



GRAVITY - DYNAMIC ETHER INFLOW

(The Evolution of Nether Gravity Theory)

by Lew Paxton Price

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www.lewpaxtonprice.us

Behind Light's Illusion consists of seven little books of about 60 pages each.
Book One - Overview Book Two - Gravity Book Three - Electromagnetism
Book Four - Light Book Five - Time
Book Six - Finale, Book Seven - Series Index
They are available in PDF form on CD (see my website).

Part One - The Beginning

It is sure to be dark if you shut your eyes.
Tupper

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Once someone asked me why the nether (dynamic ether) theory of gravity, if it is so reasonable, was not originally discovered from "scratch". The questioner had barely glanced at the second edition of *Book Two - Gravity* in my series of books with the title *Behind Light's Illusion*. Actually, the fundamental

equation *was* discovered from "scratch", and is shown as such in the first edition of *Book Two - Gravity*.

The more sophisticated proofs were substituted for the original in the second edition. When the original proof was placed on my website, no more objections along that line were brought to my attention.

The basic concepts of nether theory came as a very sudden revelation that left me in a state of shock for a few days, and the world took on a new in-depth appearance that has grown since that time. From someone who was never quite certain about any theosophical or philosophical theories (there are so many and they disagree with one another) I became someone who *knew* (as opposed to believing) the truth about creation and our subsequent and consequent universe. It was all so simple, so elegant, and so different from accepted models of physics that the idea of Einstein's "unified field theory" was not even close enough to allow anyone to begin to conceive of such a thing. Even the idea of a "field" was a ridiculous mathematical excuse for something that was not even remotely understood.

When I attempted to explain the theory to physicists, I was ignored and later insulted. Never was there any discussion of refutation involving reason or scientific fact. It became apparent that politics was prevalent in science to a degree that was far beyond my young and naive mind. My wife has three qualifications that she uses to discover who is a true scientist and who is a charlatan. To be a true scientist, one must first have a genuine overwhelming curiosity; second, one must use true scientific method in his research; and third, one must be honest - especially to himself - about what he discovers. Today, politics, unscrupulous ambition, and ego are everywhere, and in every scientific discipline. This is especially true in particle physics.

A housecat is far more of a scientist than an overwhelming proportion of the humans who make their living as "scientists". Having realized this unpleasant fact, I adopted the method of others who were denied their rights by the current holders of the heights of so-called scientific thought. I began to write and publish my own little books - not for the "scientists" to read - but for the educated layperson. My writings almost never mention calculus, but I do use algebra because math is a necessary means of proving many concepts. Even so, in most cases one can still understand the gist of my writing by ignoring the algebra. I try not to use words that are too big or analogies that are too obscure. My intent is not to dazzle, but to clearly explain. If you discover a word in this essay that is not understood and that I have not defined, try using your dictionary - the word should be in it.

Nether theory is much more than another theory of gravity. It does what the unified field theory would have done, but in a way that does not depend upon "fields" (mathematical concepts without any visual model to base them on). The nether theory of gravity was an evolution in thought that occurred gradually during my spare time. The concept of the electron as a vortex came very quickly in May of 1965. This was followed by the early concept of gravity as an inflow into matter. The electron as a vortex was obvious to me because engineers are trained to use physics that have been proven through the years, and only a vortex is able to maintain what appears to be constant "spin". *Any other conclusion would mean that the electron is breaking two known fundamental laws of physics: the conservation of momentum, and the conservation of energy.*

A vortex uses the pressure difference between its center and the fluid of which it is composed. It must have a means of exhausting the incoming fluid once that fluid reaches the center. The solution to the mystery of the disappearing nether led to more discoveries, which are shown in detail in part of my website and *Book Five* of the series *Behind Light's Illusion*. What must be understood at this point is that nether does not come back into our universe once it disappears into the centers of subatomic entities. Nether is on a one-way trip into our subatomic entities - it does not come out again. According to my findings, the diameter of the electron center is only 1.3530×10^{-57} meter. The centers of other subatomic entities are also quite small. Subatomic entities are far apart from one another - even in most black holes. So we are not going to run out of nether in our universe for a very long time - if ever.

If the electron is a vortex, there must be some type of ether to form that vortex. Obviously, that type is dynamic rather than static because only dynamic ether could form a vortex. Physical objects moving through space "coast" along when they are not influenced by some force. If the dynamic ether were not frictionless, such an object would slow down, so the dynamic ether must be frictionless - which indicates that it is non-particulate in nature. It must flow in a manner similar to that of a liquid or gas if it is able to form a vortex. So this was listed as quality number three.

At this point, it became time-consuming to call it dynamic ether. In ancient Greek myth there was a nether region symbolizing the underlying fabric of the world. The word "nether" comes from Old English and signifies that which is beneath the heavens and the earth. The dynamic ether is truly that which lies beneath and is the foundation of everything. The word, as it applies to physics and was coined by me, is pronounced as if it rhymes with "weather" or "feather". Saying "nether" is quicker and easier than saying or typing "dynamic ether", so I began to call it "nether" from then on.

A fourth quality of nether is inertia. It will always do whatever it is doing until a force alters its behavior. A vortex is formed because of inertia, the tendency of the incoming fluid to move as it had been doing. A vortex is formed when the fluid must turn at ninety degrees to the way it was moving before. Because inertia prevents a sudden movement at ninety degrees, the fluid adopts a curved path and becomes a vortex.

It soon became evident that fluid flowing into a large group of vortices, such as a planet, will accelerate as it moves closer from farther away. This happens because the area of a theoretical sphere surrounding the planet decreases as the radius of the sphere decreases. Try to visualize invisible theoretical spheres of varying radii having a common center with the smaller spheres nesting inside the larger spheres. Now visualize our planet at the center of these spheres. Finally, visualize the nether flowing through these spheres from outside to the planet at their center. This strange visualization can be likened to a funnel with the areas of the spheres as cross-sections of the funnel and the bottom of the funnel being the celestial body creating the funnel. In truth, our celestial bodies are "gravity funnels" through which nether flows.

The same amount of nether must move through all the invisible spheres surrounding the planet, so the

nether must move faster when the cross-sectional area of the funnel is smaller - like a wide river moving slowly accelerates when the riverbed narrows. This makes sense because gravity is an acceleration. So the fifth quality of nether is that it accelerates its movement toward a large mass - the acceleration increasing more when the distance to the mass decreases.

As nether theory developed, it became apparent that all matter is formed of vortices or combinations of vortices, so the sixth quality of nether is that nether is everything and is everywhere. The next revelation was that time dilation exists as a mandatory consequence of nether's existence. So the following became my conclusions about the nature of nether. These were based upon reason - not mere supposition.

Nether:

- (1) is dynamic in character,
- (2) is a perfect non-particulate fluid,
- (3) can flow like water or air,
- (4) has inertia (or it could not form a vortex)
- (5) accelerates as it approaches a large mass in space,
- (6) is the *only* constituent of all matter, and
- (7) time dilation is a mandatory consequence of its existence.

The Electron

As some properties of dynamic ether were theorized, some properties of electrons and positrons were also theorized, based upon what is known about fluids, vortices, and Newtonian physics.

A vortex must have a "mouth" and a final "direction" of inflow which is at ninety degrees to all the directions from which the medium forming the vortex is coming. An electron actually moves in any direction within our three-dimensional space while still remaining as a vortex. The only answer that I could find, as to how the electron can do this, is to postulate a fourth dimension into which the incoming nether flows. The fourth dimension has been traditionally considered the dimension we call "time".

The first dimension of what we call space is a like a line such as east to west. The second dimension is

at ninety degrees to the first - like a north to south line. The third dimension is at ninety degrees to both of the first two - like a line going up and down. The part that separates one geometric dimension from another is the ninety degree angle between them. So a fourth dimension, by definition, would be at ninety degrees to all three of our dimensions of "space". Thus, the electron would be able to point its mouth in any direction of our "space" and the incoming nether would be forced to move into the fourth dimension through a ninety degree turn - which causes nether to take a curved path as it moves into the fourth dimension, and thus create a vortex.

