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http://www.youtube.com/watch?v=ctPyeNZqFho



web page also http://www.amperefitz.com

And take a quick look at this:

Milo Wolff and String theorists are correct: It's all resonances.

Essentials---for later--- if this gets too tedious & you only want some basic ideas:

http://www.rbduncan.com/ShortTOE.htm

But the following is the classic that everyone is talking about.

Is this the answer Einstein was looking for?

Fitzpatrick's

Theory of Everything

Daniel P. Fitzpatrick Jr.

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In this you will see the universe's building principle.

This special High School level, Internet abridged version is more than 80% of the full, elaborate, printed edition.

It takes up 675 KB of disk space.

Daniel P. Fitzpatrick Jr.

Dedicated to Dr. Frank R. Caputo who is still very much with us and who lived his long life as American as John Wayne and as honest as Pericles.

Since this was written and published, Dr. Frank R. Caputo of LaVilla Drive in Miami Springs, Florida — my neighbor of many years — has passed away.

For many years this has been on the internet totally devoid of links by which readers could better understand it so I've begun to add a few here and there

1. Why can't anyone give us a Theory of Everything?

Someone has: It's in front of you right now.

If you promise to stay awake and keep reading then I'll hand a genuine "Theory of Everything" to you, right here, on a silver platter.

It is plain to see everything is showing you these particles are built from waves. Especially quantum theory and superstring are showing you the building blocks are waves, therefore all you have to do is ask the following: "How can a wave universe be designed to make us see things as particles?" Then the logical answer

to unification is right in front of you.

Fate played a role in the discovery of how this universe really works because I had the luck to be working on all the right things in the right areas at the right times.

Albert Einstein was correct: The **answer** is an **extremely simple** and relatively **easy** to understand **unified principle**. Einstein predicted the human mind would be able to comprehend it. I'm afraid this universe is not quite what most think it is and while these invisible forces can be unified, this would have to be termed more of a unified principle than a unified field.

Dirac, however, said this <u>entire</u> <u>universe</u> was extremely complex and he too is correct.

You couldn't want a simpler foundation wave-particle principle.

What you have here is an exceptionally simple cornerstone wave-particle principle, that almost anyone can understand, producing a highly complex universe that no one will ever understand in its entirety. This **extremely simple** principle only takes up about as many lines as you have already read. Explaining why we never saw this principle and how this **extremely simple** principle builds this entire universe makes this an exceedingly long book.

In this Theory of Everything you will find the essence of unification:

- * <u>All</u> the forces have a common origin.
- * <u>All</u> the forces have identical properties.

The problem is that they are not presently related by exact mathematical symmetries because our actual universe is primarily a wave-particle universe all the way throughout and it is not even close to being the universe that today's scientists think it is. All of us have held on to too many of our old ideas a bit too long even though all the evidence was right there in front of us showing us the truth.

Even without this perfectly accurate mathematical relationship yet in place, you can still obtain a very good picture of what is really going on in this universe if you continue reading.

You might say that this universe turns out to be much like a cake containing Einstein's ingredients but having been baked by Niels Bohr and having Paul Dirac's icing on it.

The theories of relativity, quantum mechanics and superstring have provided all the necessary input that anyone needs to see this amazing "Theory of Everything".

It's simply that you have to understand all the subtle evidence in those above-mentioned theories. No one seems to be paying even the slightest bit of attention to all the correct vine covered road signs: Instead they are all following their old well tested, well worn science road maps.

I'm very much afraid that you cannot locate this Holy Grail by using all those old well tested, well worn road maps that this present science guild has amply provided to you and you will see the reason for this as you read on. Instead you will have to keep looking for these often well hidden special relativity, general relativity, quantum mechanics and superstring road signs that are hiding underneath all that side of the road foliage. I'll point them all out to you as we proceed.

You do **not** have to be an expert or even a mathematician to understand this **extremely simple principle** but you will have to put some effort into understanding how this **extremely simple principle** works to form this entire universe.

One of the hardest parts will be erasing the blackboard of some of these things you think are true.

Here's a "**for instance**": Why is it that you cannot see all this motion in the microcosm yet you can see all this motion in the macrocosm?

There is a definite reason for this — that you'll see as you read on — and it isn't

the reason present science exhorts.

Many people — even some scientists — will throw up their hands in despair with Einstein's general relativity that uses such things as curved space and space-time. It doesn't have to be quite this mysterious if you use this **extremely simple** explanation that shows you why it **must** be so. In addition, you will find some slightly clearer concepts that will enable you to better "see" into some of these enigmatic areas of quantum mechanics, relativity and superstring.

I'm pretty old and I can remember when <u>all</u> tires had tubes inside them and when they got a hole in them these tubes had to be patched. They continually needed patching the same as our science today continually needs patching.

Einstein's relativity contain all the mathematical patches for your 19th-century science tubes and if you want to run your old science car then you have to keep patching things with Einstein's relativity patches all the time to get any accuracy at all. You use Einstein's **special** relativity patches in the microcosm and Einstein's **general** relativity patches in the macrocosm. You still have to use relativity even if you don't like it or don't understand it. You will have to believe me when I tell you there are scientists — who feel they have a good enough grasp of relativity — who do have to use it but don't like it and also do not fully comprehend it.

There is no doubt about this either. This **new** exposition is a great simplifier and all the information anyone needs for an **easy** to understand Theory of Everything is right here for all to see — if they look hard enough for the information — in relativity, quantum mechanics and superstring theory.

First you do have to uncover all those fairly well hidden road signs and then **second** you must know how to read all those road signs after you do finally locate and uncover them.

Those aforementioned theories are essentially telling you what is wrong with your present science setup. Moreover, they are informing you how the true universe is built.

Keep reading and I'll take you through everything step by step and show you what is wrong and how it all went wrong as humankind pieced together this

present science structure that most people now believe in. I will also show you the problems because you must understand the problems if you want to see all the various important things that went into giving us all this present science structure that we have today.

We had this wonderful world of science that the smartest of scientists, from the entire world, had all contributed to and methodically put together extremely carefully step by step for several thousands of years. It was all going together beautifully just like clockwork but then suddenly, out of nowhere like a giant tornado, came all the problems.

About 1823, the very first major problem with our neatly constructed world of science arrived. It was put forth by Wilhelm Olbers who had studied the amount of light that we receive from our sun and from all these other stars at the various distances we are from them.

He saw that all these stars were adding up around us at the rate of the volume of a sphere or $^{4/3}$ A R^3 but this was a <u>much</u>, <u>faster</u> rate than the light depletion rate to us that was being diminished by the square of the distance (R^2).

Therefore we get the following and this is known as Olbers' Paradox.

Olbers then asked, "Why are we not blinded by all of this light?"

This was the very first indication that all our methodically built house of cards or 19th-century science was probably wrong because if space was this uniform, geometric thing that our scientists were all claiming it was then we should, in fact, have far, far more light coming to us here on earth from all those distant stars but we don't: We get very little light from all those far away stars.

Why? (This will be answered later.)

Then came the Michelson-Morley experiment in 1887 and this showed us if one adds the velocity of the earth in its orbit to the speed of light then one still only gets the speed of light.

So at the turn of the century, science went into a virtual upheaval mainly because of this Michelson-Morley experiment that showed the speed of light to be a

constant, independent of the velocity of the source and independent of the velocity of the observer.

Before that, we had a universe that we thought had **only** <u>Motion</u> and <u>Euclidean</u> geometry. (*The geometry you learned about in school.*)

Now take these three following items:

- * #1. Motion
- * #2. Euclidean geometry
- * #3. The speed of light being a constant

Basically, you can build an easily understandable universe with any two of the above but **not** all three.

Before the Michelson-Morley experiment in 1887 scientists thought the universe was built with the above #1 and #2.

If you consider a rock then you could see it as built with #2 and #3 because it remains a solid even though you know electrons are in motion inside it but in the rock all this motion seems to get canceled out so that you essentially have no motion. Please remember this concept of the rock because it, in essence, is the concept of a quasi steady-state universe (see chapter 5). So then using only the above #2 and #3, this ultra, ultra high frequency motion is restricted. And we find that with the speed of light a constant, motion is actually restricted, isn't it? (Later you'll see why motion is restricted.)

The NASA satellite tracker knows this universe is built using #1 and #3 because when he uses your high school geometry to track these inter planetary voyagers, they are simply not there when he aims his dish antenna to the spot. He then has to correct his Euclidean geometry, using Einstein's math, to find where to aim his dish antenna to get the spacecraft's signals.

It is perfectly obvious therefore that this universe is not using anything even close to your idea of distance measurements. It does seem to understand your idea of frequency and motion though even though it does not use them exactly as you do.

Please remember those two terms of **frequency** and **motion**: They will come up again and again. Once you see that something cannot go faster than the speed of light then you <u>know</u> you must define the term motion quite differently from the way this science "in-crowd" is presently defining it. Here's our new motion statement but don't worry about understanding it right now because we'll dig into the full meaning of it later.

* **Motion** is something that is "seen" quite differently by different subset systems. 3/8/2005

After the Michelson-Morley experiment there was turmoil in the scientific world simply because it all didn't seem to add up somehow. It was all eventually more or less haphazardly resolved with the Lorentz contraction and various other patches but the enigma of the speed of light remaining a constant was still essentially there. Exactly why it was a constant and exactly why you could not obtain a faster speed, no one ever really found out. So essentially the Michelson-Morley experiment still presents this presently accepted view of science with quite a riddle even though our basic 19th-century science foundation is constantly and extensively being patched all the time using the tools Einstein provided us with in special relativity and general relativity.

All of this can be totally avoided by accepting this new view of the universe. While future computers and math will monopolize and utilize this new view, unfortunately this new view will not currently work at all with your present math. You will still be using Einstein's corrective relativity math for quite a while yet. This new view beautifully resolves this seemingly incompatible reason for the results of that Michelson-Morley experiment. Using this new view of the universe, the Michelson-Morley experiment answer makes perfect sense.

Einstein's papers in 1905 (microcosm tire patch kit) and 1915-16 (macrocosm tire patch kit) showed us exactly how much error all of our scientific rules would

have, not only in the microcosm, but also in the various cases where speed or mass was high and Newton's 17^{th} century principles entirely failed. But remember this is still only patching this old $15^{th}+16^{th}+17^{th}+18^{th}+19^{th}$ century accumulated science foundation. No one provided us with a good thoroughbred set of 20^{th} century science rules. I will, however, give you a good set of <u>laws</u> herein for the 21^{st} century though.

All these things discovered after Olbers' Paradox and especially after 1887 made it perfectly obvious to every scientist that our basic science structure was way out of alignment with the actual truth.

Even with all of the proof that our basic system of science was in need of a major overhaul, scientists did absolutely nothing but add some *necessary relativity corrective patches*.

Few even attempted to look around to try to find out what was really wrong.

And most still haven't either.

I attempted it.

I had the "luck of the Irish" in that not only was I immersed in this right from my youth but later I also was involved with things in areas that proved invaluable in this particular quest. Even with all of that, after I found most of the bones it still took me over 33 years to completely solve the problem and put the entire skeleton of Einstein's dinosaur together. The answer is contained herein.

What you must understand is that mathematics is the very soul of science. It always was and it always will be. No one will ever change that.

- Johannes Kepler used math to prove all the planets moved in elliptical orbits.
- Isaac Newton used math to prove the law of gravity.
- Ole Römer used math to discover the speed of light and this goes on and on and on.

Math was important to me in my working years and it still is now in my

retirement. Math is the very soul of science and it is the sword of Excaliber that every scientist carries next to him just as the Vikings always carried their swords right next to them all the time.

So now when I state that it has been our math that has led us down the wrong road, most scientists who are reading this will immediately chuck this into the waste basket and they will have nothing more to do with anything else that I write as well.

So I know I'm going to lose many of my readers at this point by making that previous statement but this is the way I have to put it because this is the road we have all been led down. You will see exactly why this happened.

I'll then make another statement that is even more preposterous: It is the sentence that follows.

- You do not have to know any math at all to see this new big picture of unification.
- As I said, Einstein was right. He predicted the **answer** would be simple enough that the human mind could understand it, and it most certainly is.
- Not only that but it's probably even a simpler revelation than Einstein himself thought when he made that prediction.
- Yes that's right: It's an **extremely <u>simple</u> answer** that requires absolutely no mathematical procedures of any type. I will show you **precisely** what this universe uses and it most certainly doesn't use any of our present math. I'm going to give you a big, extremely simple picture of unification in **3-D** and living **color** without the need for you to know even the slightest bit of math.
- What Einstein did not know was that even though the big picture can be made relatively simple, this brand new math must take into consideration things that today's scientists do not even think exist. This universe is more like the universe that Dirac predicted; it's very complicated and not nearly as simple as most scientists today suspect.

But even though this universe is extremely complex, any good high school student who is interested in science, and gets good grades in science, should be able to see this big simplified picture.

I will be able to show you this **extremely simple** unifying principle and how it works providing you have some knowledge of science and/or you do some homework and if you try to concentrate on what I'm telling you.

This is one of those books that needs to be chewed well and digested for you to get the main idea behind it all. You won't be able to skim through this one and get the "big picture" because, I'm afraid, this is a whole brand new ball game: It's too much of a change from today's scientific "big picture".

Einstein's general relativity tensor math formulation works — it's the best thing we have — and we have no other choice but to use it whether we believe he was right about the entire setup or not. He gave us veritable diamonds of new science. We will be looking closely at some of his other ideas too. Never have so many of us owed so much to so few of these early scientists even though all of them did make some mistakes now and then: For instance Einstein claimed gravity was a wave and therefore he predicted it could be polarized. Yes, gravity is a wave all right and you will even get the wavelength for gravity herein so theoretically it might be polarized. We think we know a lot about polarization of light waves, RADAR waves and much longer radio waves as well. But even as I type these words scientists are working on a new discovery where more information can be put out on one frequency provided that you have a multiple antenna arrangement with a different polarization in each single antenna inside this multiple transmitting and multiple receiving set of antennas. Not only are we still learning about polarization but it is this very factor of polarization, along with the Planck's constant factor, that makes us sense these ultra, ultra high frequencies of the orbiting electrons as a solid mass. We know they are moving and we should sense all this movement but we don't so we know polarization has aspects at these ultra, ultra short wavelengths (many thousands of times shorter than the light frequencies) that still remain somewhat of a mystery to us. If you ask the question if it is even possible to polarize at these ultra, ultra short wavelengths then the answer is possibly no. You will discover that the gravity wave(s) is/are at two extreme ends of the spectrum.

Most of gravity emanates from the spin of quarks, which spin at a much higher frequency than electrons. This is too high a frequency to polarize. Much of gravity emanates at the galactic spin rate, which is at the other extreme end of the

spectrum and it may be virtually impossible, as well, to attempt polarization at this ultra, ultra long wave end of this bandwidth of frequencies immediately concerning us here on our earth. After you have read all of this then you will have all the necessary information to determine for yourself whether this polarization prediction by Einstein was a good prediction or not. Also you will see why Paul A. M. Dirac's monopole prediction will be hard to justify on one hand but even harder to rule out practically because you will be presented with a sort of physical evidence of it herein. Having said that, you will also see another prediction of Dirac's that the future would bring forth a theory which would express the fundamental laws of nature that would be intuitively constructed only on the basis of approximations, mainly because of the highly complex nature of this universe.

That prediction of Dirac's is a perfect description of this universe **and** this new theory that you are about to read. You will see this universe turns out to be far, far, far more complex than most scientists presently think. Dirac was right about it being extremely complicated and he was also right about predicting that a way would be found to see a big picture of **approximately** how it all works.

Not listening to **other** great scientists was an error many of our 20th-century scientists made: They made a great many of these type errors too. One of the biggest mistakes ever made was in not listening to David Hilbert. Hilbert spelled it all out when he questioned geometry. This text would be far too long if I went into all of Hilbert's analyzing but I'll give you a small fraction of it here right now: Hilbert asked, "What is this dimensionless thing we call a point?"

Hilbert proved, beyond any shadow of a doubt, that such a conception as an imaginary point was absolutely useless when examining our entire universe because as you imagine yourself getting smaller and smaller, while trying to look at things smaller and smaller, this point must start to take on size. It must get bigger as you keep getting smaller and smaller, as you try to visualize this tiny micro world. If you could still keep getting smaller yet, then this thing that was once only a tiny point would finally take up the size of a marble, then a golfball, then a baseball, then a basketball, then eventually a lot of the room in your new universe. If you counter this argument and say, "No, it will not. It will stay at the same point size." Then if that point was at the end of a three degree angle when you got smaller then what is this same angle now that you are smaller? Sorry, you lose. Hilbert pulled the rug out of the very foundations of not only Euclidean

geometry but also all types of geometry, because all types are forced to use points. Geometry is OK only if you keep your same size. An all-encompassing geometry of both the microcosm and the macrocosm is simply not OK. When trying to examine both the ultra macrocosm and the ultra microcosm throughout this entire universe, you will see herein that your geometry will fail. Einstein's success with general relativity showed that he understood this but this success also made him think he could somehow mathematically prevail. So Einstein sidestepped this advice of Hilbert's entirely because in looking for his "Unified Field" he should have realized that fields depend on geometry. If there is no such thing as an all-encompassing geometry (You'll even see further proof of this) then surely there can be no chance for an all-encompassing "Unified Field". But having said that, I now know Einstein was correct in searching for the one single extremely simple unifying principle because if I have not discovered it then I have at least found the closest extremely simple method you will ever get to visualize it.

I always believed if there is, in fact, a unified principle then the foundation for this must be a unified premise and the premise has to be that this indeed is a 100% wave universe and these waves have the ability to form into what we perceive is a particle. There is no other premise, that I know of, which will lead to a unified principle. Quantum mechanics shows you particles are built from waves. Quantum theory, more or less, shows you that these waves are assembled into spherical particles. This is simply because of a rapidly changing wave polarization caused by space-time. These particles then retain original wave properties while also assuming — because of changing polarization mainly — brand new individual particle properties. The electron, for instance, is a far different particle from the quark.

If the polarization of these standing waves change rapidly enough and trace out a sphere, then they actually become a spherical particle. They will then behave like spherical particles especially to all their exact sister particle copies.

Understanding this, I took this one step further and saw that <u>every</u> micro or macro spin/orbit-frequency level, of <u>different</u> type particles, was also <u>different</u> because in this brand new context, for any specific calculation, you absolutely must define a place of rest and this can only be at <u>one</u> spot on <u>one</u> specific orbiting geodesic.

While Einstein was a loner, Niels Bohr was not and he gathered around him in Copenhagen others who all worked diligently at quantum mechanics. These same years in America, Henry Ford gathered people around him diligently cranking out cars. America and Copenhagen, in those years, cranked out one new miracle after another. Einstein was fully eclipsed behind all these Copenhagen quantum mechanics' miracles discovered by the many who gathered at Bohr's home.

All types of geometry are useless to us as we try to examine our <u>entire</u> universe. **Bohr knew this!** That's why quantum theory is designed to skirt around it. Einstein — who with Planck — helped lay the first foundation stones for quantum mechanics, then looked at what the Copenhagen bunch had done to it. Einstein made some remarks about Bohr, something like, "God never designed a universe such as Bohr had in mind." Bohr found out about this later and replied, "Who is Einstein to tell God what He should do."

* * *

2. What went wrong

If you took one of our best directional (*horizontal axis*) gyroscopes in the best set of friction free gimbals to either the North or South Pole and kept that gyroscope spinning then this gyro axis would simply remain in the same position — horizontally with the fixed stars — as the earth turned completely around under it. If you were at the pole watching it and timing it then you would know it was holding its position with all the stars. You, however, would not **see** it positioned in space with all the fixed stars because you would be turning along with the earth and you would perceive the axis of this gyroscope as making a complete rotation

each 23 hours, 56 minutes and 4.09 seconds or one sidereal day. In other words, the gyro is holding its position constantly to all those fixed stars.

Why?

George Berkeley, Ernst Mach and a host of others firmly all believed that there must be some unknown force between the rest of the universe — the fixed stars — and these gyro devices causing the gyro, the pendulum, vibrating things, and today some lasers and some super-cooled elements to behave like this. Einstein himself started out believing this too but later — about 1927 — he felt differently about this. Once people see this theory is correct, then they will realize Einstein's change of heart, and later thinking the universe was expanding, was his "biggest blunder" and not his "cosmological constant" that he thought, at the time, was his "biggest blunder".

Einstein's "cosmological constant" was not a blunder: It is here to stay.

Since this was written Saul Perlmutter's group has proven that Einstein's cosmological constant does indeed exist. This indicates we are in a steady-state universe. What about this expanding universe? What does the red-shift indicate then? Click this: http://www.rbduncan.com/page4.html and scroll almost to the end of that page.

Most people reading this will have a strong belief in an expanding universe. In this you will see some of the reasons for this belief. I, once upon a time, also believed in an expanding universe. I no longer think of it using this terminology because relativity has proven that this aspect of it can drastically change for different observers and, besides, now our "A" laws show you exactly what is really going on. Please examine all the evidence in here before you slack off reading this. In some respects while it may seem to be an expanding universe from one particular point of view, you will see as you read on, it will definitely not seem to be an expanding universe from the overall entire universe's point of view and it is this point of view that we must aspire to if we want to achieve a grand unified theory. But let's get back now to the gyroscope and the fixed stars.

While present science doesn't even give us the foggiest idea of what this force might be that holds these gyroscopes to the fixed stars, this new theory most certainly does.

What Berkeley saw — long before Jean Foucault essentially proved Berkeley's position by demonstrating the rotation of the earth with his celebrated 200 foot long pendulum — was that this gyroscopic precession at ninety degrees to the

applied force could also be explained if the fixed stars were trying to keep that portion of the spinning gyroscope's rim in its **new** found path now that it had been shifted by some external force. What Berkeley correctly saw has now been all but lost by present day scientists who think of this precession as nothing more than a ninety degree shift in gyro torque for the applied force. They completely fail to see — what Berkeley saw — its connection with the rest of the universe.

The majority of my present scientific peers claim that the gyroscope does this merely because this is what it intrinsically will do. I'm afraid that this answer simply will not do. Your present science lacks the ability to show you why the gyroscope holds to all the fixed stars and this is a fact no one can deny. The majority of scientists will eventually get it right one of these days but the problem is that it takes them such a long time to get such things as this right. We'll come back again to these gyros later.

About 1820 in France, Andre Ampere — who had mastered all the math of that age by the time he was 12 years old and who the "amp" is named after — constructed the first electrical measuring instrument ever made and gave us one of the very first magnetic-electrical rules.

About this same period of time, across the water in England, Michael Faraday — who was **not** a mathematician — gave us his electrical rules.

Incidentally much later, in honor of Faraday, the scientific world named the farad the unit of capacitance.

Faraday thought he could unify the fields of gravity and magnetism and even suffered depression when he failed.

Now came a juxtaposition of sorts because the world accepted Faraday's rules and used these instead of Ampere's laws because Faraday's rules were found to be more suitable when adapting to the mathematics of the day.

Well, in hindsight it turns out this was the wrong fork of the road to turn down for unification because it ensured that as you constructed your science empire on Faraday's rules, you lost your chance of being able to easily unify these four fundamental invisible forces of magnetism, gravity and the strong and weak force.

I'll give you a good example by asking you to consider the following: Without looking at any other references, tell me in which direction — clockwise or counterclockwise — as you look down at the north pole of a magnet, which way all the electrons are spinning that are causing this magnetism.

The answer is clockwise.

However, very few people will immediately know this because Faraday's lines of force totally obscure this. Ampere's laws, on the other hand, do not use lines of force and once Ampere's laws are perfected and adapted they even disclose not only this spin presence but also this clockwise direction of spin rotation.

- Magnetism, Niels Bohr proved, is caused by the electron's spin and the direction of the electron's spin rotation determines the direction of magnetism.
- The same way Faraday's rules hide the electron's rotation from you, they also hide unification from you as well, because they show you things they shouldn't and they don't show you things they should. It's as simple as that.
- Therefore, this is the reason that I said mathematics our trusty sword ended up cutting us badly instead of cutting out all the vegetation that prevented us from seeing all those unification road signs.
- In addition, that wasn't the only wrong fork of the road we turned down either.
- Einstein and Bohr argued over which fork of the road to take and here I have to state this was the second wrong fork in the road toward unification that we took.
- It's indeed true that Bohr finally, totally eclipsed Einstein and everyone agrees that Einstein's attempt, in his later years, to unify the four fundamental forces of gravity, magnetism and the strong and weak forces was a complete failure. However, that does not mean this was the wrong road to take. I'll prove to you herein that it was the correct road leading to unification of those four fundamental invisible forces.
- You cannot get to unification unless you go down both the Ampere and Einstein forks of the road.
- Having said all that, I also must state that we would not have all the material

things in this world that we have today had we not taken the Faraday and Bohr forks of the road.

James C. Maxwell's equations worked beautifully with Faraday's picture of things and as soon as Heinrich Hertz clarified Maxwell's equations then radio took off like a storm. It grew about as fast as this computer revolution is growing today.

The same thing happened on the Bohr fork of the road where first QED (*Quantum Electrodynamics*) then QCD (*Quantum Chromodynamics*) were formed. Then the fields of magnetism and the weak force were mathematically unified and from that came the standard model.

And if we had not gone down these two wrong forks of the road then I would never have noticed all these well hidden road signs and you would not have this simple big picture answer to unification before you now.

So we probably had to go down those wrong forks of the road anyway to get the answer.

Never-the-less if you want unification, you have to completely backtrack and take the Ampere-Einstein road because no easily understandable grand unified theory is to be found down the Faraday-Bohr road.

Both Dirac and Einstein have to be credited with believing that the human mind could conceive of a better answer than present science was offering. Both believed scientists could find out "what was behind it all". And this is the road you have to take. Bohr quit this Dirac-Einstein road and moved full time into quantum mechanics' magic math manipulations just a slight bit too early. So you can't take Bohr's magical math road here because, as you will see later, this is a subset dead end road. Einstein believed the answer was simple and Dirac believed the answer was complicated but some approximation would come along to allow us to understand it. Both Einstein and Dirac, in a way, will be proven right for trying to find out what was behind it all. Both will also be proven right for sensing we had to travel down the intuition road a bit further to achieve unification.

Einstein failed in his attempt to unify the four fundamental forces and Bohr eventually failed too when he tried to use his modified centrifugal force to obtain the spectral lines in atoms more massive than the single electron hydrogen atom.

Today's "in-group" claims that Bohr's work was all coincidental because he did not really derive these various spectral lines but he imposed what he wanted on to his model. This may indeed be true but what **if** this modified centrifugal force that he used, to obtain the spectral lines of the single electron atoms of hydrogen and helium, was indeed the <u>true</u>, **new** centrifugal force caused by the changed surroundings in the microcosm around those electrons?

That is precisely what this new theory is stating.

The mere fact that Bohr did obtain the spectral lines for the single electron hydrogen atom but then couldn't for the more massive atoms shows you that centrifugal force was different with the different surroundings: This is the whole crux of this entire thesis because you know that magnets can be produced by either strong magnets or an electric current in their surroundings. On top of this, both George Berkeley and Ernst Mach claimed our surroundings were likewise causing our inertia: You will see, as you read this, that they were both absolutely right about this too. If this is true then centrifugal force would indeed have also changed with the different surroundings and Bohr therefore may indeed have found the **new**, **true centrifugal force** to use to match all those spectral lines in the single electron hydrogen and helium atoms.

We know that we are dependent on the microcosm staying more or less the same but are we also dependent on the macrocosm (things exterior to us) remaining the same too?

What type of a universe is this where surroundings are this important to change not only the magnetic field but also centrifugal force and to actually cause inertia as well? Keep reading and you'll find out.

With both of these failures of Einstein to unify the four fundamental forces and of Bohr to match the spectral lines in the more massive atoms, are to be found the gems of those hidden road signs that point out all the correct roads to take.

Stop and think! What are these things telling you?

In the case of Einstein, I understood Hilbert's warning that told me it was definitely not a unified field. Instead — providing we adopt universal laws and

terms — we can, therefore, very well have an **extremely** simple unified principle if this is basically an all wave universe, which everything so far seems to indicate it is.

I was indoctrinated into radio theory by my father at an early age and soon saw the microcosm was all waves but much later to my astonishment I found the wave aspect, including of all things impedance matching, was in the macrocosm as well. This, to a veteran of all of these things, was extremely hard to believe.

In the case of Bohr's use of centrifugal force, this told me that something in these more massive atoms are proving — beyond a shadow of a doubt too — that centrifugal force is changing with the surroundings which it would do if both Mach and Berkeley were right. So therefore centrifugal force is merely a subset rule: It is not a global universal law such as you think it is.

Not only is centrifugal force a subset force but so are your four fundamental forces as well. In chapter 5 you will see that our new extremely simple "A" Laws completely replace, not only the four fundamental forces, but all your old subset invisible forces. Not only that but you end up with the following.

- * <u>All</u> the forces have a common origin.
- * <u>All</u> the forces have identical properties.

Einstein failed because there is indeed an **extremely simple** unified **principle** with unified "A" laws and special terms for these laws but there is **no** single, particle type, unified field. There is a big difference between a unified principle and a unified field and you will see why we can have one without the other.

In addition to all this, as you probably already know, none of your scientific rules work in the microcosm. All your scientific rules must be kept out of the microcosm and above that magic level of Planck's constant.

The only things that work <u>below</u> the level of Planck's constant are the gauge theories of quantum mechanics. In quantum mechanics, the essential tool scientists use to predict are local gauge invariance which gives the theory a type of symmetry that governs the math.

You have to ask yourself why our scientific rules cannot be used in the microcosm and our "A" Laws will show you why.

Both local gauge invariance and therefore this symmetry change drastically with spin/orbit **particle-frequency** levels: For instance, you have different gauge invariance and symmetry in QCD than you have in QED and, of course, a different symmetry means that you use different math in QCD than you do in QED.

You use QCD to study quarks. You use QED to study the behavior of the electrons that build up the various atoms.

Later our "A" Laws will make it perfectly obvious to you why this **must** be this way.

Here's the advantage of the "A" Laws: While quantum theory divides up the study of quarks and electrons into QCD and QED respectfully, the "A" Laws also divide all particle levels into something similar to quantum mechanics' local gauge theories except by using the "A" Laws you use the same laws and same terminology for each different spin/orbit particle-frequency level.

At this point the reader will question this and say that if you use the same laws and same terminology then you don't need different levels.

Ah, but you do because each different wave-particle level will be at an entirely different spin/orbit-frequency and this my good friends is primarily a wave and frequency universe.

This is another hidden quantum mechanics' road sign all covered over with vines and leaves.

Not only are surroundings important but it's the <u>matching</u> spin/orbit-<u>frequencies</u> of these surroundings that are tremendously important.

Please remember that just as your radio or television can only tune into one frequency spectrum at a time, your mind <u>also</u> can only tune into one frequency spectrum at a time. You simply cannot see this entire universe at once. In this universe deck of cards, you can only see one card at a time just

as you can only get one station at a time on your radio or TV. Your mind is no different from your radio or TV in this respect.

Superstring and Quantum mechanics are telling you **this is really a wave and frequency universe.**

One other extremely important reason that you must have this division into separate spin/orbit levels is that **you must <u>define</u> a place of rest**. You can no longer afford to <u>forget</u> this mandatory place of rest. This place of rest only exists, at <u>one</u> spot, on a certain geodesic so you <u>must specify</u> which geodesic, therefore you must specify which spin/orbit-frequency level.

These hidden Quantum mechanics' QED and QCD road signs are pointing out to you that only <u>one</u> specific place of rest is allowed for each card in this universe deck of cards. In other words you must have separate cards for each separate particle-frequency level.

This is why — as in quantum theory — things <u>must</u> be separated into different spin/orbital <u>particle-frequency</u> levels because the <u>surroundings</u> are different for every spin/orbit-<u>frequency</u> level. In this theory, <u>surroundings</u> and the <u>frequencies</u> of these spins and orbits are the key to inertial qualities.

You'll see later exactly how this all works.

Since these wave-particle levels are all **subset** particle levels then what information you have for one wave-particle level is worthless in another level: You can't use information in one and move it to another just the same as information in QED can not be directly used in QCD in quantum mechanics. From this, you can see the reason QCD must be different from QED and the reason is simple: It is a difference of spin/orbital frequency and different surroundings.

- Now I may lose some quantum people reading this as I use that above statement.
- If you are still onboard after that pronouncement then look at this next one.
- The universe you think you have is nothing like the universe you really have.
- Here's what you really have: Quantum theory divides up things into local gauge

theories so that QED is for looking at electrons and QCD is for looking at quarks and the **strong force** that govern quarks.

But the "A" Laws divide up all spin/orbit levels into distinct spin/orbit-frequency levels and by doing so gravity can be easily added to the unification scheme. So with the "A" Laws you now have the electron spin/orbit frequency level and the quark spin/orbit-frequency level, the same as quantum theory but then to get the gravitational forces, you must add the quark spin/orbit-frequency level and galaxy spin/orbit-frequency level; Virgo super-cluster spin/orbit-frequency level and this may even go on. The gravity wave bandspread, I'm afraid, is a wide spectrum of waves at the Quark spin frequency plus a great many diverse extra long and ultra long waves emanating from Galaxy and Virgo super-cluster spin frequencies of even lower frequencies. But the beauty of these "A" Laws is this: All laws and terminology for each distinct spin/orbit-frequency level are the same. Even though you are still stuck like quantum theory with different sections, now you have the same laws and terms for all the sections so you can readily see how they all join together and this is much harder to presently do in quantum mechanics that uses different laws and terms for the different gauge theories. Even without the help of math yet, these pages should be a big help to you in seeing what's really going on and later with correct utilization of the proper math, this new theory will give this world big changes in science.

Because now we have to take the <u>surroundings</u> into consideration, we do not have the computers yet that can <u>fully</u> utilize this new knowledge. But with this new information we can mathematically now definitely incorporate gravity into quantum theory. While this essentially is unification in some respects. It is not the best achievable method of unification that you will eventually have using these "A" Laws properly together with future super-computers.

