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Structure and Gravity the Universe is Otherwise – Part 2b

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I. Introduction

The details of working with space are well analyzed and understood by astrophysics study but big parts are overlooked within most cosmological views. Particle physics is the breaking down of matter into components such as atomic particles. The purpose is to gain understanding of all matter and its place in the universe. Radiation is separated from particle views and simply viewed as in motion serving as lines of flow. Overall views using field and vortex analysis is in sufficient. A detailed analysis of radiation reveals a connection with and a new nature for gravity.

II. Attraction Gravity - A Metaphysical Concept

When mankind's base of reality is the solid earth, then all actions can be related to local masses. Thus gravity, which pulls objects downward toward Earth is called an attraction. Gravity pulling is denoted as an "action at a distance". It is this awkward term that stimulated a need for correction by future gravity theories such as Relativity. "Action at a distance" is the concept that an object can be moved, changed, or otherwise affected without being physically touched (as in mechanical contact) by another object. That is, it is the nonlocal interaction of objects that are separated in space. The term attraction was used most often in the context of early theories of gravity and electromagnetism to describe how an object responds to the influence of distant objects. For example, Coulomb's law and the law of universal gravitation are such early theories.

Attraction is a mystic term that is not treated as a physical action in the study of physics as no motive can cause a pull without some background of pushing being involved. Although it is metaphysical, attraction also found believers as a mystical answer to the Copenhagen EPR paradox. This accepts magic known as "quantum entanglement" to explain how separated atoms can seem to react simultaneously to an action. This would negate the limiting speed of light and all other limits to simultaneous responses. The acceptance of "action at a distance" led science in questionable directions long ago by claiming the failure of early atomistic and mechanistic theories which sought to reduce all physical interaction to collision. That is the same issue we face today. The quantum mechanics of Physics logically wants all actions to be caused by contact and has had to work around gravity to get there. The exploration and resolution of this problematic phenomenon led to all the concepts of the Standard Model physics, from the concept of a field, to descriptions of quantum entanglement and the mediator particles.

III. Pushing Gravity

God created the universe in seven days. Mankind was then left to make sense in some detail, of the universe, its motions, and interactions. We accumulate detailed theories and solutions until the complexity is overwhelming. Then a change of perspective is useful. An example was the change from the geocentric to the heliocentric view of the universe. So many epicycles were needed to determine celestial motions that Copernicus's simpler perspective took hold in the face of a seeming impossible challenge as our senses denied the newfound motion of earth. Understanding of spatial motions today must focus on gravity and related concepts. Current theories tend to be piecemeal, not addressing complete facets of human knowledge. The perspective presented here is all encompassing and simple. What follows uses redefined gravity to restore perspective to our universe. Some building blocks are:

1. Gravity is an external event.
2. Gravity is a 'net effect' force resulting from interacting beams of radiation particles.
3. Gravity is multidirectional, not simply a down force.
4. Gravity particle beams penetrate and exit from masses. The beams are bent by the rotation as they depart the rotating body.
5. Kepler's 3rd law relates planet times to orbital distances. The sun causes Kepler's formula to work. So the center must somehow provide impetus for orbitals.

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a) Introduction

The structure of the universe is a simple concept though mankind continually complicates it. The universe is essentially isotropic within a 3 dimensional framework, allows for motion and structure, and contains a force that holds macro bodies together. That force is of course gravity. In the hierarchy of theories, the view of the universe proposed here is the most basic. It is simpler in its concepts and terminology than is current theory. A complete overall perspective starts via a rationalist view before succumbing to the experimentation - proof requirements of empiricists.

Since gravity dominants action in the universe, a proper focus on gravity as the prime mover provides an optimum perspective of our universe. We have not logically defined gravity. Most concepts and definitions lead to misrepresenting gravity as a metaphysical force. Scientists begin their theorizing with mass and define motions using concepts of fields, forces, charge, and energy rather than begin by relating to a physical form of gravity.

Scientific investigation within physics and astrophysics produce experimental results that lead to new concepts, ad infinitum. But they rarely lead to understanding. Many analyses are designed to alter exiting theories such as relativity. Instead there are advantages to considering a perspective that eliminates many current concepts. We start with gravity.

b) New Perspective

The concept of attraction is not a physical event. It is a perception resulting from the "net" effect of beams arriving at masses. Physics should have dealt with this issue eons ago. Physical events demand interaction via contact so gravity must be a push upon things. We perceive the pressure as gravitational 'attraction' and will see that gravity keeps masses together. As we begin seeking interaction we will relate actions to linear beams which are easier to understand and work with than are fields.

Understanding gravity as an external event is the key to understanding. Consider gravity pushing rather than attracting. Doing so addresses a logical requirement for Physics, the requirement for contact. Push contact occurs between two or more particles. The push is continuous suggesting gravity travels as a beam. The part of the beam associated with the contact is the wave. The varying altitude within a wave gives it impact potential. I had named the wave as a particle called a Paep for ease of discussion. Gravity (however defined) must move in order to create pressure. By default it must move in all directions. Thus, in the void of space, all gravitational push is in balance. To get "gravitation pressure" there must be an imbalance. One way that occurs is by more gravity beams moving in one direction and overwhelming the offsetting gravity from the opposite direction. Understanding that gravity acts as a result of a "net" force is important. Gravitation at a point can be variable depending on the force contained within opposing beams. The common spherical curvature of spheres such as earth hid the variability of gravity throughout the ages. Gravity varies due to modification by masses or by radiation.