Every dimension is like a line going in two directions from where you are. If you are standing on our planet, there are two directions moving away from you along the east/west line which you call "east" and "west". There are two directions moving away from you along the north/south line which you call "north" and "south". The up/down line has the directions "up" and "down". A time line moving away from you would have the directions "past" and "future".

An electron is created by the meeting of two gamma rays, and simultaneously a positron is created. It appears that one cannot be created without the other. This makes sense because the positron is the anti-matter counterpart of the electron. And since the fourth dimension is the dimension we know as time, the nether flow into the electron would be going into the past, while that into the positron would be going into the future. Thus, there would be an equal and opposite reaction during electron/positron creation with one final inflow in one direction of the fourth dimension, and the other final inflow in the opposite direction.

The above leads to more reasoning about the nature of time. It appears that space-time does not exist. Instead, time is separate from space and is the dimension along which our three-dimensions of space move - much like creating pictures which change as they progress along a strip of old movie film - and time cannot be experienced without motion - and motion cannot be experienced without time.

For a thorough discussion on the nature of time, please read *Book Five - Time* of the series *Behind Light's Illusion*. The entire series can be purchased quite reasonably in pdf form on a CD.

The Math

These conclusions were followed later by the reasoning for the mathematics of gravity. The early reasoning was published in 1999 in the first edition of *Book Two - Gravity* of the series *Behind Light's Illusion*. In this series, the dynamic ether was given the name *nether* for the reasons explained. Prior to the writing of the little book on gravity, I had spent over a month of sixteen hour days, seven days a week, studying various alternative solutions to gravity, and had arrived at the conclusion that the only viable explanation for gravity is the one published as part of nether theory. The reasoning found in the first edition of *Book Two - Gravity* of the series *Behind Light's Illusion* follows in a more easily understood version.

Part Two - The Inward Nether Flow

***It is a descending stream of pure activity
which is the dynamic force of the universe.***

Kabbalah

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Nether is a perfect non-particulate fluid. It has inertia, so it has a mass of its own. Nether mass will be shown in equations as a capital "M" rather than the usual small "m", and as a word, it will be "Mass" with a capital "M" rather than "mass" with a small "m". Nether is the primal substance of which all is created, so its Mass should have a capital "M" to denote its presence.

Nether can have varying density which is proportional to its pressure. In a gravity funnel, it can seem to be more compressed in two dimensions than in the third. This is not actually what happens because the pressure transfers to the third dimension very quickly. This apparent effect is possible because analyzing it requires two or more steps and nether is always in motion. If it were not always in motion, our universe would cease to exist.

Motion means that nether is always becoming. It is always changing. It is this changing, this motion, that affects us. Velocity, in our space, is relative in the sense that an object's motion can be perceived only as relative to something else. Once something has a velocity (state of uniform motion in Newton's terms), it continues with that same velocity until a force causes it to accelerate (change its velocity).

Acceleration is the same as deceleration, but in the opposite direction. Since both are forms of acceleration, they will both be called *acceleration*. In other words, if you are standing by a railroad track and a train goes by at 30 miles per hour heading west with your brother in it, you see his face in the window passing you at 30 mph going westward. He sees you moving eastward at 30 mph. If the train accelerates at the rate of 10 miles per hour per minute while it is passing, your brother sees you accelerating in the opposite direction at 10 miles per hour per minute. You will feel nothing, but he will feel the acceleration. If the train decelerates at the rate of 10 miles per hour per minute, your brother feels the acceleration but in the opposite direction. So scientifically, deceleration is another form of acceleration.

Nether does not have a particulate structure. It is the particles in a medium such as air or water that cause friction. Nether is without friction, and once a velocity for a stream of nether is established, it will continue unchanged indefinitely until acted upon by an unbalanced force. So velocity is essentially the same as being at rest as far as the nether is concerned. *Acceleration, on the other hand, can be detected and causes changes just as changes cause acceleration.*

Einstein once showed that gravity and acceleration would feel the same if one were inside a closed box and had no outside references. From this, he deduced that acceleration and gravity were essentially the same. He was right about the similarity, but he postulated a curved space-time to create the acceleration we call gravity.

Actually, curved spacetime is not the answer. Gravity is caused by nether acceleration downward. Let us look at two examples: (1) you are in a spaceship in space accelerating at one "g" (one "g" is merely an abbreviated way to say the acceleration of one earth gravity), and (2) you are standing on earth at sea level where there is a force of gravity at one "g".

In the first example, you may stand up just as you would on earth by having your head point in the direction of travel and your feet on the trailing wall. Here, you could perform gymnastics, jump rope, or do push-ups, with the same feel and effect that would be the case if you were on earth as you are in the second example. So the two examples are very much alike. Why?

In the first example, you are accelerating past the nether that is the same relatively as the nether accelerating past you. In the second case, the nether *is* accelerating past you. Gravity is nether accelerating past us. If we were to jump off a high cliff and fall, we would accelerate at the same rate that the surrounding nether accelerates. We are made of nether that is moving into many vortices (the name I coined for vortices that have previously been regarded as particles). When we are "at rest" or moving at a constant speed in the same direction, our vortices are oriented and structured for the speed and direction of our travel. But when there is acceleration, our vortices must be rearranged. Rearrangement requires energy, so the vortices prefer to remain in a condition where the nether moves past at the same velocity all the time. By accelerating at the same rate as the surrounding nether, the vortices prevent rearrangement. So when we jump off a cliff, we accelerate at the same rate as the nether around us, and call this condition "free fall".

Nether is accelerating as it moves past you in example two, because the earth is like a funnel for the nether. As previously suggested, imagine a series of theoretical spheres with different radii and with a common center, at which is the earth. These are spheres with varying radii from the surface of the earth to infinity. The spheres "nest" within one another, all with a common center. Sphere one is the surface of the earth. Sphere two is the next outward sphere from sphere one, just slightly larger than the earth. Sphere three is just slightly larger than sphere two. Sphere four is just slightly larger than sphere three, and so on. Nether moves through each spherical surface in its journey inward (downward), beginning with the larger spheres and flowing through each until it passes through Earth's surface. The larger spheres have larger surface areas than the smaller spheres, just as the top of a kitchen funnel has a larger

cross-section than does the bottom. Nether flows through each spherical surface just as it would through a cross-section of a kitchen funnel. So the surface of each sphere is like the cross-section of a funnel through which fluid is passing.

If you are actually using a funnel to pour liquid into a container, the liquid is passing through the upper part of the funnel at lower velocities, and passing through the lower part of the funnel at higher velocities. In between the top and bottom of the funnel, the liquid is passing at intermediate velocities with the lower at the top and the higher at the bottom. This happens because the funnel will not allow fluid to enter or exit at its sides, causing the amount of fluid passing each level of the funnel in one second to be exactly the same as the amount of fluid passing every other level of the funnel in one second. The same effect is seen in a river. When the river is wide and deep the current is slow. When the river is narrow and shallow the current is swift.

The fluid near the "top" of a gravity funnel is like that at the top of any other funnel. The nether flows into it at the top, at a very small fraction of the inward velocity that is later achieved at the bottom. However, the gravity funnel, due to its unique construction, has no sides. Without sides all of the nether flows together, accelerating uniformly at each level (each spherical cross-section). For nether moving through any particular sphere there is no inclination for one portion of nether to move more quickly or more slowly than any other portion. Since all portions move together, the nether compresses in the two tangential dimensions and extends inward in the radial dimension, while increasing constantly in velocity.

The result is acceleration obeying the inverse square law that we know as a law of gravity. Because everything is made of nether, everything actually **is** nether that accelerates. So the acceleration causes free objects to fall and holds down objects which are unable to fall. This is analogous to water draining from a bathtub. The drain is the vacuum pulling in the nether, the water pressure is the nether pressure, and the whirlpool is a vorticle of which all things are made, and which causes anything floating to be accelerated toward the drain along with the rest of the water.