Therefore I repeat, in this Theory you will find that using our new "A" Laws:

- * All the forces have a common origin.
- * All the forces have identical properties.

(We need to work on the required mathematical symmetries.)

I hope with this statement that I haven't lost a lot more readers.

If all this is a bit too much for you then don't worry even one little bit. Just remember that each permanent wave-particle level will require something similar to an entirely different gauge theory because each different permanent particle level will have a different symmetry governing its equations because each spin/orbit-frequency level will have far different surroundings as governed by our forthcoming "A" Laws.

I use the terms particle-frequency level or spin/orbit-frequency level to be essentially the "A" Law equivalent of the quantum theory systems requiring local gauge theory.

We certainly end up with considerably more levels than quantum mechanics but we come out a bit better than having to use quantum theory's different terminologies because instead, now we are able to use the <u>same</u> laws and terms in all spin/orbit-frequency levels and, of course, we can include gravity this way where quantum theory simply cannot.

And my friends you have just learned — later I'll show you more about this — something that many scientists might not be fully aware of yet: You will always have different subset rules — a different local gauge theory — for every different permanent spin/orbit-frequency level discovered.

Why?

Because of their surroundings according to our "A" Laws. Mach and Berkeley were correct: Each different particle level has a different frequency border on each side of it. Each different wave-particle level has an entirely different microcosm and macrocosm. Yes, I'm afraid these are the things that our "A" Laws will show you determine a different local gauge invariance. Therefore, there will be a different symmetry of equations and different inertial qualities for each different spin/orbit particle-frequency level.

A particle can not even remain a particle unless its surroundings are correct. You'll see exactly why later when we get into the "A" Laws. While protons seemingly last forever by themselves, neutrons simply cannot: Neutrons must have protons in their close proximity to survive. Once a neutron is pulled out of

the nucleus, it can only last about ten minutes before it decays into a proton, an electron and an antineutrino by the beta decay process. So this is telling you surroundings are important for particle stability. You will see in chapter 5 and 18 why the neutron needs the proton for stability.

You will see exactly why surroundings cause inertia when we get into our "A" Laws. Because our surroundings in the macrocosm are homogeneous and isotropic in the large (spread out evenly over space and time) then our present high priests of science seem to be correct when they inform us our surroundings most likely do not cause inertia. But if our surroundings were not so evenly spread out all around us then we would have seen long ago that these priests of science were wrong and Mach and Berkeley were right and our macrocosm was causing this inertia that we feel.

Einstein's special and general relativity are far different creatures from Bohr's quantum mechanics. I shouldn't really call it Bohr's quantum mechanics because Planck and Einstein really started it, but Bohr took it over and made it his. Einstein hated it going in the direction that Bohr took it too, and Einstein did not hesitate to voice his opinion about that either.

Einstein always wanted exact answers and you can see in both special and general relativity that you always get exact answers.

Not so in quantum mechanics though, where you sometimes only get a high probability that something will happen.

To see the big picture you do not have to be an expert in either relativity or quantum mechanics but you do have to understand basically what gauge invariance and symmetry are all about. This much of quantum theory is extremely important.

Gauge invariance — also sometimes called "eich" invariance — is the distinctive manner in which that particular system always reacts to something.

Symmetry is more or less the symmetric way everything is being built at that particular level and this can — most of the time — best be described mathematically: Say for instance your child builds an octagon with Tinker Toys. If this octagon is rotated 45 degrees on the table, the transformation ends up with

the octagon not being changed: You could therefore say these items built with Tinker Toys will all have a certain symmetry of construction. If another child builds a square building out of Lego blocks, and this is rotated 90 degrees, on the table, it will have the same appearance after the 90 degree transformation: So these things he builds out of Lego blocks will all have a certain type symmetry of construction that will have a different description mathematically from the items that are built out of Tinker Toys.

* Quantum mechanics, together with these "A" Laws, is showing you — beyond any doubt — that each particle level has its own distinct style of local gauge invariance. Therefore, each particle level has its own distinctive type of symmetry as well.

Each particle-level will therefore — in this new theory — have its own distinctive type of <u>inertial</u> <u>qualities</u>.

There is a distinction between our inertia and the other non-quark particles that will all also display inertial qualities. Chapter 13 covers inertia.

If you use the correct common terms and our new "A" Laws then you can improve upon the quantum mechanics' system of entirely different rules and terminology for each distinct spin/orbit-frequency level or local gauge theory.

You can substitute and then use **the same** "A" Laws and **the same** terms for each spin/orbit-frequency level.

If you forget all else about what quantum mechanics is telling you then please remember this because this **is** important. This is one of those prevalent road signs that they all could easily see but somehow couldn't exactly understand.

You could say quantum mechanics started when Max Planck discovered that all radiation energy waves are given off in individual chunks or quanta. For instance your eye needs at least 11 of these individual quantum chunks of light coming from a distant star before your eye can see that star. Some animals can even see things with less than 11 quanta of light emanating from them. If your eyes were eleven times as sensitive as they now are then you would actually see each

individual quantum of light and those stars that you now see only in a telescope might then even seem to be flickering on and off and look like sparkling bubbles in a sky of champagne.

Einstein immediately saw the importance of what Planck discovered, and Einstein dug the foundation for quantum mechanics by giving us the first quantified particle, the photon.

The problem with all of these new discoveries was that none of these things were predicted or even should be happening according to this 19th-century world of science as this new 20th-century unfolded — and by the way, we are still using all this 15th-century to 19th-century science accumulation, as our science foundation, today.

Einstein proved — using methods all scientists agreed with — that if a man in a super fast train passed by a man standing near the tracks then when this man standing saw two simultaneous lightning flashes then the man inside the train would have to see the lightning flash in front of the train first, before he saw the one in the rear of the train.

This essentially meant that time for the super fast moving man was not the same as time for the man standing still.

This was all too much for the majority of the people at that time, and I remember a World Book encyclopedia that my father bought for us about the time of the Second World War and it went out of its way to say that this was not a theory that Einstein was putting forth: It was only a hypothesis which they then emphasized was far less than a full theory.

Einstein was the first to show us we now have a problem with time as well as space.

The big revelation that Olbers' Paradox showed us was that space was not uniform. If space was uniform all throughout then we could not possibly have Olbers' Paradox and all this starlight would indeed blind us. The tensor math of general relativity is designed to give us a more accurate prediction of gravity in those more massive or higher speed situations where Newton's laws entirely break down. One simple explanation of Olbers' Paradox according to general

relativity, considering we have a quasi steady-state universe, would be that space is not uniform: It gets curved more around massive stars and more space than usual gets super densely packed around all these massive stars that we see in the night sky. So all that light gets lost in all that extra densely packed space around those stars before it can even get to us.

This would be one way of answering what is happening but there may be a better concept of explaining this as well.

While curved space may be the answer given by general relativity, you will see some additional clarification to this concentrated light loss around the stars and the concentrated area of charge close to the electron — in this new theory — which will be given in chapter 15. "Proof of Einstein's Principle of Equivalence using these "A" Laws" that you will find toward the end of this book.

What you have to realize is that these massive stars — such as our sun — begin to act on light and begin to act like black holes restricting a certain percentage of their light to us somewhat before they get so extensively massive that all their light is prevented from coming to us. You get a certain amount of water vapor evaporation well before the boiling point of water and you also get a certain amount of light loss well before the black hole point as well. It does not work like a light switch where, at the black hole surface, the switch gets snapped and 100% of the light and gravitational attraction suddenly stops: While light, to us, stops at the event horizon (surface) of a black hole, gravitational attraction, to us, continues further inside the black hole up to the singularity. Black hole link Galaxies act something like this as well at light frequencies: Far more light comes to us from the less dense outer portions of the various galaxies than from the far more dense inner central portions. This theory, you will see later, explains it as wider "angular lock on" along with general relativity's more curved space: It's essentially the same thing really but adding a little different twist that seems to me to be a bit more acceptable to the average human mind.

Another term you will see is the "blitzseit" (defined in chapter 4) which together with "angular lock on" (defined in chapter 15) can be used along with Einstein's curved space to give you a much better and fuller picture of how and why this tensor math of general relativity works as well as it does. Later you will

realize, using both of these terms, that you can plainly see why gravity always increases with aggregation but light acts reciprocally and diminishes around super massive objects. Personally, I like to look at it picturing Einstein's curved space as actually causing "angular lock on" than simply using the curved space concept by itself but I'll mostly refer to it as curved space herein because this is more or less the generally accepted terminology.

The electron's charge is tightly and densely concentrated right around the electron in a very similar manner as this light loss is concentrated around all the stars. You can see this when you hit something with a hammer. When you hit a piece of steel or a nail with a hammer, nothing touches really. The atoms in the hammer and the steel or nail both have a swarm of electrons around them and these electrons never really touch each other. What you feel, when the hammer hits, is this tightly packed area of charge concentrated right around every electron.

Remember, no electrons touched, so nothing touched: What you felt was "action at a distance" or concentrated wave action in the hammer electrons acting against other concentrated wave action in the steel or nail electrons.

But this is our main problem because we have all been brought up to entirely discount this "action at a distance" or concentrated wave action and instead we substitute our subset idea of two distinct particles colliding which we know is essentially not true because nothing actually touches. Those exterior electrons of both the hammer and the steel or nail simply do not ever touch each other. Since we know this, then why not simply attribute this entire colliding action to "action at a distance" and the reaction to the collision as to the underlying wave action from which it really stems?

If charge was uniform all throughout then when you hit a piece of steel or a nail with a hammer it would feel as if you were hitting something softer.

Therefore, the way charge gets concentrated around these electrons is similar to the way general relativity explains that space is curved and concentrated around all these stars giving us the answer that Olbers never found.

To top all this off Einstein went on to prove it is not space and it is not time but it is really space-time.

Space changes and time changes but the <u>average overall</u> space-time interval <u>space-time interval link</u> never changes in each individual spin/orbit-frequency level nor does it change <u>in this system of ours</u>. (Those underlined, clarifying words are extremely important.)

In relativity, we find the space-time interval is similar to the hypotenuse of a right triangle with space being one side and time being the other.

If the hypotenuse always stays the same length, you can make the time side larger but then the space side becomes shorter. If you make the space side longer, the time side, of the triangle. must get shorter.

Einstein showed us this then he moved into another area and showed us that $E=MC^2$.

In the half century since Einstein died no one has been able to figure out what kind of a universe setup this can possibly be where space can be packed around all these stars much like charge is packed tightly around all these electrons. On top of that, time and space changes and energy can be converted into mass. Moreover, topping that off now with **Fitzpatrick's** theory you have the surroundings entering into all of this and complicating things even more.

And this person writing this says he has an **extremely** simple answer to all of this?

Come on!

* * *

3. One more even worse problem

Gödel's proof, some feel, is only a mathematical entity that has nothing much whatsoever to do with our real world.

To those who think that way I will now quote these few words, informing them about Gödel's proof, from the 1997 Britannica CD:

"This proof has become a hallmark of 20th-century mathematics, and its repercussions continue to be felt. . ."

Incidentally, I like the 1997 Britannica CD better than the in-house browser types that came after it and I like it even better than my new Britannica 2000 DVD because the 1997 CD uses Netscape Navigator and I can enlarge the font sizes — important to us old timers — and it can be also used on the Mac and there are many more options with it as well.

If I could add to that 1997 CD quotation, I would simply say that the preceding Britannica description is a vast <u>understatement</u> because Gödel's proof is eventually going to bring down this complete science system used today. (*This is being initially published in the year 2000.*)

Gödel's proof **does** have everything to do with our present science set of rules and it does this because — and I'll continue to show this to you herein — our science is built upon subset rules and our present rules of science are anything but universal global laws.

If centrifugal force was a global universal law then Bohr would not have had to modify it before he took it below the level of Planck's constant, and he would also have been able to take it to the more massive atoms as well — but he couldn't.

We can't take any of our scientific rules or even very many of our scientific terms down into the microcosm below that magic level of Planck's constant.

We are forced to use only gauge invariance with the resulting math symmetry in the microcosm.

So this means what?

This means that since both your scientific terminology and your scientific rules do not work **everywhere** at any **speed** and with any **mass**, without being corrected, then they most certainly are subset terms and rules and are both subject to Gödel's proof.

Gödel's proof tells you this: If you somehow are trapped entirely within any subset system then you might never know if all the laws you have built for this system are really true or not.

So this pertains to all of us here on earth because we are most certainly trapped here within our subset system. If there is no way we can even peer out far enough into the microcosm or macrocosm, then we might never be able to see if all our highly prized scientific rules are absolutely true global universal laws or not.

Once you see that our scientific rules cannot be carried into the microcosm, and on top of that you have to keep correcting your present science rules with Einstein's relativity corrections all the time, then this tells you there is a real problem here indeed with our science being true global universal science.

You know from quantum mechanics that you do have this thing called local gauge invariance so there is one option open to you. Today's science guild is not going to like it one bit, but I'm afraid that they will have to buy into it eventually.

You have the option of downgrading all your thousands of years of accumulated scientific rules and terms.

You can downgrade them from supreme global importance to something similar to local gauge invariance and merely treat them as rules for this particular proton-neutron particle level in a similar way to what's presently being done in quantum mechanics.

You would then have:

- * QED subset rules for local gauge invariance and symmetry for the electron particle level.
- * QCD subset rules for local gauge invariance and symmetry for the quark

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particle level.

*Our old science rules transformed into subset rules for this proton-neutron particle level, which is the closest microcosm level that begins to enter our science rules world.

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You must treat each one of those above levels as a single card in a group of cards that you are holding in your hands.

It must be treated similarly to QED and QCD in quantum mechanics.

You therefore cannot move either your rules or even much of your terminology from card to card.

Our "A" Laws, later, should convince you that this is the correct reasoning.

I can hear the howls about this one.

This statement will lose me even more readers but at least they can't burn me at the stake like they did Giordano Bruno or do to me what they did to Antoine Lavoisier.

Once upon a time, the great scientists of this world believed in phlogiston, a mystical substance that sometimes supposedly weighed less than nothing. During this phlogiston era came Antoine Lavoisier who produced a gas he called *oxigine*. Lavoisier was the first person ever who saw that this oxygen in the air is the substance that allows things to burn when they combine with it and in one fell swoop he, more than anyone else, ended the phlogiston era. His country — forever thankful to him for this great discovery — chopped his head off with the guillotine.

And my fellow reader, such is the world we live in.

But "not to worry": You are not a friend of the old French nobility nor are you expressing any opinions or producing any new gas; you are just reading.

Getting back to our subject again, I have now tried to show you herewith that all

your science is subset science and subject to Gödel's proof.

I strongly feel there is no doubt about this. All your present scientific rules and terminology must be downgraded to a form of local gauge invariance and used that way. Your basic science structure simply cannot be changed all the time with some mathematical relativity corrections if you are using this same science foundation as you try to use various mathematical endeavors to see how this entire universe works.

- Therefore, it looks like things are so mystifying that I'm off to a really bad start.
- Is this the same writer who promised you a simple big picture of this universe?
- Why is he making things even more complicated?
- Because I have to show you we have some major problems here with our present science structure.
- This science system has to be downgraded simply because it has been misleading you: I don't mean misleading you in everyday life because it has given you a cheap, efficient, mathematically 99.9% accurate system that in turn has provided you with better production of things that you consider you absolutely need here on earth. I'm talking about misleading you toward a Theory of Everything.
- This present science system has given us miracles indeed in new things for us to buy and new weapons that the military cannot live without. I'm not telling you not to use your present science system. If you have a car that is running then, certainly, make use of it but this does not prevent you from looking for a better car.

Yes, this present science system is a mathematically simple and wonderful system and a very, very efficient system math-wise compared to what you will need if and when you do shift to this new system that I'm advising. We do not even have computers yet that are good enough to process the massive amount of information that will eventually be needed to properly work out problems in this new science that I'm portraying herein: This is a far, far, far more complicated universe than most presently suspect. Only the big picture is easier to see. Once you bring in all the surroundings into the picture then the new math becomes simply tremendous. After you see these "A" Laws, you'll see why I say this.

Because the math in **Fitzpatrick's** system will be so extensive, the speed of computers will have to go up much, much more and the price per computation will have to come down much, much lower than it is now before this new system will be economically feasible. When computers do become good enough though then this new system will allow the people using it to produce close to the strongest metal alloys that will ever be produced; the lightest and strongest aluminum or whatever alloys that will ever be produced; the best lubricants that will ever be produced; the best weapons that will ever be produced and so on and so forth. You will begin a new age once you change over to this system of science with the forthcoming future faster and more efficient computers.

This, however, does not mean that you have to wait until that day to see a splendid, 3D, full color, big picture of everything and it doesn't mean the big picture is hard to see: It isn't. It only means that the math is going to be quite a bit harder.

What these disciplines of relativity, quantum mechanics and superstring are telling you is that your present science system is only good here on earth at this proton-neutron particle level and what Gödel's proof is telling you is that neither you nor this science guild will even know this unless everyone sticks their heads out of their present science shells and looks for these hidden road signs.

The human mind developed inside this closed, subset system here on earth where it felt it was at rest. Giordano Bruno was burned at the stake for sticking his head out and saying we were <u>not</u> at rest here on the earth and Galileo — who had far more powerful friends — barely escaped that same fate but instead was put under house arrest for the rest of his life after saying the earth moved and then recanted this in public so he could save his life.

This "idea" you incorrectly have, of being "at rest" when you most certainly are not, must absolutely be "defined" and pin pointed to a certain spot in this new theory. We can no longer afford to be as lax in such things, as is sloppily allowed, in your present science. Isn't this a road sign that quantum theory has put forth but that is now hidden by all the weeds?

Whether it was the Catholic Church ruling in those days of Bruno and Galileo or whether it is this "in-crowd" of scientists that rules today, the results for sticking

your head out and publicly voicing a dissenting opinion is the same: Your head gets chopped off, only it's now done quietly financially instead of on the public square brutally.

Many hundreds of years have passed since Bruno and Galileo, yet all your present science still deals with things at rest or at certain speeds when you know full well **nothing** in this universe is at rest and speed gets changed with relativity corrections and indeed even gets limited, so this is proof there is a problem with speed as well. When you know, full well, there is something basically wrong with these two terms "at rest" and "speed" then if both of these present science foundation stones are flaky, this is also telling you something is basically unsound with your present science structure isn't it?

Gödel's proof is telling you that you can design a certain subset science and even refine the math for it and 100% of the people will be deceived by it just so long as they never come into contact with something that points out the ineffectiveness of that certain science.

Quantum theory, along with special and general relativity, is now bringing you into contact with different science-religions aren't they?

They are: And those science-religions are just as good as yours are now that yours has been downgraded.

You must therefore keep your science world downgraded to just another local gauge theory.

It must be held within certain parameters.

It needs a big **red** warning label on it saying:

WARNING — Use only on earth for measuring things at this proton-neutron particle level and use only at low speeds and at low mass.

In this next paragraph and throughout this text I use the word "see" in quotes to indicate how that particular system would actually see it if it had eyes like you have.

Don't lose hope because now with common terms and our "A" Laws, we can

replace all of the quantum mechanics local gauge theories terms and rules with these \underline{same} "A" Laws and their terms. So we can essentially \underline{unify} all the local gauge theories with our common terms and "A" Laws.

Our science rules are only 99.9% correct because you will see from our "A" Laws that this universe is a frequency universe and it is highly dependent on certain frequencies. You will see that spinning and orbiting particles get "tuned in" to their surroundings and thus derive their inertial qualities from similar items also "tuned in" to the same identical spin/orbit-frequency: This will be the spin/orbit frequency bandwidth at that particle level. We are built out of several types of particles that have more than one type of surroundings according to our "A" Laws. Our atoms are built up of two distinct types of particles. Since these two distinct particles will "see" their own distinct types of macrocosm frequency spin/orbit bandwidths then you will have to view the inertial qualities of each from that particle's spin/orbit-frequency bandwidth viewpoint. You will never be able to see all the inertial qualities of a particle correctly unless you view them from that particles own local gauge system's (local gauge theory's) frequency spin/orbital bandwidth viewpoint. Don't worry about the frequency aspect of it now, but I must include it here to make you aware of what's coming. We happen to be composed of both the heavier proton-neutron type particles and the much less massive electron. Later I will show you that we "see" the electron as less massive, but what we are measuring and calling the electron's mass is only its "lock on" to the proton's subharmonic frequency. This is only a portion of the electron's true inertial qualities. You will see later using our new "A" Laws that much of the electron's inertial properties have to come from its sister electrons of the same exact spin/orbit-frequency in its surroundings, but we see these inertial qualities of the electron displayed to us — in our lower spin/orbit frequency **level** — as either light, velocity, magnetism or charge.

Only after you downgrade all your science to spin/orbit-frequency levels can you understand why Werner Heisenberg could not get both the electron's velocity and its momentum at the same time. *Heisenberg link*

Once you downgrade to a type of local gauge invariance then you realize that other systems' viewpoints have as much weight as yours do because these are all subset viewpoints now.

Coming up are an **extremely <u>simple</u>** powerful set of laws — more powerful than anything science has yet properly utilized — that will show you exactly how this entire universe is operating "from this universe's point of view".

When you use these new "A" Laws then you will see both our proton-neutron viewpoint and the electron's viewpoint: They are quite different.

This is the essence of this theory. Your brain knows this subset system best because it was developed here. Since you know there are other subset systems then try to find the **common denominators** in all of these. Use **only** these **common denominators** and then you will **better understand** each subset system you look at. Yes, you are limited: Your mind is designed in such a way that you can only look at one subset system at a time but if your mind is designed so you cannot see the full deck of cards at once then at least this way you can see one card at a time and after seeing a few cards then you will have a better idea of what the full deck looks like even though you will never be able to <u>completely</u> see all of it at once. Later we'll look at this as being a major part of the reason for the Heisenberg-Bohr idea of complementarity.

When Heisenberg viewed the electron's velocity he had to be viewing it from our proton-neutron's viewpoint because we see it as having velocity but — like you — the electron surprisingly "sees" itself at rest. Remember, in this new theory you have separate frequency cards and a separate place of rest in each of those spin/orbit frequency cards. (I want to remind you again that I've put the "sees" in quotes because we really know the electron has no eyes but I'm sure you understand what I mean even though this would not get by if published by any of the science guild's regular publishers.)

You'll see later that when Heisenberg measured the electron's momentum he was looking at it more from the electron's viewpoint. From our viewpoint using our place of rest, the electron's behavior is seen as either velocity, light, magnetism or charge. Heisenberg could not get the velocity from the electron's viewpoint because an electron, especially one that is on an orbital geodesic, views itself as having no velocity and being at rest the same as you think you are at rest all the time as you sit on this earth as it stays on a geodesic orbit around the sun.

With this next description of the geodesic, you will begin to see how surroundings enter this picture.

A geodesic is a path where the item in orbit is perfectly balanced between the item or items it revolves around and its **macrocosm**.

Nothing is really at rest in this universe but the closest to being at rest in this theory is traveling on an orbital geodesic and this goes for you or planets or stars or even electrons. This necessitates a different **spin/orbit-frequency level** for each spinning orbiting entity. The "A" Laws will show you there is no way around this: So in this theory each spinning orbiting entity gets its very own **spin/orbit-frequency level card** but they still use the same "A" Laws and terminology as all the other spin/orbit-frequency systems.

So much for the coming attractions. What you have to understand at this point — as this chapter closes — is that your wonderful science system along with mostly all of its terminology must be downgraded to a type of local gauge theory **spin/orbit-frequency card** that uses common terms and common "A" Laws. This way you can see each card and better understand the entire deck of cards.

Don't let all these bad problems worry you though. Just remember if you want a fast, big picture of what is really going on then you had better keep reading.

This big, 3D picture does not compete with quantum mechanics or relativity. You use it **in conjunction** with relativity, quantum mechanics and superstring.

I want to end this chapter with a couple of questions and then a thought and then a statement.

Is it indeed possible that a well-known scientist could have inadvertently given us the answer to unification and even this scientist was not aware of how important this was?

And on top of that another question.

Could that answer have stayed right in front of the noses of all the best scientists in this world for one hundred and forty-seven years before someone realized it was a method whereby unification of these invisible fields could be accomplished?

Now, look at Gödel's proof. It tells you that this is a distinct possibility.

Now I'll tell you something: This did indeed happen.

* * *

4. Local gauge invariance

Quantum scientists have never discovered any type of <u>global</u> quantum mechanics' rules for all types of particles. They have discovered that only rules for each separate <u>local</u> particle system are reliable. There are only two things that are of such great importance in quantum mechanics that you absolutely have to learn about them: They are <u>gauge invariance</u> and <u>symmetry</u>. I would suggest using all the encyclopedia CDs that you have and reading everything you can about those two and related subjects.

So far, scientists have only found <u>local</u> gauge invariance to be good: They haven't found any valid universal <u>global</u> type of gauge invariance.

This is because they are dealing with particles and not waves. This entire universe is basically all waves. You can be fairly well certain that there is such a thing as global pure wave invariance because — as you'll see later — this must have given us the "big bang" using the reasoning of this new theory. In quantum mechanics, pure energy (waves) can be turned into particles but I'm afraid that the mere construction of particles — where each different particle has different surroundings — prevents us from ever having anything but something similar to local gauge invariance as far as particles are concerned: This is because surroundings determine inertial qualities and different frequency surroundings cause different inertial qualities. Therefore, you will never find any genuine global universal type of particle gauge invariance.

But I have discovered something <u>almost</u> as good: What I have found is that you can translate and reduce your present science terminology to a common language

that every "eich" or local gauge system understands. Then — even though there is no such thing as a genuine global unified field — you now will have the ability to look at each subset local gauge system, including our own, and see how each of these subset systems works using the same terms and principles for each local gauge system. You will understand all of this as you read on.

You might be able to have a unified field theory if you dealt solely in waves and left particle theory **entirely** out of it. This is a wave universe. Unfortunately, your mind has been developed in a particle world that most scientists do not yet know is only a subset world. So the human mind is condemned to working in this subset world of these particle-frequencies that are in this octave or so of particle-frequencies in which we find ourselves. We are thus limited to frequencies with which we find we can interact.

So in all practicality you might say there definitely is no global unified field particle law: The frequency aspect of our "A" Laws, where the particle world mixes with the wave world, prevents this but there most certainly is one big global frequency and wave picture.

What you do have now are these "A" Laws and global terminology. So what you do is substitute this much simpler global terminology for all your present science terminology and then using these "A" Laws, 'presto', any spin/orbit-frequency system fits like the correct puzzle piece beautifully into this entire global universe system merely because now you are using the same terminology and "A" Laws in place of different subset local gauge theories.

Later you'll get these wonderful "A" Laws: They will show you how each subset, spin/orbit-frequency system functions *"from the universe's global point of view"*. You will then see that all your terminology must be translated into these few global terms as well before you can work out things using these "A" Laws.

Remember, we have downgraded all our science, and its terminology as well, to a type of local gauge invariance at this proton-neutron particle level. In addition, there is one thing more: In 1922, Arthur Holly Compton showed that waves could act like particles. In this, you will begin to see that all particles can be thought of as nothing more than standing waves.

This statement will not be surprising to anyone working in the field of quantum mechanics: They are all aware of this.

What will surprise them are the hidden road signs I've discovered especially in superstring discipline.

Let's stop and put on our thinking caps: You have this universe now with all these massive problems and on top of that I've just added another that you didn't even know you had and I've downgraded all your science as well.

What kind of a universe setup gives us all these effects?

Remember that it has to give us every single thing we are observing in the disciplines of special relativity, general relativity, quantum mechanics and superstring. On top of that, it must also show you the reason why all your mathematical attempts at any grand unified theory have led to nothing but failure.

The problem with people — scientists are people — is that they jump onto the latest bandwagon that seems to be moving along fastest at that present time. My old, heavy, book type 1967 Britannica uses the words, "as if by magic" to describe how the answers come out of these mystical, mathematical manipulations of quantum mechanics: Yes, they most certainly did appear magical long ago as people looked into this frequency world of quantum mechanics. But you must understand that this magical local gauge bandwagon can go only so far. Your magic, in quantum theory, suddenly runs out when you shift to another completely different spin/orbit-frequency level as it did in QED. Then you need to find another mystic set of rules that you can move into to get your magical answers from that particular local gauge spin/orbit-frequency level such as when QCD was developed. What the people in quantum mechanics haven't realized yet is that there are far more levels than merely QED and QCD and when you bring in these other levels then you bring gravity in as well. And you already know gravity uses neither the rules of QED or QCD. Why not adopt the "A" Laws and use them for each of these separate levels?

Since both quantum mechanics and your science rules are local gauge rules, I find it hard to believe that anyone would try to first tackle a complicated mathematical unification of these four invisible fundamental forces **before** they had some conceptual, general big picture of what was really happening in this universe as a

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whole.

This general big picture is here right now so why not look at it. When you see it then you can compare it to the already unified fields of magnetism and the weak force and to the standard model to see if it makes sense. Isn't that a fair enough approach?

Look, let's be realistic about this: Mach told you inertia was caused by our surroundings. Surroundings are important to the electron and Bohr had to modify centrifugal force a bit before he took it into the microcosm and then while it did work in the single electron hydrogen atom, it did not work at all in the more massive atoms: This tells us once more that surroundings are playing an important part in all of this as well. If this is so then we would expect far different rules for each particle level mainly because each level would have different surroundings: Now isn't this exactly what we find we have here? The forthcoming extremely simple "A" Laws will give you further proof of this.

There is only one possible type of setup that can do this: Superstring theory has put out another road sign telling you how some of this is done too.

You do not need any such things as charge or magnetism to explain this either. It all can be explained by simple inertial qualities of everything providing you look at inertia correctly. You must realize that the all-important things here are the following spin frequency, motion, orientation and inertial qualities of the electron. These are common terms to all spin/orbit-frequency levels and these terms become of paramount importance when explaining how either charge or magnetism really works. It's positively all inertial qualities and nothing more than that when you are observing things correctly. You use charge or magnetism most effectively whenever you are restricted to your particular subset spin/orbit-frequency system but never if you want to easily see unification.

For those of you who say you cannot look at things two different ways then I'd suggest these people look at the four entirely different speeds being indicated on the front panel to the crew of the modern jet airliner: These are airspeed, true airspeed, Mach and ground_speed. If the flight crew hasn't the least problem with these four different ways of looking at their speed then why should you have problems with only two different ways of looking at things in this universe? Now on to standing waves.

Erwin Schrödinger showed us that these discrete quanta, in quantum mechanics, could also be represented by orbitals of discrete standing waves while de Broglie showed us that particles themselves could be thought of as waves.

Compton also showed us particles act like waves. Quantum theory shows everything as waves too. So the foundation of everything seems to be waves: The cornerstones of resonances must be regular waves that are quickly absorbed and the foundations of permanent particles must therefore be standing waves that remain and are not so easily absorbed.

Superstring theory shows us that all particles can be seen as one dimensional 10-33 cm. (decimal point plus thirty-three zeros then 1) (Planck length)

massless strings with a different vibration for every different particle. And the way these strings interact is exactly the way the particles interact as well. This is telling you that all particles are nothing but waves of various frequencies.

Incidentally, while we are on the subject of superstring theory, you can combine this new theory of Fitzpatrick's with superstring to explain the masses of the particles which superstring itself doesn't presently do.

Quantum theory has proven to us that you can take pure energy and create particles from this energy. While we know this to be absolutely true, our minds have a hard time understanding such a thing and from this we learn a valuable lesson: Your mind can't easily comprehend the all wave world in which pure energy can create particles. This is done all the time in quantum mechanics. Your mind, however, can't easily understand this because your mind was developed in a subset system. This tells me your mind might not be able to visualize the entire global wave picture without super-computer assist. But if you build up a series of subset pictures using the same laws and same terminology then you can put all these subset pictures together — like you put together a deck of cards — and get a pretty good global, 3D, color picture of what is really going on in this entire universe even though your mind is still only a single card type subset developed mind.

So while this may indeed be a wave universe, our minds, because of the different local gauge time frames, see these things that the big bang produced —

these spherically encapsulated waves or wave trains — as particles and therefore we are going to have to make use of some laws that incorporate this particle (or short spherical wave train) aspect of these waves.

This means our "A" Laws will only fit one subset system at a time but this is all we really need anyway, isn't it? If you can only see one card at a time, you can still get an idea of what the entire deck of cards looks like together even though you may never be able to see either the full deck or more than one card at a time. You will have to see things as sort of both waves and particles but this will be better than no unification at all, which is what we presently have.

Now, if a particle is a spinning standing wave entity — which we'll dig into later — then all particles should be — in some way — similar and they are because they will all have inertial qualities of some sort. What this means is that however small we can find particles in this universe they will all show inertial qualities. I didn't say inertia. I said inertial qualities: There is a difference. We will delve into this.

I intend to show you exactly what inertia is later and that is something no one else on this earth right now can show you.

Now, if all particles are spinning standing waves and all are, in some sense, similar, then where does this plus and minus charge come from? You can only have this element of charge in an unbalanced spin situation: This is why you never see it when all the spins are balanced such as in the noble gases. Charge is a manifestation of an almost totally free electron's spin frequency and whether it remains free or becomes "locked". Something must be "locked" into position before you can even have this aspect of opposite charge. We will go into that in detail too later. Charge is a valid entity in quantum mechanics and I am not questioning its use therein: I am merely going to show you what it really consists of.

Now, if a "tuned circuit" tunes in to a particular frequency only, will a spinning particle also tune in to another spinning particle spinning at the same frequency? The answer is . . .