Treating gravity as a pressure alters a myriad of concepts. Start with a physical gravity which pushes upon things. A simple corollary defines its opposite, what we call anti-gravity. If gravity is a push, then anti-gravity must be a push in the opposite direction. It is not some mystic situation in which everything disintegrates, born of those who thought of gravity as an attraction and can't reconcile an anti attraction which lacks physical attributes. Anti gravity causes the repelling of 2 bodies from each other, as opposed to attraction. Imagine a mass levitating on earth. In fact we may cause such anti-gravity by interfering with gravity from one direction. We will explain magnetism, the other "attraction force". Magnetism is directional, both attracting and repelling. It occurs only in limited situations. We may someday expand the situations.

To do away with the occult nature of gravity in existing systems we have to have a push source that provides gravity. That observable push is the "net" of all pushes upon any object from all 3 dimensional directions. This statement removes the dependence upon earth itself as the reference point and resets space as the reference for ongoing cosmology. The "Universe is Otherwise" and all gravity exists as pushing forces throughout space. What is it that pushes? The pushing must be done by the radiation beams throughout space as there is nothing else that fills space. In most places, such as remote space, the pushes net out to full equilibrium and no motion happens. The finding of a net pressure and therefore motion within any place in space indicates an imbalance of gravity push upon that place from the various directions. Without gravity providing the basic push there would not be any basic source for motions.

Radiation flows in all directions everywhere. We usually don't recognize that flow in any measure because all motion nets out. We recognize that light beams do not interfere with light from any other direction. So within a point of space, radiation is flowing everywhere at speed c and is undetected.

We can make use of the term attraction only if we recognize we are discussing the apparent motion relative to us. We do measure the downward falling motions in measures such as meters/sec. Extending the time beyond the fixed measure of one second, we create the concept of acceleration as a way to reference the change of the apparent motion over time.

1) Our pushing gravity is the source or cause of the pressure that produces detectible effects. This source is currently undefined and has been since the time of Newton.

2) The term gravity is often used to denote the detectable effects of actions which are caused by the source of gravity. The effects of gravity upon matter bodies results in detectible motions or pressure. The effect is the 'attraction' of matter toward mass bodies. The attraction effect is expanded by Newtonian dynamics to include the potential motion of 2 or more spatial bodies toward each other

Pushing gravity is a result of a push by all the radiation beams traveling throughout space. When no outside influence is involved the net of the pushes is that no motion is created. To have motions there must be an imbalance of gravity beams. Attraction that occurs is dependent upon masses. The center of bodies is considered the cause of attraction gravity. So pushing must be modified relative to the center of mass. That can be accomplished by having mass serve to diminish the push of radiation. Thus beams exist within mass as well as in space. Gravity beams within matter flow forward and are diminished in some relationship with time and distance of travel within. Radiation is everywhere including within masses. The gravity beams penetrate and then exit.

IV. A Proper Analysis of Mass Allows for Pushing

1. Light has no mass. So perhaps light is the source of gravity. Light in motion has no mass even though it causes impact upon arrival.
2. Light travels as a beam with waves. It was finally given a particle component by Einstein to satisfy impact. If we penetrate matter with light it stops near the surface. But other EM radiation with different wave frequency may penetrate further or entirely. Coils are 3D views of sine waves and their shape causes action duplicating mass. Since penetrating EM radiation doesn't incinerate earth, it must provide gravity.
3. Mass evolved from weight measures and can be inversely called the measure of gravity pressure. The property of mass that incurs gravity pressure must be in some degree of perpendicular motion vs the waves of gravity. Then you have interaction.
4. The density of mass is the amount of spin either surficial or internal that crosses gravity waves. A circle in space that does not rotate some way has no mass measure as all gravity beams penetrate straight through.
5. Science has found F-=ma to fail at extreme velocities and allowed Relativity to decree that mass increases with speeds near c. "Einstein was so sure that momentum conservation must always hold that he rescued it with a bold hypothesis: the mass of an object must depend on its speed! If an object at rest has a mass *m*, moving at a speed *v* it will have inertia corresponding to a "relativistic mass"

$$m_{rel} = m/\sqrt{1-(v^2/c^2)}.$$

6. Since mass growing is accepted then we are allowed to claim mass diminishing as a reason F=mv doesn't work for EM radiation.
7. Earth's atmosphere topped by the simplest atoms then down to more complex atoms all remain in space. Gravity would push them down over time so they are being recreated by EM radiation intersections. My section on mass creation is that beam lines with altitude from center intersect similar beam extensions to form electrons so that the intersections remain in place as matter and the beam itself flows onward as radiation.

Math formulas interfere with the freedom of understanding what is going on when they are extended toward extremes.

V. The Concepts and Components of External Pushing Gravity

a) Radiation

Radiation has provided the advancements of science in the last 100 years. But it has not been properly assigned its place within our universe structure. Radiation arrives everywhere from all directions. Likewise it comes from all 3 dimensional directions throughout the universe. A point in remote space exists because radiation continuously passes through from all directions. There is no void in the universe. Though one might imagine that nothing exists between lines or between particles, our reality stems from continuous motions changing all the time. Should one seek void space within a point, that void would vanish to the ongoing radiation flow coming from continuously shifting angles. The structure of the universe is defined by flowing lines of radiation. There is no need for an Aether to carry light and EM radiation.