The nether may be compressed, but it prefers to remain uncompressed. Actually, it is compressed all the time and is expanding, which is why the universe expands. When the geometry of a very strong electromagnet causes enough nether to be compressed inside it, the magnet explodes.

Nether will decompress rapidly as the foregoing explosion of a magnet illustrates, and also decompresses radially as the pressure difference draws it inward toward the center of a gravity funnel.

Nether will continue to do whatever it is doing until a force causes it to change (accelerate). This continuance is called inertia, and is what causes a vortex to exist. The relative vacuum at the center of a vortex draws nether inward, but because of inertia, nether cannot turn ninety degrees without adopting a curved path, and since nether is subject to centrifugal force (a special case of inertia), the vortex forms and we have a vorticle.

There are many vortices in the universe, but they are widely separated with only nether between them. Therefore, it takes a long time for the water to run out of the bathtub. The nether was highly compressed at the time of the Big Bang which started the universe (although in nether theory the Big Bang is somewhat different to that theorized by contemporary physicists), and the inertia of the nether overall has prevented expansion from accelerating more rapidly than it has. However, as the outer portion of expanding nether reaches a higher outward velocity, the inner expansion moves outward more quickly, so that as time passes, the overall expansion rate increases. Even so, it takes a long time for nether pressure to be reduced sufficiently for the laws of the universe to be greatly altered (assuming that they ever will be altered). The span of the earth's existence is short cosmologically speaking.

In the submicroscopic world of the vortex, nether flows inward in a spiral, and there is a substantial tangential vector to this flow. The mouths of the various subatomic vortices are pointed in many directions. But in the macroscopic world of a planet, the tangential vectors of the many vortices that form the planet, as well as the directions their mouths are pointed, average out, so that the inward flow that we call gravity has an almost negligible tangential vector, and the flow is inward radially. The gravity discussed here is the gravity of the macrocosm, the gravity of suns, planets, moons, and black holes. At the submicroscopic level, gravity becomes something entirely different, and divides into what we call the *strong force*, the *weak force*, *static charge*, and in a special case, *electromagnetic radiation* or *light*. But call it what you will, as described in Kabbalah, gravity is still *the descending stream of pure activity which is the dynamic force of the universe*.

Part Three - Momentum and Energy

Action is the product of the qualities inherent in Nature.
Bhagavad Gita

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The nether passing by us in our gravity funnel is very similar in effect to us passing through nether in space outside the major effects of a gravity funnel. If we were accelerating through the nether in a spaceship at an acceleration of one "g", we would feel the same effect that we feel here on earth as the nether passes through us at an acceleration of one "g".

If we postulate a theoretical sphere, larger than the earth, with the center of the earth coincident with the center of this sphere, and if we give the spherical surface a quality of thickness so fine that it is like the surface of water in a pond when it meets the air above it, we will still have difficulty in finding a velocity for the nether which passes through this sphere. Why? Because there is no velocity as such. To have a true velocity, we must have a distance along which nether passes with no acceleration. But in a gravity funnel there is always acceleration, and even that changes with distance from the center of the attracting mass. Accelerating acceleration is "jerk", so we are way off to say that nether in a gravity funnel has velocity. [There are ways to obtain a theoretical velocity, and those which can be found algebraically will be used later on, but the point I wish to make is that actual velocity does not exist here except in theory.]

There is an analogy in plane geometry that helps one to see this point. If we have a circle next to a straight line and wish to see the angle that a length of the circle makes with the straight line, we find that there is no straight line that is part of the circle. So we make a line that is tangent to the circle at a point. We do this by extending the point to make the second line perpendicular to the radius of the circle that touches the point. Now we can measure the angle between the two straight lines. However, there is no actual angle between the circle and the first line.

When working with any theoretical sphere through which nether moves to enter the vortices of our planet, we must choose a point in that sphere and "extend" the point so that we can work with a velocity that actually does not exist as a true velocity.

Letters or symbols for simple concepts used in the following equations:

d = distance

m = mass

t = time

M = Mass of a quantity of nether

$\pi = 3.14159$ approximately

Letters for composite concepts:

r = radius of a sphere

v = velocity which is d/t

a = acceleration which is d/t^2

j = jerk which is d/t^3

A = area of a sphere = $(4/3)(\pi)r^2$

\sim = "in proportion to"

$Mv = w$ or $W =$ nether momentum, proportional to r^2

A gravity funnel cross-section is the area of a sphere we can call "A".

The area of a sphere is found with the equation:

$A = (4/3)(\pi)r^2$

in which we notice that the area is proportional to r^2 .

We do not know that the density of nether Mass passing through all of the spheres is the same. Nor do we know that it conforms to any absolute law. The velocity of nether passing through the spheres would conform to the dictates of the sphere's area and the nether density at that sphere. We do know that the funnel cross-section is the sphere's area which is proportional to its radius squared.

$$A \sim r^2$$

The amount of nether passing through any surrounding sphere (funnel cross-section) during any unit of time must be the same as the amount of nether passing through any other funnel cross-section during that same unit of time - because the funnel has no sides through which which nether can escape or enter.

We may not know what M or v is at each funnel cross-section, but we do know that the product, MvA , must be constant for the same celestial body. We also know that A is proportional to r^2 . So if a sphere above the earth's surface is called sphere "a", and the surface of the earth is called sphere "e":

$$M_a v_a A_a = M_e v_e A_e$$

For the same amount of nether to pass through each sphere, MvA must be proportional to r^0 . The only way this can occur is for Mv to be proportional to r^{-2} . Then:

$$MvA = (Mv)(A)$$

$$MvA \sim r^{-2}r^2$$

$$MvA \sim r^0$$

Anything to the zero power equals one. So:

$$MvA \sim 1$$

So now we know that $Mv \sim r^{-2}$

Gravity is subject to the inverse square law which means it is also proportional to r^{-2} . So Mv and gravity share a quality.

$$g \sim r^{-2}$$

$$r^{-2} = 1/r^2$$

In case this was not clear before, when we look for a value for the velocity of nether that is passing through any particular sphere and down into the earth, both gravity, "g", and "Mv" are proportional to $1/r^2$. In this case, v is merely a way to show the velocity of nether passing through the sphere, and "Mass"

is the amount of nether which has that velocity. So what we really have is "M/t", which is Mass of nether per second if we use seconds as the time unit. This is what is proportional to $1/r^2$, and for MvA to always be the same from one sphere to another, we must have a term that allows the dimensions of MvA (as regards dimensional analysis) to equal one.

$Mv = M(d/t)$ which is proportional to $1/r^2$

"A" is proportional to r^2 Therefore

MvA is proportional to $(1/r^2)r^2$ which is one.

Every gravity well is a funnel for nether. The attracting mass of every gravity well must be composed of numerous vortices, but such a gravity well may be very small even though it is composed of numerous vortices. The gravity well is not shaped like the funnels we have known, but the function is the same. For example, the surface of our earth is the bottom of the funnel, infinity is the top, and the funnel has no sides. For purposes of calculation, the bottom of the funnel is the center of the earth. But in reality, nether begins to move into vortices as soon as it arrives at the outer edge of our atmosphere.

Our funnel cross-sections are spheres at or above the planetary surface. The cross-sectional areas vary according to the areas of the spheres. When passing through our funnel, nether has three choices. It can either accelerate, compress, or do both. Since there is no way out of the funnel except through the bottom, the same Mass of nether per second must pass through each funnel cross-section (sphere). This is why MvA must be the same for all of the spherical cross-sections for any particular body (such as earth).

As mentioned before, "Mv" and gravity must be proportional to $1/r^2$ - "Mv" due to each theoretical sphere acting as the cross-section of a funnel through which nether flows, and gravity because "v" must be accelerated in this funnel. It may be noted that this is merely a means of stating verbally the inverse square law for gravity.

In the paragraphs that follow, nether is considered to be flowing from outside the earth into the earth as if there were an infinite number of spherical funnel cross-sections above the earth. The spherical surfaces are treated as cross-sections of a funnel. So we have, in essence, a spherical "funnel" as nether flows toward the center of the earth. The total Mass, M_t , passing through each sphere in one second is always the same. So at any point in the spherical surface, Mass flow per second multiplied by the area of the sphere will always be the same.