Before we answer this we have to look at what Max Planck discovered. You have a coil on your car that gives you a spark for your spark plugs. In school, you

learned about transformer action where the voltage increases as a ratio of the turns on a transformer's windings. Well, that's only part of the story. Max Planck discovered there was a bit more to it than that. He found that frequency plays an even greater role in all of this. It was known that frequency played a role but Max Planck gave us the correct role. If you connect the primary of you car's coil to a 12-volt train transformer then the secondary will read somewhat more than a thousand volts. It takes twenty times this much voltage to fire a spark plug. The same coil-transformer does provide twenty times this on your car. Where does this gigantic voltage increase come from? Well, I saw this for the very first time on some of the ignition analyzers that came out on the late model constellation aircraft — I know the super G model had it. You could distinctly see the radio frequency jags given off by the coil and capacitor "tuned circuit" that was placed across the ignition points. Remember, when these points opened, a spark was created and sparks are in the radio frequency range. (The very first Morse code radio transmitters were spark transmitters.) The capacitor, along with the coil windings, creates a "tuned circuit" that keeps these radio waves resonating a bit longer, more or less like a flywheel effect. Your 60 cycle train transformer switched the coil on and off sixty times each second and got a bit over a thousand volts on the secondary but your car "coil-capacitor" circuitry switches the coil on and off several hundred thousand times a second (radio frequency) and gets twenty thousand volts. So it wasn't transformer action that gave you all this voltage to fire your spark plugs: It was having the correct capacitor and coil "tuned circuit" and using the <u>much higher frequency involvement</u> that Max Planck discovered that made all the difference in getting twenty times more of spark voltage that fired your spark plugs or sparking plugs to my more British educated readers.

You can see the light from distant stars. These stars also give out heat like our sun but you can't feel it. Why? Because, for one thing, light waves are at a **much higher frequency** than heat waves and therefore generate a much higher voltage than heat waves and we understand this because of Max Planck again. Even if we take the light spectrum itself, we find that because the violet colors are at a higher frequency than the red colors therefore each quantum of violet light has about **twice the voltage** energy of a quantum of red light. Max Planck is behind it once more.

But Max Planck is showing you something far more important if you look for the

hidden road sign: Not only the electron can produce this high frequency feature of Planck's constant but if you go anywhere in the spin/orbit-frequency spectrum of this entire universe then from the lower spin/orbit-frequency level point of view it will always "see" the higher spin/orbit-frequency spectrum — not acting quite like the electron of course — but yet showing some aspect of not only Planck's approach to a solid as frequency is increased but something similar to relativity as well.

Yes, you see the voltage increase of Planck's constant in the higher frequency things and you see much higher frequency things than that as **solids** because your frequency is so low now that your low frequency wave is modulating — **transforming and becoming a part of** — these much higher frequency waves. But you will no longer see these higher frequency waves as waves once you cross the threshold where the spherical polarization change of these waves is faster than your "blitzseit" of time can effectively note such polarization. These waves at this higher frequency now will appear as a solid particle to you.

You must understand that as two frequencies get further and further apart, the subharmonic "tuning" effect between the two gets less and less. What takes over then is the modulation of the higher frequency wave by the lower frequency wave. Planck's voltage increase is in the subharmonic tuning range and the solid stage is the final modulation range. This is why you could say Planck's effect causes you to see things approaching a solid as frequency keeps increasing. This is really a wave and frequency universe all throughout and the spectrum is tremendous.

My description of this being a piano key universe should be seen as all these spin orbit/frequency levels being a bit further apart frequency wise than regular piano keys: They will be further out of that "tuned" frequency area and more into that modulating area.

Anyway, you know when you look at a solid (*much higher frequency*) object, such as a rock, that it is not really solid inside but it is made up of these molecules that have all these electrons buzzing around like bees but going much faster and they are doing all this over and over and over again with an accuracy better than any digital clock we can build. Now you know this to be a fact, don't you?

If you enlarge one nucleus in one of those rock atoms to the size of a pinhead

then the closest **electron** would be as far from that **pinhead** sized nucleus as the top of **a forty-story building** is from its base. This is telling you that if all this system of electron motion inside this rock stops then there is simply no more rock because it's mostly all empty space. And precisely this spin/orbiting motion stopping is what happens when a particle and anti-particle collide. Most of your present 15th-century science system sees a 15th-century rock and not something of 99.999% empty space. Please remember this because this is trying to prove to you that the electrons in your eyes and fingers are tuned to the same bandwidth as the rock electron orbital waves and this is what is making you see it as solid because it is absolutely not solid. It is 99.9999% empty space and you simply cannot dismiss this.

Spin and motion on orbiting geodesics is seen by much lower spin/orbit-frequency levels as a **solid.** You cannot transfer the same motion from one spin/orbit-frequency system to another.

Now you can understand that motion statement you saw in the beginning of this book.

* Motion is something that is "seen" quite differently by different subset systems.

This is another vine covered road sign that no one saw because this is pointing out to you that this thing you call motion — that you have used for a foundation block for your science — simply doesn't exist if viewed from outside your system such as we view the rock. The rock looks solid to us doesn't it? Yet we know all those electrons are moving all around inside it yet to us out here all that motion somehow seems to be canceled out entirely. That's the problem with motion — you can't move it from one subset spin/orbit-frequency system to another. But you can use it providing that you use it only within one particular spin/orbit-frequency system at a time and that's the way we will do it in this new Theory of Everything.

Once you know the speed of light is a constant then this demands investigation — not patching — because this is a vine covered hidden road sign telling you that all

your motion in your system ends up being totally nullified if looked at from several lower particle-frequency levels.

Motion is OK if only used inside your subset system.

Inside the rock all these moving electrons must be making these "tuned circuit" type of "blitzseit", momentary connections with everything within that atom or molecule.

This "blitzseit" — by the way — is the shortest interval of time measurable in any local gauge theory (*spin/orbit-frequency level*): It will differ from local gauge theory to local gauge theory (*spin/orbit-frequency level*).

You will see this exact "tuned circuit", momentary, "blitzseit" binding method later when we come to the "A" Laws. The thing you must keep firmly in mind is that all binding is momentary but repetitious and the same elements will always bind with the same strength no matter what the distance. You cannot distinguish binding from quanta in this theory other than the fact that quanta are electron binding elements. In this theory all things can bind in momentary but repetitious quanta type chunks where each distinct entity binds with the same distinct energy no matter how far the distance. Different entities, however, will bind with different strengths. In this theory, quanta would be a subset of the many types of binding. The fact that light energy comes from electron quanta binding does not alter the fact that these electron quanta are still a binding subset: Atomic energy comes from the quark binding energy quanta and you will see this as you read on.

Our "A" Laws show you why we have particles binding together and why aggregations of these same particles must remain a certain distance away from each other as we see in both the microcosm and macrocosm.

If you think of that then think of superstring theory and then you can see that if this universe has spin — which it has — then if a certain wavelength or better yet a wave train of a certain wavelength were given a spin then it would not only have spin but precession as well and it would really describe a spheroid. You have the choice — under relativity — of either seeing it spinning or the universe as a whole spinning: It makes no difference. Each wave will still be seen to shift a slight bit before the next wave and the entire encapsulated wave train will still describe a

spheroid. Therefore, you are seeing that particles are behaving the same as the waves they are built from and this is essentially what Compton saw. Isn't this what superstring is telling you as well?

For those of you who understand string theory, a plain quantum string is a wave and a closed looped string is — because of precession — a spherical particle and you don't have to be a mathematician to see there would be an infinite number of these vibrating, closed looped strings (*string theory*) all spaced apart at various periodic frequencies much like piano keys.

Now on earth here all these radio waves of any wavelength all finally get absorbed but if there really was a big bang and so many of these waves — of one particular wavelength — were produced then there would be absolutely nothing at that wavelength that could possibly absorb all of them if they were processed correctly. And if they were processed correctly then they could be made so that they could not only stay here but be given this superstring spin, precession and a spheroid shape as well, couldn't they? This spheroid encapsulation is so very important in building this entire universe.

Now take a giant step.

I never did like George A. Gamow's particular explanation of the big bang because it never showed me where all that energy came from in the first place so I have a much better answer. Gamow modified Lemaître's big bang: Now I shall slightly modify Gamow's big bang.

I am not a cosmologist. You should see, before you finish, that cosmology is only valid if kept within certain parameters. I have no intentions herein of even contemplating how all this was built. I am only going to describe to you what must, in fact, already have been here.

OK, let's say we have this universe of spin/orbit-frequency levels where each orbiting level is very much like a piano key tuned to a certain frequency much like a single piano key is tuned to all the rest of the piano keys (*string theory*).

The separation between all these encapsulated spheroid wave train frequencies is extremely critical: All sister particles of the exact same frequency — for a stable global universe — must all "see" themselves remaining a certain distance apart

distance wise: Part of this is because of a feature called "angular lock on" which comes later. This entire group of similar particles must also be separated frequency wise from the other higher and lower frequency groups exactly like keys on a piano (*string theory*).

Remember this is a frequency universe and since all particles are waves, whether similar or not, they must all be kept far enough apart — both distance wise and frequency wise — so that there are no close harmonics between any of them that can rob any particular object or group of an excess amount of energy.

Yet, they must all have some far distant subharmonic frequency of linkage with the piano key type particle group above and below them in frequency. These linkages can only be momentary and the particle momentarily linked must be able to regain its energy equilibrium from its surroundings. A method such as this would be enough to link each particle with its microsystem and its macrosystem but yet not rob it or give it an excessive amount of extra energy. When you master our "A" Laws, you will see that just enough attractive and repelling linkage is there to give us this type of universe we live in. You will also see exactly how energy is transferred.

This "A" Law world is your real world and your macrocosm is composed of the *lower* particle-frequencies and your microsystem is composed of the *higher* particle-frequencies. You see the microcosm as smaller but it really isn't: From the *"universe's point of view"* the microcosm elements are all merely higher frequency spherical encapsulated waves or wave trains.

At this point, some are going to say this writer must have it backwards because if higher frequencies are smaller particles and lower frequencies are larger particles then this is just the reverse of the de Broglie wavelength.

I can assure you that this is the correct way and later I'll point out everything about the de Broglie wavelength to you.

Gödel's proof has pointed out to you something is wrong so, to see the big picture, you must change your idea of small to higher frequencies and your idea of large to lower frequencies. These are terms this universe will accept.

Once we have seen that Louis V. de Broglie, Schrödinger and Compton have

shown us it is all waves then let's use a slightly different terminology along with some brand new laws.

Remember, we want to see this big picture from the "universe's point of view". We are not interested in seeing things any longer using terminology strictly from our spin/orbit-frequency level's point of view because that view, using the old rules and that strict old terminology, has been getting us nowhere. Gödel's proof has been amply warning you about this for almost seventy years now. That was another road sign everyone entirely missed: Incredible!

So this universe is just like one big universal piano with God only knows how many keys. See, we are only aware of the few keys in our particular octave or so: This may be far, far less than a billionth of a billionth of a billionth and so on of what may in fact be here. These keys are all the permanent particle groups such as the electron, quark, proton-neutron and then solar system and galaxy and the Virgo super-cluster that contains our galaxy and the other galaxies around us, and from there we can even imagine larger clusters and we can continue on and on: All of these things are orbiting — vibrating (*string theory*) — a certain specified frequency apart; even further apart than piano keys.

Yes, you read correctly. I did add solar system, galaxy and Virgo super-cluster and so on to the list of the microcosm elements and by doing so we add gravity to the equation because all of these much lower spin/orbit frequencies make up the well modulated gravity wave but they all do not contribute equally to it by any means. Eventually when humans are able to determine, detect and measure these frequencies of rotation better than is presently being done then they will find all these too will fit perfectly into those piano key frequency slots just the same as do all the microsystem particles but the problem for you is that you have no receptors designed yet for the solar system spin/orbit-frequency level; galaxy spin/orbit-frequency level or the Virgo super-cluster spin/orbit-frequency level.

The fact that you have to keep changing universal standard time by a second every now and then tells you gravity is not steady and this is another hidden road sign warning you that gravity is a long wave modulated by other ultra long and extra long waves.

Your present science rules are derived from your experiences here at rest on earth and therefore they will come closest to some average of both the proton-neutron

and the solar system spin/orbit frequency levels.

You also have these "blitzseit" momentary "tuned circuit" antenna connections between everything just as must be happening inside each atom over and over and over again with an accuracy we can only dream of achieving.

You see all these "blitzseit" momentary "tuned circuit" connections as particles, space and time. This was the very best your mind could do for you: You must realize, at this point, that relativity has proven that your mind's idea of one single space and time setup for everything in this universe is not quite good enough.

You must now stop thinking of space and time per se and think of it like quantum theory does: Quantum theory has set the pattern with QED and QCD. This is kindergarten for what's coming: It's all going to be separate spin/orbit-frequency levels with each one being a separate card in this big universe deck of cards that we can't see but these individual cards we can see. As I will mention herein many times, unlike quantum mechanics, we will use a standard set of new laws and new terms for each different spin/orbit-frequency level — each gets a different card. In other words we will have different particle levels but we will only have one set of laws and one set of terms for all of these various spin/orbit-frequency levels from electron to quark to proton-neutron to solar system to galaxy to Virgo super-cluster.

The big bang was merely the **retuning** of a few of these spin/orbit-frequency system keys of this big universe grand piano: This explains why the big bang began not simply at one point but instead "all throughout" the universe. This is a necessary assumption for a big bang model that you can calculate the history of all the way back to Planck time. Before Planck time, in this new theory, electrons, quarks, protons, neutrons, solar system and galaxies never even existed but some other type particles and aggregations with slightly different spin/orbit-frequencies did in fact exist. These previous piano keys though had gotten slightly too far out of tune for continued existence in this master global grand piano type of universe.

Resonances; all bosons; photons, gluons, etc., could also be seen as particles in this new concept just like they are in quantum theory <u>but</u> since they do not have that main qualifier for permanency — **this mandatory piano key tuning** that is paramount in this theory — they are excluded from particle status in this new concept. In this new theory, Bohr is seen as being correct by saying that the

photon was merely a wave.

By using this new piano key (*string theory*) concept of **permanent** particles, I've been able to sweep the house a lot cleaner than Bohr has: When you can thus eliminate over two hundred momentary particles, it clarifies the waters tremendously.

While resonances; all bosons; photons, gluons, etc., are indeed also waves, the only spherical encapsulated waves that will be able to stay here as permanent particles are those that are at exactly the correct piano key frequencies spaced at specified intervals. What must have happened was that somehow, over time, too much energy was lost or gained by one specific octave or so of keys and this universe indeed has some type of global wave and frequency gauge invariance making it mandatory that all these keys stay perfectly in tune with each other. Our big bang was merely an automatic piano tuning of sorts with all new particle-frequencies arriving "all throughout" as the quark and these protons and neutrons and electrons and then eventually us. Although we think of the big bang as something tremendous, I'm sure that to this entire, global, unseen universe spectrum, it was only a whimper of available energy. The big bang was simply a normal balancing and piano key tuning that this universe must from time to time be forced to resort to. This universe, my friends, is far more than billions of billions of billions of times greater than many of our present scientists even suspect. It is also a frequency universe that to you may look solid in spots but yet these supposedly solid objects when placed in the proper motion will all — much like the electron — display some extremely similar wave like qualities. Because the foundations of all solid objects are really waves then we will find certain motions in every level where these supposedly solid objects will all behave the same and thus we can come up with a standard set of laws and terms.

The reason objects appear solid to you is that, here on earth, your "blitzseit" of time is too long compared to the "blitzseit" of the electron and you will not be able to determine the polarization of this electron's orbital wavelength so it's no longer possible for you to see it as a wave and it has to appear as a solid to you. For you to see this as a wave, its polarization has to stay relatively the same during your "blitzseit" of time but since the orbital of the electron is changing its polarization so quickly compared to your "blitzseit" of time, you simply cannot pick it up as a wave train and you sense it as a particle instead of the spherical

wave train that it really is. This is why we sense the Planck's constant approach to a solid as frequency keeps being increased.

I got slightly off the course of the big bang there but going back to the big bang now, isn't this better than Gamov's (*He spelled it this Russian way too.*) explanation that doesn't explain where all the energy for the big bang came from?

Not being a cosmologist, I can't tell you how it all got here but at least I'm glad I can be of some help to you in clearing up a few loose ends.

The one thing you absolutely must remember is that your present science with all its rules and terms can never be used and mixed with our forthcoming "A" Laws.

Remember that we've downgraded all our present science to something like local gauge invariance and these rules and terminology are to be used in one local spin/orbit-frequency level at a time.

So use your science and your terms here and when looking at it from the global "universe's point of view", use the "A" Laws and their terminology.

You must never mix these sets or parts of these sets.

Use all of one set or all of the other set.

If you understand all of this — and you've read your encyclopedia CDs — then you understand as much as you really need to know about properly using and working with these new types of concepts such as local gauge invariance and symmetry.

* * *

5. Fitzpatrick's "A" laws

Ampere gave us the laws that we should have seen were the ones this universe uses but it was the ideas that Faraday advanced that we embraced, so Faraday's set of local gauge theory rules won out over a superb, global, universal set of laws.

Humans adopted these local gauge theory rules, instead of the universal global laws because these local gauge rules seemed to be so easily proven mathematically.

Einstein proved all that seemed to be was not. But this did not in any way affect this 19th-century science structure nor did it adversely affect any of the high priests of that scientific religion type of structure: They merely added some special relativity **corrections** to the microcosm and some general relativity **corrections** to the macrocosm; then they sat back and continued to collect their paychecks. I ask you in all sincerity now, how do you search for a grand unified theory using a crumbling science structure that forever is needing many relativity **corrections** all the time?

You must understand that you are in a frequency world. You can comprehend only some of it. But this is all you need to understand in order to see the big unification picture.

If your science foundation is only half truths to begin with then when you input your computers you are simply putting garbage in and you will still keep getting garbage out, just the same as you have always been getting. But the attitude seems to be, "If the taxpayer is paying for it then what the hell."

You must realize that you need a brand new <u>science</u> <u>structure</u>: You need a new, universal, global edifice of some sort.

These coming generations of humans will witness the proof of these new universal laws using the future super-computers.

This new theory, even minus the necessary math, will give you this big picture, road map of everything as seen in each local gauge view — that all the present theories simply don't — so take it and utilize it. Even with this extremely limited terminology and without all the math yet in place it still will show you which roads to take in all of the present fields of relativity, quantum and superstring

theories and it will also show you which paths to avoid. Your present math cannot do this but this new theory most certainly can.

Again, use this new theory in conjunction with what you now already have.

Superstring theory is correct as it portrays these dimensions being folded up when you only view from one local gauge viewpoint. From your viewpoint, the electron's dimension is folded up to point size or zero. You will find out the electron "sees" itself as definitely having a dimension and it is because of this dimension that you get what you see as light, velocity, magnetism and charge while from the electron's point of view all it has are simple inertial qualities.

I'm trying to show you that there are other local views besides yours. They are just as good as yours are too. You have to translate all your present scientific terminology to common terms and then you can see both their view and yours. After you do this translating, you'll see that all local gauge theories — including ours — can use the same "A" Laws. You then use that new global terminology along with these new "A" Laws as you look at each separate local gauge view.

This is the only way meaningful unification can ever be achieved.

It will take you a while, as you look around this new place, to see exactly how this new house is built. You will have to read a few parts of this over and over again until you fully understand it. It took me over thirty years to get it all down pat but I've got the keys now and I'm letting you inside this new structure so you shouldn't have anywhere near the number of problems that I had in figuring it all out.

We will soon have a look at these "A" Laws. But first we need to take notice of a few more things.

Niels Bohr saw light as a wave and Einstein preferred seeing the photon of light as a particle. While in this theory it's a wave only, if you have studied science then you should know why each of them had a valid argument under their old science rules.

Having said all that, you still have to see that this theory is telling you what Compton told you that waves **sometimes** act similarly to particles. You simply

cannot ignore this.

The attributes of all particles stem from the attributes of the waves from which these particles are composed.

When you see two things hit, you attribute this action to the particles themselves but you fail to attribute it to the correct underlying wave concentration at that point of collision. Nothing really touches. No electrons ever touch each other. You are witnessing concentrated wave action from a distance that you call particle action. Things can and do also repel and attract even though from your or other standpoints they may be from a further distance or far away.

When you see two billiard balls collide and bounce apart, this action that you see and understand as "normal particle action" does not actually exist because no atomic particles in those billiard balls ever even came close to touching each other. Seeing those billiard balls colliding is about the same as a person who sees how to drive a car but knows nothing about what makes that car run. It was really the underlying concentrated "wave action" that we do not fully understand that made those billiard balls spring apart after they collided. Our minds and our scientists have certainly simplified it. This simplification was done <u>at a price</u>. Relativity shows us the price was accuracy.

We also must take into consideration the Niels Bohr-Werner Heisenberg theory of complementarity that essentially says that the human mind somehow only gets part of the picture each way that observations are made but all of these separate observations go together to complement the big picture of what must really be here.

Albert Einstein, Erwin Schrödinger, Louis de Broglie and many other physicists did **not** agree with the Bohr-Heisenberg idea of complementarity.

Complementarity presents us with a major problem because if we accept it then we, like Bohr and Heisenberg, essentially throw in the towel and admit possible defeat saying the human mind may never be able to <u>completely</u> understand what is behind it all.

Bohr and Heisenberg have put forward a good point about this one mainly because of the subset nature of our science which Einstein totally ignored even though Gödel's proof was published in Einstein's native German language in 1931 and Kurt Gödel along with Einstein were both members of the Institute of Advanced Study at Princeton, N. J..

The wave foundation to everything is another aspect leading to complementarity and I've struggled with this for decades and I now see that without future super-computer assist that we may never know what is behind it all as far as this global universe wave foundation is concerned, but we can, presently at least, get to the unification answer providing that we understand the subset nature of our science and we treat each of these subset systems as a separate card in the universal deck of cards. Quantum theory has shown us the correct approach.

Merely improve upon it.

These thousands of years of retained subset particle knowledge of things must have given us the Heisenberg-Bohr aspect of complementarity.

For example, we wouldn't see the complete picture by looking at it in the particle world because this is only a subset world. We are not able to see the big picture of everything in the wave world simply because we are not trained — nor are most of us able — to see things as waves. We see things as particles.

This, I now feel, is the reason for the Heisenberg-Bohr aspect of complementarity.

If all things are only waves then all particles have to be thought of as similar from microcosm to macrocosm in that they all essentially are made up of nothing but big bang produced spinning, precessing, spheroid encapsulated standing waves that ended up perfectly balanced between close binding and macrocosm binding.

OK hold on tight, here's where you, once more, begin to see the actions of Berkeley's and Mach's surroundings.

All permanent particles have their close binding and their macrocosm binding perfectly matched.

One particle that doesn't is the neutron: This is why the neutron needs protons in the vicinity because with these protons close at hand then the neutron's close binding and macrocosm binding are perfectly matched and the neutron can then remain here. See chapter 18.

The one lesson that must be learned is that when something is given a new spin or new orbit then this upsets the original close binding to macrocosm binding.

Energy is merely the temporary disruption of close to macrocosm binding that results in a new spin/orbital arrangement also having close binding equal to macrocosm binding. In other words, energy is a temporary binding interruption while the close to macrocosm binding is being changed. It can be changed more in either direction too. This is why you can either gain or lose energy. We'll go into this later. It is possible for the big bang to have re-tuned the piano keys so that various frequencies of spherical encapsulated particle-frequency types were produced as the particles we now have and these exactly fit into the proper piano key frequency slots and stayed here, while any others were quickly absorbed much like resonances are yet.

We must also answer the question from what substance are these waves built? You will see that in this new hypothesis, with waves simply being an imbalance between close binding and macrocosm binding, that the answer to this is much better than you are presently getting in the standard model now being used in quantum theory.

If all things are in reality nothing but spinning standing wave spheres then this forces you to search even harder now for the real source of these invisible forces of magnetism, gravity, charge, centrifugal force, inertia, gyroscopic inertia and the strong and weak forces.

We are now going to dismiss from our minds our old laws of gravity, magnetism, charge, centrifugal force, and the strong and weak force and substitute some simple new all purpose laws that will **take the place** of all of those aforementioned *old* subset *rules*.

The old rules don't go into the trashcan: Far from it. Not only is your present math designed especially to use with these old rules but your mind will have a bit of a problem working with these new unified force "A" Laws as well. However, in spite of all this you must temporarily dismiss those old rules completely from your mind whenever you are using these new laws. It's going to be hard but if you fail to do this then you will definitely not see the big picture of why everything all works the way it does.

To move from your old subset rules to global laws, so you can get the big picture, use only these new "A" Laws. You can't mix your old rules and terms with these new "A" Laws and their terms. Either use one set of rules and terms or the other but do not mix them.

As you start using these new "A" laws it will be like riding a bicycle for the very first time.

There is no other choice but to use gravity, magnetism and the strong and weak forces as you are examining things in your world but as you try to see the relationships between yourself and the micro or macro worlds then you are best to entirely forget your old rules and use nothing but these new "A" Laws.

It must be thought of as switching from driving a gearshift car to driving a car with an automatic transmission whenever you want to see the entire big picture of everything.

As previously stated, some old factors that you do need to continue to keep in mind — as you switch over — are all the <u>inertial</u> attributes of things, especially those of angular momentum caused by the gyroscope, pendulum and vibrating elements. There are good and substantial reasons for doing this because this new unified force is really in essence an <u>inertial</u> type force in many respects.

All particles of any type will have some form of inertial qualities.

Keep in mind as you use these "A" Laws that vibrating things are essentially the same as spinning things seen edgewise especially when you take into consideration the "bad quarter" that we cover later. This force can see right through certain things because a different frequency can sometimes become transparent. The terms "spinning or moving" in the coming laws also pertains to vibrating things as well.

Be warned that the forthcoming picture of the universe that is about to be revealed to you is not at all what you expect. It is definitely not what present scientists want simply because the way math is presently being used is not going to work at all using this new notion. If you have dwelt either in the realm of general relativity or in the world of quantum mechanics then you will see why this works so beautifully with both of those worlds. I am not saying it will work

beautifully <u>mathematically</u> in both of these worlds: The strange part about this image is that you really don't have to be proficient in math at all to clearly see the big picture of things as you piece everything together using only this brand new hypothesis.

Here are your new simple global laws that this universe uses. Remember the word "see" was used in quotes to emphasize that these frequencies and paths must be seen by those portions from that particular local gauge spin/orbit-frequency view and not yours. In the coming laws, the word "object" means a spherically encapsulated standing wave permanent particle of any frequency or aggregation of same.

I told you the principle would be **extremely simple** and these "A" Laws are. They are also definitely wave-particle laws and therefore subset laws that our subset developed minds can understand and use.

The French will call these the Ampere Laws and the Germans will call them the Aufbau Laws. I'll stay out of this and simply call them the "A" Laws.

The space-time interval is <u>diminished</u> the most between any two objects, the closest sides of which "see" themselves spinning or moving on parallel paths in the <u>same</u> direction at the same frequency or a close harmonic thereof. You can also say these two objects will attract each other.

Both space and time are created the most between any two objects, the closest sides of which "see" themselves spinning or moving on parallel paths in <u>opposite</u> directions at the same frequency or a close harmonic thereof.

You can also say these two objects will repel each other.

Of great importance, in the two preceding laws, is that these laws are <u>frequency</u> laws and they work separately for each separate spin/orbit-<u>frequency</u> level which means these individual wave-particles must *"see"* themselves doing these things from their viewpoint in their local gauge environment. It does not matter how some other spin/orbit-<u>frequency</u> level views these things because space and time and indeed the average space-time interval is entirely different for each different spin/orbit-<u>frequency</u> level.

These two laws look equal and opposite but they are not: The 1_{st} "A" law "locks on" while its opposite 2_{nd} sister law never does. This is because the total force is generally centralized and you can feel this 1_{st} "A" law "lock on" when two magnets come together. These two laws — along with "angular lock on" that comes later — result in limits of aggregation being established all throughout this universe: This is why there are limits to the size of atoms and limits to the size of stars as well.



The Aufbau or Ampere Corollary

The aforementioned forces, or space-time intervals, between two objects will vary proportionally with the cosine of the angle of their paths and they will have a torque that will tend to make the paths parallel and to become oriented so that objects on both paths will be traveling in the same direction.

Or

All objects that "see" themselves traveling *in the same direction* on parallel paths at the same frequency will attract and/or space and time, at that frequency, between them diminishes.

All objects that "see" themselves traveling in <u>opposite</u> directions on parallel paths at the same frequency will <u>repel</u> and/or space and time between them, at that frequency, increases.

Remember it's the space-time **interval** that is being diminished by the 1st "A" Law and increased by the 2nd and this can be seen as either simply **more space** or **more time** or **both**: Also remember that this perception will depend on the observer's geodesic or path and to you it will seem as if it's always space and never time that is being created or diminished but read chapter **18**.

Remember also that this space and time that is either created or diminished will be altogether <u>different</u> at <u>different</u> frequencies.

As you look at these laws you can immediately see that <u>for each</u> single spin/orbit-<u>frequency</u> this must indeed be a type of steady-state universe exactly as was put forth in an article "A Different Approach to Cosmology" that appeared in the April 1999 edition of *Physics Today* written by Geoffrey Burbidge, Fred Hoyle and Jayant V. Narlikar saying we were actually in a quasi steady-state universe.

You must keep in mind that your world is only a few of these piano keys and that anywhere you go on this piano keyboard that the lower keys will "see" the higher keys performing much like we see our electrons performing with Planck's approach to a solid as frequency is increased and relativity and all the rest of the things we associate with our electron's behavior.

Remember that the **electron** is also built from waves so it is not that much different from all other particles in this respect. **But** we see it at a **higher** frequency and this is why we ascribe all these magical qualities to it when we really shouldn't. These magical qualities merely come from the **higher electron** frequency.

We can determine the spin/orbit bandwidth of the solar system because this is the easiest bandwidth to determine and after that, scientists must try to determine all these other spin/orbit-frequency bandwidths and how far apart they all are from each other frequency wise. We'll find some common separation ratio there not

only between particles but also between the micro and macro worlds.

To us human beings, that are composed of a narrow band of these frequencies, the universe has to be termed a quasi steady-state universe and now we know the human mind had to do the best it could to cope with such a universe. The use of the four fundamental forces, that we are now using, was a novel way various human minds finally found to cope with the different forces in such a universe. The old 19th-century science worked fine providing we remained slow and not too massive — where none of Einstein's relativity math would be needed — and this is precisely the arena that humans found themselves in for several thousands of years before 1887, the year of the Michelson-Morley experiment. From 1887 on and especially after Einstein's papers in 1905 & 1915-16, in light of all this new knowledge, everyone has seen our ancient rules simply do not work properly anymore.

Scientists did not derive the correct universal laws that would work properly. Instead they started making new rules and then used these new rules as patches on some of the ancient thousand year old rules but now this patchwork quilt of various types of old and new rules used with various types of old and new math is becoming more and more laboriously unworkable. It is becoming less and less understandable as well.

The entire universe that has no mind at all seems to have no problem whatsoever of understanding it because it doesn't use our scientific local terminology at all: It simply uses these "A" Laws.

* You will notice a certain aspect of Planck's approach to a solid as frequency is increased and that of impedance matching with these laws as well.

You will see this aspect of Planck's approach to a solid as frequency is increased with these laws because in general, this attraction or repulsion will increase as the particle spin or movement increases in frequency — as viewed from the lower frequency (larger) particle. As you will later see this perspective of it cannot be directly included along with the "A" Laws because surroundings will also affect

this and surroundings of different frequency objects will not only all be different but some, unlike our inertia, will not be homogeneous and isotropic in the large.

Because of the aspect of Planck's approach to a solid as frequency is increased we will not notice as strong an action by slower spinning or orbiting entities: Venus, for instance, always points the same face toward this Earth when the two planets come closest together which undoubtedly is some subharmonic frequency relationship between the Earth and Venus which are both almost equal in mass. And this is E PLURIBUS UNUM (one among many) of the numerous planetary motions that will get solved once scientists understand that they must be looking at all these spin and orbiting frequencies. Each spin and orbit is there for a reason and this reason is that of perfect balance between close neighbors and the macrocosm.

This spin/orbit-frequency science upgrade is one science upgrade you had better heed.

The inertial qualities of the locking on sister particles or aggregations (*Venus and Earth are about equal in mass.*) must be the <u>same</u> for maximum "lock on": This is equality of impedance. You already know impedance has to match in radio circuitry for maximum energy transfer.

There is no such thing as an elementary particle in this new theory because these have to be built of waves which themselves are being generated from another spin/orbit-frequency level and since our mind seems only to be able to comprehend one spin/orbit-frequency level at a time then we will have problems with these waves because they are imbalances between particle levels. You must remember that all particles are essentially built of waves which themselves are imbalances between their close binding and macrocosm binding but the trick of this big bang spherically encapsulated wave is that it spins and precesses and arrives back just in the nick of time to be exactly at the starting point again every time the "blitzseit" in several lower levels below begins. This lower spin/orbit-frequency level must see all energy transfers in its microcosm as already having been completed and not as being underway.

Space and time are actually being produced by these various spherical encapsulated wave particle levels all spaced apart at essential spin/orbit frequencies like piano keys.

This manufacture of space and time by these big bang processed wave train spheres did a good job of preventing their absorption: This our minds can comprehend.

We must consider all these particle-levels together with the galaxies and upward that we can detect are only an infinitesimal fraction of what must really be here. These things are also telling you that these simple "A" Laws, that you see here, are only a tiny part of what is yet to come.

Remember this next paragraph? You have seen it before.

Space changes and time changes but the <u>average overall</u> space-time interval never changes in each individual spin/orbit-frequency level nor does it change <u>in this</u> system of ours.

This is pointing out to you the fact that whenever you do diminish space-time in one particular spot then you also must be creating that exact amount of space-time somewhere else in the same subset system: In fact this is Einstein's original "cosmological constant". This is telling you that rectilinear motion or motion on geodesics inside a system does not change the overall average space-time setup in that particular subset local gauge system. This is why when you look at a rock, from your place of rest and from your lower spin/orbit particle-frequency level, it looks solid.

All of this will be hard for you to believe but the universe from the smallest unit in the microcosm to the largest unit in the macrocosm uses <u>only</u> those previous laws, in bold black print, to build itself.

The rest of this text — and especially all my earlier books from 1967 on — are simply an explanation of how these two "A" Laws work and therefore how this entire universe works using **only** these two **extremely simple** laws.