Radiation is called rays as it departs a source and beams as it travels and arrives. What we called a source, such as a lamp or a gravitational body, is but a modifier changing the characteristics of existing radiation. All radiation travels at velocity c depending on its medium as defined within physics. The prominent characteristic of radiation is wavelength and frequency. The wave altitude is also important. Light is the predominant radiation and serves as a central focus of a scale of all possible radiation. The EM spectrum, detailed by wave length, describes the various radiation effects which depend on the wave frequency.

EM waves in space are known to be transverse in form. They are pictured as sin waves on a document which is a 2 dimensional representation. Unlike water waves, radiation waves are 3 dimensional. We would

see the sin wave by inspecting the flow from the side from all directions, be it side, top, or bottom. Being three dimensional we must picture a wave as a coil. A sequence of coils emulates the spring in a pen. The whole spring is moving rapidly at speed c suggesting its forward flow of the waves/coils. We may use the terms coil and wave interchangeably.

Radiation has the ability to push matter. This violated early physics laws and led to the duality of wave/particle nature of light. Light is known to push in order to cause vision and X-rays are known to push from the Compton Effect studies. Pushing is a transfer of motion and does not depend on light having photon particles. Comptons x ray charts support radiation push but science has missed the proof of pushing gravity within.

b) Penetration

The whole EM spectrum of radiation is available for us consider as gravity beams. The gravity waves are coils whose frequency determines whether a wave impacts matter mostly at the surface or within the mass. A beam with low frequency waves arrives more like an arrow and penetrates the mass. High frequency impacting waves may apply greater surface pressure. However, the total of surface pressure is minor relative to the penetration pressure of long waves which continues contact throughout the mass. Penetration contact applies throughout the internal field of mass. Matter is considered as mostly empty except for the nucleus. Gravity beams that exit the mass must be less potent than unblocked incoming gravity beams that did not penetrate any mass yet. The "net" pressure then becomes a downward push on and near the body's surface. It is that simple to create the "attraction". Remember the word "NET"'.

Since matter modifies the push intensity of gravity, mankind should also ultimately be able to modify it. A simple case suggests inserting sufficient gravity beam blocking material above some something in order to cause a reduction of earth's gravity downward. If the reduction were extensive it may overcome the total push in the original direction. The result would be anti-gravity, a net push in the opposite direction. If spinning causes blockage, maybe spinning by propellers or rotators is actually a blocking of gravity?

Long wave radiation has more potential to penetrate matter than does higher frequency short waves. Long straight beams are like arrows and lack the wave that impacts and stops the flow. The penetrating long wave beams both push masses and are modified by the masses.

c) Gravity Modification

The modifying action within masses has atomic particles interfering with the beams. Two parallel beams may wrap together into one wave without quite doubling the frequency. Wave merging continues throughout any penetration of masses and results in fewer beams of higher individual frequency. But what remains is less total frequency, and thus less energy. The longer the path of merging, the fewer beams remain to exit. Thus the exiting beams cannot offset the incoming downward beams and a 'net' downward pressure occurs. The mass center is the average pressure/force point causing the reduction process rather than creating attraction. The diameter determines the path length. By time of exit the remaining penetrating beams have higher frequencies and exit on average as radio beams for example from earth and as light beams from the sun. The new frequencies upon exiting depend on the celestial body size.

The reduction process outlined here is unique. The net pressure idea replaces Newton's model in which motion in space continues without change unless impacted by other matter. The concept of prior unchanging motion in space solved the friction issue with space defined as void. We know today that space is not empty. A driving force is needed to explain continuation of orbital motions. For orbital motion that driving force must relate to the center body in some way. Orbiting is revolution relative to the center, actually the relative rotation of the center.

That center, which rotates relative to an orbital body, is ejecting the diminished gravity beams while pushing them in its rotation circle. Solar beams arrive at an orbiting planet from the right causing pressure toward the left. We accept that planets are pushed toward the sun by a net amount of the inward gravity. Now we recognize that the orbital is also pushed counterclockwise around the sun. The two "net" force directions, inward and leftward, achieve balance. Both light and gravity beams from the sun curve in toward earth avoiding any appearance of earth overtaking the beams. Rotation is the highly overlooked source motion maintaining the universe.

Physics could never work with their gravity source as it is a linear pull to an unattainable center. Switching to an external incoming source opens a whole new chapter for modifying the gravitational effects of gravity beams. We can work with it. We can try to block it. The common 'attraction' force of magnetism can be seen as a redirecting of gravity beams by the spinning of matter, ie electrons. There is no reason this can't be done on larger scales. We spin propellers such as helicopter blades. They raise up a big carriage/cockpit attached below. Propeller The theory is that the spinning air pushes downward, but isn't it easier to view the motion as being caused by the blades pushing aside the incoming gravity beams. Then the push from below can equal or exceed the push from above. By extension, how did the ancients move the huge blocks forming pyramids and stones such as those at

Stonehenge and Easter island? Clearly the blocking of gravity would be a logical method?

d) Non Linear Force

Pushing gravity can act upon a body from all directions. Current "attraction gravity" is simply a linear effect. The force acts in only one direction, straight downward toward the center of mass. Now consider all the beams arriving at a spherical body, planet. They create a net downward push in all directions. They become the force that gives bodies structure. In sum they are the "nuclear" force. That force is claimed to be much stronger than gravity, but that is because attraction gravity is linear while a nuclear force as well as any pushing gravity is spherical. Pushing has a nearly infinite number of additional lines of force. That same nuclear force extends to masses of any size and in the atomic region it provides the nuclear force that causes the structure of atomic particles such as nuclei. All spheres receive a similar surface pushing force of downward gravity on their surface. A difference in the attraction is the "net" force which includes the force caused by exiting beams from the opposite direction. The smaller a spherical particle is, the less penetrating gravity beams will be diminished.