If nether acted in the same manner as a gas, we would expect its density to vary due to pressure farther from the earth being greater than pressure nearer the earth. In the case of nether, the pressure variations

move at the speed of light, and this means that the nether should react so quickly to them that pressure need not be a major consideration. However, the word "should" is misleading. From the preceding argument, it would seem that nether density would be almost uniform throughout its expanse. But this may not be true, and we must explore this possibility.

The total Mass for nether at each spherical cross-section is "MvA". This does not change as nether falls through each spherical cross-section - because as "A" decreases, "Mv" increases accordingly. I called MvA total momentum in *Behind Light's Illusion*, but this is difficult to comprehend because MvA is constant through all of the funnel cross-sections.

Momentum at a point in the spherical cross-section is "Mv". The density of M would be likely to increase as nether falls through decreasing areas. We know that "v" definitely increases. So Mv grows as the nether nears the attracting mass.

One of the most difficult things for me to accept was the concept of nether being compressed as it approaches a mass. This is more easily understood as being analogous to a wedge splitting a log. The driving force for the wedge is less than the splitting force of the wedge - and the driving force for nether moving into a gravity funnel is less than the tangential force that compresses the nether. Also, nether is energy conscious. It is reluctant to alter its flow pattern when it can more easily accept greater compression. More energy is required to rearrange the "parts" of the inflowing nether than is required to compress the inflowing nether.

If total Mass is "M_t", and total Mass at spheres "e" and "a" are "M_{et}" and "M_{at}" respectively, then

$$M_{et} = M_e v_e A_e$$

$$M_{at} = M_a v_a A_a$$

$$M_{et} = M_{at}$$

Part Four - Potential and Kinetic Energy

Everything is energy in motion.

Pir Vilayat Inayat Khan

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Now let us look at potential energy. When we drop an object in our gravity, it accelerates until it hits the ground (or the floor or whatever). Before it is dropped, it has potential energy, E_p .

$$E_p = HF$$

"H" is height between the invisible sphere where it was before it was dropped to the invisible sphere where it was stopped. "F" is force which we call "pounds" and is the product of "g" and "m". These are known facts that were discovered long ago.

H = height

F = force = ma

a = acceleration

m = mass

g is a form of "a"

$$\text{So } E_p = HF = Hmg$$

We must use a theoretical center for earth in our calculations, which is a point at which all the mass of the earth is concentrated. We must choose levels of potential energy which are the surfaces of the invisible spheres. If we have an invisible sphere which has a surface that is located a very short distance from a point that is the center of the attracting mass, the gravity and the nether velocity will be almost at their maximums. If the center is the place where a dropped object is to stop, then "H" is the radius of this tiny sphere.

"g" is incredibly strong at this sphere and more than makes up for the tiny radius, "r". We can say that $E_p = r(mg)$. This is the highest level of potential energy when speaking of an object that may be dropped for a short distance. When making this calculation, we must use an r that is close to the center and use a value for g that is an average so that "g_{ave}" can be used in our equation as if "g" were constant during the object's fall. Actually, "g" would be changing rapidly. On the other hand, at the exact center, "r" is zero, and that means the the product of "r" and "g" is also zero.

Looking at a point many millions or even billions of miles from the planetary center, we still have a level of potential energy that is equal to "rg", but "r" is very great and "g" is very small. "r" can actually approach infinity and "g" can actually approach zero. At very long distances from the center, potential energy is very small when speaking of an object that may be dropped for only a short distance, because

"r" increases directly and "g" decreases as an inverse square. At an almost infinite distance from the center, when "g" is effectively zero, the product of "r" and "g" is also zero, regardless of the fact that "r" is very great.

When looking at potential energy at any point, we see that an object could fall from this point and arrive at the center. The object would fall in time " t_i " and arrive at the center with an impact velocity of " v_i ".

Gravity does not change very quickly between two invisible spheres that are only a few feet apart. So a simple value for gravity in the potential energy equation is sufficient. If we were to use an H that is very large, we would need to compute average gravity between the two spherical radii, and use this average in our equation. So when speaking of nether Mass, and when using H, both M and g must be averaged and the equation

$E_p = Hmg$ becomes

$$E_p = HM_{ave}g_{ave}$$

The kinetic energy on impact is E_k .

$$E_k = (1/2)M_{ave}v_i^2$$

We know that the kinetic energy on impact is the same as the potential energy expended, so

$$E_k = E_p$$

$$(1/2)M_{ave}v_i^2 = HM_{ave}g_{ave}$$

We can divide both sides of the equation by M_{ave} .

$$(1/2)v_i^2 = Hg_{ave} \quad \text{or}$$

$$v_i^2 = 2Hg_{ave} \quad \text{taking the square root of each side:}$$

$$\textbf{Equation 1: } v_i = (2Hg_{ave})^{1/2}$$

The total acceleration multiplied by the time of a fall is equal to the impact velocity.

$g_{ave}t_i = v_i$ substituting into equation one,

$g_{ave}t_i = (2Hg_{ave})^{1/2}$ dividing each side by g_{ave} :

$$t_i = (2Hg_{ave})^{1/2}/g$$

Squaring both sides:

$$t_i^2 = 2Hg_{ave}/g_{ave}^2 \quad \text{which is:}$$

$$t_i^2 = 2H/g_{ave}$$

So:

$$\text{Equation 2: } t_i = (2H/g_{ave})^{1/2}$$

Gravity is an acceleration caused by a change in nether velocity. Nether velocity is increased between a larger invisible surrounding sphere and a smaller invisible surrounding sphere. The area of such a sphere is a function of the square of its radius. So through a sphere with a smaller radius nether will have a greater velocity than it would have through a sphere with a greater radius. This is evident when viewing a river. The water in the river moves slowly where the river is wide and deep and rapidly where the river is narrow and shallow.

A celestial body with a particular mass may have either a greater radius (like a gaseous planet such as Jupiter), or a lesser radius (like a more substantial planet such as Earth). If two planets exist having the same mass, and one is gaseous and the other rocky, the gaseous planet would have a greater radius than the rocky planet. The nether velocity between two invisible spheres (gravity funnel cross-sections) just above the planetary surface of the gaseous planet would increase as it should - but increase less than would be the case of the velocity between two equally separated spheres just above the surface of the rocky planet. The point is that gravity - which is an increase in nether velocity - would be greater on the surface of the rocky planet than gravity on the surface of the gaseous planet.

The magnitude of gravity is a function of both the mass and the radius of a celestial body. The radius of a celestial body is at least as important as its mass to determine its gravity, and every celestial body has its own gravitational signature based upon both of these factors.

Equation 1 is

$$v_i = (2Hg_{ave})^{1/2}$$

We can use Earth as an example for a planet, and adjust the equation accordingly. The velocity of nether Mass when it passes through the surface of earth would be the impact velocity if it were to stop there. So we can substitute v_e , the nether velocity at Earth's surface, for v_i in the equation.

We can substitute g_e , the gravity at Earth's surface, for g_{ave} because we already know the value of g_e . It was discovered long ago by using a pendulum. If the equation is to represent v_e correctly, then r_e , Earth's radius, must be the H in the equation. The radius of the planet represents an energy level for the incoming nether because it governs the rate of change of nether velocity which we call gravity. Furthermore H is the only distance in the equation, so the radius of Earth must be placed where H is. A spreadsheet was used to confirm the logic of using Earth's radius. The equation becomes

Equation 3: $v_e = (2r_e g_e)^{1/2}$

To solve equation 3, we may use a value for "g_e" of 32.25777559 feet per second squared, which is the value of gravity at the poles of the earth and is therefore not distorted by centrifugal force. We may use a value for "r_e" of 3,950.19 miles multiplied by 5,280 (the number of feet in a mile) which gives us the radius of earth at the poles in feet. These inputs provide us with a "v_e" of 36,682.4352 feet per second.