As you put these "A" Laws to work, you will then begin to see the universe that Einstein's mathematics showed to him but you will not need any math at all to see even more than Einstein saw. You will begin to see a brand new universe that is truly astounding. Using these "A" Laws, many more of our present relativity and quantum problems get solved and you get answers to everything that present science simply cannot give even the foggiest reason for. You also now get

<u>direction</u> and this you have never before had and this may well be the most important thing this new theory gives to you right now.

As you use these "A" Laws more and more then you will begin to see why we have relativity and why we have quantum mechanics and why we have superstring and why we have reality.

Many readers will be acutely aware of the lack of math that is needed to accompany those previous "A" Laws in **bold black print**. You will have to be philosopher enough to accept those limitations that have been forced upon you while this new math structure is (*possibly surreptitiously in some places*) currently being assembled (See the longer printed version). Besides that, people in the publishing business have sternly forewarned me that the number of general readers of this will drop off exponentially to the number of mathematical formulas that are included in this.

Henri Poincare always claimed that Euclid's methods were far, far more important than any of his math. Since Poincare was one of the most eminent mathematicians of his time and since these publishing experts must know what they are talking about then this is another reason I'll not be adding any perplexing mathematical formulas in any of this text. The length of this treatise alone should be enough of a problem for you.

I do need to remind you once more that the math that will eventually be developed for these "A" Laws shall in the long run be far, far more accurate than anything you presently can draw upon. Using the law of gravity, we now can work out only the orbits of everything in our solar system. And as I said before using these "A" Laws in our solar system eventually, it now appears, we will be able to get even the spins of the planets along with the differential spin of the sun as well as the orbits of everything.

So now is the time to put on your thinking cap.

I hope you remember earlier when I was explaining Einstein's space and time right triangle that I explicitly stated that in relativity the space-time interval (the hypotenuse) stayed the same all the time: I also said that it stayed more or less the same in our particle system.

The space-time interval does roughly stay the same overall in each particle system but it does change drastically from spin/orbit-frequency system to spin/orbit-frequency system and these "A" Laws are showing you exactly how and why it will change so much.

The concept of the space-time interval is an important concept in relativity but unfortunately it is not quite acceptable to our subset minds so it's best if you break it down into space and time the way your mind does. Here's the way you do it:

Consider our "A" Laws as manufacturing space instead of space-time, Then if you consider each "blitzseit" of space that is either created or diminished by the spin of two quarks then this "blitzseit" of space created or diminished by these quarks would be worth more time than that "blitzseit" of space created by two spinning electrons and worth less time than that "blitzseit" of space created by several spinning galaxies. This is one way you could look at space-time. The human mind is extremely versatile in that it is able to see different concepts.

Besides the necessity of each spin/orbit frequency level having its own distinct place of rest, another reason that we must have different gauge theories for each different spin/orbit-frequency level is that the space-time interval changes so greatly from particle level to particle level because of the different amount of wave-particles and the various frequencies and various symmetries of construction in the diverse surroundings. This additionally is why we need to have all these different spin/orbit-frequency levels and why Einstein never found any unified field.

Distance, motion, mass, space and time are all things that only relate to one certain subset spin/orbit-frequency level and these terms absolutely do not have the same meaning if taken outside of the system in which they are used. If you doubt this then look once again at that rock we looked at earlier that looks solid but in which we know electrons are really in motion.

This may be a unified frequency wave world but it most certainly is **not** a unified spin/orbit **particle-frequency** world.

You can plainly see, by looking at our "A" laws, that the construction of the space-time interval is entirely different for various spin/orbit-frequency levels.

* This means that both time, distance and motion are different for different particle-frequencies. Therefore time, distance and motion at the proton-neutron level is nothing at all such as that experienced by the electron.

^

Time and distance or shall we say the space-time interval is similar to white light. Even though you think there is such a thing as white light, you know that no laser can manufacture white light simply because there is no such thing as monochromatic white light. Lasers can produce colored light because all the various colored light waves do exist. White light is a <u>mixture</u> of all the colors. Your <u>distances</u>, along with your space or your time, like white light, are all nothing but a <u>mixture</u> of all the various distances or space or time of the different spin frequencies produced by the electrons or the quarks or the protons or neutrons or the solar system or the galaxy and so on.

In fact, present science has improperly lumped together the proton-neutron particle frequency level with the solar system and the galaxy and Virgo super-cluster particle levels as far as mass, inertia and gravitational qualities are concerned.

A big problem for future scientists will be in separating all this out. Just as gravity extends to several spin/orbit-frequency levels, so does everything else. Once certain places of rest are specified then with future super-computers, people will have to determine which spin/orbit particle-frequency levels are giving what percentage of the particular inertial qualities they are looking for.

Places of rest <u>must</u> be defined and then each of these entirely separate evaluations must be made strictly from each of those respectively. Only after this is done will you have a mathematically superior setup to the one you use now.

You must look at only one spin/orbit-frequency card at a time.

This is going to present many problems to us too: For instance, I have included this proton-neutron spin/orbit-frequency level along with and being a lower frequency than QED (*electron*) and QCD (*quark*). You do have lower particle-frequencies than these though. The solar system and galaxies are also

creating and diminishing space and time at their various spin and orbiting frequencies aren't they? Is present science taking this into consideration?

The answer is no.

Our present science, unknowingly, thoroughly mixes this proton-neutron level with the solar system level and the galaxy level and even this place of rest in the Virgo super-cluster level. It's going to be up to future scientists to resolve these different levels. What role are these super low frequencies playing in all of this?

Even though your mind thinks otherwise, you cannot accurately specify a certain distance or a certain time or space measurement unless you specify the exact spin/orbit-frequency level.

Now I certainly hope you understand that the time, distance and motion that you see is essentially the same as the white light that you see. The triumvirate of time-distance-motion and the white light that you see are creations that your mind has developed especially for you. Neither exists in the way your mind is portraying them to you.

* These "A" Laws also are telling you that at different frequencies or different smaller or larger levels (from your local view, using the present science) that from your viewpoint you would see these different levels having entirely different symmetry setups.

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From the point of view of our present science system, each different particle-level will be constructed differently. From any local gauge viewpoint it will look like each different particle level has an entirely different gauge theory with a different symmetry governing its equations. This is why Bohr had to change centrifugal force a bit before he got all those spectral lines corresponding to the orbital drops in the single electron hydrogen atom and why he could not get them lined up in the heavier atoms.

*But using these "A" Laws and translating all your present local gauge terminology into **frequency**, **motion**, **orientation** and **inertial qualities** — as

seen by that particular spin/orbit-frequency level — you then see the global, universal picture of what is really going on because you now have one terminology for all spin/orbit-frequency levels including ours here on earth. **This then becomes the theory that Dirac predicted.**

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You can also see from the "A" Laws that surroundings of the same frequency are the key to the distinct local gauge invariance and symmetry of each distinct particle level as seen by our present science system.

These "A" Laws are showing you that surroundings of the <u>same</u> spin/orbit-frequency determine the <u>inertial qualities</u> of any one particular spin/orbit-frequency level local gauge view.

The quarks surrounding us determine our inertial qualities and the surroundings of the electrons — because they are at a far different spin frequency — determine the inertial qualities of the electron. Because the proton is at some subharmonic of the electron's frequency then the electron behavior is also going to be somewhat determined by all the protons in the surroundings as well.

These "A" Laws, therefore, start out by explaining the reason we need quantum mechanics to view the microcosm and that it in turn has to be split up into QED and QCD because in each of these areas you are examining different spin/orbit-frequency levels. Hence you have learned that each level of spinning and rotating things will have a different symmetry from the ones above or below it as we look at it using our ancient terms and viewing it from our narrow local gauge viewpoint.

And this is the way quantum theory sees it isn't it?

Because our "A" Laws create or delete space and time per se then there will be no possible way to test to see if they are indeed building or diminishing space as I have shown herein. You will see later that <u>some</u> of the gravity wave modulating frequency depends on the frequency of the rotation of the Virgo super-cluster and both inertia and gyroscopic inertia depend on the frequency of the rotation of the quark. This means **both** of these two frequencies are way <u>out of the range</u> of any existing frequency measuring devices that could possibly be used to further check

this using any type of **interference** or **fringe** test. So at the present time this can't be proven; neither can it be disproved.

Please also remember that **interference** or **fringe** testing can not be carried to much lower spin/orbit-frequency levels because all motion in one particle-level gets completely canceled out when observing from much lower spin/orbit-frequency levels.

Before we leave this section I want to point out one other important global universal law and it is Newton's 3rd law of motion.

It is a global universal law and every bit as important as these "A" laws. It is the following:

* Every action has an equal and opposite reaction.

There is no guarantee though that 100% of these reactions will be contained in each separate local gauge system spin/orbit-frequency level.

Newton's 3rd law of motion is a big factor in the constant balancing that continually goes on in the universe.

In closing this chapter I want to say that while a certain motion that you see may be meaningless to the entire universe as a whole, it is not meaningless to you inside this subset system. So while the term "motion" may strictly be subset local terminology, we never-the-less can still use this term "motion" in these "A" Laws because we will only be looking at one subset spin/orbit-frequency level at a time. But when you can look at one, then another, then another using the same laws and same terminology then you can put each of these single playing card type pictures together to see the big global universal deck of cards — or at least a portion of the deck — in all its full magnificent 3-D and color.

The final thing that I want to say about these **extremely simple** "A" Laws is this: Yes, they are indeed simple but so is the principle that hot air rises and so is the principle that the earth turns. But the earth turns giving us a type of pseudo force called coriolis force and this combined with the simple principle of hot air rising gives us all this extremely complicated pattern of the weather and the weather is

anything but simple. This essentially is a similar setup to this universe where a few simple "A" Laws have created such an impenetrable monstrosity that it has bewildered humans for thousands of years and will continue to bewilder them for thousands more.

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6. Chemical Bonding

When a proton and electron both join to form a hydrogen atom, they both lose mass and this, scientists tell us, is the amount of binding energy they have gained and you can figure the amount of mass converted to binding energy by using Einstein's formula $E=MC^2$

Once you see that a quantum of light does not diminish no matter how far the distance then this tells you binding energy also does not diminish with distance either because they are both essentially the same things but at different frequencies and you can derive energy from both as well: A quantum of light is at a higher frequency (*electron*) than a quantum of binding energy (*quark*).

Therefore mass is, in a sense, only binding with the macrocosm surroundings and Berkeley and Mach were both right. You could say it was either mass that the proton and electron lost (*They lose mass when they bind to form a hydrogen atom.*) or it was merely binding with the rest of the universe that was now, not lost but instead, merely switched in equal amounts to closer binding with themselves to form the hydrogen atom.

Entirely discard all your old science and use nothing but our new "A" Laws in

observing the following relationships in chemical bonding.

At first, you will be apt to say that all the space between everything in these atoms is being created by the 2nd "A" Law: While this is true, this is not quite all of the story. Later when you see why — by using only inertial qualities — electrons repel each other, in chapter 7. This will also show you how both of these laws working together determine the symmetry of the space-time construction of the particle elements in each separate spin/orbit-frequency level.

Quantum theory uses the term "overlap" where these electron orbitals from adjacent atoms overlap and bind in covalent bonding.

In π (pi) bonding the spins of two electrons from two different atoms become momentarily parallel. They will frequently overlap with the "locked" pole of one electron — spin-up — attracting the "locked" pole of the other electron — also spin-up — causing these two different atoms to bond in π (pi) bonding. Remember these electrons do have size and they "see" their closest portions, in this case their poles, are spinning in the same direction (both either spin-up or both either spin down) at the same frequency. Thus, the "A" Law shows these will attract. These electrons in π (pi) bonding only attract each other and bond during this extremely short interval of pole to pole overlap and not during a good part of the entire orbital. All π (pi) bonds are fleeting but repetitious and the strength of these bonds will depend on the length of time these poles remain parallel to each other while facing each other and spinning in the same direction. Both quantum mechanics and our new 1st "A" Law provide us with the answer to π (pi) bonding.

In δ (sigma) bonding, electrons from two different atoms bind these two atoms together far differently from the ones in π (pi) bonding. In this δ (sigma) type of bonding these two electron orbitals are not parallel to each other but are merged into one plane yet the overlap is still here but in a far different manner. These two electrons from the two different atoms or molecules remain on opposite ends of these two in line orbitals. These two electrons are also "paired" and "locked" with one spin-up and the other spin-down but these two electrons "lock" with their closest sides going in the same direction (the 1st "A" Law) and not their poles.

The important sides are the closest sides because these are the only sides where

there will be a tiny segment where both electrons will "see" that portion of themselves traveling parallel and in the same direction.

There is a certain aspect of δ (sigma) bonding (using the "bad quarter" that comes later) where these two electrons being on two separate orbitals yet in the same plane will sense each other exactly like two vertical antennas will sense each other. Two vertical antennas and the closest portions of two δ (sigma) bound electrons — when you consider the "bad quarter" that comes in chapter 10 — will both "see" each other moving like electrons on two vertical antennas. Thus, the transfer of any radio frequency or of even light to your eye can be seen as a simple vertical antenna radio frequency transfer. Since humans are adept at changing concepts, you could also say that in the previous vertical antenna energy transfer this transfer was made possible because space was being removed from between these two antennas by our 1st "A" Law. Remember, whether it's space or time or both that are being changed depends on the frequency of the geodesic or path of the observer and in this vertical antenna case it's space that is being removed: Read chapter 18.

Each of these electrons not only orbit their own <u>individual</u> nucleus but they also both orbit an imaginary <u>common</u> "sigma spot" between their two atoms. These two orbitals do not overlap as parallel orbitals such as in π (pi) bonding but here they unite in the <u>same plane</u> and become <u>one single orbital plane</u> really in this shared common area around the imaginary "sigma spot". The placement of this "sigma spot" determines the amount of ionic bonding that will also prevail because all bonding is really a combination of both covalent and ionic bonding.

This new concept sees ionic bonding merely as the electron using subharmonic bonding with the protons in the nucleus.

Quantum theory gives you a <u>probability</u> that these electrons will be more often found in a certain area. These "A" Laws, utilizing precession, will show you that as well. One more thing too: Both of these electrons will be orbiting exactly on the opposite sides of the same orbital as the other electron but this is not what is most relevant here: What is most relevant is that one electron will be spin-up and the other spin-down and their <u>closest</u> <u>sides</u> (and the "bad quarters" of both — covered later) will constantly "see" each other exactly in phase and the same mass on the closest sides. Thus, both electrons will attract each other at least a

good portion of the entire orbital using their closest sides according to our 1st "A" Law. Remember this is a δ (sigma) bond.

Although the closest sides of these two electrons may attract each other with less force than the closest poles, you must remember that in π (pi) bonding these poles only overlap a small fraction of the orbital. Whereas in δ (sigma) bonding the sides of these two electrons "see" and attract each other more of the entire orbital so the δ (sigma) bond is the stronger of the two.

There is one other reason that δ (sigma) bonding can be stronger than π (pi) bonding and this is because δ (sigma) bonding utilizes impedance matching that incorporates a greater attraction because of the effect of the "bad quarter" that will be covered later in chapter 10.

You must also keep in mind that free electrons that are allowed to roll, precess and spiral — this proof comes later — will always repel other free electrons but once these free electrons are "*locked in*" then all this changes and they act exactly like **magnets** or like an **opposite charge** to another electron.

Any electron that is perfectly <u>free</u>, such as resembling a gyroscope in gimbals, <u>cannot</u> be locked with another <u>free</u> electron. You will see later, in chapter **7**, why all <u>free</u> spinning objects in this universe must repel all other similar <u>free</u> spinning objects.

An electron bound to another electron or the nucleus loses its freedom and thereby **is**, in effect, locked into a certain position and thus it <u>can</u> attract other electrons.

These can lock in many ways. They can lock together for part of the time. They can "lock on" for part of an orbital. They can use either their sides to lock or a stronger lock with their poles. Two somewhat restricted electrons can lock together or one free electron can "lock on" to some electrons that are already locked.

To this present science guild, who remain in the Faraday-Franklin dim and distant past era of darkness, this locking is seen as either **magnetism** or **opposite charges.**

Space is frequency conscious and these electrons that are locked and binding together are essentially removing space between themselves but that space is only at the electron's spin frequency: When you see two magnets come together then all you see is space being removed at the electron's spin frequency and you call this attraction.

We know that magnetism is caused by both the electron's spin and its orbital motion. Binding energy is also caused by various spin and other motions of the various particles. Unlike iron, we could expect, in many substances, to get much more than 2% of the total attractive force on some orbitals.

In ionic bonding, the bonding is really a bond that results from the electron's attraction to the nucleus. This would really be a close subharmonic frequency bond in this new concept. Subharmonic frequency bonds are normally the weaker bonds but in this case it's the strongest bond because the nucleus holds a steadfast bond while the other δ (sigma) and π (pi) covalent bonding must be done with other similar moving, wobbling, precessing electrons. The most prolific and numerous chemical bonds are the δ (sigma) and π (pi) covalent bonds. What is plain to see from quantum theory is that covalent bonds are definitely not electron to nucleus close subharmonic bonds like ionic bonding. Covalent bonds are those frozen or "locked" electrons being attracted to other electrons by exact same frequency of spin and this our 1st "A" Law will show.

The above terms "frozen" and "locked" really should read "somewhat frozen" and "somewhat locked" because if these electrons were perfectly frozen and locked and without any kind of wobble whatsoever then covalent bonds would be as strong or stronger than ionic nuclear bonds but they are definitely not, so from this we know quite a bit of electron to electron perturbation must still exist even when electrons are "locked" together.

This 1st "A" Law essentially unifies the old concepts of Benjamin Franklin's opposite charge attraction and Faraday's magnetic unlike pole attraction. In both of the above situations, the electron's total freedom stops and you have "lock on" and you'll see this better as you continue.

There are various types of "lock ons" because the electron wobbles and precesses: All electron to electron attractions are done with moving electrons both of which are being highly disturbed by their surroundings. They simply are not going to be

spinning perfectly parallel to each other 100% of the time but the subharmonic bonding to the nucleus is far different because the proton(s) in the nucleus are not being this much disturbed and can provide a much steadier "lock on" and therefore a much more powerful "lock on" than the electron to electron "lock on". Thus, this subharmonic "lock on" is much more powerful than the electron to electron same exact frequency "lock on". Normally subharmonic "lock ons" would be less powerful.

Covalent bonds are really the electron orbitals of two adjacent atoms simply overlapping and/or the spins attracting each other via the 1st "A" Law. Once you realize this then you can easily see how covalent bonding really works.

A "locked" electron — even while it's on an orbital — is really nothing more than a tiny magnet. These electrons are now "locked" into position and are no longer free to wobble, so now in a sense can become tiny magnets and they stay orbiting with their closest sides or poles in phase with another electron from an adjacent atom. These "locked" electrons can bind like magnets or opposite charges through either most of the entire orbital or a good part of an orbital and our law tells us if the closest sides of these electrons are spinning in the same direction then this will be a δ (sigma) bond and if the orbits overlap so their closest poles face each other and these poles spin in the same direction then this is a π (pi) bond. You can use either quantum theory or our "A" Laws to describe this bonding.

Today's quantum scientists claim that the spin-up electron neutralizes the spin-down electron completely. First we see them binding as we look at their functions in their micro world and yes, they eventually do neutralize each other as we look on it from our perspective in the macro world but there is certainly a lot of binding that goes on there before this neutralization happens.

You simply could have no covalent bonding without electron pairing because unless an electron is held steady and "locked" either with closest sides or closest poles then the electrons would never attract each other like tiny magnets nor would they attract like opposite charges but they would keep twisting, wobbling and precessing, all of which would repel a similar free electron and you will see that our "A" Laws explain all the whys and wherefores about this in chapter 7.

Electrons have to "see" each other as lined up, not free, but "locked" in place to act like tiny magnets or opposite charges thereby attracting each other:

"Resonance" is the term quantum theory uses to describe this in phase feature. One more important thing about this pairing is that electron pairing is the rule rather than the exception: This generally is the least energy setup. In other words, their mass — inertia — will be less when they are paired than when they are unpaired usually. All of this brings us to the final thing pairing shows us and it is that the electron must be able to "see" its paired partner right through the nucleus which must mean the electron is composed of waves that are of a far different frequency yet some harmonic of the waves comprising the protons in the nucleus.

A single unpaired electron from an atom can also bind with another from an adjacent atom as long as the electron, its closest sides are in phase with, has also been stabilized by pairing in that adjacent atom. The paired electron then for a time can lock in the free unpaired electron.

Some orbitals will repel others — spins reversed or orbits out of phase — and these will be destructive orbits and these are also known about and can be calculated with the math of quantum mechanics. (*Quantum mechanics would refer to this as an antisymmetric wave.*) Our 2nd "A" Law tells us why we have these.

The principle behind all chemical bonding is that the interacting parts of these binding atoms all will lose mass and this mass will be turned into binding energy via E=MC2 thus binding these components together. This is the current accepted scientific reasoning. In this new theory the term mass or M (in the preceding formula) is really only macrocosm binding. Although you will suffer in accuracy using only these new "A" Laws without any math, I believe they will be put to work to advantage first in this area of chemical bonding. Using these new laws, you can certainly picture how everything works. You've never had anything quite as directive as this before.

We have the Pauli exclusion principle that says two electrons on the same orbital must have their spins reversed — one spin-up and the other spin-down. The reason for this is simple. Our 1st "A" Law shows us why: Electrons have a dimension. The closest sides, of each of the above, are spinning at the same frequency in the same direction.

Now you have Hund's rule that states that if two orbitals are open then the two electrons that settle in will both be spinning the same direction. On two separate

orbitals these electrons would be a distance from each other and whichever way the prevailing magnetic moment would be, it would affect them both so they would both spin the same way. These two electrons will stay well away from each other now because their closest sides will be spinning opposite to each other thus repelling them.

You get the maximum bonding in the least energy state; the "A" Law reason for this comes later even though you might have figured it out already but you should entirely comprehend the reason for this before you finish chapter 13 that covers inertia. Our present science says binding energy can also be considered mass: This is where the energy for the atom bomb comes from. The binding energy curve (*Look it up in an encyclopedia CD*.) is one of the most important curves in all of science. While your present science considers binding energy to be an equivalent to mass, you will need our "A" Laws to show you exactly why this is so. They do clearly show this to you while your present science simply doesn't.

Covalent bonding is a spin to spin attraction where a pair of electrons is shared between the bound atoms and this is a highly directional attraction because these electron closest poles or closest sides that are spinning in the same direction at the same frequency bind together even though the electrons themselves remain a distance apart.

The covalent spin to spin attraction is highly discriminating: It only attracts those closest poles that are spinning in the same direction — unlike poles.

Unlike magnetic poles or opposite charges will always have some portion of something "locked" and facing each other that will be spinning in the same direction thus they will always attract.

The real problem with Faraday's magnetic rule is that it tells you that opposite poles attract but when you look at these opposite poles then the facing electrons in these opposite poles see themselves spinning in the **same** direction and this is what is doing the attracting.

The above tells you why I previously stated that Faraday's rules don't show you what they should and show you things, like this, that they really shouldn't because this prevents you from seeing the <u>real reason</u> for the attraction or the repulsion. In fact, Faraday's rules will give you the exact opposite impression as to what is

really happening.

Today descriptions of bonding are worked out by quantum mechanics math but some of it is getting very complicated and this is where I proffer the use of this new law for direction and help. Someday when we have finalized the proper math structure for these new "A" laws then you will no longer even need quantum mechanics to work out the bonding or at least things will be changed so much that you will no longer even recognize it as the old quantum theory.

In this universe of these "A" Laws, all spinning objects have this property of attracting and repelling. Remember the spin has to be at the right frequency or a harmonic thereof. And remember Planck who showed us that the faster these things spin then the more the attractive or repelling force as viewed from the lower frequency (bigger) object. Symmetry and such things as an antisymmetric wave function take on a whole new light because now we see exactly what is positively behind it all. Today's scientists will tell you that all of this spin is not real spin anyway. I'll say they are right about many of these because many of their particles are momentary and can **not** be considered permanent particles in this new theory. So far, in quantum mechanics, there have been about 200 particles discovered and many of these are classed as Fermi-Dirac and therefore have anti-particles as well, so this even increases the number of these pure wave like entities.

The electron, however, is a permanent particle and the electron — as viewed in our subset system — has to be considered having a <u>true</u> honest to goodness spin along with honest to goodness gyroscopic inertia.

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7. Einstein's cosmological constant; the

electron's charge and a bit more

Einstein saw that all this space between everything in this universe implied that there had to be a force equal to gravity but this had to be some type of a repelling force. Einstein saw this in 1917, the era when almost 100% of scientists still believed in a steady-state universe. The era of almost 100% steady-state universe believers ended in 1927 with Belgian cleric, Georges Lemaître successfully preaching his gospel of an expanding universe. Willem de Sitter had considered an expanding universe earlier but it was not quite like Lemâitre's big bang model that, in the roaring twenties, seemed to catch the public's attention. This model of Lemaître's expanding universe was modified by another big bang model put forth by George Gamow and his friends in the 1940's and Gamow's modified big bang model seems to have even gained in popularity especially since the publication in 1965 of the discovery of the cosmic background radiation. This radiation is 2.74 degrees Kelvin in temperature and of frequencies in the border of microwave and infrared and was even predicted by Gamow and his group back in 1948.

The COBE satellite instrumentation sent back to earth important information about this radiation that has provoked arguments and raised the tempers of many cosmologists.

This background radiation seems to indicate that something indeed happened.

This big bang, supposedly, happened about ten or maybe even fifteen billion or some think possibly even twenty billion years ago: That's ten or fifteen or twenty **American** billion (in which a billion is a thousand, million) and **not** ten or fifteen or twenty **English** billion (in which a billion is a million, million).

Now that this new theory adopts the view of a quasi steady-state universe then Einstein's "cosmological constant" repelling force is again necessary but what causes it? Einstein put forth no ideas about this. (Wait and you'll see.)

Even before we start on this, we notice that these atoms in the microcosm also are well separated much the same as all the stars in the universe. It seems that our "A" Laws are the **only laws** that tell us why this is.

Once you see all this separation (99.9999% empty space) both in the macrocosm and microcosm then it doesn't take much of a brain to convince you that there is

only <u>one</u> precept behind it all and that all your science, that gives entirely different rules for the microcosm from what it does for the macrocosm, must be seriously outdated.

This "Theory of Everything" says that once you change your idea of small to higher frequency and your idea of large to lower frequency then electrons and stars are both essentially built up of spherically encapsulated spinning standing waves and the differences between electrons and stars will be basically one of spin and orbiting frequency which will determine a different symmetry of construction but yet of a basic wave foundation.

The "A" Laws will show you that the big differences between these two can only be in their surroundings that will cause a differing symmetry of construction. Similar surrounding objects spinning and orbiting at the same frequency are extremely important in giving all these items — whether electrons or stars — their inertial qualities, local gauge invariance and the resulting symmetry of construction.

The surroundings of all these stars are homogeneous and isotropic in the large while the surroundings of electrons are nothing like this at all. With magnets, you can drastically change the surroundings of electrons thereby changing their inertial qualities. You can call it changing their magnetic fields if you want but it's still changing their surroundings.

Niels Bohr showed us that 98% of the magnetism in iron is caused by the spin of the electron. The orbital motion of the electron should really be the largest cause of magnetism but in iron this gets mostly canceled out so that the electron's orbital motion only contributes about 2% to iron's magnetism.

Nature continually tries to balance all movements of all particles and the orbital, if shifting is possible, always gets shifted first before the spin. The electron is one particle we know of that has problems getting its spins and orbitals totally balanced. The worst imbalance is in iron where one atom will have many more electrons spinning one way than in all the other directions. These electrons will line up with electrons that have similarly oriented spins in many more atoms of iron and form a domain in which all the electrons in the domain flip either spin-up or spin-down all at the same time.

Picture the atom as having essentially three types of electrons — also caused by their surroundings — and those closer to the nucleus we'll call the *majority* of the electrons: These simply cannot shift their spins but some of them do give off energy by dropping to a lower orbital. They cannot, however, change from a spin-up to a spin-down no matter how the magnetic field around them changes because they are too close to the nucleus and "locked" in to it too tightly.

Other electrons further from the nucleus, on certain orbitals, are *flip-able* electrons: These most certainly can suddenly flip and change their spins from spin-up to spin-down with a change of a nearby magnetic field. Flip-able electrons are found locked in place in the *d* or *f* shells of the iron atom. Flip-able electrons act like tiny magnets; in fact, they are the smallest magnetic moment. These flip-able electrons that can easily flip over and spin the other way are not the furthest from the nucleus though. Electrons furthest out are called *free* electrons or valence electrons or sometimes they are called conduction electrons. These are the electrons that we say have this thing called charge. Flip-able electrons also sometimes do.

The **majority** electrons, occasionally dropping to a lower orbital, are forced to precess and wobble and doing this show their inertial qualities to us as *light*.

The **flip-able** electrons show their inertial qualities to us mainly as <u>magnetism</u> but sometimes they can also have an attraction or repulsion similar to charge as we saw in the previous chapter.

The **free** electrons mainly show their inertial qualities to us as *charge*.

Only in your narrow subset system can you retain the concept of charge.

In this big picture of everything, there are no such things as plus and minus charges.

Please pay attention to the following.

Electrons can exhibit either ferromagnetism attraction or an attraction such as unlike charges when they are "locked" or a repulsive behavior such as with similar type charge or similar magnetic poles when they are "free": Our "A" Laws show us why this is and in the **next 8 paragraphs** you have the **best** explanation of **why electrons repel each other**.

Lets look at these free electrons first: They spin and hence they have inertial qualities and this includes gyroscopic inertia which always provides this force 90 degrees to any external force acting on such a spinning item.

Completely forget about charge now and only look at our new "A" Laws and what they say.

The 1st "A" Law tells us that there is a possibility that two free electrons can attract each other providing that any portion of their closest sides are spinning in the same direction at the same frequency. This means either their sides can be spinning in the same directions or they can be lined up so that both of their poles can be spinning in the same directions: Any such two electrons will attract each other.

Then we see that there is something else: This attracting force comes in as the cosine of the angle of the movement.

As this force begins to act, it in turn causes this 90-degree gyroscopic torque to **twist** both of those totally free electrons **away from this initial attracting position**, doesn't it?

So because of this gyro torque, two free electrons can never remain in a full attracting position and they will therefore be forced to stay more in a **repelling** position and therefore free electrons will always end up repelling each other and this repelling is not explained by using this thing called charge: it is explained only by simply using **global** inertial qualities and our new global "A" Laws.

The above 8 paragraphs explain not only why electrons repel each other but they also explain why <u>any</u> two perfectly free similar spinning objects <u>must</u> repel each other. So now you know why both electrons and galaxies stay well away from each other.

This is Einstein's cosmological constant.

Whenever you have a **positive** charge then you have something that is being **shifted** which in turn synchronizes in with the spin of an electron and "locks" it in place thus "locking" in a free electron or an electron from an adjacent atom and binding with it and this is seen by present science as a **positive** and **negative** item

attracting each other when it really is only the system obeying our "A" Laws.

Something somewhere has to be "locked" in place and synchronized in frequency with the electron's spin or a close subharmonic of the spin to get any kind of attracting force:

Such things as positive and negative charges do not exist in this theory: This theory, in fact, explains what charge is.

The proton attracts an electron because when two up quarks combine with one down quark to form a proton then something in this special type of assemblage is able to synchronize in with the electron's spin frequency and "lock" it thereby preventing the electron from precessing or wobbling and therefore it can attract the electron.

This is why aggregations come together (**gravity**) and larger aggregations come together and accumulate because as these things grow in size there are more things "locked" in place strengthening the attractive force of the 1st "A" Law.

Once we know more about quarks and we learn exactly how those two up quarks and the one down quark in the proton are set up then we will know more about how this type of attractive quark **strong force** binding functions. Attraction is **always** a **synchronized frequency attraction** and it is **not** simply the old idea of plus and minus charges.

All attractions in this theory must be synchronized frequency attractions.

Here is something that I learned while working on radio transmitters: In order to transfer energy between the stages, not only must the frequency be exactly the same but the impedance of both stages has to match and the power of the emitting stage must be able to be absorbed by the next stage in line as well or no power can be transferred.

I see the universe in a similar light as the radio transmitter and there is no doubt in my mind at all that, like the radio transmitter stages, if all that light from all the stars were not being seen as instantly absorbed in several lower levels then we would have no light being given off by the stars. That instant absorption of light — that we see — from electron to electron, in <u>our spin/orbit-frequency level</u>, as soon as they produce it, is an essential factor in those star electrons being able to

give off all their light. It's simply an instant electron balancing act seen totally within several lower levels or in this local gauge system: That's all it is. The electrons on the star will give off energy and balance whenever they can do this. But because so few electrons are ever correctly lined up in each projector frame, this limits the amount of light. Motion gets totally balanced out in each subset spin/orbit-frequency level as seen from several lower spin/orbit-frequency levels.

When you know electrons are rapidly moving around inside a rock then you also know that to see the rock as solid, your smallest increment of time or "blitzseit" must be extremely larger than the "blitzseit" at the electron's spin/orbit-frequency level.

If you look toward the macrocosm then you can see motion between everything in the macrocosm because your "blitzseit" time period is of a shorter duration than that in the macrocosm. It's all frequencies and the microcosm is at a higher frequency than you are (It's at a shorter wavelength than you are.) and the macrocosm is at a lower frequency than you are. (It's at a longer wavelength than you are.)

Only in the macrocosm, where time is slowed down considerably, does light **seem** not to be instantly absorbed but from your viewpoint it most certainly is, the same as it is in every stage in a radio transmitter.