A side issue is that the binding upon nuclear to cosmic particles can be broken by interfering with or redirecting incoming gravity beams. Such event leads even to nuclear bombs.

e) Chemical Compound Weights

The mass of 2 elements is known and yet when combined the resulting mass is less than their total. The reason has been confusing. Pushing gravity rather than internal attracting gravity answers this issue.

1. gravity is a physical pushing force. 2. Since gravity's source is not centered, its holding things together from nuclei to celestial bodies. 4. Mass is the capacity to diminish gravity beams as they penetrate matter. 5. The capacity of matter to do that originates with its spins both at the surface and within its nuclear particles. 6. The measure of mass is the measure of the total 'net' gravity force acting on the surface of the matter piece. 7. Given any 2 matter particles, the gravity beams that align directionally so that they penetrate 1 of the 2 pieces of matter, then exit and then penetrate the other matter will apply less force there (particle 2) than unimpeded beams would apply. 8. thus matter 2 now has less pressure applied to it and is thus less massive. Conversely the same applies in reverse to particle 1.

As an aside, the gravity discussed here is mostly long wave EM radiation and it both penetrates matter and pushes matter.

f) Pushing and Bending

As external gravity particle beams penetrate and exit masses their beams are slightly bent as they depart the rotating body. They absorb the rotational motion. There never can be a concept of straight up in our universe due to rotating sources and revolving observers. Absolutely all radiating beams in the universe curve and the universe itself is curved throughout for all relationships. Upon arriving at orbital distances some pressure is parallel to the central body surface. Bent gravity beams essentially push orbitals in their orbits. Gravity thus provides both the centripetal force and the perpendicular motion offset called centrifugal force. The common source provides unprecedented stability and rejection of any doomsday collision concerns.

VI. Orbiting

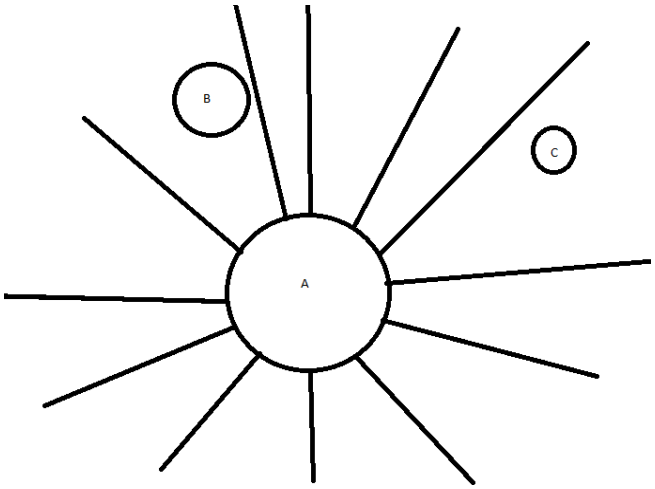


Fig. 1: Radiation exiting the sun

Our goal here is to emphasize rotation controlled orbiting with a diagram showing how a rotating body can cause motion for a second body.

Consider first a two-dimensional picture of two equatorial circles A and B. Circle A is larger. It spins counterclockwise and has lines radiating out from it. The lines are attached to and rotate with the circle. The key question is what will the lines do when encountering matter in their path?

They may:

1. Not interact with the matter
2. Push and carry the matter along with them.
3. Partially push on the matter

If they don't interact with matter we have no orbiting.

Assume the lines to be massive so that they can push upon and carry with them anything they encounter in their path. A line encounters and pushes circle B to the left, somewhat like the force we call centrifugal. This

push will also cause motion by B angularly away from A as B rolls out further along the line. There is no retaining wall.

We can't have circle B moving away from A in our analogy. Our example produces a linear motion, and we need an attraction toward center as a partial offset. We need something to attract/push B toward A with exactly the right force to balance the leftward motion caused by the central body spin. This attraction is a centripetal force, the attraction of gravitation. The source for this is the net amount of push along the lines where the outward push is diminished by body A. The result is an inward pressure from pushing radiation beams.

We have developed the beginnings of an external gravity system. Netting the sideways pushes with the attraction pushes in concert results in orbiting. But in the example given, the left pushing radiation beams will push any object around the center in the same time frame. If a second body such as circle C is located further than B is from A, it will travel faster but its rotational velocity will be the same. That assumes the pushing beams likewise dominate motion at all distances, that the original radiation lines retain the same leftward carry ability at all distances. The model needs to be modified so a partial push occurs due to a weakness of the lines.

At this point we have orbital angular motion for B which corresponds with the surface spin of A. But this is not how orbiting works as we know that spatial objects usually do not retain their position in space over the same surface point permanently. In this example the period of revolution would be independent of the distance *R*. There does happen to be an example to this unusual relationship as the earth nearly retains its position over a point on the moon's surface. This can only occur due to the moon being a minimal source of earth's motions.