If we customize equation 2 for Earth, it becomes

Equation 4: $t_{ie} = (2r_e/g_e)^{1/2}$

After attaining the results above, it became apparent to me that 36,682.4352 feet per second is the escape velocity for Earth. This indicated that something was correct about the new equations. Upon further investigation, it was apparent that these equations would work for any celestial body and at any altitude above the surface of each. So equation 3 becomes the more general equation

Equation 5: $v = (2rg)^{1/2}$

and equation 4 becomes the more general equation

Equation 6: $t_i = (2r/g)^{1/2}$

Equations 5 and 6 may be used to find the escape velocity at any point within a gravity funnel, or to find the incoming instantaneous nether velocity at any point within a gravity funnel.

At this point, it was apparent that g_e could be the average velocity for a fall with an impact velocity equal to the theoretical nether velocity at the earth's surface. But if this were so, it was not so apparent to me precisely why r_e should fit into the equation as the correct height for the fall. Yet it had to be the distance an object would fall with average gravity g_e . Regardless, the equation worked and that fact led me to two other ways to discover the same equation. In *Book Six of Behind Light's Illusion*, I published the new material, and one of those ways follows.

Nether must fall an almost infinite distance to reach Earth's surface. At this distance, v is zero and so is g . However, if someone gave the nether a nudge toward Earth, the v would exist and so would the g . The impact velocity after the fall, would give the nether the kinetic energy of $(1/2)Mv_e^2$. Using r_a as the radius of the invisible sphere where the nether began its fall, the potential energy (which would have been equal to the kinetic energy) would have been the product of $(r_a - r_e)$ and g_{ave} during the fall. In the following equations, g_a is the value of g at the time we nudge the nether toward Earth. So:

$$E_k = E_p$$

$$(1/2)M_{ave}v_e^2 = M_{ave}g_{ave}(r_a - r_e)$$

r_a is almost infinitely larger than r_e , so we can eliminate r_e in this case.

$$(1/2)M_{ave}v_e^2 = M_{ave}g_{ave}r_a$$

$$(1/2)v_e^2 = g_{ave}r_a \quad \text{after dividing both sides by } M_{ave}$$

But g_{ave} is not a simple average because more time is used during the fall when g is small than when g is large. One equation we can use to find g_{ave} is

$$g_{ave} = Bg_e + (1 - B) g_a$$

In the above equation, $B = 1/[(r_a/r_e + 1)]$.

"When r_a is nearly infinite, r_a/r_e is so great that "+ 1" is negligible, so

$$B = 1/[(r_a/r_e) + 1]$$

$$B = 1/(r_a/r_e) \quad \text{Removing "+ 1".}$$

$$B = r_e/r_a$$

$$g_{ave} = Bg_e + (1 - B)g_a$$

At distance r_a , g_a is essentially zero, so

$$g_{ave} = Bg_e$$

Substituting for B , this equation becomes

$$g_{ave} = (r_e/r_a)g_e$$

$$(1/2)v_e^2 = r_a g_{ave} \quad \text{If we substitute for } g_{ave}$$

$$(1/2)v_e^2 = r_a [(r_e/r_a)g_e]$$

$$v_e^2 = 2r_a [(r_e/r_a)g_e]$$

$$v_e^2 = 2r_e g_e$$

$$v_e = (2r_e g_e)^{1/2}$$

This is the same as equation 3 above.

Bear in mind that the product $r_e g_e$ may be equal to the product $(r_a - r_e)g_{ave}$, but r_e need not be equal to $(r_a - r_e)$, and g_e need not be equal to g_{ave} .

In fact, it seems obvious that $(r_a - r_e)$ must be much larger than r_e , while g_{ave} must be much smaller than g_e .

What follows is a second method of arriving at equation 3 that was published in *Book Six of Behind Light's Illusion*.

Hypothesize two invisible spheres (gravity funnel cross-sections), sphere "a" above the other, using the surface of Earth as the lower sphere (called "e"). The first equation is to determine the average gravity experienced by a body in free-fall between the two spheres. The difference between v_e and v_a is the increase in nether velocity between the two spheres. Gravity is an increase in nether velocity which is normally given as an increase per second. $[(v_e - v_a) / H]$, where H is the distance between the two spheres, is the increase in nether velocity per distance fallen. To find the increase in nether velocity per second, we must multiply $[(v_e - v_a) / H]$ by the average distance fallen per second.

1. $H = r_a - r_e$ which is the difference between the radii of the two spheres.
2. $[(v_e - v_a) / H]$ = increase in nether velocity per distance fallen
3. $v_{ave} = [(v_e + v_a)/2]$ gives us the average number of feet (or other unit lengths) fallen in one second.

From our study in proportions of quantities in a gravity funnel:

$$v_a / v_e = r_e^{1/2} / r_a^{1/2}$$

$$v_a^2 / v_e^2 = r_e / r_a$$

4. $v_a^2 = v_e^2 r_e / r_a$
5. $g_{ave} = [(v_e - v_a)/H] [(v_e + v_a)/2]$
6. $g_{ave} = [(v_e - v_a)/(r_a - r_e)][(v_e + v_a)/2]$ by substituting for H.
7. $g_{ave} = [(v_e - v_a)(v_e + v_a) / 2(r_a - r_e)]$
8. $g_{ave} = (v_e^2 - v_a^2) / 2(r_a - r_e)$
9. $2g_{ave}(r_a - r_e) = (v_e^2 - v_a^2)$

$$10. \quad 2g_{ave}(r_a - r_e) = v_e^2 - [v_e^2(r_e / r_a)] \quad \text{by substituting for } v_a^2 \text{ (see \#4).}$$

$$11. \quad 2g_{ave}(r_a - r_e) = v_e^2[1 - (r_e / r_a)]$$

$$12. \quad 2g_{ave}(r_a - r_e) = v_e^2[(r_a - r_e) / r_a] \quad \text{Dividing both sides by } (r_a - r_e),$$

$$13. \quad 2g_{ave} = v_e^2 / r_a$$

$$14. \quad 2g_{ave}r_a = v_e^2 \quad \text{Let } H \text{ approach and become zero, then } r_a \text{ becomes } r_e \text{ and } g_{ave} \text{ becomes } g_e.$$

$$15. \quad 2g_e r_e = v_e^2$$

$$16. \quad v_e^2 = 2g_e r_e$$

$$17. \quad v_e = (2r_e g_e)^{1/2} \quad \text{which is equation 3 again.}$$

Going back to the almost serendipitous initial attempt at finding equation 3, r_e was used without really knowing why it should work. It seems to have done the job, primarily because r_c , the r at Earth's center, is essentially zero.

$$B = 1 / [(r_e / r_c) + 1]$$

When r_c is almost zero, (r_e / r_c) is essentially infinite, a "+ 1" is negligible - so we can remove "+ 1" from the equation, and

$$B = r_c / r_e$$

$g_{ave} = Bg_e + (1 - B)g_a$ But in this case, g_a , which is the for a higher sphere, is actually g_e , and (r_c / r_e) is nearly zero. So

$$g_{ave} = 0 + (1 - 0)g_e$$

$$g_{ave} = g_e$$

$(1/2)v_e^2 = r_e g_{ave}$ Substituting g_e for g_{ave} , and multiplying both sides by two,

$$v_e^2 = 2r_e g_e$$

$v_e = (2r_e g_e)^{1/2}$ and we have equation 3 again.

Part five - Updating Facts about Nether and Gravity

*Truth is compared in scripture to a streaming fountain;
if her waters flow not in a perpetual progression,
they sicken into a muddy pool of conformity and tradition.*

Milton

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As we think of nether flowing inward, we can consider it to be analogous to a wind blowing past us. Most wind is measured by its velocity. However, this wind is constantly accelerating toward the planetary center. In reality, it has no velocity because true velocity is measured as a constant distance per time even though the distance per time may be only constant for a very short time. Inflow of nether in a gravity funnel is never constant even when measured at a point. It is always accelerating. It's acceleration is also increasing as the flow moves inward (known as "jerk"). Nether flow *is constant* only in its total mass flow per time as it passes through consecutive theoretical spheres about the center of the attracting body. Were the nether not accelerating, we would not have gravity because it is acceleration or increase in acceleration rather than velocity that we can feel. Even so, we can theorize instantaneous velocity and instantaneous acceleration.