These four things: frequency, impedance, phase and alignment all have to match when an orbiting electron transfers energy to another orbiting electron just the same as it does in a radio circuit. These orbits of both the sender and the receiver of the energy have to be oriented exactly and in the case of the electron perhaps within an extremely tiny fraction of one degree. This transferring of energy is not an easy thing to do. It looks easy, simply because there are so many electrons in the universe that there are always some in the correct mode to do it. Impedance always has to match for proper transfer of power in radio and in the electron's spin or orbit too: Here impedance would be considered matching if both electrons have the same exact mass at points on their closest sides. If orbitals were elliptical then this orientation would also have to match. All this is not as easy as it seems because you must remember the slightest orbital forward movement must change the electron's mass. Elsewhere in here I have said that energy transfer is not an easy thing to accomplish. We have so many electrons though that it looks easy because there are always some that will exactly fit the bill for an exchange

situation.

For the essentially simple light quantum energy transfer, such as between a star and your eye, the orbits of both sending and receiving electrons have to "see themselves" as being exactly in the same plane: Mass, on their closest sides, does have to match exactly too. You'll see this same effect later in inertia also.

Now let's go to the stars and you will see the same "A" Laws apply there as well and, as you can see, these too will always have to remain in a repelling position with each other.

Close binary stars of the same mass, on the other hand, will always be spinning so that their closest sides are always moving in the same direction at the same frequency.

So here you can see that our "A" Laws tell you exactly why we have Einstein's "cosmological constant" not only in the sky but in the microcosm as well.

Now this can be checked but not with electrons because they move too fast but eventually super-computers will check throughout this entire universe and eventually even these high priests of this contemporary science type religion will be startled to find that all the stars are in a position where they are spinning in such a way as to repel their closest neighbor.

And, by the way, this goes for galaxies as well.

So you can also say these stars and galaxies will someday all be found to be spinning in a way that creates space and time between themselves and their closest neighbor.

The stars and galaxies are all repelling each other or creating space between themselves by the use of our new "A" Laws.

You will also notice that the stars and galaxies are also creating time between themselves and all of this creation of space and time gives us the explanation for the red shift and is also one of the reasons that this theory shows the two NASA probes Pioneer 10 and 11 seem to be slowing down as they travel on through space.

This is the creation of space and time that results in this curvature or distortion of the space-time continuum described by Einstein.

All these stars are repelling all the other stars and creating — and curving — space and time between themselves so you must assume space and time is not uniformly distributed and more of it is curved and packed more tightly around all these stars and therefore these "A" Laws are correct and space and time and/or this repelling force — Einstein's "cosmological constant" — is being generated by all of these stars much in the same way that all of these free electrons generate this thing we call charge. Another easier way of looking at it using "angular lock on" comes later.

Scientists agree that electrons have both size and spin. Most consider the electron's point like size to be insignificant. It's hardly that. To the electron its size, shape and spin are all extremely significant factors. To this electron, our space is the thing that changes. The "A" Laws clearly show you why this is so: Size is determined separately by each spin/orbit-frequency level and merely because you see something as a certain size this doesn't mean it really is that certain size in its own subset system as you see it in your local subset system.

When the future super-computers come on line to process all of this, they will be programmed also in frequencies because these particles that we see are only in our limited frequency bandwidth. To see the entire universal global picture you have to consider frequencies. You must concern yourself more with waves.

Remember this entire universe is a global <u>frequency</u> universe and things you see as solids only exist for you and about an octave or so around you in this subset spin/orbit-frequency level.

Max Planck has shown you that as you look at higher, then higher, then even higher frequencies, then from your lower spin/orbit level these highest frequency spin/orbitals approach a solid.

What superstring theory is telling you is that you are really like a radio. You are tuned into spherical standing wave stations on your dial. These stations are the particles that science knows about and the galaxies in the macrocosm are the spherical wave stations on the low frequency end of the dial. But you can only tune into things on your dial even though these things, you can tune into and

notice, may be just the smallest fraction of 1% of what is out there.

Superstring shows you what Compton, Schrödinger and de Broglie have also shown you: It's a frequency and wave universe. If you see a rock as solid then that only means your receptors are tuned in to a frequency that is some extreme lower frequency of the orbitals of those electrons in the rock: That's all seeing things as solid means. It most certainly doesn't mean the things you see as solid are really solid: They are not. They most certainly are only waves.

Again, what you constantly must remember is that the things you see as solid are not: They are 99.9999% empty space, aren't they? They are waves and you must be "tuned in" to these waves or they will effectively not exist as far as you are concerned. As long as you stay alive, you stay "tuned in". As long as you stay "tuned in" you stay alive. Things that are not "tuned in" can't even react with your universe because to them it simply doesn't exist because to them they can't "tune in" to these wavelengths; they are not on the dial.

Your distance, speed, mass, space and time all vanish just like the radio station that you tune away from when you select another radio station. This is a **frequency** universe, my friend.

That rock that you see as solid but is really 99.9999% empty space, suddenly becomes 100% empty space if either you or it shifts frequency enough. Just a slight frequency shift to two lower spin/orbit-frequency levels and all the electron motion in that rock now seems to vanish doesn't it? At the solar system level, the rock looks solid doesn't it?

You can see from this that our biggest problem is our own minds that attempt to make reasonable assumptions basing things on a solid particle world in which one supreme unified type of space and time exists. **Einstein has proven that such a world does <u>not exist</u>.** Once you know this to be a fact then the next step is to try to find out what type of a universe would exist that <u>will</u> give us all these things we see in reality plus what we also have in relativity, quantum mechanics and superstring theories as well.

And getting back to the rock concept again, we see that both you and the rock will suddenly vanish if this universe is forced once more to retune the piano keys of the electron, quark or proton-neutron particles: It had to do this to similar

particles once already.

Heisenberg showed us that we can't tune into a wave without either destroying it or affecting it in some manner but here is the beauty of these spherical encapsulated standing wave particles: You can <u>momentarily</u> tune into them provided that they can immediately recover this "blitzseit" of energy from their surroundings which they in fact do.

This is why it all appears to be solid to you.

However, it will only appear to be solid to you if your frequency is that extreme lower frequency. If your frequency is too far away though then it vanishes completely like a radio station does when you tune away from it.

This is why distance, speed, mass, space and time all vanish just like the radio station that you tune away from when you examine another subset system and tune into a different spin/orbit-frequency level.

Heisenberg had to tune into one level to get the electron's velocity and to tune into another level to get its momentum didn't he?

You absolutely must only use these new "A" Laws with their terminology of frequency and motion. You have to entirely forget your old rules and all your old terminology concepts whenever you are trying to see either several different subset spin/orbit-frequency levels or the big picture of this entire universe.

We do have a quasi steady-state universe and this is why Einstein's "cosmological constant" repelling force must equal the total of gravitational attracting forces exactly.

Now that we know we have a quasi steady-state universe then we see our two exactly opposite "A" Laws show us why the attracting force has to exactly equal the repelling force and therefore why we have Einstein's "cosmological constant" in not only the macrosystem but in the micro world as well. In the microcosm scientists presently see this attracting and repelling as either charge or magnetism.

Charge, as we said before, can only exist in an unbalanced system and the positive charge always exists in a situation where an orbital or something is shifted causing some element of the unit and another free electron to "lock on"

together using the 1st "A" Law. Attractions are always done with some element "locked" while in repelling, both elements must be spinning in different directions or entirely free such as a gyroscope in gimbals: It really has nothing to do with plus and minus charges in this new theory.

Let's look at how a so-called negative item and a positive item behave in a magnetic field. We'll use a negative beta particle that bends one way and a positive alpha particle that bends in the opposite direction.

A beta particle is really a high speed electron going from 10% to 99.8% of the speed of light and it is obvious that both its spin and curve of travel will be in the same direction as the electrons are going in the electromagnetic coils that are producing the field.

The alpha particle takes an opposite curve because it is really a high-speed helium nucleus. The proton in this nucleus is unlike the high speed electron that is free but instead here a portion of the proton in the nucleus gets "locked" now making the proton-neutron assembly rotate in a direction opposite to the high speed electron. Again, if you grasp the Frisbee at this "bad quarter" it will twist in the opposite direction to the way the electrons are traveling in the electromagnet that is applying the field. And this is the direction the Alpha particle curves.

* * *

8. Ferromagnetism

Surroundings play a most important part in magnetism. Look at the energy curve. Iron is located right at the midrange peak. Cobalt and nickel are right next to it.

Only these three metals show a high degree of strong ferromagnetism.

Why?

In chapter 5 we spoke about the binding balance and in chapter 18 we go further into the importance of balance between close binding and macrocosm binding. Look where iron is located on the energy chart. It is neither the heaviest element nor the lightest but exactly midrange between everything. Theoretically all elements lighter than iron could give off energy by atomic fusion and all the elements heavier than iron could give off energy by atomic fission. This actually happens too in various parts of our universe at sundry times with star formations and supernova explosions and probably even more types of things with which we are not yet acquainted. The result of all of this various energy creation is the production of iron. You can theoretically get atomic energy out of everything except iron. When you get down to iron though you are finished. You can't go any further than that. Iron is the atomic energy ash heap. You simply can't get any atomic energy out of iron. It's at the very peak of the energy curve. And it is also midrange isn't it?

What is that telling you?

It's showing you the main thesis thread that is running clear through this exposition: Surroundings are the key here.

Everything gets perfectly balanced out all throughout our universe <u>except</u> for these spinning electrons in the d and f shells in iron that are **midway** exactly between their close binding inner neighbors and their <u>outer</u> neighbors.

The only electrons that can be flipped from spin-up to spin-down or vice versa are those that are exactly **midway** between their inner and outer surroundings.

Doesn't this mean anything to you?

This is telling you that if the electron is on an orbital **further in** or if the electron is on an orbital **further out** then it is getting too much **more of a lock** from <u>either</u> one direction or the other to be able to flip back again isn't it?

When an electron is on a geodesic then it is the totality of both spin and obital that is perfectly matched between close items and macrocosm items. When the

spin flips then the orbital also must change slightly to compensate for the flipped spin difference.

This is another hidden road sign that is roaring to you that **surroundings** are as important as Berkeley and Mach said they were.

In heating iron, as you get it hotter and hotter you will actually keep changing the crystal structure of the layout of the iron molecules and the structure of these greatly determine its magnetism.

If you heat an iron magnet above the Curie temperature which is 1,043K then it loses its strong ferromagnetic quality and becomes weakly paramagnetic. In other words at that temperature it can still exhibit some magnetic qualities providing you add an additional magnetic field.

Remember the geodesic or balanced energy path that was discussed earlier in chapter 6. "Chemical bonding"?

Heat is something that increases all the particle movement in the area heated and this will make far more close "A" Law linkages available to each electron. This creates more of these 90-degree Frisbee and gyro type counter movements and therefore this creates more of a destructive environment for strong ferromagnetism. Heat substantially raises all these least energy path geodesics.

Super-cooling can have just the opposite effect and this we dwell on in chapter 12. "Various forms of magnetism".

In the iron atom electrons fill the *d* and *f* shells by the first of Hund's rules which is maximizing the same direction of spin and this means up to five electrons spinning the same way in the *d* shell and up to seven spinning the same way in the *f* shell. You can use our 1st, "A" Law instead of the combination of Hund's rules and the Pauli exclusion principle and the Curie temperature and so forth and so on. Our new "A" Laws show you all this as well, in fact, these are what the universe itself is actually using to build all of this.

This universe is a great balancer and it balances all transfer motion completely out in each subset system in a single "blitzseit" of the several lower spin/orbit-frequency levels and it balances things out globally all throughout the universe this way as well. You will witness this balancing act, however, inside

your spin/orbit-frequency level: One result of orbital balancing (*You must remember that orbitals have leverage over spins and orbitals will therefore balance first.*) that you will see in your spin/orbit-frequency level is this magnetism of the electron where the worst spin imbalance seems to be with all these electrons spinning the same way in these *d* and *f* shells that in turn form into stronger domains thereby causing a considerable amount of ferromagnetism.

Even though there <u>seems</u> to <u>be</u> a spin imbalance in magnetism, there is no close to macrocosm imbalance in spin/orbital totality because the orbitals have adjusted to compensate for this.

Magnetism is far more complicated than the easy lessons learned in high school. There are six types of magnetism. Each type is caused by a separate distinctive style of electron spin and orbital behavior. Magnetism is created by spinning electrons that not only are moving on orbitals but they also spin and therefore have considerable gyroscopic torque that causes both them and their orbitals to precess. The variety of their surroundings and these different modes of precession are some of the things that gives the 6 different forms of magnetism that we find by magnetizing various materials. Iron, nickel and cobalt exhibit the style of magnetism you are most familiar with: It's called Ferromagnetism.

Ferromagnetism is always a special grouping of similarly oriented electrons that form with other groups into crystal type domains and all electrons in these domains click into position at the same time as the magnetic field is slowly increased and these clicks can actually be heard as Heinrich G. Barkhausen heard them for the first time in 1919 using an amplifier and headphones. Ferromagnetism is the strongest type of magnetism and can exist without an applied electro magnetic field. Ferromagnetic materials can — and as in the case of iron generally do — amplify the applied electro magnetic field strength by a thousand times or more and this ferromagnetic field is always stronger centrally which is definitely not the case with diamagnetism. Levitation is not possible with ferromagnetism because of this magnetic force being centrally concentrated. This you can see as you hold two magnets together so they repel each other and they try to twist away from that central strongest point.

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9. The big picture

Let us stop here and think a bit about solving problems in a universe as complicated as the one in which we have found ourselves.

We can't use our present science because it is only local gauge theory; neither can we use many of the mathematical procedures that go along with all this local gauge science terminology.

This told me — in no uncertain terms — that I could not trust any of today's mathematical procedures to get at the truth of unification. It had to be done by a process of positively eliminating all those various other possible setups that conflicted with relativity, quantum theory, superstring and reality.

Up until now the use of math has reigned supreme in the discovering of new science breakthroughs but not this time my friends. That was one of the big surprises for this person too. I saw, early in the game, that math would be of no use whatsoever in solving this problem. It was Kurt Gödel who showed me that math was not going to play the big role in figuring this one out. Two big factors helped me in this: One was my long standing belief that the electron's behavior could be easily explained once we found what inertia was. My intuition was right about that too. The other big factor was that I had seen, early in life, that Ampere's laws were pure gold compared to Faraday's lines of force. My life was spent troubleshooting and I soon found out Ampere's laws helped me tremendously and Faraday's didn't. The difference between the two, in this pragmatic world of real problem solving on tremendously expensive equipment, was like the difference between night and day.

Where time was money, instead of using Faraday's slow, complicated, round-about rules, I used the clear, concise, fast Ampere method for decades which kept me way ahead of my peer group and this also gave me the necessary training whereby I could, eventually, make use of Ampere's laws in solving this unification problem as well.

The idea you have that you are built from the microsystem is not all that wrong because in this theory all the electron movement in the microcosm will all have to eventually be balanced out at your level thus the electron orbital microcosm will be a stable platform upon which to build. Geodesics are also important because they are always the paths of least resistance, so to speak. The universe can therefore build from them because they will make an extremely good foundation.

You must keep in mind that these new "A" Laws will be giving you a mind picture of only one spin/orbit-frequency world at a time, but you will be getting the picture more toward the "universe's point of view" and not so much in the narrow subset view of your local gauge theory.

If you use the terms of inertial qualities, speed, distance, size and momentum then you must also specify the spin/orbit-frequency level because these are only local gauge terms and they are useless unless you define the specific local gauge environment you are talking about. These terms also are worthless when trying to see the entire global picture but where they are priceless is in getting a mathematically cheap and extremely efficient 99.9% accurate image of this narrow spin/orbit-frequency level mainly because our surroundings are homogeneous and isotropic in the large. The math for a much better 100% accurate global view is going to be far, far more expensive indeed.

The waves created by moving entities will seemingly get stronger with a rise in frequency when viewed from a lower subharmonic spin/orbit-frequency: Max Planck showed us this. This is inextricably linked to the fact that you, from the earth's much lower spin/orbit frequency, see the orbiting electrons in the rock as all solid.

Remember that this universe tries its best to stay in balance by equating momentary, repetitious close binding to momentary, repetitious macrocosm binding. Wave energy is a temporary disruption of the equilibrium with an end

is a temporary binding interruption while the close to macrocosm binding is being changed. In this new theory, as in our present science structure, "every action has an equal and opposite reaction" and anything that moves most probably causes some type of disturbance. There would also be cases when this would not happen as in the next paragraph.

A neutrino can pass right through your world and neither you nor the neutrino might realize it because the proton-neutron spin/orbit-frequency differs from the spin/orbit-frequency of the neutrino so much that there are no close subharmonic frequencies so neither one can rob much energy from the other. This shows you that you can have absolute zero mass in **Fitzpatrick's** theory because if the neutrino is not spinning or vibrating at any frequency or subharmonic frequency of any quarks or hadrons then it absolutely must have zero mass from the quark-hadron point of view. This, however, does not mean it will have zero inertial qualities because, in this theory, these will come from similar neutrinos or other things in the surroundings that are the same spin/orbit-frequency as the neutrino.

Our inertia (*mass*) here is obtained at the quark-hadron bandwidth, but inertial qualities are obtained at any bandwidth by similar surrounding objects. You can have inertial qualities without having any of our particular inertia (*mass*) whatsoever. You, therefore, absolutely can have zero mass in this theory.

Please remember this. Mass is measured at our proton-neutron frequency bandwidth and this might extend a bit higher and a bit lower: Gravity, on the other hand, may extend from the proton-neutron particle frequency level way past the Virgo super-cluster particle-frequency level.

Just because we can't see things at a far distance at the much higher light electron frequency bandwidth, doesn't mean we can't feel things further out than this at the much lower mass bandwidth.

Essentially, this is all about frequencies. In a nutshell, the main thing you have to see is that this entire universe is made up of all these various "tuned circuits". This entire universe operates on that same "tuned circuit" analogy.

Fitzpatrick's theory sees the photons, gluons and all bosons for that matter of quantum mechanics as only momentary "tuned circuit" connections. Even permanent particle binding connections only take place when the transmitter antenna is suddenly and momentarily perfectly in the same plane as the receiving antenna: These two would both simply view each other as vertical antennas that way. However these momentary "tuned circuit" connections generally cannot remain. Neither can resonances remain because they get immediately absorbed. Only those specified piano key frequencies can remain here as permanent particles.

To remain here as a permanent particle the standing wave or wave train sphere composing it must be at a discrete distance frequency wise from all the other higher and lower particle-frequencies (*string theory*). The standing wave(s) also must be given a certain spin and precession whereby they resemble a spheroid to their identical sister particles therefore any "tuned circuit" "lock on" with their sister particles can only be fleeting and inconsequential to the particle's spheroid structure.

A permanent particle spheroid has to be exact in that its wave train <u>never</u> gets out of phase in the least while retracing its steps over and over and over again. In turning all these waves into spheroid particles the universe achieves better universal balance all throughout.

This is what superstring theory is really telling you.

As previously stated, on earth, all waves that you presently call waves, photons, gluons, all bosons and resonances, etc., eventually get absorbed by something but if nothing was there to absorb other certain waves then they could have remained after the "big bang" and could have been turned into these spheroid particles by the spin of both their microcosm and macrocosm.

You can call it spin. You can call it isospin. This is that part of the wave world that our minds are simply not fully comprehending. We do know as long as this spheroid wave train holds all its frequency relationships with both its close binding and macrocosm binding, it <u>remains</u> a permanent particle.

As a boat makes waves when it moves so do these spheroid wave train particles make energy waves whenever they move from one geodesic to a lower geodesic

much the same as electrons do when they drop to a lower orbital. Why? Because the lower orbit geodesic is a faster frequency and in this frequency world the balance has thus been upset. The particle, itself, is changed with this energy change too. Gyroscopic inertia is a good example of this and there is an entire chapter about this coming.

You cannot get another radio or TV station unless you tune in to it and the antennas — both yours and the station's — have to be positioned correctly for both of you to get a signal exchange: It's exactly the same in this particle world too.

This universe tries to stay in balance using these piano key type particles set up at critical frequency spacings much like the critical frequency spacing of the keys on the piano. These piano keys set up the basic framework for this universe (*string theory*).

Energy must be thought of as nothing more than a momentary disturbance between all these, more or less, permanent piano keys. **In other words,** all energy is a temporary disruption of the equilibrium with an end attempt at better balancing between close items and the macrocosm and sometimes even between (piano keys) particle levels. These particles stay on geodesics. This is what a geodesic is: It is the path taken for the best balancing between what the item is revolving around and its macrocosm.

* There is only this low amount of subharmonic frequency linkage from one subset spin/orbit-frequency level to the next local gauge system spin/orbit-frequency level therefore we at this local gauge level will never see the complete universal frequency linkage between everything in this entire universe. You will also only be aware of a tiny fraction of all that is here.

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Keep all this in your mind as we move along and show what is really taking place and why distances are different for different particle levels.

Distance for you at the proton-neutron's spin/orbit-frequency level is far different from distance for the electron at its spin/orbit-frequency level. Far different features for each level was the problem Heisenberg discovered because the electron "sees" itself at rest and having both inertial qualities and size at its own

spin/orbit-frequency level.

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10. Gravity and the 'bad quarter'

The reason that you are attracted to this earth can be shown by these "A" laws. Nothing is at rest in this universe. Everything is in motion therefore much space and time is being created according to our new "A" Laws. But because you are on a parallel path with this earth and going in the same direction as it is then there will be some actual attraction to the earth and some actual repelling by your macrocosm so your simple force of gravity is really the resultant of different opposition forces and therefore this so called force of gravity is a far, far, far more complicated force than today's scientists think it is. It will require far, far, far, more massive computers than we have today to figure this all out exactly too. When we are able to do this then you will be able to work out the spins of everything as well as the orbits and this is something that you cannot do now.

This theory states that if anything in this entire universe is spinning a certain way <u>now</u>, then there is something setup <u>now</u> in its <u>surroundings</u> making it spin that way.

The idea that certain things were simply left with a certain spin or spin orientation, merely because of some event in the dim and distant past — such as is presently claimed for the planet Uranus — doesn't play too well in this new theory.

Let's sum up that you feel this force of gravity because it's the resultant of the repelling forces of the macrocosm and the attractive forces to the earth because you and the earth are going on parallel paths in the same direction at the same frequency. This is not quite as simple as Newton imagined. Think about it.

And our "A" Laws show us that it is this way for everything in our microcosm and macrocosm as well.

J. H. Oort has shown us how much material we must have in space for these galaxies to rotate the way they do and this is twice what we find we really have. So where is all this "missing mass"? It may be missing but then again, it may not be missing: You have learned herein that you must only use your old subset science in this subset system here on earth. Some of it you may be able to use in the macrocosm but you should know full well by now that you can't use all of it there. It will take gigantic future super-computers taking into consideration the attraction and repelling set up by the proton-neutron spin/orbit-frequency level; solar system spin/orbit-frequency level and the galaxy spin/orbit-frequency level. These will have to be separated. Then these will have to be combined with what it gets from the Virgo super-cluster spin/orbit-frequency before you will get things accurate enough so you can obtain the spins of everything. All of our macrosystem knowledge must now be painstakingly reevaluated and this is going to take generations while we improve these "A" Laws so that we can build a firm foundation of math for them. You have to remember that with this new theory each spin/orbit-frequency really means each level of spinning and rotating things so this means, for determining gravity accurately, that you can no longer confuse and combine the proton-neutron level with the solar system level and the galaxy level and the Virgo super-cluster level as these present day scientists are doing. Also as you look further out into the macrocosm you see less of the surroundings. Surroundings are a big factor in this new theory but seeing with your eyes is merely using one frequency and these surroundings are at lower frequencies and we haven't even scratched the surface in building efficient devices that can scan and receive these much lower frequencies.

The galaxies may rotate and behave like they do because all these stars are adding up all around us at the rate of ${}^4/3 \,\pi R^3$ plus the fact that this is a quasi steady-state universe and therefore the gravity wave can be felt from a <u>further distance away</u> than the light wave: This may be why the galaxies behave and rotate as if the

universe contained more mass.

Einstein was correct and gravity is a <u>wave</u> and hence it is no different from light, therefore it **has to** keep adding up in a steady-state universe but you must have another type of a gravity type red shift and some type of "angular lock on" process — the same as at the shorter light frequency — that considerably weakens certain more massive portions (*Olbers' paradox*) and keeps the total gravitational attraction, here on earth, from being overwhelmingly strong.

Please do not confuse inertia with gravity.

- * Inertia is the impedance to change their attachment that spinning quarks have with other spinning attached quarks because of the 1st "A" Law.
- * Gravity is the attraction that locked aggregations of spinning quarks have for other locked quark aggregations versus all other surrounding moving aggregates. How much of it stems from a certain place of rest versus the <u>difference</u> of each of the rotations of our solar system, galaxy or Virgo super cluster remains to be seen.

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Tomorrow's scientists will be more aware of and not confuse these "at rest" spin/orbit-frequency levels. Today's scientists are not even aware that various "at rest" spin/orbit-frequency levels even exist.

Remember that your mind is a subset mind and you must state the subset level you are describing. Your mind is limited. It can only work on one spin/orbit-frequency card at a time. So, don't mix them!

While Olbers didn't know about the Red Shift and the curvature of space caused by gravity, he did see the implications that things added up all around us much faster than they were decreased by the square of the distance. It's the same with gravity too because this pertains to all waves of any type. We know that we are limited to a certain distance out that we can see stars. Gravity — we now see because of its far, far lower frequency — has to be felt from a much, much further distance away than we can see light emanating from.

This means that Einstein's finite universe extends a certain distance for the proton-neutron particle frequency and this extension is well beyond the limits of the finite universe that the electron's in our vicinity can sense using light waves.

Many of the things learned in radio can be brought into this area and many things that we know about in this area can also be brought into the area of antenna design and so far in antenna design you are only now seeing the tip of the iceberg that is yet to be revealed to you once you start using the elements shown to you by this new concept of Everything.

You will also see — and very plainly so I hope, as you read other things — that Einstein was basically correct when he said space-time is curved.

It is this curvature of space-time — and increase of "angular lock on" *(coming later)* — that is the real reason for the red shift we sense.

I'm sure there will be other various future concepts slightly modifying Einstein's relativity: But they will all be like the various speed indicators in the modern jet-liner basically showing the same thing but with a significant different twist so it better fits the specialized problem being solved.

Not only light but **all** frequencies throughout this universe everywhere, not only in the macrocosm but in the microcosm as well, will be shifted in frequency as seen from another observer's point of view simply because the observer resides in a different space-time setup. The macrocosm's frequency *seems* the reverse of the microcosm's frequency to us in between.

With future super-computer assist, human minds may eventually figure out exactly why this seems so.

Getting back on track again, you simply wouldn't have this much gravitational attraction in Lemaître's expanding universe: That's one of the reasons why the expansion people are looking for all this "missing mass". What this all seems to boil down to is that the way these spiral galaxies are rotating is proving that there is far more gravitational attraction in this universe than we once thought we had. We therefore know we are in a type of steady-state universe and perhaps there is no such thing as all the "missing mass" that you would need to find in a Lemaître type expanding universe. It's going to take generations to figure this all out. Now.

Let's move on to how all this gravity affects light.

We already know that an increase in gravity at the **source** of light, shifts light toward the red: It lowers the frequency. But **in addition**, as proved several years after Einstein predicted it, **stars in the transfer zone** — in this particular case our own sun — will also slow light down enough to bend it. Even though these observations were done in 1919, 1922, 1929 and 1951 and all proved that light in the **transfer zone** from a star to the earth was **being slowed** down by gravitational force — our own sun — yet no one realized that if these rotating galaxies were responding to all this unknown mass then **all** light coming to the earth from distant stars also must be slowed down by this same unknown mass type gravitational force during light's lengthy trip in the **transfer zone** — as sensed by us in our subset spin/orbit-frequency level.

This tells us that we also must take into consideration the total amount of gravitation felt in the area of the **light transfer zone** — not merely from our sun but from all the **other** stars as well — and the **time** that we, in our subset system, sense these light waves to be in the transfer zone, doesn't it?

The total gravitational attraction that light experiences in the **transfer zone** from all the stars will lower the frequency of light **in addition to** the gravity of the light source.

While this might have escaped people's attention or seemed inconsequential before, now with this added gravitational attraction that we find we have in our universe, shown by these rotating galaxies, this gives us far more gravitational attraction than we thought we previously had. Does this give us the exact amount of gravitational attraction for the **exact amount** of "Red Shift" we find that we have in our universe today? If it does then we no longer have any need for Lemaître's expanding universe. Therefore, this pushes us more toward a quasi steady-state universe.

There are a good many scientific problems with accepting either a pure steady-state or an expanding universe per se. There are far fewer problems with accepting a **quasi steady-state universe** that is set up along the lines put forth by this new theory.

The gyroscope, pendulum and vibrating elements all maintain their position in

relation to the fixed stars. This new reasoning tells us why. They would have to keep this reference to the fixed stars if indeed inertia was caused by the linking of all similar spins and orbits of the components of matter to the rest of the universe.

Even certain super-cooled substances such as all the isotopes of super-cooled liquid helium that are being spun in a container will entirely stop spinning, even though the container does not, as the temperature approaches absolute zero. As the temperature nears absolute zero, the liquid helium inside the spinning container will come to a complete stop, holding a place at rest with the fixed stars. This is because the intense cold temperature has tremendously reduced all the close linkages to the container itself because they can no longer swivel and they must swivel a bit to link effectively. This is the exact opposite of the Curie temperature above which an item loses its permanent magnetism because of too many close linkages.

Even the gyroscopes that were used aboard aircraft thirty years ago were sensitive and accurate enough that they could act like this super-cold liquid helium too. Many a time I would place the axis of a rotating aircraft gyro almost vertically straight up — pointed at the sun — at noon time and come back at supper time to see the axis now almost horizontal but still pointed at the sun that was now setting in the west.

The gyro had held its position with the fixed stars and the earth had simply rotated under it.

When I first witnessed this, I immediately thought about the pronouncements made by both George Berkeley and Ernst Mach.

Besides the double right hand rule it's easy to know which way a gyroscope is going to precess if you know why it precesses. It precesses simply because here again we have these quarks in the spinning wheel that have to align up with others of exactly the same "bad quarter" mass somewhere in the universe. So take a spinning bicycle wheel and look at that portion of the tire and rim at the instant you push it to make it change direction and the first initial path that this tire and rim take at that spot you moved — projected on the sky — is the new path in which that entire wheel has to follow. You will notice this best with a bicycle wheel: You won't notice this as much with heavier wheels because the higher torque will react before you can give them much initial movement. So once you

know how a gyroscope really works then it is simple to see which way it will precess. You can throw away the complicated double right hand rule. Let's move on.

You need to have locked items to have either a magnetic unlike pole effect or an opposite charge attracting effect.

Before any aggregations of anything can <u>attract</u> and accumulate anywhere together, they have to be first <u>locked</u> so they can no longer act as if they were like gyroscopes in gimbals.

Free items must always spin and repel similar free spinning items.

Magnetism and the opposite charge effect are both caused by all these locked electrons where many are locked in the same direction. Inertia is caused by the locked quark triumvirate. The proton is composed of two up quarks and one down quark while the neutron is built of two down quarks and one up quark. Both of these quark triumvirates are assembled in such a way that it prevents the quarks from wobbling when they move closer together so they do not give off any waves as electrons do when they fall further to the center of the atom. This triumvirate locking is a form of locking that prevents all these quarks from ever being locked in one direction such as an entire domain of electrons on the *d* and *f* shells in iron.

Later we'll take up inertia: Inertia is a bit more complicated. To see the cause of inertia it is going to take some thinking. This is where mind pictures played an important part and I had to come up with an answer that made sense compared to special and general relativity and quantum mechanics as well. It took me quite a while and I finally found the answer but I can not explain it to you without using Murray Gel-Mann's quark and Rachel Carson's example of the "bad quarter" of a hurricane.

First of all to understand inertia you must understand what relativity and quantum mechanics are showing you and you must also listen to Ernst Mach and George Berkeley who told you inertia was being caused by all the rest of the universe.

How can that possibly be?

OK, first let's look at a Rachel Carson statement where she said she didn't believe any wooden vessel could withstand the "bad quarter" of a severe hurricane. While this undoubtedly is true, what exactly is this "bad quarter" anyway?

The "bad quarter" of a hurricane is that sectional quarter near the eyewall and further out where the forward speed of the storm **adds** to the circulatory wind speed.

For instance if a northern hemisphere storm is rotating counter-clockwise at 120 mph and also traveling toward the North at 25 mph then if you got caught, near the eyewall, in that bad east quarter section you would get hit with winds of 145 mph with the destructive force increasing as the square of the wind speed. Whereas if you were in the western portion of the same storm, near the same eyewall, you might have winds of only about 95 mph.

The destructive force, therefore, would be about two and a third times greater in that "bad quarter" in the eastern portion of the storm with those 145 mph winds than in the western quarter of the storm that had those less powerful 95 mph winds.

All free, spinning, moving entities have this important "bad quarter" effect similar to the hurricane. It doesn't really matter what the entity is, as long as it is free and it is moving with some forward speed: If it is both spinning and also moving with some forward speed then it will have this "bad quarter" effect. Even items orbiting on a geodesic have a certain amount of this "bad quarter" effect.

Later, when you see how light is produced, some will say this "bad quarter" effect is here producing the light and this will be true. You must remember at this time the electron is not on one permanent geodesic but it is **changing** geodesics.

This "bad quarter" effect plays one of the most important roles in our explanation of how <u>all</u> things really work in this universe and today's scientists have missed this significant road sign entirely.

This "bad quarter" plays a significant role in many things and is the prime explanation of this force we call gyroscopic inertia or angular momentum.

The "bad quarter" motion that you will see time and time again in both the micro and macro worlds is the same force that would tip a helicopter over if the operator had no cyclic pitch control. Igor Sikorsky made the helicopter a practical machine by his invention of the mechanism that allowed the pitch of the main rotor to

change as the blade turned: This is called cyclic pitch. Cyclic pitch works this way: If, on a stationary helicopter, the tips of the main rotor blade are going 400 mph and now you fly the helicopter at a 100 mph forward speed, then one main rotor blade (blade moving to the rear) is, on one side, cutting through the surrounding air at 300 mph. The opposite main rotor blade is moving through the surrounding air at 500 mph on the other side of the copter (measurements at the blade tip). This would turn the copter over were it not for the cyclic pitch mechanism where the main rotor blade pitch on the 500 mph side is now reduced, and it is increased — scooping in more air — each time the blade is on the 300 mph side.