Orbiting has remained somewhat mysterious and its function is often related to particle spinning. What Kepler sought and we here are seeking is a relationship between orbital motions that varies somehow depending on the distance from a central body - sun. This relationship has been quantified in a complex formula for the closest 6 planets by Kepler's third law.

Kepler's formula can be simplified to $KT=R^{3/2}$ for each planet, where

T is the period of a full orbit cycle,

R is the distance of the center of the planet (B) from the surface of the (A) sun,

(for elliptical orbits, R is the major axis.)

K is constant for every planet connecting their periods to a central body action.

We called the lines coming out of the sun (A) radiation beams. With current logic they would be unable to push sideways if we assume they are like light moving rapidly outward at the speed of C. Theoretically light beam has no mass. But we do know light creates some pressure upon impact. Light has waves that emulate a particle upon impact. Light is only considered massless if at rest. For our radiating lines to push, they must have some sideways motion toward the mass being pressured. Radiation traveling at speed C is usually considered linear motion. If the waves bend a bit sideways a miniscule amount of their push can be in the lateral direction. One might call the sideways impact glancing blows. So any bending of the radiation line toward the impacted mass should provide motion to the mass. Bending of the beam relative to circle B must occur given our definition that A is spinning relative to B. For a radiation line to move up against B it has traveled to our left. That leftward motion L occurs while the beam moves outward at speed C. So L/C is the amount of sideways push delivered to B. This is a very small portion of the speed of light.

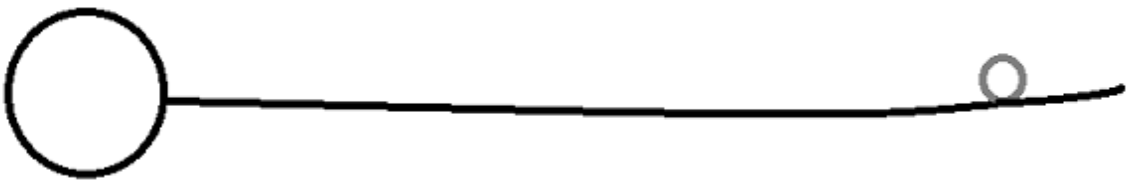


Figure 2: Bent transmission beams from the sun that push earth

What happens as beams exit rotating massive bodies?

We have pictured orbiting. Here we analyze in more detail the issues involved in orbiting.

Exiting solar beams apply less outward pressure upon planets than do incoming beams from outer space. Gravity thus nets out to form "attraction" of planets toward the sun. Then we are interested in planetary direction of travel.

Picture a straight line through the center of the sun. A gravity beam will not quite remain straight as it approaches center. The sun is rotating (spinning). The beam is being pushed in one direction by the atomic particle contents of the sun into a slightly curved path. It passes very near center, after which the pushes impact the beam from its opposite side. By the time it exits the entry point and exit point may connect directly through

the center as a straight line. It is upon exit that the beam is maximally shifted to the left. Describe the bend. Is the shift of the wave found by dividing the surface rotation velocity by the speed of light or 2/ 300,000 for the sun? But this is the linear offset. In fact it is the angular lateral push due to the circular motion of the sun that is carried along. It is awkward to relate angular motion to linear motion. The angular offset varies with distance of departure as the circumference increases. It requires a flow of continuous recalculation.

The beam continues on in its most recent direction which appears to observers as bent from the straight up direction. The bend is at a maximum at the surface. As the beam rises it mixes with ever more perpendicular non-penetrating beams. An intersecting motions and the mixing of irregular beams are greatest at the surface. We see this activity at the sun as solar flares. The lateral impact upon exiting beams suggests we first view them as two dimensional transverse waves since two directions, up and left, of force were applied to them. They become coils with interactions in space over time.

Beams flow thru the sun in all directions and exit with various distortions. Most as they aren't directed toward earth. Some beams that exit very near the equator we do see. We receive fewer beams from off the orbital plane. Beams penetrating at higher latitudes and passing by the polar axis will have traveled less distance thru the sun and encountered a slower moving surface. Waves passing thru but not near the axis acquire irregular wave lengths relative to observer. The waves creating our rotation are primarily two dimensional as we might view them on a piece of paper.

Any motion of matter causes exiting radiation beams to bend. The micro world has EM waves traveling at speed c being impacted laterally by matter particles traveling much slower at the rotation rate of the spatial body. The particles are discreet and the beam is essentially continuous. Therefore the beam will not be cut when impacted by atomic particles, but part of the flow will be pushed to the side by each particle impact. The impacts are repetitive and cause the wave nature of the beam. At the same time the overall flow has been redirected.

VII. Aberration

Light/radiation and external pushing gravity are the two transmissions which convey the nature of celestial bodies. While the linear motion of sources is insignificant the transmission of that light signal is subject to the orbital revolution motion of the observer body.

In order to understand the aberration for light etc. one inspects the relative motions of the bodies involved in the transmission of the EM waves. The motions of relevant bodies are especially important within the solar system such as sun to earth transmission.