If you were in a spaceship moving through the nether at a constant velocity, you would continue to move in the same direction and at the same velocity until a force acted upon you. In other words, you and your spaceship have inertia and nether is frictionless, so you can coast along indefinitely. In a spaceship coasting along, you would not feel the effects of gravity. Nor would you feel any other form of acceleration.

The situation changes when acceleration is applied. We feel acceleration because acceleration means that the configurations of the vortices of which we and the spaceship are composed are altered by acceleration - and at a constant velocity, there is no alteration.

Resistance to this alteration is inertia. Inertia is the tendency of something to resist change. Resistance to change is very logical because the resistance is not an active force, but a passive force. A body in motion will remain in motion in the same direction with the same velocity unless something makes it change. Why should it be otherwise? Why should anything change unless it is caused to change?

At this point, it was already known that nether has the following qualities.

1. It is dynamic.
2. It is a perfect non-particulate fluid.
3. It can flow like water or air.
4. It has inertia.
5. It accelerates as it approaches a large mass in space.
6. It is the *only* constituent of all matter.
7. Time dilation is a mandatory consequence of its existence.

It was subsequently learned that

8. It compresses and expands.
9. It has no memory, meaning that it does not return to one shape or one density after its condition has been altered.
10. The reaction speed of nether is much faster than the inward flow of nether.
11. The density of nether Mass, "M", is not the same throughout the gravity funnel.
12. Nether is moving as an accelerating acceleration rather a velocity in a gravity funnel.
13. It is the acceleration of the nether that we think of as gravity.
14. We measure gravity with what we call "material" objects, implying that "g", exerted upon an object at rest, is caused by the inertia of the nether. The nether enters an object in the gravity funnel and the object resists the difference in nether velocity and nether acceleration from the top of the object to the bottom. This is because every object is composed of vortices of nether which are in motion, and these vortices prefer not to be re-adjusted.
15. Gravity and Mv both conform to the inverse square law.
16. MvA is proportional to r^0 , and is the same at all invisible spheres within the same gravity funnel.
17. $v = (2rg)^{1/2}$ is a valid equation for any point within a gravity funnel.
18. $t_i = (2r/g)^{1/2}$ is a valid equation for any point within a gravity funnel.

Part six - The Planetary Signature

A moment's insight is sometimes worth a life's experience.

Oliver Wendell Holmes

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Equation 7, $v = Kg$

Using "K" as a length of time, this simple equation should aid in discovering v from known value of g. It would also be a means of discovering g from a known value of v. But v is difficult to discover without g, and g can be discovered by the use of a pendulum. Actually, equation 7 is not such a simple thing because of Mass being different at different distances from the center of a celestial object. A more correct equation is

$$Mv = Kg$$

If we choose a standard value for M at a certain sphere and make it equal to one, we can use equation 7 without regard to M. This would not mean that M did not exist, we leave it out of the equation for our convenience in calculating.

Using dimensional analysis,

$$v = d/t \quad \text{and} \quad g = d/t^2$$

We already know that Mv and gravity both conform to the inverse square law, but a value we can call "K" is needed as a time interval in such a simple equation to adjust the scalar value for g and to make the units correct on the right side of the equation. If we take the planetary surface (such as Earth at sea level) as a standard for Mass, and set Mass as equal to one, then equation 5 may be used (with no M in it), and a value for K can be calculated. My name for K is the "nether flow constant". Every celestial body has its own K as a signature, and our planet has an extremely unique K which is Earth's signature.

The nether flow constant is simply a ratio of nether instantaneous velocity to nether instantaneous acceleration when the density of M is that at the planetary surface which we have used as a standard equal to one. Once it is established for the planetary surface as having a value of one, it can be removed from the equation and the value of K for the planet can be used successfully to discover nether velocity for any altitude within the gravity funnel that the planet has created.

The procedure for discovering the planetary signature, K , for a planet is

- (1) use a pendulum or other means to discover the value of gravity for a point within the planet's gravity funnel (this can be done by setting up a spreadsheet with the correct known values for the variables), and find the correct numerical value for gravity at the planet's surface,
- (2) use equation 5 to find the value of nether velocity at the planetary surface,
- (3) use equation 7 to find the value of K for the planet.

The K for Earth was found as follows.

1. A pendulum was used to discover the value of g_e at the north pole where the effect of centrifugal force is non-existent. [The rotation of the earth causes a bulge at the equator and other latitudes which makes the radius of the earth greater than it is at the poles, and alters the value of gravity.] At the north pole, g_e is 32.2577759 feet/second², and r_e is 3,950.19 miles.
2. $v = (2rg)^{1/2} = 36,682.43$ feet/second.
3. $K = v/g = 36,682.43 / 32.2577759 = 1137.1656$ seconds.

The nether flow constant is in seconds because we use seconds as our time standard for such things. It could as easily have been expressed in units of different length created by other cultures. If we had used minutes, it would be 18.95276, or 18 minutes and 57.1656 seconds - almost 19 minutes. K is .3158793 hours long. But regardless of the units of measure, K is a constant throughout a planet's gravity funnel.

Distance is simply distance and implies no motion. Distance divided by time is velocity and implies motion that is "uniform" or constant. In this universe, velocity has very little influence on anything. Once an object in space reaches a certain velocity after being accelerated, nothing further changes. We can say that nether is passing the object rather than that the object is passing the nether because velocity is relative.

Velocity divided by time is acceleration. The nether is a frictionless fluid that responds only to acceleration. For this reason, nether with a constant velocity as a component, has no effect that we can notice. It is the change in energy, the acceleration in space near a mass, that we perceive as gravity. But the nether in this space has one more surprise. The acceleration we call gravity changes. Velocity is the change of position with time. Acceleration is the change of velocity with time. In the space near a body, gravity changes with the dictates of the inverse square of the distance from the body's center. In other words, there are lots of changes in nether flow.

K can be expressed in various ways. For Earth,

$$K = T_e = (2r_e/g_e)^{1/2}$$

$$K = 2r_e/v_e$$

$$K = v_e/g_e$$

$$K = r_e M_e v_e / r_e M_e g_e$$

$$K = r_e W_e / E_e$$

$$K = (2^{1/2})(256\pi) \quad \text{This is approximate.}$$

Using the equation that is directly above, K is 1137.378032 seconds.

Using $K = v_e/g_e$ as solved for nether velocity and acceleration at the poles with a standard of one for M, $K = 1137.165679$ seconds, the difference between the two values for K is only .0375 percent.

The answer for $(2^{1/2})(256)$ is the value for the pitch we call old F sharp (F#) today. In ancient China, it was the frequency of old F# upon which their whole musical and astrological scale was based. The involvement of pi would indicate a cycle of some kind. K is a unit of time, and F# is a frequency. A time unit is in seconds, and a frequency is events per second. Could the similarity be a coincidence or not?

Part Seven - Testing Alternatives

Facts do not cease because they are ignored.

Aldous Huxley

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To test various alternatives, I set up a computer spreadsheet to simulate various solutions to gravity. The spreadsheet was based upon the following assumptions.

1. Gravity is caused by the acceleration of nether downward.
2. A falling object accelerates with the nether acceleration, no more and no less.

3. The surface of the earth and three theoretical spheres would be used: sphere "e" for the earth's surface, sphere "a" just above the the earth's surface, sphere "s" high above sphere "a", and sphere "h" just above sphere "s".

4. The distances between two sets of adjacent spheres allows a means of calculating acceleration at two different levels.

Other assumptions were based upon the following.