When you see a spiraling object in nature, then think of the helicopter blade that does <u>not</u> have the cyclic pitch but instead has a pre-Sikorsky fixed pitch and that has to keep turning over and over if it has any forward speed. This entire universe both micro and macro is loaded with this type of pre-Sikorsky fixed pitch precession of all kinds and it all comes because of this identical fixed pitched blade phenomenon but instead of air it's a mass increase but the idea behind all precession is exactly the same as the fixed pitch helicopter blade or the hurricane. If you think of it in these terms then you will immediately see the other forces causing this spiral. You can even call this fixed pitch blade itself spiraling a form of precession if you want to. The electron precesses because it too has a pre-Sikorsky fixed pitch or this "bad quarter" like the hurricane. By the way, waves — processed correctly by the big bang — precess like this too to form a particle.

For this next paragraph you must remember that general relativity shows us that mass increases as speed is increased.

Like the aforementioned helicopter blade and the hurricane, spinning and rotating items that also have forward speed are going to act exactly like the helicopter blade but instead of having more lift on one side they are going to have more mass on one side and this will destroy their linking with previously linked objects and they will be forced to link with like objects also having a mass increase on one side as well: In radio an effect similar to this is known as impedance matching. And I will repeat once more that this is the reason gyroscopic inertia or angular momentum acts like a spring storing energy as the accelerated object speeds up because each linkage with distant stars in this universe takes more and

more energy as the object is further accelerated. The newly accelerated particle has more "bad quarter" mass and it must find a higher "bad quarter" mass object far away in the universe to bind with as well and so the "wind up like a spring" inertial or gyroscopic effect is noticed. Again, you have impedance matching here exactly the same as you do in radio but here it is the rotation of the quarks producing it where the quarks are all homogeneous and isotropic in the large whereas in radio the spinning electrons — that are <u>not</u> homogeneous and isotropic in the large — produce what we see as a magnetic effect.

I did sneak a bit of inertia and angular momentum into this chapter but I'll go over all this again further on in this book.

Keep all this in mind about this "bad quarter" during this next chapter and when we get to inertia later.

* * *

11. Transformers, motors & generators

First of all you must realize that, even though we can't measure it exactly, the electron has a size. One absolute proof of this, that has been around longer than I have, shows it must be larger than 1.4×10^{-12} cm, (.000000000014 twelve decimal places to the left of the 1.4)

From this we know the electron is not point sized. It is also not perfectly round: It is an oblate spheroid and this — much like the earth — causes it to wobble.

This electron wobble has some very important effects that you will see later when we discuss the production of light.

Before this, absolutely no one had closely examined all the spin-up and spin-down electron pairs that are everywhere. Why hadn't they? Why didn't scientists ask why we had so many of them?

The two electrons we see on normal orbitals with one spin-up and the other spin-down and the two electrons in δ (sigma) bonding and the electrons transferring a quantum of light **all** are similar spin-up and spin-down electron pairs that constantly stay in the same plane and lock with their closest sides going the same direction and in the same phase but with these entire electrons really 180 degrees out of phase with each other during both precession and orbiting. These electrons attract each other and lock with their closest sides together using the 1st "A" Law.

It does not matter in the least if they are rotating around the same nucleus or not: It's the spin-up, spin-down, both in the same plane that always is there. The closest sides of both of these electrons are going in the same direction at the same frequency and this according to our 1st "A" Law is what really matters.

It's also imperative that you analyze the "bad quarter" in δ (sigma) bonding and these side to side "lock ons". Here you have a sort of Sikorsky's cyclic pitch where the "bad quarter" will actually be working much like cyclic pitch and this becomes of paramount importance in binding the closest sides in δ (sigma) bonding and all of this side to side type of locking using the 1st "A" Law.

Everything in this universe is tied in a similar way to everything else through the attraction or if you want to put it the space diminishing process that comes because of our new 1st "A" Law.

A single locked electron can only attract another sister locked electron when either the sides or poles of each are going in the same direction at the same frequency: This is what chemical bonding is all about really. A permanent magnet works because of electrons locking either sides or poles. A permanent magnet locks strongest at its poles, not because some fictitious lines of force are concentrated there but, because here the complete circular path is locking whereas in the side attractions only the closest sides of all the electrons are going in the same direction at the same frequency with the "bad quarter" mass actually matching at the closest sides like Sikorsky's cyclic pitch.

With everything balanced, this "bad quarter" matching on the closest sides is enough to make a tremendous difference in this electron to electron behavior.

In chemical bonding the polar or π (pi) bonding is only momentary and hence weaker than the side to side or δ (sigma) bonding that more or less remains a constant bond especially when the closest sides of these twisting, wobbling, precessing electrons stay locked together and "in phase" with each other. To two electrons, their size and orbital diameter are large indeed therefore they "see" a far different distance than we do between their closest and opposite sides. Magnets have a weaker side to side attraction and repulsion much like individual electrons once they are locked in place. You must consider the sides when working out all these actions in δ (sigma) chemical bonding, transformer, motor and generator actions.

In all the following actions it will be spin-up and spin-down electrons attracting each other with their sides like in δ (sigma) bonding. You will also have sides repelling here too. The following are all side to side actions and <u>not</u> exact pole to pole actions which may indeed happen but which will not be effective in producing the following results mainly because there is no effective "bad quarter" impedance matching with exact pole to pole attraction or repulsion.

Transformers, motors and generators can be shown all to work according to our "A" Laws and this "bad quarter" effect. You can completely forget all about Faraday's lines of force and you will see how they all work using these "A" Laws, the "bad quarter" and inertial type forces.

The transformer is the most interesting because this new system makes far more sense than the ancient, one hundred and seventy year old system where you have magnetic lines of force being cut. Magnetic lines of force are fiction but these "A" Laws are real.

Electrical current means a general movement of more electrons in one direction: They are really moving in all directions and if you prevent the movement of electrons in one particular direction then you will have an electrical current moving in the opposite direction and this is essentially where this starts in the transformer.

The electrons in the primary wire on the first half cycle all have a forward speed hence a "bad quarter" and if you've studied and can remember Einstein's relativity, this will give them all a bit **more mass**. If you also remember me saying there will be an aspect of impedance matching in this then this comes into effect right here in the secondary wire of the transformer because the conduction electrons here are moving too but haphazardly in all directions.

The primary wire electrons have **more mass** because of their speed and they will tune in and attract those electrons in the secondary wires, with **like mass** that are also moving in the same direction as they are but which are spinning in the **opposite** direction like those in δ (sigma) bonding. These electrons will now attract each other, and move **toward** each other, because their closest sides are going in the same direction and have the same increased "bad quarter" mass as well.

This essentially kills all secondary coil electron movement in this same direction because each secondary wire electron — that locks on to a primary wire electron — is now given a powerful almost ninety-degree tug and pulled toward the surface of the wire. Now an additional "bad quarter" is created while this secondary wire electron is moving toward the skin of the wire and this gives it another almost 90 degree swing that will entirely reverse its original direction a good 180 degrees.

This is the cause of the reversed current in the secondary wire of the transformer.

For this additional "bad quarter" you must add the speed that the secondary electron is now pulled <u>sideways</u> from inside the copper wire to the surface of the wire in the transformer. Even though the copper wire in the transformer is of a small diameter never-the-less these electrons in the secondary coil wires are being pulled to the outside surface skin of the wire — by the primary coil electrons whose closest sides are going in the same direction — each half cycle of the alternating current.

Since the electron will act like a gyroscope there will be no gyroscopic action if this "bad quarter" action is exactly at either pole of the electron or exactly at the electron's equator. But at the equator you do have this 90 degree Frisbee grasping reaction that is quite different from the gyro 90 degree reaction in some respects

but produces exactly the same results as the gyro 90 degree reaction as far as the secondary current is concerned.

There will be electrons in the secondary wire that will also be parallel to those in the primary but these will have their closest sides going in opposite directions and these — according to the 2nd "A" Law — will be pushed away from the primary wire and will end up on the opposite side of the secondary wire. Their "bad quarter" will necessitate them going down the secondary wire also opposite to the direction of the primary wire current.

The next half cycle all electrons reverse this procedure and, depending on the alternating current frequency, some might even travel the full diameter of the wire again to the other side the next half cycle. In radio, the condition of these electrons constantly on the skin of the wire is known as skin effect.

So far we have shown only those electrons that have this exerted force at the equator but there are others where this "bad quarter" force is exerted at other points and with these electrons it will not be as if they were grasped like a Frisbee at that "bad quarter" but these other electrons will all pivot much like a gyroscope when they are given this added speed crosswise in the secondary wire and these too will all pivot much like a gyroscope and all of these will also head down the secondary wire opposite to the current in the primary wire.

On the next half cycle when the alternating current reverses then this procedure entirely reverses again.

Now with this picture you can see why you have this skin effect at radio frequencies: The electrons are actually being pushed and pulled toward the skin of the wire each half cycle.

Not only is this a **total inertial explanation** but overall it's a good deal more sensible than the old magnetic lines of force explanation.

Now for the motor: In a simple permanent magnet DC motor the current in the armature winding gives these electrons in it a forward speed and this forward speed gives them this "bad quarter" which acts like someone grasping a Frisbee at that "bad quarter" and this 90 degree movement is what moves the armature wire.

In the generator it is the movement of the armature itself that adds the forward

motion to each electron and these also are grasped at that "bad quarter" and they pivot 90 degrees like a Frisbee being grasped and they move down the armature wire as a current.

Remember the first electric motor ever made? It was made by Faraday who put a magnet, pole up, in a dish of mercury and he put a DC current into a wire that hung over the mid point of the magnet and dangled in the mercury. The wire went round and round the magnet and newspapers carried that story all over the world a hundred and seventy-five years ago.

You can do the same experiment today using a car battery and salt water in a metal pot. **Be careful not to short anything because you can get badly burned.** Connect the car battery to the metal pot and the other battery terminal to a metal hook suspended over the mid point of a pole up magnet that sits in a half inch of salt water. Cut a wire and form another sharp loop in it so it fits into the mid point hook. Make this wire just long enough so that it dangles an eighth or a quarter of an inch into the salt water. The magnet needs a bit of tape or some such insulation around it so it can't touch the bare wire and the bare wire cannot be so long that it touches the metal pot. Keep adding more salt to the water until it works. Reverse either the magnet poles or the battery and the wire rotation will reverse.

In Faraday's motor there were electrons whose "bad quarters" were not exactly at the equator so these did not act like a Frisbee being grasped at the "bad quarter" but these electrons pivoted like a gyroscope thus moving the wire around the magnet.

If you check all these examples closely, you will find all of them going in the correct directions to verify all these new "A" Laws.

* * *

12. Various other forms of magnetism

Can you remember earlier where I said the two "A" Laws were not quite even and the first rule locked things together and the second rule didn't?

Hold two magnets together and you can feel that when two unlike poles come together — two poles coming together where the electrons see their closest facing poles spinning the same way — you can physically feel this lock.

Whether this lock is a "lock on" in the micro or macro world it means that now once two items have "locked on" together this is similar to Einstein's original "cosmological constant" in that now there must be an equal repelling force for other objects that equals the total of this aggregated locking force so those aggregated items must now also be generating a repelling force to various other similar aggregated objects provided the other assemblages have their closest sides spinning in reverse or are spinning and are perfectly free.

When magnetic poles repel they never lock but even try to twist away from each other. When this occurs in magnets then you are really bringing the electron's gyroscopic inertia into action and you are feeling some of the same type of inertial torque that keeps your bicycle up. I have also mentioned that this twisting away is the reason that two free electrons can never come together and they will always repel. This is also the reason that you can never levitate anything with ferromagnetism.

The reason that graphite can be levitated using diamagnetism is that here you are back to all these spin-up and spin-down electron pairs in graphite again. You simply can never have any gyro torque at all with one gyro spinning 180 degrees to its opposite "locked on" paired partner. Levitation is possible once all this gyro effect is canceled and this **is** the atomic layout in graphite.

Our two laws also show we should have about the same amount of attraction as repulsion in both the micro and macro worlds don't they?

You have both attraction and repulsion going on at the same time in the magnetic world as well and we will look at some of these different varieties and mixtures.

Paramagnetism is the term applied to that magnetism shown by those materials

such as the rare earths that when magnetized show some magnetism in the same direction as the applied magnetic field.

Incomplete inner shells in the atoms of these substances are the cause of this paramagnetism.

Our "A" Laws show the reason for paramagnetism just as well as Faraday's lines of force. Where our "A" Laws do even better is explaining the other kinds of magnetism that follow.

Paramagnetic qualities are seen in most of the elements. The metals are paramagnetic materials and in non metals where the magnetic response results in a solitary unpaired electron being left in its orbital and the resultant magnetism being in the same direction as the applied field. Rod shaped paramagnetic objects will always align themselves in line with the applied magnetic field. Platinum, palladium and oxygen are all paramagnetic materials. Unlike diamagnetic materials, paramagnetism is always in the same direction as the applied field. Paramagnetic materials emit a very weak magnetic field and generally exhibit a magnetic field of only one hundredth to a ten thousandth of the field strength of the applied magnetic field for strong paramagnetic substances and one ten thousandth to a hundred thousandth of the applied field for materials exhibiting weak paramagnetism.

Diamagnetism is a type of "negative" magnetism in that these materials always line up at right angles to a non-uniform magnetic field. In diamagnetism, you have the electron orbit precessing and the orbit always can be more easily shifted than the spin because of leverage. There is a mass increase every time the electron comes into that "bad quarter" section of the orbit. You then have both the Frisbee 90-degree shift and the gyro 90-degree shift aligning the material 90 degrees to the applied magnetic field. Even quantum theory indicates that diamagnetism is caused by such an orbital shift.

Diamagnetic materials can be levitated. Levitation is easily achieved using diamagnetism with graphite being the easiest material to levitate. The electrons responding in graphite and all other diamagnetic materials all are paired (spin-up, spin-down) and they enhance levitation because the field is always opposite to the applied field and it is never centrally focused. Only tiny diamagnetic objects so far have been able to be levitated using water-cooled electromagnets drawing

around 20,000 amps. Rod shaped diamagnetic objects will always align themselves perpendicular to the applied field. A slightly different type of diamagnetism occurs with superconductors that have a much better stability while being levitated than other diamagnetic objects.

In antiferromagnetism our "A" Laws show us the electrons are laid out so their sides are all going in the same direction thus attracting each other but when this occurs then you have this spin-up and spin-down arrangement that makes the stronger poles completely cancel each other so in antiferromagnetic materials this stronger polar magnetic field is completely canceled out.

I have tried to cover many things in this lengthy manuscript but at this point it will suffice to say that everything you can show with the photon or magnetic lines of force or charge, I can show using these "A" Laws. In fact, I can do a lot more: I can provide you with a simple big picture of unification as well.

If you read this to the end then you will understand the one simple principle that Einstein said was here but that he could never find. It's an exceptionally simple principle. Einstein spent the later part of his life searching for a simple principle that he thought would provide him with a Unified Field Theory. Unfortunately, there is no such beast as that particular field theory he was searching for and if you haven't seen why this is so then you should eventually see why this has to be so before you finish with this. It is the role the variety of particle type surroundings play in all of this that prevent us from having one all encompassing unified field. Instead of a unified field we have these "A" Laws: They were given to us by one of the world's greatest physicists long ago but in all those many years no one recognized it as the long sought after key to the operation of this entire universe.

* * *

13. Inertia & angular momentum

Inertia is being caused by the spin of the quarks with the sides of the quarks attracting the sides of other quarks, spinning in the same plane, far away in the universe. Our "A" Laws show anything that spins, can attract exactly like a magnet but if all these quarks keep these spins perfectly balanced and never show any imbalance such as electrons happen to do massively in iron, cobalt and nickel then, of course, you would never know that the quark spin could possibly attract another quark especially if your surroundings are homogeneous and isotropic in the large. Modern science has simplified inertia tremendously so it seems to fit the present math here on earth and then even here at only slow speeds and low mass but unfortunately inertia changes with higher mass and high speeds so much so that your present science fails and you have to use relativity corrections. Your universe, therefore, is not anywhere near as simple as today's scientists think.

As almost everyone now knows, quarks — in the proton and neutron — are grouped in groups of three. Quarks and electrons both have spin and whereas the electron's spin causes magnetism which will attract other electrons of similar mass that are oriented correctly, the spin of the quark, in much the same way will attract and bind onto other correctly oriented, spinning quarks, of the same mass, far, far away in the fixed stars and this attachment effect is known by us as inertia.

Just because you see these stars as far, far, away, you have to remember that when you looked at that rock you saw nothing inside that rock far from anything else.

When you are at rest, some of this feeling of being at rest has to be coming from as far away as the Virgo super-cluster. To some sort of super-colossal giant viewing from that Virgo super-cluster spin/orbit-frequency level — and our mind must only view from one spin/orbit-frequency level at a time — the close binding distances and the distances to your fixed stars would both be short range distances.

Distance is a concept and it changes with frequency. Even present science says that when a far distant star loses a single quantum of light to your eye there is no

energy loss whatsoever in that vast distance. So this is almost yelling to you through a loudspeaker and telling you that distance is only a frequency concept that is quite different for different particle-frequencies.

It's all waves and even the particle actions that we all know so well really stem from underlying fundamental wave to wave actions.

As in light, radio and electro-mechanical actions, impedance matching is important here as well but the quark is quite unlike those electrons in partially filled *d* and *f* shells that all flip over together the same way and form magnetic domains that can be easily spotted. The quark always acts individually, locking on with far away distant quarks to cause inertia and thus since our surroundings are homogeneous and isotropic in the large then we do not notice all this quark locking. Thus present science has totally missed all of this and therefore simply accepts inertia as some unknown factor that can never be discovered. It's hard to believe intelligent people would do such a thing but this "in-crowd" of scientists today have most certainly done precisely this.

As we said before the 1st "A" Law "locks on" and the 2nd "A" Law doesn't therefore inertia is caused by all these quarks that they sense are not only spinning but **moving in the same direction** as other quarks and thus have the same matching "bad quarter" mass, as that "bad quarter" mass on the far away distant stars. Both "see" themselves as being exactly in the same plane as the ones they lock with and they also "see" their closest sides going in the same direction. Once a quark "locks on" with another quark somewhere in this universe it can hold this side to side "lock on" for a short period of time or lock on other similar "bad quarter" mass quarks in the same spin plane. This is essentially how inertia is caused.

Impedance matching comes into this because these locking quarks must not only "see" themselves as spinning but also **moving** at the same speed hence their "bad quarter" mass must identically match.

There must be impedance matching here the same as in radio.

Since there are plenty of stars out there then there are plenty of other quarks for them to "lock on". Because these are spread out so evenly we can find no direct evidence, other than a few hidden road signs, that this is what is causing our TOEbyFitzpatrick

inertia.

Believe it or not, it is only to you that the rest of the universe looks far away: To these tiny particles, it doesn't. All particles "see" is that their "angular lock on" is narrower: "Angular lock on" will be covered later. The binding force, near or far — like quanta — is exactly the same for quarks of the same "bad quarter" mass no mater what the distance is.

All these spin and orbital attractions are the glue that holds everything together. The 1st "A" Law shows you why you have binding energy and why you have inertia. The 2nd "A" Law shows you why we have all that space between everything (Einstein's "cosmological constant") and both "A" Laws show you why we have symmetry.

All atomic particles **must** either bind with close neighbors to form their unit or they can bind with particles far away (in the fixed stars) to cause inertia (*mass*). They must attempt to bind with something and they cannot use the same portions of themselves to bind with both near and far objects at the same time. Some may rapidly and repeatedly switch their binding to the best aligned objects whether near or far but that near-far percentage mostly stays constant. I said mostly because in an atomic fission explosion a good many do abruptly shift from near to far binding. In fact, that's the reason for the explosion.

Any mass gain where binding energy is converted to mass is a shift from near to far (surroundings) binding or creation of mass.

Any energy gain where mass is converted into nuclear binding energy is a shift from far (surroundings) to near binding (fission or fusion),

In this theory binding energy and mass, are seen as equivalent, but two distinctly different things: **Binding energy** is the close binding and **mass** is the far off binding with the fixed stars.

So here's something you will find me repeating: **All** energy is a **temporary disruption** of the equilibrium with an end attempt at better balancing between close items and macrocosm items: **That is all energy is.**

Energy can be stored in two ways: You can either store energy by moving an item to a higher orbit. You can also store energy via binding with more massive "bad

quarters" as in angular momentum (gyroscopic inertia) or by increasing an item's rectilinear motion.

The thing you have to remember is that as you increase the speed of an inertial object in rectilinear motion then you are increasing the speed of those "bad quarters" of the spinning objects that make up the unit you are accelerating. This means these "bad quarters" have more mass, the faster the speed is increased. Thus, you are increasing their gyroscopic inertia. Using impedance matching with the 1st "A" Law, if a quark has more mass in one of its "bad quarters" then this quark will have a stronger inertial "lock on" with things in the universe that also have a similar "bad quarter" mass on their closest sides. This is also the reason that gyroscopic inertia increases as you increase the speed of a gyroscope. I'll go over this again toward the close so you don't forget it. This is important. Also the following is something else that is even more important.

* When you see that an atom has less mass than its constituent individual components, then that almost tells you outright that these electrons, protons and neutrons have a choice: They can either bind with each other to make the atom or — as individual unbound units — they can use that same amount of binding energy to additionally add to their individual inertial binding with the rest of the universe.

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I simply cannot understand why present day scientists can totally ignore this major evidence: This is absolute confirmation that our surroundings are causing inertia. This is proving to you in no uncertain terms that Berkeley and Mach were absolutely right.

If scientists agree that binding energy always equals mass lost, well, why isn't that mass lost considered binding energy too? Isn't it binding with the fixed stars instead of binding the individual units together in close binding?

If quarks in neutrons and protons all suddenly bind inward where previously this binding was outward to the fixed stars, well, then this immediately temporarily disrupts the <u>old matched equilibrium</u> in the vicinity and then re balances and that's mass turned into fusion energy isn't it?

This theory is positively **showing** you exactly why $E = MC^2$.

As I said before energy is simply a temporary disruption of the equilibrium with an end attempt at better balancing between close items and the fixed stars.

Remember near or far binding is momentary, repetitious and always exactly the same strength for the same units binding: Only "angular lock on" falls off with distance, not binding energy. "Angular lock on" falls off with the square of the distance and obeys Einstein's general relativity tensor math, all of which is covered in detail in chapter 15.

The CMBR (Cosmic Microwave Background Radiation shows the initial big bang had to be "all throughout" the universe and did not start at some central spot and travel outward.

This is telling you that you need to have the rest of the universe out there even before you can have any type of outward explosion. This means it all had to be out there before the "big bang" too. Before this new approach came along only a few working in general relativity seemed to understand this but now everyone can with this new theory.

It is important to note that the Lemaître-Gamow "big bang" could not have happened either under general relativity or the premises of this theory unless something was already out there. A much larger universe of some type had to be already out there under either assumption.

In this new theory, people will have to feed enormous amounts of information into future super-computers to see what could have really gone on during such an event. Even so, any expansion would have been over as soon as all the piano keys were finally in tune with all the rest of the piano keys. In this new theory, the exact particle frequencies are the determining factors in the stability of the entire universe: When that eventually happens then the universe is finally in a quasi steady-state of balance.

There is no such thing as the 19th-century human idea of one all-purpose type of distance anymore: Einstein proved that. The distance we see is a composite of all of these various spin frequency distances. Distance has to be frequency qualified. Time does too because remember, it's the space-time interval that is frequency

conscious. Each spin/orbit-frequency "sees" its own type of time and distance. These "A" Laws use inertial qualities, with something similar to a general relativity kind of increase in every level. Inertial qualities for each spin/orbit-frequency, however, will be different along with surroundings. We'll see later on, that even though we can only see light from a certain distance away; we can, however, feel gravity from a much, much further distance away mainly because of the quark's wider angular "lock on" and possibly slower spin. Einstein's curvature of space, it turns out, is also different for different spin frequencies.

Binding energy can be extracted from mass even from chemical bonds. When an item binds with a close neighbor — and loses it with something in the universe — then it stores energy (binding energy) in the binding and loses mass in the proportion given by Einstein's famous formula E=MC². When you consider that C= the velocity of light then this formula shows that you get a tremendous amount of energy — in this case binding energy — from a tiny bit of mass (binding with the fixed stars). But really, you are just changing macrocosm binding to close binding.

The energy you get is merely the **upset** that you get during this change.

This is why you can have both fission and fusion energy because you get this **upset** going **both ways**.

Get a very good description of what energy really is by clicking this link: http://www.rbduncan.com/page5.html and scroll about three quarters of the way down this page.

These attractions can be both from spins and orbitals and unlike magnetism, a sideways attraction of one spin-up and one spin-down neighbor can be more powerful than a polar attraction if they bind with a higher "bad quarter" mass and/or if it is for a longer time duration such as in δ (sigma) bonding.

The electrons in the outer orbitals are the ones that bond the strongest with other electrons in covalent bonding. What does that tell you? It adds proof that this entire idea is correct and that the electron is composed of even smaller spinning inertial entities — that we'll call "de Bs" after de Broglie — because it is the binding of more and more of these the closer it gets to the nucleus that gives the closer electrons a higher nuclear binding thus depleting the amount of binding left

for covalent bonding with other electrons. This difference in electron bonding also validates this theory because since these electrons are far from the nucleus and binding less with it than the other inner electrons, then the outer electrons have more binding power left over to bind with other things won't they? Binding is an either or process: The binding that it does with the closer things can not be used — at the same time — to bind with things in the macrocosm.

You should now be able to see why you always have the most bonding in the lowest energy state and that is simply because binding is an either or process and when there is more close binding then there must be less far off binding with the fixed stars therefore less mass.

I told you I wanted to cover gyroscopic energy or angular momentum once more before this chapter ends so what happens to get gyroscopic inertia or angular momentum? Please keep impedance matching in mind: Not only is it important in radio but immensely important here as well.

You start riding your bicycle and as you pick up speed then this bicycle holds you up better. What's really happening?

You must first consider this entire universe to be composed of free orbiting and spinning things all held apart by the 2nd "A" Law. Once you accept this then you can plainly see that everything is composed of gyroscopes in gimbals that themselves are built of smaller things that are gyroscopes in gimbals that are also built of even smaller things that essentially also are gyroscopes set in gimbals and this goes on and on and on.

So as your bicycle wheel picks up speed the quarks in your wheel have an added "bad quarter" now and thus their mass increases therefore they must now only "lock on" with higher mass quarks in our universe. Just so long as you keep this speed up then you stay up on the bicycle because you maintain this high "bad quarter" mass attachment with the rest of the universe. As you get tired of pedaling and your bicycle slows and your wheels slow down again then all these "bad quarters" diminish and things return to where they all were originally and it's time for you to get off the bicycle.

What is this telling you?

This is showing you where all this gyroscopic inertial energy is being stored! This is a **strong force** energy storage mechanism.

The weak link in our present science structure is that it doesn't show you where all this gyroscopic energy is being stored and this new theory most certainly does.

A single inertia-binding quark can be pulled a slight distance away from the quark triumvirate like a piston acting against a head of compressed air where it is pulled further and further away as the mass and therefore the binding energy increases. This asymptotic freedom is your quark energy storage mechanism for gyroscopic inertia. As "bad quarter" mass is increased in gyroscopic inertia, the quark is pulled further out against the **strong force.**

We therefore learn that gyroscopic inertia or angular momentum is caused by a change of **strong force** reaction.

Quarks do move in and out like pistons against a head of compressed air and this is called asymptotic freedom. This quark attractive force can effectively swivel a bit angularly, even though the quark doesn't swivel at all, in the same spin plane to hold inertial "lock on" with other similarly massive quarks spinning in the same spin plane but because of this triumvirate grouping of three quarks, they do not wobble and give off light waves like a single electron does when it drops more toward the center of the nucleus.

In a proton that consists of three quarks, these three quarks have considerable asymptotic freedom when close together but when another quark in the universe gets an inertial "lock on" on one of these quarks and tries to pull it out of the proton, the **strong force** starts acting before the quark separation from the other two is less than the diameter of that proton they are building.

The **strong force** will not allow a single quark to be pulled away from the quark triumvirate although with sufficient force quark anti-quark mesons have been obtained.

There is a big difference between this inertia given to us by the quark's **strong force** and these inertial qualities that all these other particles have. Since they don't have this particular quark triumvirate arrangement that will give them the

quark's **strong force** then their inertial qualities will have to be quite a bit different from our inertia where we act against this **strong force**.

The same gyroscopic action will be there but it will not act in the intensity as our inertia. The **strong force** is why our inertia must be distinguished from the inertial qualities of other particles and their aggregations.

Our "A" Laws show us the reason for all of this because the quark is far denser than a neutron or a neutron star, both of which are about 1014 (1 with

fourteen zeros after it) times the density of water. A neutron star has about the same density as a neutron or an atomic nucleus and this is about a million times the density of a white dwarf star.

The quark seems to be smaller than 10-18 (decimal point then eighteen zeros then 1) meter or one-thousandth the size of either the neutron or proton that three quarks build up. You don't have to be a mathematician to see that this puts the quark far into the density area of a black hole.

A neutron star is formed when a supernova collapses and the collapsing core ends up having about the same mass as our sun but the entire neutron star is only about 12 miles in diameter.

If the collapsing core is more than three times the mass of our sun — according to most physicists — then it cannot become a neutron star and it must become a black hole instead.

If the quark is only one thousandth as big as either the proton or the neutron (both of which are approximately as dense as the neutron star) then it should be many times as dense as the least dense black hole.

Anyway, we know the quark is quite dense and because of this density along with utilizing relativity, a single one of these quarks will not sense these spin frequencies of the other two quarks as being the same as its own unless this quark gets close to the distance of the diameter of a proton <u>away</u> from the other two quarks.

There are several methods in which this **strong force** may be generated by three super dense black hole type spinning quarks. Sorry, but you will have to wait for

the correct full explanation as to exactly why this happens.

Fantastic you say. No, only common sense because this answer is the only credible answer that can possibly be and still agree with special relativity, general relativity, quantum mechanics and superstring theory.

On the subject of black holes, you should take note that these have a definite **limit** of density: Using either our "A" Laws or Einstein's cosmological constant, you can see where the attractive cohesive force of the black hole plus all the cohesive force inside the stars in a galaxy must always exactly equal the total repelling force of all the stars to each other in that same galaxy.

You simply cannot use your local gauge theory to see how this entire unified global universe works. The illustrating to your subset mind must be done by the mind picture method that I have shown you herein.

I feel that if Einstein would have kept the George Berkeley-Ernst Mach idea of inertia that he originally had and had heeded David Hilbert and had worked more in radio, especially on transmitters and antennas then he would have surely gotten it because it's all frequency that is then coupled with William Thomson's original idea that it essentially all boils down to motion: And it does really because it is all frequency and motion as seen from within a subset spin/orbit-frequency level.

There may be no such thing as either a certain frequency or a certain motion from a global universe point of view so these must be ascertained from a subset spin/orbit-frequency level's point of view which we here on earth have either rightly or wrongly developed after thousands of years. If this is all you have then you are forced to use it.

Now I am going to again repeat something here and state that not only is the orbital of the electron built of standing wave units but so is the electron itself: In fact all particles are nothing more than spinning standing wave spheroid entities. The electron, itself, is nothing more than a spinning standing wave sphere. I want to pound this home even at the risk of being redundant: All particles are nothing more than spherical collections of standing waves that remain stable because they stay perfectly balanced between their sister particles. In addition, they have the ability to quickly recover — within the "blitzseit" time span of several lower spin/orbit-frequency levels — this balance energy with another sister sphere that

either adds or subtracts momentary energy to or from them respectively.

The electron has a certain spin rotational speed and travels a certain route because this world of waves keeps it on a geodesic which is the path through space-time where the electron has a balanced energy level. The electron moves from being a blurred object with a quasi spin in the old world of quantum mechanics to this new world where it is a genuine solid spinning standing wave spheroid particle with real honest to goodness spin along with the resultant gyroscopic inertia.

At this point, I want to state that eventually the fractional quark charges will be understood when we can better understand the various motions contained in these up and down quarks that build both the proton and neutron.

Scientists forgot all about the electron's spin frequency. All electrons are spinning — or resonating — at the same exact frequency. You have seen in chemical bonding and even with magnetism that electrons do not always repel each other as they always should if there was such a thing as charge. Under chemical bonding you saw that it is the <u>attraction</u> that electrons have for one another — when correctly lined up as they overlap — that gives us much of the molecular bonding that we have. (covalent bonds)

If a particle is nothing but a spinning standing wave spheroid entity that remains resonating at a particular frequency, then we can expect all particles to exhibit essentially the same wave qualities. De Broglie — as we said before — discovered particles do seem to have wavelengths. What I have found, that our good scientists still have not yet discovered, is that the electron precesses — or wobbles — at various light frequencies and this is exactly why we have light.

What you essentially have in this universe is a never ending balance game between all electrons and nuclei where they are throwing off and absorbing energy while each tries to absorb or move or precess a trifle faster or slower or emit just the right amount of energy to remain at the lowest energy level in the latest situation. Since the situation is constantly changing, then so is all this energy transfer balancing act. The number of electrons that end up matching in all respects is what it takes to get balanced or to transfer energy from one to the other. When any two electrons — *or anything for that matter* — do balance out or transfer energy then this balancing process or transfer process is carried out within one "blitzseit" of several lower frequency levels.

Quantum theory gives the name "resonances" to these quasi particles that do not remain here long but have the shortest of all known lives.