There are four relative motions between two bodies. The first motion of interest is the motion of earth around the sun. Analyzing this we first imagine two circles and a straight line connecting the two circles and serving as a beam of light. The paper we draw on is static space and ignores the revolution motion. Given the beam takes 8 minutes to transmit, and earth moves to the left, counterclockwise, during that time, the beam will pass behind earth. To correct for this we select a beam aimed ahead on earth's path which we intend will hit exactly the center of earth in 8 minutes. That straight line beam will appear to bend slightly backward to earthly observers upon arrival pitting earth's motion of 29.8 KM/sec against the outward velocity C of the beam. The bending is called aberration.

The next, and most important motion, is the rotation of the sun. Consider an observer on the sun and the launch of the light beam. Say a beam is launched straight up like an arrow toward a chosen point. After 8 minutes is the beam still straight up from the solar observer? Since the sun has rotated a bit (its period of rotation is 24 days), it is above and somewhat behind the observer and the point of origin. The beam has not gone straight up! What does straight up mean? What is static space? The motion should be represented by a curve drawn to compensate for the rotation of the solar surface. Then the arrow can be pictured as straight up at some future times. In fact this representation does occur in some form as the launch site was moving sideways while the beam headed upward. The first assumption about the form of the sideways motion is that the beam will move toward the left at the sun's rotation rate, which is 2 km/sec pitted against the upward velocity of C. But this offset, at 2km/sec vs 29.8km/sec. of earth's revolution velocity, is insufficient to explain earth's revolution; it bends the beam only $1/15^{th}$ as much as needed. Note that we are considering only the lateral effect of the perpendicular push in a static space. The other offset perspective is that of angular velocity, a much more significant factor. The sun rotates in 24 days, which is 15 times faster than earth's revolution. Applying this rotation to an EM transmission throughout would have the beam arriving at earth from behind. This would suggest a large reverse aberration.

Essentially there is gradually fading lateral equilibrium at the surface of both earth and the sun. Space is not a static medium. The angular velocity is the initial offset to C at the surface of the sun. But the angular velocity applied to radiation beams diminishes as the beam departs the source. To understand source to receiver (sun to earth) transmissions vs the motions of earth we must consider the real condition of space.

External gravity is long wave radiation beams traveling at velocity C. These beams are the fabric of

space. Gravity beams behave as does other EM radiation. The exiting beams acquire the rotation of the sun. If we assumed the solar rotation angularly pushed these beams throughout they might push earth 15 times as fast its actual revolution rate. The sun rotates in 1/15th of our year. But intensity diminishes with distance. The density of the original beams and of space itself diminishes with distance. Think of master beams as continually modifying themselves by absorbing beams angling inward.

The solar atmosphere which rotates with the sun's surface gradually loses its connection with increasing altitude and its rotation contribution slows to that of the planets orbit speed. That happens because the sum of the master beam representing our gravity beam absorbs increasing portions of beams that did not originate at the sun but angled in. In any case, there is no aberration in gravity as it is the motive force of the planet's motion. The whole explanation to Kepler's third law comes from netting together the beams that have gained bending by exiting from the sun.

External gravity and light are both EM radiation beams. The absence of gravity aberration applies similarly to light. Gravity is also the cause of the whirling space in which light beams follow the flow and arrive without aberration.

VIII. Mass and Radiation

a) Looping Intersections

A family connection between gravity radiation and mass is the spectrum of existence. Everything is waves from very long to so dense they become mass. The wave length variation across the whole spectrum dictates the penetration ability. The shorter the wave, the less it penetrates and the more it mimics mass. Short wave radiation such as gamma or X rays usually perform mass creation adjustments upon approaching the unbalanced gravitation near spatial masses.

Short wave coils are most prone to intersecting with adjacent waves in their beams when the beam is bent. The bending and wave nature cause beam line intersects or crossings. The interactions become electrons. The interior of the coils becomes protons and/or neutrons similarly as magnetic beams are created within electrified coiled wires. While motion continues within the beam lines, the overlap location remains in place as unmoving mass. Matter occurs when beams bend sufficiently to create a loop within itself or when intersecting other beams.

So, a mass is the action of coils which constantly repeats and remains in place. Mass is composed of intersecting and looping beams. The amount of mass within a volume of space is the density of the beam crossings which are also spins in physics terms. Mass is the existence of spin relative to a local equilibrium of space. The spin of internal components of a body and of the body as a whole, taken together, defines the density of mass and ultimately the existence of mass.

Mass is created by unbalanced intersections of Paep gravity beams at points in space and creation continues very gradually in accord with the equation $m = E/c^2$. This inverts Einstein's energy release equation.

Masses exist as rotation relative to the local equilibrium. The rotations can be of the components such as protons and electrons, and/or of the whole mass. Non-spinning mass doesn't exist.

Since the particles of matter spin their surface becomes somewhat perpendicular to arriving or penetrating waves thus creating interaction. The interaction becomes a push relative to the matter particle. It can create a wave or shorten and bend the gravity wave.

b) The Universe

Since gravity is only variable upon interaction with mass it must be infinite in range. The gravity beams define all infinite space. The universe is space fully defined as beams like radiation and can exist without mass. It is the actions of radiation beams that build matter over time creating hydrogen on up to the largest suns.

Interacting bent radiation beams that bend enough to loop back such as gravity or EM radiation are what creates mass and matter. We can discard concepts that have planets created by condensing of gasses, which gas could never mimic all the various orbital revolutions.