Between the two adjacent spheres, "e" and "a", and using equation 4:

$$g_e t_e = v_{ei} \quad g_a t_a = v_{ai}$$

The foregoing equations can be re-written:

$$g_e = v_{ei}/t_e \quad g_a = v_{ai}/t_a$$

From equation 2, $v = kg$, we have $g = v/k$. So:

$$g_e = v_e/K \quad g_a = v_a/K$$

From these two sets of equations:

$$g_e = v_e/K = v_{ei}/t_e \quad g_a = v_a/K = v_{ai}/t_a$$

With some algebraic manipulation, we have:

$$\text{Equation 8: } \mathbf{K = v_e t_e / v_{ei}} \quad \text{or} \quad \mathbf{K = v_a t_a / v_{ai}}$$

The above alternatives for "K" are not equal, and since that is so, "K" is not a constant unless we have more evidence than the above. So appears that we must introduce Mass into the equations and that Mass is different at different spheres above the center of an attracting celestial body.

From equation 6, $t_i = (2r/g)^{1/2}$, we have:

$$t_e = (2r_e/g_e)^{1/2} \quad \text{and} \quad t_a = (2r_a/g_a)^{1/2}$$

If we temporarily assume that in equation 6, $K = t_e$, then we can solve for " t_e " which would be "K".

Using the same values for " g_e " and " r_e " as before:

$K = 1,137.16567$ seconds

Using this logic, "K" is a time dimension based upon "g" and "r". If "K" is actually the same as " t_e ", then it should change to " t_a " when we are using other spheres or to "t" for impact velocity when using another celestial body.

When using the spreadsheet, the number of unknowns still exceeded the knowns in the equations. By properly arranging the spreadsheet, I was able to set values and adjust the unknowns, one at a time, until I found the way to make them fit correctly together. There was only one way that they would fit and this led to the correct equations and the correct values.

The value for " v_e " turned out to be the same one that was found above. Not long afterward, I realized that it is the escape velocity from the earth. This led to the more sophisticated proofs published in *Book Six* and then the second edition of *Book Two* of *Behind Light's Illusion*.

Part Eight - More Items of Interest

Men love to wonder, and that is the seed of science.
Emerson

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The other things that were initially discovered and published in the first edition of *Book Two* are worth mentioning here and follow in sufficient detail to be understood.

Mass Density

Mass density of nether increases as it moves into a gravity funnel. When using sea level on earth as a standard so the Mass is set to equal one at this level, the equation for Mass becomes:

$$M = M_e(r/r_e)^{-X} \quad \text{or} \quad M = M_e(r_e/r)^X$$

"M" is the Mass we are attempting to find, "r" is the radius at that point, and "X" is 1.5. This means that as "r" increases, "M" decreases proportionally to $1/r^X$, or as "r" decreases, "M" increases proportionally to $1/r^X$.

MvA must remain constant at all levels for any particular body of vortices. "A", area, always decreases when moving inward proportionally to r^2 . We know from the equation that "v" increases when moving inward proportionally to $1/r^{1/2}$. This means that "M" must increase when moving inward proportionally to $1/r^{3/2}$.

$$1/r^{1/2} = r^{-1/2}$$

$$1/r^{3/2} = r^{-3/2}$$

$$MvA \sim (r^{-3/2})(r^{-1/2})(r^2) \quad \text{which is } r^0$$

Because a gravity funnel decreases in cross-sectional area as we move inward (the area of a sphere), we know that "M" would be forced to compress and increase in density as $1/r^2$. This is what must be happening in the two dimensions of the areas of the cross-sections. So nether is compressing in two dimensions.

For total "M" to increase as $1/r^{3/2}$, "M" must be decreasing in the radial dimension, as it moves inward, as $1/r^{-1/2}$ which is the same as $r^{1/2}$. This is logical since negative pressure at the center is the driving force. The nether actually stretches (expands) in the radial direction in response to the negative pressure.

And this is why MvA remains the same at all levels from the center. M_{area} (meaning M for the entire area) is responding as $1/r^2$ and M_{radial} is responding as $1/r^{-1/2}$.

$$1/r^2 = r^{-2}$$

$$1/r^{-1/2} = r^{1/2}$$

$$M = M_{\text{area}} M_{\text{radial}}$$

$$M \sim (r^{-2})(r^{1/2})$$

$$(r^{-2})(r^{1/2}) = r^{-3/2}.$$

$$M \sim (r^{-3/2})$$

Taken in logical sequence, first the negative pressure at the center of a body of vortices draws the nether inward (or it is pushed by the positive pressure if you prefer). Second, the nether is being compressed as the funnel decreases in cross-sectional area. [This cannot cause very much resistance because the pressure vectors parallel to the area of each sphere act essentially at right angles to the inward negative pressure vector. However, inertia causes resistance to the inward pressure because the nether is accelerating at all levels.] Third, the nether stretches radially as a result of the negative pressure inward from the mass and the outward pull of inertia. Fourth, the velocities inward respond as only they can, and stabilize. And fifth, the instantaneous velocity inward, as it increases (which is what it does at all times), is what we know as gravity.

The compression of the nether tangentially as $1/r^2$ is the only response it can have. The response of the nether to the inward and outward forces is equal between acceleration and stretching - and this is logical. They are actually the same thing viewed from different perspectives. It is the increase in expansion that creates the increase in velocity - or vice-versa.

From the second edition of *Book Two of Behind Light's Illusion* is another version of the above with the title *The Behavior of Nether in a Gravity Funnel*. In this version, D for nether density is used in lieu of M. However, the math is the same. The newer version is supposed to be a more easily understood explanation of the older version.

1. The mass creating the funnel is pulling on the nether which distends it and lessens what would otherwise be its density so that radial density, D_r , is proportional to $r^{1/2}$ where r is the distance from the center of the celestial body.

$$D_r \sim r^{1/2}$$

2. This distension of the nether, S_r , is proportional to $1/r^{1/2}$. Shown here as

$$S_r \sim r^{-1/2}$$

This distension is also the instantaneous nether velocity which is given here as

$$v \sim r^{-1/2}$$

Please note that D_r must always be proportional to the reciprocal of S_r and of v , and S_r and v must always be the same. One cannot happen without the other because they are all part of the same phenomenon.

3. D_t , the tangential compressing of the nether is caused by the reduction of the funnel cross-sections as the nether moves inward, and must be proportional to $1/r^2$ due to the solid geometry involved (area is proportional to r^2). This is shown here as

$$D_t \sim r^{-2}$$

4. $D_r D_t = D$ where D is the total nether density. This is shown here as

$$D_r D_t = (r^{1/2})(r^{-2}) \text{ or } r^{-3/2}$$

5. At all levels of the gravity funnel, the product of DvA must be the same because the same amount of nether must pass through each level. Once again, D is density, v is instantaneous nether velocity, and A is the area of the funnel cross-section.

So $DvA \sim (r^{-3/2})(r^{-1/2})r^2$ which is (r^0) or one.

The Meaning of K

For any particular celestial body, the value of "Mv" for any point in the universe may be easily calculated from "g" at that point once a standard for "M" has been established. Nether is compressible and varies in density according to the conditions where it is found. No standard for nether density had been established previously, so "M" at sea level on earth was the standard established for this theory. This standard is reflected in the mass flow constant, "K", used in the equation $Mv = Kg$.

"Mv" is the momentum of nether at a point and may be easily found by the use of the above equation when "g" and that point is known. However, the value of "M" or "v" is impossible to discover at that point as separate values unless more is known.

"K" for Earth is calculated to be 1137.165679 seconds using the equation $K = (2r_e/g_e)^{1/2}$ with the values for " r_e " and " g_e " at the earth's poles, and "M" set as "one" for sea level on earth.

Perhaps it is best to think of K as simply a ratio between nether velocity and gravity, found in every celestial body, that is unique to that body.

Coincidence?

It is common for an ancient civilization to encode its knowledge into its weights, measures, and other commonly used concepts in its culture - and ancient China was no exception to this rule. But there are common phenomena among all the old civilizations, like the mathematics of music, its effects upon the human ear, and its consequent effects upon their musical scales. Many old civilizations knew that astrology is based upon musical (vibrational) principles.

$K = (2^{1/2})(256\pi)$ seconds = 1137.3769 seconds. This is approximate. And

$K = 1137.1657$ seconds when using Earth's radius and gravity at the poles.