I, not only agree with quantum mechanics about this highly appropriate name being given to these ultra short lived particles but I am going to show you that all particles are really nothing but "resonances" but some have a certain ability to remain here longer. You should have seen why they remained here longer if you kept your nose to the grindstone reading this mind-grinding book. I'm awful sorry that I failed to tell you it was going to be this hard in the very beginning of this book but life in general is harder than what you think it is going to be when you first start out on that too.

You will think I'm going off on a tangent now but I'm not.

When I was young, my father impressed upon me the importance of the "tuned circuit" in radio. We didn't have TV in those good old days. I did see an oscilloscope though, way back then, that had a screen the huge size of two inches in diameter.

A "tuned circuit" in radio is generally a capacitance in parallel with a coil. The capacitor stores energy but it takes a certain time for it to charge and this essentially is the secret of the "tuned circuit". A certain size coil and capacitor will resonate at one certain frequency because for one half of the cycle the capacitor will be charging one way and on the next half of the cycle the current will be flowing in the opposite direction. That's about the basics but how it really works is that a parallel "tuned circuit", such as you have in your car engine developing its spark voltage, will short out and destroy all other radio frequencies except the one it is tuned for while a series "tuned circuit" acts exactly opposite. All electronic devices are chock-a-block full of "tuned circuits". The "tuned circuit" enables you to select one single radio or television station. This basic idea is also why, in transferring a quantum of light, an electron picks out only one other single electron to transfer its energy to.

If one electron can pick out another specific electron to deliver its quantum of energy to then both electrons must be "tuned circuits".

How can they be otherwise?

As you will again read later on in this book, the "tuned circuit" produces a certain frequency that continually resonates and these continually resonating frequencies, along with these "tuned circuits" that cause them, are the most important things in radio, television and computers. Now you can see where else that they become of paramount importance.

They are important all throughout this universe and they are important in the area of inertia as well.

I was able to assemble this jigsaw puzzle because I perceived that this is a universe built entirely of "tuned circuits" and of resonating waves and I spotted some extremely important frequency connections.

* * *

14. Steady-State plus de Broglie

The more massive the star, the more the red shift. Acceleration will also cause this red shift in the macrocosm and the more the acceleration the more we see that light is red shifted as well.

Edwin P. Hubble discovered one more reason for a red shift and he found the further away stars were from us that the more we saw them as red shifted too.

This led Georges Lemaître to pronounce that we were in an expanding universe and he was joined by Gamow, almost two decades later, who then predicted we would find the background radiation from this violent sudden building of our universe. Robert H. Dicke started looking for this background radiation and discovered that it had already been found but its discoverers hadn't realized what

it was they had accidentally discovered.

Einstein, at first, told Lemaître that this assumption of an expanding universe was absolutely wrong but then as time went on even Einstein changed his mind and got on board this new expanding universe ship. With Einstein now on their side this expanding universe idea took on a whole new life.

Linear speed would be swiftly changed into angular momentum in this new theory because of the effect caused by the surroundings and any of the "Big Bang's" expansion would have eventually completely stopped and that is exactly what must have happened. Once you accept these "A" Laws then you must also accept the fact that the "Big Bang's" expansion had to cease after it had used up any expansion energy and turned it into the angular momentum of spinning and orbiting entities.

To all this I must add that the latest Britannica says, ". . . while an actual physical expanding universe is, indeed, the popular view, it is not the accepted scientific view."

My science reading began with the beginning of that raging, lengthy, argumentative Gamow-Hoyle debate where Gamow would hurl unkindly epithets toward Fred Hoyle and Hoyle — the steady-state universe's champion — would always respond with derogatory but yet printable remarks about Gamow's "Big Bang" which were two words that were probably initially meant to ridicule and which may indeed have done so for a while until they at last became a veritable picture in themselves and gave to the common man the shortest best phrase expressing the entire idea of the Lemaître-Gamow Expanding universe.

Now as I sit here at my computer and contemplate those "good old days" when I was young, I will now be the very first arbitrator who settles that great confrontation.

Gamow may have been right about the Big Bang but Fred Hoyle has never wavered in his belief of the steady-state universe. Hoyle, who is still here living amongst us, now sees it's a quasi steady-state universe. So — more or less like his fellow countryman Arthur Wellesley the 1st, Duke of Wellington who remained up in front of his troops and held his ground all throughout the very worst of the battle — Fred Hoyle essentially wins this victory: Look at a rock that also has

spinning and orbiting electrons inside it and the rock gives you a perfect model of the way our universal new "A" Laws work in both the microcosm as well as the macrocosm that — for one spin/orbit-frequency anyway as seen from several lower spin/orbit-frequency levels — is also just as steady-state as the rock.

You must realize that the same as you see that rock as having no motion, the entire universe sees all your motion as meaningless too. You — in your subset world — have developed this concept of motion and it is indeed a valid concept as you look at all these things in your own subset system. But for this universe as a whole, that is looking at it more or less as you observe that rock, the motions that you see are simply — in the universe's longer time period — all canceled out. You now have the answer as to why the speed of light plays such an important role in your scientific world.

Einstein — who first conceived of general relativity during the era of the steady-state universe — made the **three** following assumptions:

The universe is homogeneous and isotropic. (*It is more or less spread out evenly over space and time.*)

* This universe would be finite yet have no borders or edges.

And this would be the **effective** universe in this new theory because it is definitely limited to the point where "angular lock on" is no more. There is more universe past this point but it has no **effect** on our mass (particle-frequency) for this finite portion in which we find ourselves.

This would be the reason why Einstein's relativity tensor math works.

* This was a **steady-state** universe that didn't vary with time. ^

But the problem was, with using these <u>three</u> assumptions that Einstein found his general relativity equations — that were first published in 1915 — had no

solutions whatsoever. So in 1917 he added his "cosmological constant", which was a repelling force equal but opposite to gravity that kept all the planets, stars and galaxies in this universe apart. In other words he saw that such a steady-state universe must have a certain unknown repulsive force — just the opposite to gravity — that exactly cancels the effect of gravity and keeps everything in the universe firmly in place.

Einstein did hesitate in using this 1917 "cosmological constant" because it implied some slight problems with his 1905 special relativity. (Special relativity states that under certain conditions you would not know your orientation but once all these cosmological constant repelling forces are in place then you most certainly would be able to orient yourself via these forces.)

Over ten years later Einstein felt that with his original equations alone (first two assumptions alone and without the steady-state universe with necessary cosmological constant) he should have foreseen an expanding universe. Subsequently when Einstein later thought we really had an expanding universe, he called the input of his "cosmological constant", his "biggest blunder".

When **Fitzpatrick's** theory is proven correct then everyone will plainly see that Einstein's "biggest blunder" was in listening to Lemaître.

So now that we are again back to a somewhat steady-state universe, this new Theory of Everything beautifully removes Einstein's "cosmological constant" from that of unknown origin to one whose origin is now as clear as crystal: The cosmological constant is equal and opposite to gravity because the 2nd "A" Law is equal and opposite to the 1st "A" Law. It's as simple as that.

It took the world about 40 years to accept Newton's idea of gravity. I guess it will take another 40 years to bring us all to a quasi steady-state universe. With all this new information, it certainly looks as if we are headed back again to a type of steady-state universe notion.

(Now in 2010, ten years after this book was written, my peers have brought back Einstein's "cosmological constant" — designed for a steady-state universe — but they have maintained their belief in an accelerating, expanding universe. But the two don't match! So this gives them a universe that many of today's scientists say

makes no sense whatsoever because — NASA tells us we have 72% Dark Energy, 23% Dark Matter and 4.6% Atoms in http://www.amperefitz.com/dark.m.e They read the old worn road maps instead of the available road signs.)

Therefore, if we are back to a type of steady-state universe concept again then the de Broglie wavelength reveals another hidden road sign.

The de Broglie wavelength of an electron can vary with acceleration. An electron accelerated in a vacuum by a pressure of 1 volt has a de Broglie wavelength of a bit more than the average X-Ray while one accelerated by 40,000 volts would have a de Broglie wavelength of 1/10 that of the average X-Ray. It is <u>blue</u> shifted with acceleration.

Then as we turn to the macrocosm, to us here on earth, there seems to be a red type frequency shift (shift toward a lower frequency-longer wavelength) for all frequencies in the macrocosm and a blue shift (shift toward a higher frequency-shorter wavelength) for all frequencies in the microcosm. To us — as we look at the microcosm — it will look like a shift to the blue or to a shorter wavelength or higher frequency: For instance our instruments out here will "sense" the de Broglie wavelength, in the microcosm, getting shorter as the microcosm objects are accelerated or get more massive. Thus the microcosm seems to be a reverse of the macrocosm which is to be expected if space-time is curved and all frequencies are red shifted in the macrocosm and blue shifted in the microcosm. You should be glad that this is the method the universe uses to insure stability because this is what keeps energy from excessively leaking out of your particular spot in the universe and stops a catastrophic amount of energy from entering.

The de Broglie wavelength, in the microcosm, "seems" exactly in reverse to the <u>red</u> shift in the macrocosm. The de Broglie wavelength gets <u>blue</u> shifted. With things of a higher mass or with more acceleration the de Broglie wavelength gets <u>shorter</u>, not longer.

When you "sense" that mass or acceleration shifts wavelengths in the macrocosm to longer wavelengths and it shifts wavelengths in the microcosm to shorter wavelengths then what is that telling you?

It is telling you that you are truly seeing how space-time is being built.

You would only see this reversal of the de Broglie wavelength if **all** frequencies were shifted from one space-time area to one of a different **consistency**. You would never see this reversal in an expanding universe. You would only see this reversal if the space-time consistency of you and things of "your size" were far different from both things of the microcosm and in the macrocosm, for instance if **all** frequencies were shifted.

Now that we have dissolved all our science into a mere gauge theory we have no alternative but to say light — to us in our subset spin/orbit-frequency system — seemingly gets red shifted in the macrocosm and the de Broglie wavelength also gets seemingly blue shifted in the microcosm.

It was Niels Bohr who discovered that as light is being generated in the microcosm it also gets seemingly <u>blue</u> shifted in the microcosm because the closer the electron drops toward the massive nucleus then the more the emitted light goes toward the <u>ultra</u> violet, which is the shorter wavelength

But in the macrocosm, it's just the opposite and everything that caused light or any electromagnetic waves to <u>blue</u> shift in the microcosm <u>seemingly</u> causes these to <u>red</u> shift in the macrocosm.

We notice that compared to us inside the microcosm, time seems to be going faster and space seems to be compressing.

We also notice that compared to us inside the macrocosm, time seems to be going slower and space seems to be expanding.

All the signs that people have read to show the universe is expanding are also there in the microcosm as well showing them that the microcosm is being compressed. Niels Bohr even had to add a microcosm compression term to his simple solar system type math so that he could slightly modify centrifugal force when he linked the various orbital drops to the different light emissions.

Once the fact is established that the space-time setup in the microcosm is a direct reversal of that in the macrocosm then this throws a spotlight onto the framework of established science thus eliminating any possibility of a universe that is presently expanding.

Once it is seen that the microcosm space-time setup is a direct reversal of the macrocosm then new opportunities in viewing science also open giving mankind a much greater grasp into the full picture of this enigmatic universe of ours.

If we look at the microcosm where time seems to us to be compressed then we understand why, when we look at a rock, we see it as a solid rock even though we know there are electrons in motion inside it. There is only one reason that we cannot see this motion and this has to be that these "blitzseits" or shortest increments of time in the microcosm must be quite compressed and **shorter** compared to ours here. But if we reverse things and observe the macrocosm then we should expect the macrocosm "blitzseits" to be of a **longer** time duration than ours and here we should be able to perceive the <u>difference</u> in these rates of time and we do: Römer saw it first: He saw that it took 8 minutes for light to come from the sun to us here on earth.

Why can we see this <u>difference</u> one way when we can't from the other? The answer has to be a microcosm-macrocosm space-time reversal along with a different time duration for these "blitzseits" in each distinct level.

One of the first things that comes swiftly unglued is this present thinking that you can claim that the de Broglie wavelength gets shorter with an increase of either mass or acceleration both here and in the microcosm. This is absolutely wrong.

The de Broglie wavelength **only** gets shorter with mass and/or acceleration in the **microcosm**. **Don't switch to other subset systems using your old science: Use our "A" Laws.** You know full well that you cannot take our science rules past that magic level of Planck's constant and into the microcosm: You also cannot take de Broglie's mass-velocity formula for the electron's wavelength out of the microcosm past the magic Planck's constant level and then place it into our spin/orbit-frequency level here either.

To equate the much greater mass of things in our world here with a much shorter de Broglie wavelength — as many scientists are now doing — is **pure rubbish**.

In fact, by doing this, they have the **de Broglie mass to wavelength ratio of things out here entirely reversed**.

This is one of the prime factors that have held us back the most. Following is a

list of these principal factors responsible for us remaining in this scientific darkness.

Not seeing the microcosm-macrocosm reversal of the space-time setup and that these are two entirely different subset systems that border our subset system here.

Using Faraday's lines of force that, in effect, prevented us from seeing which way electrons are actually spinning which you must know to see the real reason for magnetism and for everything else.

* Failing to see what Gödel's proof and Hilbert's reasoning are clearly pointing out.

Failing to see that charge — and all these forces — are merely variances of speed, spin, alignment and frequency.

* Failing to see that our concept of time, distance and motion is similar to our concept of white light.

* Failing to see the "A" Laws.

Failing to see the reason for Einstein's original "cosmological constant" and that the reason things repel in the galaxy and giant Virgo super-cluster is the same reason electrons repel in the microcosm.

15. Proof of Einstein's principle of equivalence using the "A" Laws

Scientists agree that Einstein's principle of equivalence is correct but as of this writing, few know precisely why this is true. This is one of the first publications where people will be able to find out exactly why it is so.

Thinking about what we said in the last section, we have to ask ourselves why does gravity act like acceleration according to this new theory?

As something accelerates then you are increasing the forward speed of all the electrons and quarks in the same direction that you are moving the object, aren't you?

This increases all their "bad quarters" and hence their mass doesn't it?

This means that now when they lock with the objects in the universe, to cause inertia, they are locking with more mass. You have a mass increase don't you?

Now let's look at the other side of the coin.

The general theory of relativity shows that when a unit approaches an object of ponderable mass then this unit gains mass.

According to Einstein's Principle of Equivalence this mass increase would be equivalent to that gained by the same unit accelerating instead of being brought

close to the ponderable mass.

Now that this has been established what we have to do next is show you how this equivalent mass is given to the unit as it is brought close to the ponderable mass, don't we?

OK, remember me saying before, in the beginning of this, that what fell off with the square of the distance was the way electrons lined up to transmit light?

Something very similar is now happening in the unit that is now close to the ponderable mass.

The closer the unit gets to the ponderable mass then the greater is the amount of inertial "angular lock on".

What is this amount of inertial "angular lock on"?

OK, we said that all these spins (of quarks mostly) locked on other far away quarks to cause inertia just as electrons locked on to other far away electrons to cause light transfer.

In inertia, these quarks must line up, the same way, in exact same planes. With light, these electrons must also line up in exact planes. The next question is how exact is exact? Even though we don't precisely know this, we do know that since this same type line up of planes always falls off with distance then we must assume that surroundings more than two light years away will have an "angular lock on" of far less than a closer ponderable mass.

"Angular lock on" is one of the things that falls off with distance. At a certain distance, this "angular lock" on gets so small that "lock on" is no more and it ceases altogether with both light and inertia.

The spinning and orbiting things in the unit have the same strength of "lock ons" to far away things in the universe that they have to the ponderable close object. Not only that but they must attempt to lock with something. When they lock with things far away these are fast momentary "lock ons" because the "angular lock on" is very narrow. This is not so when they are forced to lock on with things inside a nearby ponderable mass.

The quark has asymptotic freedom so it can lock for a wider angle than the electron and this "angular lock on" with close objects is even wider. Close things lock for a wider angle. You could also say close things lock for a longer time. What does that mean for these "bad quarters" of the electrons and particularly the quarks inside the unit?

It can only mean while they hold this wider "angular lock on" they are also both **increasing** this "bad quarter" longer thus **extending the <u>time</u>** that these **masses** stay "locked".

Therefore — *from the eye electron's view* — this is definitely changing the wave shape plus this also must be tending to lower the wobble frequency of the transmitting electron.

Your eyes are not going to be able to "lock on" with these because the increased mass in these "bad quarters" will be for a **longer time** period than the "bad quarter" periods in your eye. Not only that but now the wobble frequency of the electron in the star will be a bit slower than the wobble frequency of the electron in your eye.

The two can't match if the frequency of only one changes and gets too low. They can't match if the wave shapes of only one changes either.

Remember all binding is momentary but repetitious: Since we know all binding quanta of the same elements are the **same strength** and we also know that these are all momentary locks then what else do we know?

We know that when <u>electron</u> "angular lock on" gets too narrow the locking falls off to zero. When it gets too wide then precisely the same thing eventually happens but for an entirely different reason: With a wider <u>electron</u> angular lock on the "bad quarter" time duration is getting so much longer than the time duration in your eye, at the same points in each wave cycle, that the impedance matching eventually gets lost. Remember light has to be given to a <u>wobbling</u> electron that is a "tuned circuit" tuned to a certain frequency and that frequency must remain the same and it also must remain the same <u>especially on the closest sides</u> for the transfer of a quanta of energy. Your eye cannot see these same strength "bad quarters" if they are not equal at their closest sides. This also effectively changes their impedance while the eye impedance remains the same

so the two no longer will match. The eye has no way to match this new shape wave. Not only that but this "bad quarter" longer time duration, while close to the ponderable object, is lowering the frequency as well.

But now think of this: The quark does not wobble like the electron as it moves closer toward the center of the nucleus and the quark has asymptotic freedom which <u>does</u> allow <u>both</u> quarks to get pulled out further and thus quarks <u>keep</u> this longer "lock on" with quarks that are near massive stars or near ponderable objects. Here, there is no wobbling nor energy transfer and both quarks increase in mass the same amount.

Incidentally this wider "angular lock on" of the quark is also one of the reasons gravity is sensed much further away than light.

You are essentially moving all these "bad quarters" of these quarks closer toward the speed of light <u>longer</u> or you can also say you are <u>increasing the time</u> of the mass of all these "bad quarters" by giving them a closer and therefore <u>wider</u> "angular lock on" because you are also giving them a <u>longer</u> "angular lock on" aren't you?

We have Olbers' paradox because this cannot be done when permanently **exchanging** energy one to the other as with two electrons. It <u>can</u> be done, however, with an energy build up between two quarks that are <u>both</u> going <u>up</u> in energy as they both are pulling equally against their respective **strong forces**.

So where light decreases with a **wider** "angular lock on", gravity increases with a **wider** angular "lock on". In other words with **wider** "angular lock on" impedance doesn't match with light but it does match with gravity.

So for gravity you have the following reasoning.

The <u>amount</u> of mass increase in these "bad quarters" (of the quarks) when the ponderable object is close, is <u>equivalent</u> to the mass increase you also get by accelerating something and giving the quarks added speed that also increases a similar "bad quarter" in these quarks that give us almost all of our inertia.

Therefore Einstein's Principle of Equivalence is just that because the "bad quarter" mass increases inside the atoms in the unit are **equivalent** in <u>amount</u> whether they are caused by a close ponderable object or by acceleration.

This new concept shows why Einstein was correct with his principle of equivalence.

"Angular lock on" is the answer to Olbers' Paradox and this loss of light to us from all the stars around us because of this general relativity curved concentrated space concept around these stars. You can use both curved space and the concept of "angular lock on" that this new theory supplies to you. The concentrated charge right around the electron is best seen using "angular lock on" rather than solely using Einstein's curved space. With a changing "angular lock on" the strongest repelling would be concentrated near each electron when they both are the closest.

This does not, in the least, diminish relativity but it does give you one more instrument for relativity that you can have installed on your instrument panel.

What general relativity sees as this curved concentrated space around these stars can also be thought of as this wider "angular lock on" for these electrons close to these stars preventing them from transferring their light energy to our eyes.

Remember impedance matching! The electrons in your eyes simply can never match the lower frequency nor the longer time mass wave shape of the majority of these electrons close to the stars.

You can see it as curved space and/or wider "angular lock ons": Use whichever concept you want to use just as the pilots flying these jet airliners use whichever of the four speed indicators are more appropriate for that particular portion of their flight.

What you must always remember is that even though your mind has been developed in a subset system and it is a subset mind, it is good at switching concepts and it works best in one such subset system at a time so you are going to have to be constantly switching concepts all the time. There is no getting away from this. **If airline pilots can do it then so can you.**

Curved space or wider "angular lock ons" are why centrifugal force is changed with heavier atomic surroundings: So Bohr was using the **new correct** centrifugal force when he matched the spectral lines for the single electron hydrogen atom and the single electron helium atom wasn't he?

Now you see how all the rest of the spectral lines can eventually be matched, don't you?

"Wider angular lock on", as we said, can also be seen as responsible for the charge concentration close around each electron: Those "de Bs", mentioned earlier, also use impedance matching and this — with two free objects such as two free electrons — will show up as more repelling force concentrated close to the electrons.

But quarks and electrons will work differently.

Each spin/orbit-frequency level will have its own distinct symmetry because it has a distinct different frequency set of surroundings.

* * *

16. Light & Planck's constant

The transfer of light is a 1st "A" Law, "tuned circuit", "lock on" **pull** of one electron for another electron, that we sense, is a distance away. So, as far as this is concerned, it is similar to the transfer in a transformer.

Remember in the transformer where the primary electrons pulled and pushed the secondary electrons closer to the surface of the wire creating an additional "bad quarter"?

The slower frequency acts to change the mass of the primary electron long before it can be pulled to the surface of the copper wire. What this essentially means is that as the mass of the primary electron increases then the attraction with the

secondary electron is lost and the primary electron must bind with another secondary electron and then this binding too is lost with a mass increase and this might go on and on so that in a slow frequency, a large number of primary electrons are slowed and maybe even none are actually fully reversed in their direction but still this would mean a change of current in the secondary but at a higher current but lower voltage than would be effected if each secondary electron "locked on" to was faster and was given a grand slam hit and actually reversed in direction by a faster moving primary electron with a far more massive matching "bad quarter". This is one of the reasons that we find we have Planck's constant.

This is essentially why a higher voltage in the primary also produces a higher voltage in the secondary of either a transformer or your eye.

This is a universe that attempts to stay in balance. It's never able to do it finally but it is constantly trying. Energy will always flow from an area of high concentration to an area of low concentration but the method of transfer is what limits the amount of energy that is precisely transferred. You will see exactly why energy is delivered in quanta.

If your eye — when looking at a far away star — receives one quantum of light from that star then that one quantum was also released from the star and came to your eye with no energy loss whatsoever no matter how far the distance. We used to think that energy dropped off with the square of the distance but quantum mechanics proved that wrong.

One fine day in Copenhagen, Niels Bohr proved that when an electron, on that distant star, drops to a certain level then an electron in your eye goes up that same amount giving your eye the one quantum of energy the electron on the star lost. No energy whatsoever was lost in that vast distance. This is the truth and this is what today's scientists believe. Why don't they believe that binding energy will also lose no binding energy with distance? They are exactly the same things but at different frequencies. This theory tells you that your distance has no meaning outside of your narrow subset local gauge system anyway and therefore since the electron is outside of your spin/orbit-frequency system, your distance has no meaning to the electron and it also has no meaning to those quarks either.

Only you saw a vast distance to that far away star. Both of those electrons did

not: They only "see" their "angular lock on" falling off, giving them fewer other electrons that are lined up properly. They also sub-harmonically "see" protons inside the nucleus. Those two electrons "see" none of this time nor all that distance that the slower spinning protons and neutrons produce that you see. The electron in your eye and the one on that star merely still "see" both of their binding sides closer than their own furthest sides. To them, all that time and distance that you see between the two of them simply doesn't exist: To them it's time at their frequency and distance at their frequency that counts.

People working in radio and quantum mechanics understand the importance of this frequency aspect as to certain sections of our universe but very few realize how important this frequency aspect is to this entire universe.

Your mind has given you a good 15th century "approximation" of how it is all working but I'm afraid this will have to be vastly improved.

The global universe is a **frequency** universe and it understands **frequencies** but your subset world is a particle world. Unfortunately your subset mind works best in this subset particle world but this is **not** the true global world.

The way the square of the distance comes into it is shown by the following:

When you burn your hand on a hot stove, you may think it is easy to transfer energy but it is not. It is a good thing it is not too because if it was quite a bit easier then you would not even be here.

Before that far away star could transfer its one quantum of energy to your eye, it had to have its orbital plane lined up exactly in the same plane as the orbital of the electron in your eye. This theory shows us there is even more: The mass of both those electrons must be the same. Since a change of speed will change mass then this means that both orbitals have to "sense" a certain equality of being at the same speed which is not at all simple. Furthermore each electron has to "sense" that the other is orbiting exactly out of phase with it — like two δ (sigma) electrons on the opposite side of the orbital with their closest portions going in the same directions and being of the same mass — and remember as we said in the beginning, in the same orbital plane with it too before that quantum of energy can be transferred. Few electrons will be exactly lined up like this: This is why you have energy falling off with the square of the distance.

The **number** of electrons that are lined up properly and are available to transmit immediately is what falls off with the square of the distance. In fact, general relativity shows you where it falls off even faster than this.

Remember, there are only 4 terms you can use with these "A" Laws:

- * Frequency
- * Motion (phase)
- * Orientation (alignment)
- * Inertial qualities similarity (impedance)

In this theory, one must use the term <u>inertial qualities</u> instead of the term <u>mass</u> if it is going to refer to <u>other spin/orbit-frequency</u> levels besides ours here on earth. I have used the term <u>mass</u> herein only when it pertains to our world here on earth.

More terms must be added to this list to begin the "A" Law mathematical solutions but presently all you need to see the big picture are these four terms you have here.

These 4 terms along with the "A" Laws are all you need to see the big picture.

Now we will go into this transfer in detail.

This entire universe is continually in a balancing act as all energy in this universe is continually trying to spread itself from high-energy areas to areas of lower energy.

Max Planck taught us that this is all done by moving these quanta of energy.

Niels Bohr was the first person to show that an electron has to drop to a lower orbital in order to give off energy. But in this, you will learn quite a bit more.

In 1912 Bohr showed us that various orbital drops matched various spectral lines, each being a quantum of energy. Then in 1916, you must remember, Dirac showed us that energy also could be transferred via other methods besides a full orbital drop, such as an electron flipping completely over — 180 degrees — and since then other methods have been found.

Color comes from distinct waves each of which is produced as the electron wobbles inside and then outside of its slowly shrinking geodesic but these are still all tiny discrete bits and these are all incremental fractional units of h. This is because all these wobbling cycles, precessing cycles and spiraling cycles of these electrons are also gyroscopic fractionals of the electron's gyroscopic inertia.

Not only are electrons moving on these orbitals but because of their fast spin they are like the earth and like many Americans: They are fat around the middle. Similar to the earth, the electron is an oblate spheroid and thus exactly like the earth, it is subject to wobbling. We will "sense" this electron's wobbling frequency to increase — a change of color toward blue — as it drops closer to the massive nucleus.

Very much like the two electrons in δ (sigma) bonding that are orbiting two distinct nuclei, an electron in a high energy area binds with an electron in a low energy area using their closest sides with both their orbitals in the same plane and each 180 degrees out of phase in both orbital and wobbling — their "bad quarters" on their closest and opposite sides <u>are</u> in phase and going in the <u>same</u> directions and in this sense are much like two vertical antennas. This will be seen by some as two of Dirac's monopoles attracting.

This wobbling then becomes even more intense and *seemingly* faster as the high energy electron drops to a lower orbital giving the low energy electron, it has tuned in with, an exact mirror image of its more intense wobbling and orbital increase for its own orbital drop. In other words not only is the quantum of energy exchanged as a mirror image but also each distinct wobble — light wave — is exchanged as a mirror copy of the emitting electron.

Bohr showed that an electron would not radiate unless it falls to a lower orbital inside of its original orbital geodesic.

Fitzpatrick's theory shows you that Bohr was right because energy is a

temporary binding interruption while the close to macrocosm binding is being changed.

As they change geodesics — one going up and the other going down — remember both their "bad quarters" are cycling and pulling them more, then less, then more, then less: This even helps **maintain** their wobbling.

Each distinct wobble is one wave of light because this energy emitting electron is now excessively wobbling both <u>inside</u> then <u>outside</u> its slowly collapsing orbital geodesic and the electron must not only radiate whenever it drops below its defining orbital geodesic line but it must also reciprocate and receive energy when it jumps above its orbital geodesic line.

Both transmitting and receiving electrons have set up a **rhythm** where both are participating in this wobble **rhythm** of exchange. You could say energy is actually passing back and forth as each wobbles inside and outside its respective orbital geodesic. As this is happening the orbital of the emitting electron is collapsing and the orbital of the receiving electron is building up. Each electron is now a tuned circuit oscillator.

You must remember that since the earth spins around once in about a day and its wobble cycle is 26,000 years then we can expect the electron's wobble to be a much, much longer time period than its spin as well. From this we have to assume that the frequency of our light waves are at a much, much lower frequency than the electron spin/orbital frequency. This makes sense too because from this you can see that the aspect of Planck's approach to a solid as frequency is increased is showing us that as we — from the solar system level — approach the higher frequencies, things are approaching a solid and they do become a solid at the electron level when viewed from the solar system level such as when you view the rock.

So the reason that we see these higher light frequencies giving off higher and higher voltages as you increase the frequency is that you are now approaching a key much higher frequency where the electron spin/orbital frequency, as seen from your much lower solar system spin/orbit-frequency, actually becomes a solid.

Not only is light energy transmitted this way but, in fact, all radio frequency

energy is transmitted similarly by two electrons that are in the same plane and "see" each other much like two vertical antennas: You must take into consideration the "bad quarter" to see both light and this vertical antenna approach.

As far as this new theory goes, Niels Bohr was absolutely correct in arguing with Einstein that the quantum of energy that is being sent out is not this neatly packaged photon particle described by Einstein. Instead, in this new concept, all photons are a distinct radio frequency alternating current signal of a certain quantum of energy that is being transferred from electron to electron as if there was no space whatsoever between them. If they are lined up properly, they don't even "see" any space between themselves. Energy transfers are most certainly not permanent standing wave spheroid type particles. Neither the photon nor any boson is a particle in this theory.

A particle must always be a permanent spinning standing wave spheroid in this new concept and the photon is not, so in this new theory Einstein's photon package is ruled out and Niels Bohr, who said "No way" to Einstein about this, wins this argument hands down. Energy transfer is a wave only in this new approach.

Remember that energy is only a temporary binding interruption while the close to macrocosm binding is being changed.

Before this, absolutely no one had closely examined all spin-up and spin-down electron pairs that are everywhere. Why didn't they? Why haven't scientists asked why we had so many of them?

The two electrons in δ (sigma) bonding and the electrons transferring a quantum of light all are similar spin-up and spin-down electron pairs that constantly stay in the same plane but 180 degrees out of phase with each other during both precession and orbiting and attract each other and lock using their closest opposite sides that are the same mass and are moving in the same direction at the same frequency: These are important namely because they can utilize this "bad quarter" impedance matching or mass matching.

It does not matter in the least if they are rotating around the same nucleus or not: It's the spin-up, spin-down, both in the same plane and both 180 degrees out of

phase that matters.

Four things — frequency, impedance, phase and alignment all have to be correct when an orbiting electron transfers energy to another orbiting electron just the same as it does in a radio circuit. Impedance in the electron to electron transfer meaning that both "see" each other as the same mass on their closest sides: Of this we are certain.

Everything in this universe is tied in a similar way to everything else through the attraction, or if you want to put it "the space diminishing process", that comes because of our new 1st "A" Law.

Now we come to Planck's constant and its vector equivalent mh/.

Planck's constant is nothing more than the angular momentum of the electron throughout the specific time that the electron is falling to the lower orbit.

The term mh/ is the energy emitted by the gyroscopic inertia of the electron as it drops one complete orbital as viewed by an observer here on earth and as we need and obtain even more accuracy we will also have to set up a standard latitude and altitude of this standard place on earth where such observation is made because there is no such thing as a standard place of rest here on earth so we must eventually of necessity define one.

* * *

17. Einstein's gravity wave prediction

Einstein did make the prediction that gravity would be found to be a wave and

therefore it could be polarized.

The problem with the gravity wave is determining its frequency. Our new idea shows us that the frequency of some portion of the gravity wave should be longer than even the cycle of the rotation of our galaxy. Things seen in our solar system or even our galaxy would "see" us as in motion so a more perfect place of rest must come from several lower levels or the Virgo super-cluster. You must then realize the wavelength of some modulated portion of the gravity wave must be at least the time the larger Virgo super-cluster takes to rotate around once.

There is good and sufficient evidence to support some portion of the gravity wave being based even several more spin/orbit-frequency <u>lower</u> levels than even this Virgo super-cluster: Since we can't even see these lower levels then we'll have to stop here. I think even stopping here gets the point across though.

The maximum gravitational attraction is being caused by the spinning quark some of which must be spinning at the square of the electron's spin frequency. This is a very high frequency indeed with no way to polarize a frequency this high.

There are galaxy spin frequencies to those beyond that you cannot even see — that are responsible for gravitational type effects and also distances at these various frequencies. Right now present science lumps all these forces and distances together. You simply will never make rhyme or reason about gravity from the way science is presently dealing with gravity.

When you consider the aspect of Planck's approach to a solid as frequency is increased and the difference in frequency between light and the gravity wave then this amount of gravity that these rotating galaxies are showing us we have, indicates we are feeling the gravitational attraction of a universe much, much further than the furthest distance that we can see light emanating from.

Since our galaxy rotates around once in about 2.5×10^8 (2.5 with eight zeros after it) years then the time the Virgo super-cluster rotates around once has to be even much, much, much, more than that!

How on earth are you ever going to measure a wave such as that?

How are you going to ever polarize it?

Not only do I not see any possibility of doing it in our day and age but I don't see any future equipment coming on line that might be able to do it in the near future either.