Mass as a build up over time can occur in space where we identify the simplest existence of hydrogen everywhere. Repetitious intersecting of waves in space occurs primarily when beams bent by different sources interact. An optimum location is where streams from the sun and from Jupiter interact and build masses called Trojan asteroids in the Lagrangian L4 and L5 points of Jupiter's orbit. Mass buildup also occurs within masses where gravity beams bend and interact with existing mass particles. The output of such interactions in the sun provides light and heat. These are radiation because gravity, the source, is essentially radiation.

The same events occur within earth where minor heat and light originates. Likewise earth's mass gradually grows. Continental drift with shifting tectonic plates over time is a current scientific theory. But we expect a slow expansion of earth. The plates, separations, earthquakes and volcanism are products of interior expansion pressuring the surface. Analysis should extend back to the planetary beginning. Early features of the surface are replaced by newer ones as the earth grows. As gravity beams penetrate, such

things as water and oil are continually recreated below the surface. Unbalanced gravitation forces pushing down vs up collide and form matter. The penetration is what leads to earthquakes, volcanism and rifts separating sections of land. All the elements and types of mass that we identify are created and constantly rebuilt over long time periods.

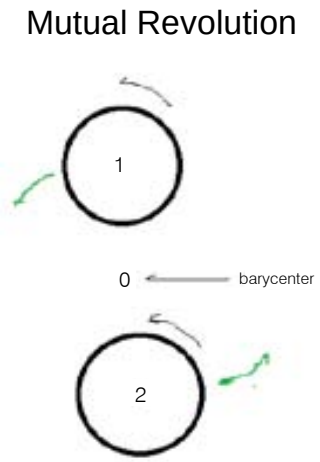
c) Charge

There is a concept called charge, a defining concept of electricity and current. Charge is labeled positive or negative and assigned to nuclear particles. But to me, charge is simply a magnetic effect that emphasizes the 'direction' of gravitational push. Charge has one constant value, and the amount of charge depends on the number of gravity beams that aren't offset by opposites. Science however classifies charge as attraction and repulsion of oppositely charged particles. Simplicity suggests dropping the charge concept, replacing it with a sum of effects of interacting push motions arriving from various directions.

d) Curvature

The universe exists and all fits together based on the curvature of a single force. Even with vector analysis, extra dimensions, or calculus as tools we can't numerically outline curvature within the universe. Curvature varies with place distance and time. In a view to be included, the motions of space are counterclockwise for all bodies relative to the center of their space. It also depends on the local Z axis.

e) Similar masses



Since we reside in the solar system where the motive for orbiting is controlled by the sun, it is not often we consider the effects of similar masses on each other. But now that we understand that the motive force for orbiting is contained within the rotations of a central body, we can consider the dual centers situation. In the picture of mutual revolution, the rotation of body 1 causes body 2 to move and ultimately attempt to orbit body 1. That pusher body 2 initially backward in the picture. Simultaneously body 2 is rotating and pushes body 1 toward our left to ultimately orbit body 2. The center of the orbiting becomes a barycenter external to both masses.

The picture shows counterclockwise rotation and that is the norm for the universe. With all rotation being counterclockwise the universe retains stability. If one of the masses in the picture were orbiting the opposite way the pushes would bring them together and a crash would occur.

IX. Planetary Rotation and Atmospheres

Besides pushing orbitals in their orbits, solar originated bent gravity beams cause the counterclockwise rotation of the orbital by penetrating, in average, to the right of center as they approach from the right. For Venus's clockwise rotation, the majority of bent streams pass just left of center.

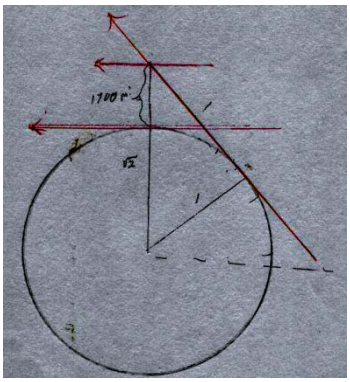


Fig. 4: Gravity pushing the atmosphere

The effect pictured above shows solar beams that pass through earth's atmosphere. This is the source of winds. The beams don't penetrate, but do cause atmospheric rotation. These upper beams surround the earth and push the atmosphere from West to East, causing our flow of jet streams and clouds. The top of the picture shows the westerly pressure at the equator at midnight directly opposite the sun. The bent gravity beams here pictured in exaggeration to arrive bent 45 degrees thus tangent to the surface at 1:30 per clock diagram. The atmosphere - 1300 miles up is pushed by solar bent gravity and earth's bent gravity and travels faster than earth does.

Note also that external gravity beams together come as a blanket of beams approaching all latitudes of earth. Toward the poles the flowing velocity will be greater as the bent beams have less distance to travel around while still providing the same worldly velocity of push as at the equator.

Drawing pictures of the upward exiting gravity beams helps relate to the overall concept of external gravity. A picture below shows beams exiting earth and those exiting the sun interacting near earth. The

magnetosphere consists of solar and earthly bent beams. Beams exit the sun and bend left due to solar rotation. Some of those beams bending across the face of the earth rather than striking earth are seen from the back by earthlings and are labeled as solar wind. That term apparently came from the observation of variable and directional pushing by solar gravity beams. The earth also bends exiting paep beams to its left. Picture a region between the sun and earth where the beams from the sun and earth interact, each bent counterclockwise relative to their origin body. There will be turbulence surrounding a small region of equilibrium which is the focus of the magnetosphere. Such an effect has I believe been detected for Jupiter. The solar wind concept somewhat misrepresents the motion. Diagrams showing the disturbed atmosphere occurring near earth such as the one below miss much of the bending activity.