I would never have noticed that "K" could be anything but a number except that I recognized that it appeared to be the same as pi multiplied by the frequency of an octave of the F sharp of ancient China. This was the frequency upon which their entire musical and astrological scale was based. Furthermore, their entire civilization was based upon their music and astrology. So F sharp might be called their fundamental for living (see The Oldest Magic by this author).

The "K" of 1137.3769 is numerically so close to the oriental frequency that an earth radius of 3,951.67 as opposed to 3,950.19 miles would make it precise. This means that there is a difference of only .0375 percent. And who knows what elevation the ancient Chinese considered to be their standard? We use sea level, but did they? If they did choose to use sea level as a standard, what was the sea level at that time? What latitude might they have used since the elevation that is sea level increases as it is measured closer to the equator?

There are 2π radians in a circle. So 2π constitutes the fundamental length for one cycle (wavelength or time unit) of a frequency. Removing 2π from K leaves us with $(2^{1/2})(128)$ - which is a time interval of 181.01932 seconds. Numerically, it is also the old frequency for a lower octave of F#, meaning 181.01932 Hertz (cycles per second). The product of 2π radians and 181.01932 would be the number of radians in one complete "frame" of the frequency we call F#.

Going up one octave is a doubling of the original frequency. Going down one octave is dividing that frequency by two. The time interval for one cycle of a frequency of 181.01932 Hertz is .005524 second, found by dividing one second by 181.01932. Dividing 181.01932 seconds by 2 to the 15th power also gives us .0055242 seconds, meaning that the K of 1137.3769 is the number of seconds in one cycle of a very low octave of old F# - or looking at it another way, this K is the number of seconds in one complete "frame" of 181.01932 events in a low octave of F#. Perhaps the ancient Chinese scientists thought of K in that manner:

$$K = (2^{1/2})(128)(2\pi \text{ radians}) = 1137.3769$$

Regardless of what the ancient Chinese thought about it, the similarity between a K of 1137.3769 seconds and a K of 1137.1657 seconds is not likely to be a simple coincidence.

The fact that "K" appears to signify that a vibration is evident leads us to believe that the $K = (2^{1/2})(256\pi)$ may be caused by a natural phenomenon. If so, I have not found what that natural phenomenon is.

As far as the universe is concerned, our "K" can only apply to this planet. It is the time that would be used for something moving at the nether velocity v_e at Earth's surface to move a distance equal to Earth's diameter. The velocity v_e is also the escape velocity from Earth's surface - so K is the length of time used in transiting a distance of one Earth diameter when moving at the escape velocity from Earth. K is also the ratio between nether velocity and gravity at the earth's surface. If any natural frequency is involved, it is likely to be found only here on the planetary surface. Our "K" can be considered the signature of Earth.

Variations on K

There are a number of ways to manipulate the equations to arrive at different ways to calculate "K".

$$K = t_e = (2r_e/g_e)^{1/2}$$

$$K = 2r_e/v_e$$

$$K = v_e/g_e = r_e M_e v_e / r_e M_e g_e = r_e w_e / E_e$$

Mordehai Milgrom and MOND

MOND stands for *Modified Newtonian Dynamics*. It is the result of work by Mordehai Milgrom.

After working with gravity to develop the foregoing, I was lucky enough to be able to read an article on Mordehai Milgrom and his work on dark matter theory. He had developed the necessary math for me to use to discover the dark matter solution. Mordehai Milgrom did his work well before the expansion of the universe was known to be accelerating. Consequently, he decided that the acceleration attributed to dark matter was actually caused by a change in Newton's second law.

My work, when mated with his, showed that the effects of the acceleration of the expansion of the universe are masked by gravity until gravity becomes weak enough to allow the acceleration to be detected. Therefore, dark matter does not exist and Newton's second law remains intact. The effect attributed to dark matter is simply that caused by the acceleration of the expansion of the universe - and should have been predicted when this acceleration was known to be a fact. So actually, Mordehai Milgrom was the first to discover that the expansion of the universe is accelerating - but at that time he could not have realized that he had done so. His work is remarkable for its time and the result of a great intellect with the courage of conviction.

For the complete explanation see [Constant Velocity Point](#) at my website.

Nether Inward Velocity Derived from Orbital Velocity

The inward velocity of nether moving toward an "attracting" body can be found from the orbital velocity of any object in orbit about the "attracting" body. This was something I discovered later on and serves to simplify what would otherwise be a lot of tedious calculating. For instance, knowing the orbital velocity of the earth relative to the sun will allow one to discover the sunward velocity vector of the nether at the distance where the earth is orbiting the sun.

For the complete explanation see [Gravity Equations](#) at my website.

Qualities of Nether (Dynamic Ether)

From work found in the first edition of *Book Six* and the second edition of *Book Two* of the series *Behind Light's Illusion*.

1. Everything is composed of it.
2. It is a perfect fluid in the sense that it is non-particulate.
3. It has inertia, and will continue act in any particular way until acted upon by a force.
4. It is frictionless, and there is none within it to prevent it from doing whatever it is doing.
5. It is compressible, and can compress in one direction while expanding in another.
6. It is energy conscious, and reacts to any change in a way that uses the least energy.

The major consequences of the above are:

- (1) It is in all of the space in our universe. Space is not empty.
- (2) Its density varies from place to place.
- (3) It becomes more dense as it approaches a mass.
- (4) It is constantly in motion.
- (5) Once its velocity is set, nether cannot be detected by normal means.
- (6) It can be detected by its acceleration or the acceleration of any vortices (matter) within it.

- (7) All energy is the consequence of motion within it.
- (8) All energy is transmitted by means of motion within it.
- (9) It can be considered "primal Mass".

Part Nine - Theosophical Implications and Connotations Giordano Bruno

Order is Heaven's first law.

Pope

[Part One - The Beginning](#)

[Part Two - The Inward Nether Flow](#)

[Part Three - Momentum and Energy](#)

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During the dark ages, the earth was flat and sun revolved around it. The stars were lights in a dome above us. Later, there was a spherical earth about which other bodies revolved and humans were alone.

This was followed by the discovery that the sun was the center of the solar system and the earth revolved around it. [Actually, it is the center of gravity for the solar system about which we revolve, and that center is usually within the boundaries of the solar surface, responding to planetary motion.] According to our theoretical physicists today, space is empty and photons are sometimes waves and sometimes particles that slow down in glass lenses and then speed up again.

Giordano Bruno was born in Nola, Italy, in 1548 AD, was educated in a convent, took his vows in the Dominican Order, was ordained as a priest at the age of 24, developed a curiosity, lived a very exemplary "religious" life (which was in opposition to the greedy religious authorities), was arrested and tortured by the Venetian Inquisition, and at the age of 50 after refusing to recant his views, was burned at the stake. He wrote on mnemonics, magic, mathematics, physics, Copernican astrology [the father of astronomy], philosophy, religion, and cosmology, to name a few of his interests. He also wrote poetry and satirical comedy. It is no wonder that he was a target of the Inquisition.

Bruno's beliefs are grossly misinterpreted and misrepresented by some authors to this very day. How could it be otherwise with the level of ignorance caused by a multitude of different and intolerant religions? What is most amazing about Bruno is that he apparently knew of the universal substance in all things.

The dynamic ether, regardless of the name it is given, is similar to what has been said of God by Christians - "**In him we live, move, and have our being...**" (From the Holy Bible, Acts 17:27-28) Dynamic ether is everywhere and everywhen. Some schools think of it as the body of God - the intellect of God being the part that is beyond the universes, beyond dimensions, and beyond time. Some wish to keep the Creator too small - implying that the Creator could not have started this universe with the creation of a substance that is everything. The discovery of the dynamic ether, its qualities, and its efficient use of evolution, have shown me the reality of an Eternal Being who is incredibly greater and wiser than one hypothesized in any exoteric religion today.

***God is the universal substance in all things.
He comprises all things. He is the fountain of all being.
In him exists everything that is.***

Giordano Bruno

the general science
Journal