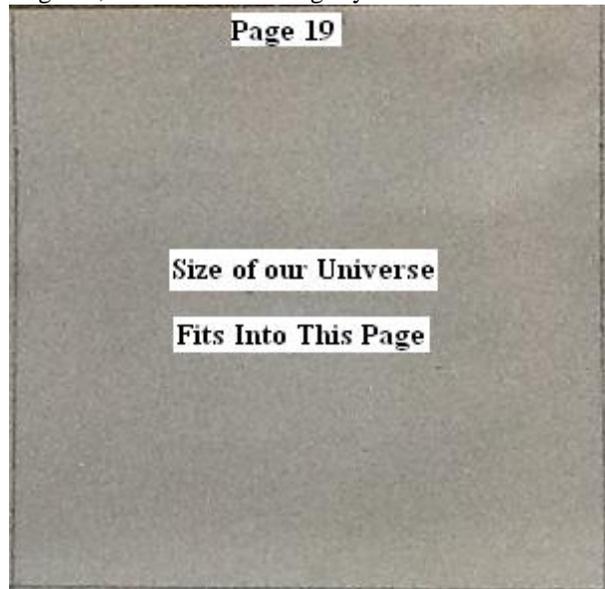
Page 17; 10cm = 10¹⁷ Km = 10,829.54 light years



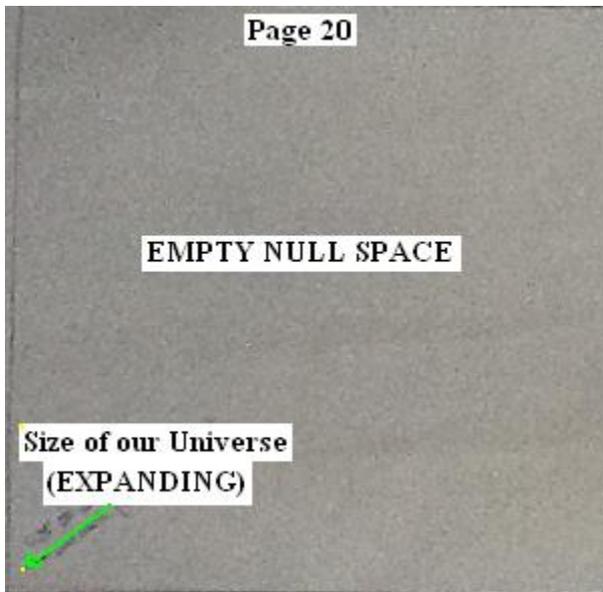
Page 18; 10cm = nearly 10.83 million light years