If humans remain here long enough then it most probably will be done someday though.

I simply doubt that it ever will for many generations though so I am not going to second guess Einstein on this one.

He made the prediction. Since you have just about finished reading this exposition of mine by now then I'll let <u>you</u> decide if anyone will ever polarize the gravity wave or indeed ever be able to even measure its frequency. One thing I'm absolutely sure of: It will never be done in my lifetime.

* * *

18. Space-time & Who are you?

The use of the space-time interval allows scientists to utilize a wonderful mathematical correlation between space and time in various situations. That's all well and good but I always want to know what's behind it all. Why does it work?

Since you know — seen from your subset system — there is no place at rest in this universe and everything is moving then your time is a rate of change you see imposed upon you.

You remain here because your particles have all struck a balance between their macrocosm binding and their close binding. On the macrocosm extreme you have the Virgo super-cluster and on the other extreme you have the electron that is your only connection with your eyes which in turn do all your measuring for you:

Your eyes are your RADAR. The electron is the only RADAR particle you really have too.

Since you can't measure to everything in this universe with a measuring tape, you are forced to use the electron to do this measuring for you. You also have a sense of a place at rest and this is being imposed upon you from as far away as the Virgo super-cluster. So here are the frequencies that you can use to detect and measure: You have the electron, solar system, galaxy and the Virgo super-cluster. These are the important spin/orbit-frequency levels involved with your detecting and measuring. Basically from these spin/orbit-frequency levels you get your entire idea of space; your entire idea of time and your entire idea of the speed of light as well.

Time is the rate of change that you sense. So is the speed of light essentially.

Both of these, therefore, are the ratio of the rotation of the electron compared to the rotation of possibly the earth, solar system, galaxy or Virgo super-cluster.

Space and time are things only your brain can devise for you. This is a frequency world. You are, theoretically, only here for one "blitzseit" at a time. Your brain is here, however, for longer than that providing all your components stay right in step with all the right frequencies and your brain keeps functioning.

Your brain is the thing that has put you into this subset world of the proton-neutron spin/orbit-frequency level because it can extend itself over a time period of a much longer duration than the "blitzseit" of the electron.

Space, in this theory, might be best seen using the "blitzseits" of the subset proton-neutron spin/orbit-frequency level where the motions in the electron's spin/orbit-frequency level begin to get close to motionless. This proton-neutron subset level is the closest microcosm level that matches most of your current science rules.

While these "A" Laws increase or decrease the space-time interval, all you have seen so far in this text were descriptions of **space** being added or removed: You have had no examples so far of time being changed by these "A" Laws.

You can see time being changed by looking at the macrocosm: We've already gone over Römer's discovery of the speed of light: The speed of light — to you

here on earth — is essentially the difference between the solar system, galaxy and Virgo super-cluster rotation compared to the electron rotation. It's simply the ratio of these frequencies compared to the electron's spin frequency because you are built up of these entities that are nothing but frequencies themselves really.

For you to change either **your** time or **your** space, you will have to change this ratio: While this can be done, it will take some fast speeds or extensively massive conditions or much acceleration before you will ever be able to even measure the change: The U.S. Air Force actually measured it.

What you **can** see, however, is the electron's higher frequency **space** created or deleted by these higher frequency electrons. Their "blitzseits" of time are much faster than your proton-neutron "blitzseits" of time. You can see how we manipulate **time** in the various sophisticated antenna designs that are built for one purpose and that is to cover as much area as possible and to match that area with a single electron stream using **time** to match the phase difference between the single electron stream and the various spots in the large antenna area. This way you **amplify** the strength of the antenna for both transmitting and receiving.

The lens in your eye does essentially the same thing and is more proof that not only can you see how space is changed but time as well.

In this new universe, <u>you</u> are constantly changing. In addition, this is true in life as well. Doesn't it feel as if you are only here for a fraction of a second or so at a time? This is your mind giving you this sense of time that we all have.

Such is the main theme of this little notion that I have laid out before you. This feeling we all have of only existing a second or so at a time might be showing us that this indeed is the world of "blitzseits" and momentary connections that this whole brand new idea calls for.

While you feel you are only here for one of these "blitzseits" at a time, you also feel you are at rest in this universe don't you? Well, now let's look at a few things: Where would you have to be situated in this universe to see yourself at rest?

You will have to be at a lower spin/orbit-frequency level than the level you are observing won't you? For instance, you see the rock electrons having all that particle spin and orbiting motion entirely balanced out while you are observing

from this planetary or solar system level where you now are located. This is at a longer wavelength or lower spin/orbit-frequency level isn't it? This is a lower frequency level, which term we said earlier in this thesis that we had to use instead of our old subset term "larger".

OK, so now that we know all motion gets totally balanced out as seen by several lower spin/orbit-frequency levels. This means we know that for us to feel at rest, this feeling of "at rest" must come from the next lower spin/orbit-frequency than the solar system and the galaxy. So this means the Virgo super-cluster level doesn't it?

You can't be getting <u>all</u> this feeling of "at rest" from this galaxy level because in this level, you along with the earth, are still in motion. But in the next lowest level — the Virgo super-cluster level — you and the earth and the sun and whatever are making repetitious motions that from the super-galaxy's point of view all entirely cancel out: This is the same as you looking at the rock where all particle motion, in the rock, are repetitious and completely cancel out.

Therefore, if some of this feeling of "at rest" comes from — at least — the Virgo super-cluster level, the lowest spin/orbit-frequency level in our octave of piano key frequencies, so this must also be where the base line for some of the modulating frequencies of the gravity wave originates as well. Therefore the wavelength of some of these modulating waves must be one full revolution of the Virgo super-cluster which you saw in the last chapter has to be quite a long time.

This tells you something, doesn't it?

As we look from here into the microcosm we see repetitious motion that seems to be frozen solid and we see ever faster frequencies the further in we look. As we look out at the macrocosm, we see motion and the further we look the wavelengths get so long we can't possibly even measure them. If this isn't a microcosm-macrocosm frequency reversal then I don't know what a reversal is. "Angular lock on" is also reversed from macrocosm to microcosm: "Angular lock on" falls off the further things are in the macrocosm and it gets larger the further you look into the microcosm. This is the reason items in the microcosm look smaller to you. This is a wave universe and because each of these momentary "blitzseit" bindings is the same strength then more of them, per unit of time — higher frequency — will create a higher voltage and thus you can actually see the

main reason for Planck's constant: Only the lower spin/orbit-frequency, whose "blitzseit" is of a longer time duration, could possibly sense this "more in a unit period of time" but remember this projection is on a curve and not a straight line.

This curve, by the way, may become extremely valuable to future scientists in initially determining the spin frequencies of everything: These spin frequencies will be of the utmost importance in future math.

As long as all these things stay their respective distances and wavelengths apart then they all survive and remain here.

As long as all your parts stay merrily in tune with everything then you happily stay here as well. You can see where life originated can't you? You are a child of this universe aren't you?

You no longer stay this solid, long lasting thing that you have always seen yourself as. Now you become nothing more than <u>one</u> of those continuing momentary, flashing pictures on a movie screen with millions of past pictures on one side of the real you and millions of future pictures on the other side of the true you.

All these frames of yours are changing at one certain fixed frequency with the micro world changing at a faster frequency and the macroworld changing at a slower frequency than yours. This is what gives you the micro-macro reversal of the red shift in the macrocosm and the blue shift in the microcosm.

You will therefore also see other things rotating and revolving whereas they will see themselves at rest provided they — like you — are traveling on geodesics.

Things that were of supreme importance before now lose some of their old clout and the four things that seem to predominate above all others in this new view of things, as we move closer to this world of waves, are **frequency**, motion, **orientation** and **inertial qualities** as seen from a particular **subset** spin/orbit-frequency level.

Space is equivalent to time. Since our mind cannot cope with the space-time interval, does it separate it into two things that it can understand, namely space and time?

Our mind doesn't understand the space-time interval so maybe it separates it into space and time. The way it does this may be relatively simple. You know you are not the same person you were in the first grade in school. What you don't seem to realize is that you also are not the same person you were a second ago or even a microsecond ago. Your mind is a continuous system though and it makes you think that you are the same person that is existing over all these separate frame periods of time.

This is one more reason that our particle world can not give us the entire picture. And this is another red warning light from Kurt Gödel.

You are living in a world of waves that the mind simply doesn't "see". Your mind has been developed slowly over millions of years for survival. Human's minds had to be able to impress humans that larger things could eat them while they could easily kill and eat smaller things themselves. So this idea of large and small had to be firmly imprinted on your mind for your survival. The human mind has been designed especially for this subset particle world and it has undeniable problems with an all wave universe. It simply wasn't designed to contemplate an all wave universe.

Although we may have finally gotten a grand unified theory, this isn't the end. This is the very beginning of a brand new world and we still haven't even scratched the surface of this universe yet.

You will be able to picture this universe that you are in by mostly using these four terms of **frequency**, motion, orientation and inertial qualities because that's all that you will need to see the big picture. For the math we will need more terms but this is all you need right now and anything more would only add to your present confusion as you take your first look at this new universe as it really is. I have shown you a model of a universe with every particle-level using **frequency**, motion orientation and inertial qualities. If you set up a model universe this way, then it will work out exactly like the universe that we find ourselves in.

I saw this basic idea before 1967 and published a book about it then: You will see a full-page ad in the N.Y. Times Book Review Section for the Sunday of June 18, 1967. The ad has a big picture of a galaxy on it and if you go through the microfilms for the Sunday N.Y. Times Book Review section for that date then there is no way that you can possibly miss it.

What I did not see in 1967 was the important part frequencies played in all of this and I should have seen this because I had the top federal radio license at that time and I have absolutely no excuse to offer for the delay in not noticing that until later.

To whom it may concern: It is hard for me to believe that I had no competition whatsoever in this area for over thirty years, particularly since practically every university in the United States had a copy of my 1967 publication. The Copyright Office has a record of all my various publications about this method of unification from 1967 until now in the year 2000. So to anyone saying they were ahead of me publishing any or all of this, I'll not argue with them but we'll simply check the records to find out who really was, as that great Confederate General Nathan Bedford Forrest said, ". . . firstus with the mostest." I know for a fact that, more than anything else, it was the 1997 Britannica CD ROM that at last provided me with the final rope and string that I needed to be able to tie all this up together.

Once you see all this turns out to be correct then you must worry about the long term survival of human life because this informs you that all the world's scientists who were being paid to investigate all of this, simply weren't. So then you must ask, "Will they also once more fumble the ball and bring on an early end to the existence of humans?"

* * *

19. Einstein called this his 'Biggest Blunder'.

Since we do have a quasi steady-state universe then we do need to emphasize once more the cause for this "cosmological constant" that Einstein so wisely saw was necessary with a **steady-state** universe.

Einstein gave us this "cosmological constant" when he thought we had a **steady-state** universe but then about ten years later he changed his mind when he later thought this universe was expanding. He then called his earlier thinking, about his original "cosmological constant", his "biggest blunder".

Now, that we see it is really a **quasi steady-state** universe, we also see our new 1st "A" Law shows us things that rotate at the same frequency will attract and this means all inertial things whether these are electrons or larger things like planets, stars, galaxies or even giant super-galaxies. All of these things will attract if spinning or orbiting at the same frequency and this attraction will be seen as greater when looking at the higher frequency from a lower spin/orbit-frequency view thus we get the effect we do from these higher frequencies because of the aspect of Planck's approach to a solid as frequency is increased, looking at higher frequencies from a lower spin/orbit-frequency level.

All these things also have surroundings constructed of the same particle-frequencies therefore they will have some form of gyroscopic inertia. This gyroscopic inertia acting at 90 degrees will **twist** these and thus prevent these objects from ever lining up anywhere near where they are spinning the same direction on parallel paths. So the 1st "A" Law attraction tends to negate itself because of this gyroscopic action coming in slowly as the cosine of the angle of the attracting planes giving the 2nd "A" Law far more advantage in keeping all these things apart.

Einstein never saw this because he never got this far but I'm sure he would be glad to know that his original "cosmological constant", that he thought up and then a decade later totally discarded, will be with us both in the microcosm and macrocosm for as long as people remain here.

* * *

20. Tiny Clusters of Matter

In our new concept, <u>similar</u> <u>surroundings</u> play an important part. The following shows you what happens to only a few atoms when <u>similar</u> <u>surroundings</u> are <u>entirely removed</u>.

Atomic clusters of only four or five molecules behave in an entirely different manner from hundreds of the very same molecules that are joined together. For instance, three or four atoms of mercury joined together act as an insulator while many joined together act properly as the liquid metal. Clusters of a few solitary molecules of any of the metals tend to act as an insulator and not as a metal. These tiny groups do not seem to bind together with the powerful metal binding force either.

Since in this new theory the key to inertial qualities and indeed the way any substance acts is <u>similar surroundings</u>, this and the following all seem to support our new "A" Laws.

This study of tiny clusters is becoming popularized now because of this new electronic chip industry where circuits are operating on layers of conducting metal of only a few molecules in depth.

Clusters are a few atoms, molecules or ions joined together. It can only be because of <u>similar surroundings</u> that they always behave differently from hundreds of the same types of atoms and molecules similarly joined together. An example would be that a cluster of twenty-five atoms of a substance would always invariably have a lower melting point than a much larger amount of the same substance. Another example would be that a cluster of four atoms would always behave far differently from the same atoms all joined in a much larger mass.

Here's the way to comprehend why this would be so. You saw that Niels Bohr could give a simple formulation for the single electron hydrogen atom but this breaks down when more electrons in higher orbits are found in all the other elements. Why? The **different** surroundings.

What have we found out so far?

We have found out exactly why centrifugal force changes: It's because of **different** <u>surroundings</u>.

Once you have another band of electrons circling the first band then you cannot figure a simple centrifugal force anymore for any inner electrons because they will sometimes be binding with that outer band of electrons instead of binding totally with the universe as in pure centrifugal force. The same thing happens with clusters of only a few atoms, molecules and ions. It's a whole different setup with things all around them then it is with similar things around them removed.

Binding energies of tiny clusters may vary greatly where the binding energy of a cluster of four atoms may be found to be much greater — or less — than a cluster of five or three atoms of the same atoms in a larger accumulation. The average binding energies, however, of those atoms in tiny clusters is generally less than the binding energies of those found in the larger groups of similar atoms.

That last sentence is of extreme importance because it hands us a veritable key that tells us tiny clusters are not able to line up as many spins and orbits to bind together with as the larger numbers. Why is that? The law of averages is higher with the larger accumulations.

Where the larger accumulations of atoms and molecules sometimes all take on a totally similar crystalline structure, the tiny clusters do not. Four atoms of a substance may take one form while five may take another form and six atoms of the same substance may take a far different form. A great many numbers of atoms or molecules seem to be necessary before they can assume this consistent similar crystal type formation. All of this is pointing to the importance of <u>surroundings</u> and our new concept.

Sometimes tiny clusters act like individual molecules and sometimes they don't. Sometimes they are similar in properties with the larger groups and sometimes

they are not. The one paramount discernible difference between tiny clusters and larger atomic conglomerations is the variety of their properties. These are never as consistent as all the larger groups of the very same atoms.

These small clusters behave differently from regular larger amounts of the same matter. It seems to me that our new law where the <u>surroundings</u> are important shows why this happens quite a bit better than any of our present science does.

* * *

21. Summing this all up

This is the very first offering of any type of a portrait of a universe in which we see all these elements of what we notice in reality being exactly the same as what we witness in special relativity, general relativity, quantum mechanics and superstring theory. Therefore I am presenting this picture of the way things must really be setup for all the above to coincide.

We all make mistakes and all scientists have made one big mistake not seeing what was happening after knowing that electrons and protons always lost mass whenever they joined together and gained binding energy. When we saw relativity corrections always had to be made in cases of excessive speed or mass then this also should have awakened us. We saw that the high percentage of empty space in the microcosm is about the same as that in the macrocosm and in both of these there are widely separated spinning and orbiting entities. This should have told us to look for **one principle** which only a very few really tried to look for. Quantum theory is a dead giveaway that our science is nothing but a bunch of subset rules.

If there is some other type of setup where reality agrees with all these aforementioned theories then I would surely like to hear about it. Nothing except

this theory has yet been published that completely unifies everything as successfully as this one does.

Inertial qualities must therefore emanate from the surroundings just as Ernst Mach suggested. These inertial qualities must depend on the spin/orbit-frequency of all similar surrounding particles. Each different spin/orbit-frequency in this universe must therefore have a type of Olbers' Paradox and the aspect of approaching a solid as frequency is increased and relativity corrections and a similar frequency shift to the lower frequency range the same as our red shift. Each of these different particle-frequencies must be tied to each other by subharmonic frequencies that are so remote as to link but yet not rob any vital amount of energy from any one of the various linked particle-frequencies.

Our space-time setup, here on earth, is mainly being caused by the difference between the electron's frequency of rotation compared to the rotational frequency of either the earth, solar system, galaxy or the Virgo super-cluster or perhaps a combination of all of these: What we see as the speed of light is really the ratio of those aforementioned rotational frequencies. Since this ratio remains a constant — for us as we sit here on earth — then this speed of light also must remain a constant as we sit here. In fact, all the constants of nature must be caused by frequency ratios.

Glass and plastics are transparent to light and certain frequencies are transparent to other frequencies. This is an edifice that has yet to be built up for this new theory. As I said before, these "A" Laws are only the beginning: We have many more doors to open.

Present science has vastly oversimplified things and it has no method that allows you to see yourself changing over time and this mandates that you see yourself as this non-changing entity over time and this unfortunately does not fit in well at all with the theme of reality or of how we really feel we are living through time or of what is really happening in this entire universe.

We must consider that the "tuned circuit" and the impedance matching aspect that we see in radio circuitry also play a strong hand in every spin/orbit-frequency.

Along with the "tuned circuit" always comes impedance matching that can be accomplished whenever electrons, quarks or whatever particles and/or

aggregations attract using their sides. There is no way an exact polar attraction can also have an impedance matching equality of mass. This is the reason that we see so many of the spin-up and spin-down side attractions such as in δ (sigma) bonding. The exact polar attractions will not incorporate impedance matching: The others will all use the more powerful impedance matching aspect where they attract those objects with an exact similar amount of mass on their closest sides.

We must consider this "bad quarter" effect in each of these local gauge system spin/orbit-frequency worlds.

The "bad quarter" or cyclic pitch phenomenon we covered earlier that becomes of the utmost importance in gyroscopic inertia, is essentially derived from the initial spinning precessing standing wave spheroid.

All the local gauge terminology must be converted to **frequency**, motion, **orientation** and **inertial qualities** and then used together with the "A" Laws to determine the proper actions of any particular spin/orbit-frequency level to obtain the true unification concept *as this universe* "sees" it.

This new universe theory accepts the idea of Dirac's anti-matter. But to remain here permanently these anti-particles must somehow fit into and be protected by the grand piano key assembly of permanent particle-frequencies otherwise they will eventually be absorbed. There is no mystery whatsoever to an anti-particle. Every anti-particle works exactly opposite to the neutron. As you have already read herein the neutron is not a stable particle and needs to have protons nearby to remain stable. Having proton(s) in close proximity ensures that the neutron's close binding now matches its macrocosm binding.

The anti-particle works exactly opposite whereas when it comes into close proximity with the particle then the particle it approaches loses its matched close to macrocosm binding and now both particle and anti-particle — when together — now both lose their equal close binding to macrocosm binding and they both disappear: What disappears is the orbiting at a frequency close to your proton-neutron inertial frequency you call mass. So what you see is a decrease of mass. So inertia decreases but not inertial qualities. Other particle-frequencies do not necessarily decrease. Just this one particular spin/orbit frequency is no more. Smaller particles or higher frequency or higher spin/orbit frequencies may indeed remain but if they are out of our detectable range then we may not even pick them

up. Inertial mass may disappear but not inertial qualities. There is nothing at all mysterious about this.

Yes, quantum theory gives anti-matter equal weight in those wave equations but if quantum theory doesn't have an input for these permanent piano key frequencies — which it presently doesn't — then their formulation will be wrong some of the time and it may be quite wrong on anti-matter because as long as anti-matter is not being supported by the proper piano key wavelengths then it can't remain here long. So Dirac is right but it's quantum theory that has insufficient and ineffective methods as it attempts to explain anti-matter.

Henry Ford is attributed to claiming that the experts all tell you what can't be done. I've been told that even if the universe does work this way that is portrayed here then there will be too many movable bodies to contend with and there is no way mathematically that this could ever be put to a practical use. My answer is that Einstein has already given us his tensor math formulation that shows mathematically exactly how it all works within certain parameters when the surroundings are far enough away and evenly spread out. The next step is to work out exactly how his formulations do work with our "A" Laws when the surroundings are not so far away and not so evenly spread out.

In 1958, three Russians — Pavel Cerenkov, Ilya Frank and Igor Tamm — won the Nobel Prize for discovering what caused that blue light surrounding atomic reactors. It is now called Cerenkov Radiation. They found it is caused by the speed of light being exceeded in the viewer's world although the speed of light never really is exceeded in the world of any of the atomic reactor components. The speed of light and who is at rest are two things that will change with different observers.

This shows you again what our "A" Laws show you and that is this speed of light is only the fastest speed in <u>our spin/orbit-frequency level</u>. Your concept of speed only exists in this limited local gauge spin/orbit-frequency system here on earth. Your concept of your speed cannot be carried into the universe as a whole. In our subset spin/orbit-frequency level, the speed of light is essentially the speed of time because it essentially is the speed that you see yourself, along with your space and time, as being built.

This speed of light — or speed of time — as measured by ourselves in this subset

system of ours is the difference between the Virgo super-cluster's rotation frequency, galaxy, solar system along with the earth compared to the rotation frequency of the electrons in yourself as you sit at rest on this earth while the earth is on its geodesic going around the sun. If you get shot off, in a rocket, from this earth and increase your speed then all your particles will all have more massive "bad quarters" that will slow them down and then there will be less difference between the rotation frequency of the electrons that compose you and the rotation frequency of the Virgo super-cluster, galaxy, etc. so therefore your time will be slowed down and if you maintain this speed, you will age a bit slower than the people in the world you left.

Space is also going to be determined by the difference between the Virgo super-cluster's rotation frequency (along with its components) and the rotation frequency of the electrons in yourself and the rocket and remember you are going to see distance differently at this different spin/orbit-frequency. You have also been reduced in size. In other words you, along with the rocket and the space inside it, have all shrunk a bit.

Now this is the **reverse** of both the microcosm and the macrocosm where everything is on geodesics. In the microcosm, there is a space reduction and time gets faster but in the macrocosm space is expanded and time slows down.

When you accelerate in rectilinear motion, you get the space reduction of the microcosm and the time slow down of the macrocosm: And this is extremely important because this shows you that simple straight line acceleration maintains this energy strictly inside this subset local gauge spin/orbit-frequency system. In other words while you may be out of balance speed wise in your own spin/orbit-frequency level, by rectilinear accelerating you have not altered the piano key tuning by shifting energy between piano keys (spin/orbit-frequency levels).

But when this energy is added to an orbiting object then the orbit is increased and thereby you most definitely have created a lower orbiting frequency, haven't you?

The universe will try to balance this but, since it's a lower frequency, it may have to be balanced out in some other spin/orbit-frequency level.

So the problem with free orbiting objects then is that if they change orbits then

they can swing energy out of the spin/orbit-frequency level and too much of this leakage in or out must have been what caused the big bang that resulted with us being here now so any **change** in all this orbiting that we see going on in both the microcosm and the macrocosm can have both good and bad consequences.

Fission or fusion or chemical energy creation is the gain of binding energy which is essentially a shift to more close binding from macrocosm binding or a release of mass energy which is a shift toward the close binding direction.

Getting back to the rocket, if you maintain this rocket speed then you will age a bit slower than the people you left back on earth. You won't notice it though because your clocks aboard the rocket will also slow down along with your aging. But you can check on this slowing of your time if you return to the earth and check your clock against the ones on earth. As I mentioned before the U.S. Air Force actually did this: Two cesium clocks were set at the same time and one was put aboard an aircraft and the clock on the accelerated speeding aircraft ended up showing a slower time after the clocks were again brought back together.

Neither speed nor any of our other scientific concepts can be carried into the universe as a whole either. All of the rules that you think are so important to you here on this earth are only subset rules and these are meaningless to this entire universe.

We still have to stay hard at work on the whys and wherefores to further discover what kind of a universe this really is. I have given you this big picture of our universe as these "A" Laws are showing it. This is your starting point. You haven't even had a starting point up until now.

A sufficient amount of evidence needed to solve this grand unified theory puzzle was probably finally in place by 1925 when Goudsmit and Ulenbeck saw the electron was spinning: So even though you might be getting this hot off the press, it's still about seventy-five years late in coming to you. We were all sound asleep like Rip Van Winkle — and I include myself in there too — and totally missed all the facts as they floated, like innocent looking clouds, right on by us.

* * *

22. Getting away from the subject

I do not pretend to be anywhere near the stature of those giants of science such as Einstein, Hilbert, Newton, Ampere or Kepler. I, however, have read what they said. I also had a bit of luck or I would never have been able to put forth this hypothesis for you to read here today.

This is also a cry for help: Because whenever a unifying principle — either this or another like it — does indeed come into our grasp then many, more mathematicians will be required to build a whole new structure of mathematical complexity that only this universe uses and that we do not yet fully have. More mathematicians will also be needed to build us an interface from our present system to this new math. Then even more mathematicians will have to go through and completely revamp certain small segments of our present day "science". It will be, in some respects, easier to do all of this with a model right in front of us that we can visualize, than it was for Einstein to arrive at his tensor formulation of general relativity without knowing exactly what was going on.

You must understand the importance of finding this unifying element of the four invisible forces. Once humanity has this firmly in its grasp then future computers can give people some incredible things. All the energy man will ever want or need will be right there for the taking as well. The problem then becomes a warming earth in-as-much as energy produced here stays here because our earth is well insulated and a massive amount of cheap energy can't easily leave. Mankind will be able to do all these good or bad things simply because computers will then be able to solve exactly how all these molecules must be lined up for maximum strength or lightest weight or least friction or whatever quality is desired.

Right now, it's all hit and miss. Moreover, if we continue going on like this then it

will be hundreds of thousands of years before we can get to the strongest materials ever. But once we get this unifying principle, then it all comes in to us with one **big bang**.

The scary part of this is that some country might have a massive super secret program of training mathematicians and putting them on super-computers that go down this correct unified road for several generations. If the rest of people in the world were asleep at the switch, then that aforementioned country would be able to make veritable slaves out of everyone else in the entire world.

There would be no way that anyone could oppose such a country that had this advantage. Hitler wanted a thousand year Reich; well, if a country could pull this off correctly then it would easily rule the earth for a good many thousands of years with no problems whatsoever. Historian Will Durant said that even the slaves of Greece and Rome had a good life compared to <u>all</u> the people under the Pharaohs. Your great, great grandchildren — if you go to sleep on this watch — could live their lives as slaves to another country under masters maybe even more terrible than the Egyptian Pharaohs.

The little person doesn't always benefit when new areas of knowledge suddenly appear. A few rich ones always do. About five thousand years ago one big invention came in. It was writing. It built Egypt and it made the Pharaohs the richest kings ever. With writing they could keep records and thereby keep bettering production. Pictures on all the tombs show how they are mass producing one thing or another. Henry Ford didn't discover mass production: The Pharaohs were the ones who discovered it. Imagine their surprising discovery as agricultural methods got better and they discovered that 40% of the people could easily grow enough food and distribute the food and necessities to all the people and this left the other 60% of the people for the Pharaoh to draw from to do what the Pharaoh wanted done. The smart Pharaohs worked hand in hand with the temples to get as much work as possible out of that other 60% too. They knew precisely how many extra people were coming on line from this massive mass production of food supplies so they knew exactly how many they could lose in the mines and the stone quarries and in battle. They didn't mind losing plenty in all of those places either. I was on my own in Egypt and about 19 and even yet I can remember well, the complete day I spent at the Egyptian Museum in Cairo. There I read, translated into English, the following words to his workers that

some Pharaoh had inscribed on a slab of rock: It said, "I have given you sandals for your feet. I have brought you food and supplies from both Upper and Lower Egypt whereby you will be sustained while you carve this image of mine into this rock which will be pleasing to the gods so that we may all derive benefit."

I thought to myself when I read that translation of the stone that it was similar to all that inspired literature produced by management that decorated the walls inside the General Motors assembly plant in Linden, New Jersey that I toured about a year before when I was in my final year of high school.

The word Amen is an ancient word and I am of the belief that it is nothing more than the name of the main Egyptian god Amun. The use of "u" instead of "e" in the word Amun is strictly an educated guess because hieroglyphics used only consonants. Hieroglyphics were written with no vowels whatsoever. This name of the god Amun also had another meaning something like "so be it". I'm also of the belief that the seventh day of rest came about as a combined labor protest from a group of some of the temples against the Pharaoh. One particular Pharaoh had a great deal of problems with the temples. Anyway, the thing to remember is that just a bit of new knowledge helped create the Pharaohs. What will this "Holy Grail" create when it too is finally put to use?

All this is nothing more than a hypothesis: It's merely what I believe is a model of a universe in which you can plainly see the unifying principle that Einstein searched for, yet this type of universe would also behave — from our point of view — exactly the same as the universe that we find ourselves living in. Is this how our own universe is also constructed? I'll leave that answer strictly up to you.

People with a good science background will have breezed right through this but others without it I'm sure have found some of this rough sledding. I'm certain that with the extra effort of using a few good encyclopedia CDs as an aid, you can do some extra homework and re-read it and this way you will also be able to get the general gist of what is going on. Maybe that way you will learn as much as many of these scientists too. You will indeed learn a lot more than a few of them presently know.

Paul Dirac's monopole, at first, would seem to be ruled out by this theory but yet these "A" Laws are all using the <u>closest parts</u> of these spinning electrons and this is most definitely a monopole effect isn't it? And gravity too is more or less a

monopole effect as well. Isn't it? Anyway, Dirac was right when he predicted that something such as this theory would come along and Albert Einstein was most certainly right predicting the human mind could understand it. Niels Bohr saw the entire trend of thinking had to change. We owe a lot to these three and many, many more.

I hope you have learned by now why you can't go faster than the speed of light.

The shortest increment of time that we can measure in our spin/orbit-frequency level is our "blitzseit" which must be somewhere near the time it takes these spherically encapsulated wave trains to complete one spherical cycle and build an electron. It takes one of these complete cycles to match the perfect balance the electron keeps between the close objects and the macrocosm. So one of these complete cycles is the time it takes to produce an electron at the electron level.

This speed of light is the speed that you, along with your space and time, are being produced so you simply can't go faster in space and time than these particles — that you are built from — are being produced.

As far as the aspect of complementarity goes, Heisenberg and Bohr may not come out winning this one if humans can remain on this earth long enough because with super-computer assist along the Ampere-Einstein road the certainty of far more thorough and precise answers are absolutely ensured.

We find what we probably have here is that Einstein's unbounded but finite universe is really only a portion, of a **Fitzpatrick** infinite ???? wave universe: Einstein's universe is that portion of the infinite ???? wave universe that can **directly** affect our particle world here.

I've put those question marks after the word infinite simply because our minds are subset minds and this is indeed a question that cannot be answered at this time. It seems the Heisenberg-Bohr concept of complementarity is still with us until we do get those much better computers.

Our minds may not be able to make major inroads into this seemingly infinite ???? wave universe without future super-computer assist. We don't even know, at this time, what makes the microcosm <u>appear</u> to us to be higher frequency waves and the macrocosm to <u>appear</u> to us to be lower frequency waves: We do not yet

fully understand the microcosm-macrocosm frequency reversal.

So it's a good possibility that the solution of the Theory of Everything now brings you to the limit of where the human mind can easily function with the computers of today. But if people are able to stay here long enough they should eventually be able to build computers that will be able to figure even more of it all out.

Logic and math must always be used together. They will always complement each other and whenever they fail to do so then this should be a flashing red warning light telling you something is wrong. The present prevalence of math over logic is another hidden road sign telling you that you are using subset logic and/or math.

Anyway, the final door has not yet been opened: There is plenty of work still out there for all you young kids that are now coming on line as we old-timers leave. Keep at it.

Thank you for reading this. I hope I didn't bore you to death.

And everyone in this world must now come to the realization that — when the right people see all this is correct — it's a whole new ball game from there on out. Is your country one of the many that will be going to sleep on this or will your country be the one that will take full advantage of **Fitzpatrick's** Theory of Everything?

SEVEN YEARS after the above book was first written, Garrett Lisi gave us his E8 model.

Remember this E8 model is a model of how we will see this set up in our spacetime realm. While it definitely is not a model of other spacetime realms, it most certainly will show us —- if it's correct which I think it is —- how all these other spacetime realms show up in our spacetime realm.

Is Lisi's model showing us the HARMONICS that appear in our realm of quarks, electrons and the gravitational components as seen in our spacetime realm?

If so then we may indeed have a PHASE model to show us how to unify the forces and the thing we need is not math but a model.

Stephen Wolfram's book, "A New Kind of Science" gives us three (3) very important facts:

- 1. Mathematics can only explain simple things.
- 2. You need a model to explain complicated things.
- 3. But a simple model can explain complicated things.

It looks to me like we have a PHASE model here.

"in phase attract"

Type those three words — above — into Google (*Include quote marks*) to learn not only the basics of electricity but how <u>all</u> the fundamental forces work.

Or click the following link that will give you the same page in Google.

<u>in.phase.attract-(in Google)</u>

Not only do all electric motors obey these phase laws but this entire universe seems to as well.

(Click link below.)

http://www.amperefitz.com/in.phase.attract.htm

Congratulations to those of you who have understood the general gist of the things that I have been ranting and raving about herein. All of this is only one more tiny step in the science stairway. There are an infinite ???? number of further steps to climb. I'm very much afraid that up until now, as far as science goes, humankind hasn't quite got things right yet. If you have understood all of this then you have just graduated from kindergarten. The real science classes will begin as of now

* * *



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