Page 19; 10cm = over 10^9 light years



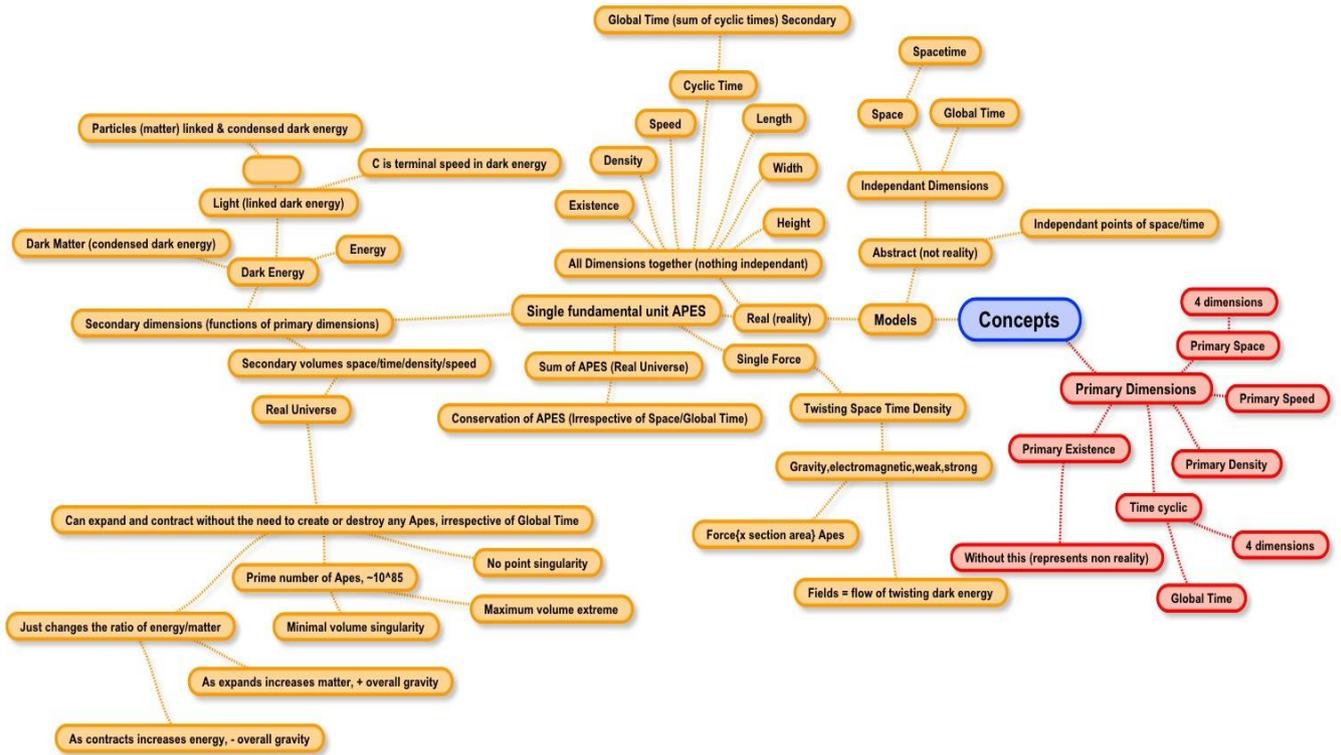
Page 20; 10cm = over 10^{12} light years



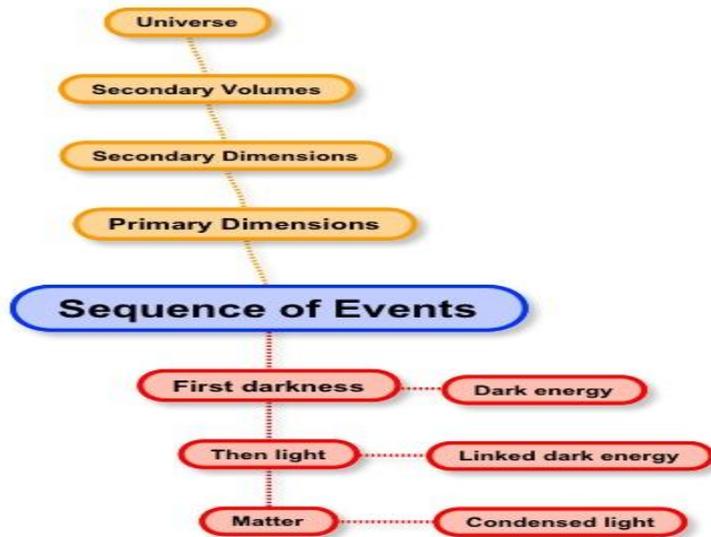
The Universe might be several times larger than this

but it will not make much difference on this scale.

80. Mind Maps



I thought I would place a couple of my Simple mind maps here.



81. A few pictures

I thought I would also throw in a few extra pictures; the following are not two ‘APEs’ but one; except the triplet. You must remember that for simplicity everything that I have said up until now has assumed the ‘APEs’ to be spherical, but you can see from the examples below that they can assume other shapes. So for example the one ‘APE’ may be able to have two Flows at right angles in two different planes? [If you spin this, the shape is not too dissimilar to a p orbital]. Enough said.