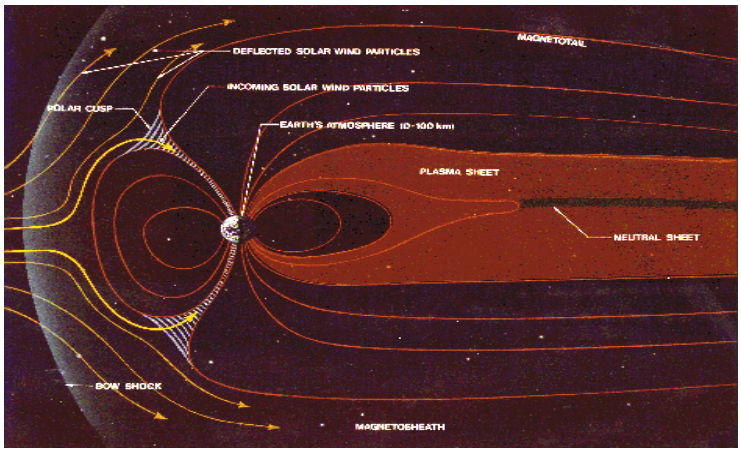


Fig. 5: Magnetosphere

X. Now Mass Rotation Controls Orbiting

a) Background

Prior to the development of physics as a science it was sufficient to have motion that offsets a perpendicular gravitational force and continues forever. A total absence of any friction was attributed to the "'void"' of space. But perpetual motion and empty space are now seen as fallacies. Continuous motion needs a driving force for impetus.

An elementary activity in the universe is motion of celestial bodies relative to each other. An all inclusive physical gravity theory must address spatial motions. We provide the reason that Kepler's third law worked for the first 6 planets.

A function of physics is to want to understand fields and matter better by searching for their components in the atomic universe. Particle theory is the search within three dimensional space for one dimensional pieces such as molecules, atoms, protons, electrons, photons, etc. Similarly the view of a whole field can be broken into linear pieces much like physicists break it into particles. Consider string theory which is the search for two dimensional linear connections or flows. This model introduces Paeps as one-dimensional particles, which serve as individual waves when in motion. That motion is the linear two-dimensional piece called a beam. This External Gravity model implies joining particle theory and string theory with emphasis on longer strings, i.e. spatial beams moving throughout space. "External Gravity" says:

1. The universe is infinite and isotropic.
2. Actions are the motions of matter. There is no perpetual motion of matter without a perpetual source causing the motion. Gravity is the perpetual source.

b) Newton

Our ideas of space develop from Newton's system of celestial mechanics. Essentially Newton applied gravity to Kepler's third law and realized that the mass of each body would then be a factor. Newton's orbital control infers that orbiting occurs because nothing interferes with the linear forward component of motion. So, to him, the linear component of motion is perpetual, devoid of outside influences such as friction. By extension the rotation of bodies themselves, like the orbital motion of revolution, lack outside influence and would also be perpetual. We now understand that space is not a void.

Physical science today depends on cause and effect and must come forward and correct these ideas. The cornerstone of attractive forces and of frictionless space comes from application of Newton's laws. But: A discussion of gravitational force by Newton follows:

> "For here I design only to give a mathematical notion of those forces, without considering their physical causes. –Wherefore the reader is not to imagine that by those words, I say where take upon me to define the kind, or the manner of any action, the causes or the physical reason thereof, or that I attribute forces, in a true and physical sense, to certain centers (which are only mathematical points); when at any

time I happen to speak of centers as attracting, or as endued with attractive powers". "You sometimes speak of gravity as essential and inherent to matter. Pray do not ascribe that notion to me; for the cause of gravity is what I do not pretend to know."

In addition, Newton had said "he would not refute gravity as a motive particle is it didn't hinder the motion of orbitals."

Building a theory on an absence of influence by anything was necessary to build a world system and an absolute space theory. But in today's world of technical detail knowledge, the absence needs to be discarded in favor of an ongoing impetus.

Newton's views competed with and overcame Descartes' whirlpool theories as the source of orbital motion. A whirlpool representation of motions of space itself didn't match central spin experiments such as controlling fluids in a bucket or rotating within a fluid medium that extends to infinity. In neither example do the velocities or actions of the fluids simulate expected planetary velocities as calculated using the formula of Kepler's third law. These examples probably led to disinterest in Descartes' model.

c) Pushing Gravity Theories

Previous pushing gravity theories suffer from concern about particles inhibiting the flow of orbitals. One recent alternative pushing gravity theory suggests an ultra high speed for pushing gravity particles. This was probably not part of LeSage's original pushing gravity theory, but comes from LaPlace, Van Flandern, and others as incorrect solutions to pushing gravity theories, all of which ignore curvature. The proper solution using bending/curvature of space is entirely new here.

XI. The Cycle of Gravity

As we stress infinity, we see that gravity itself is also an infinite force. It is infinite because it is continually transported across space as radiation. All radiation is continually sourced as rays originated as light and other EM transmissions. As we reject the absolute speed c for light, we can say that the time of transmission along with the mass of the source determine how the radiation will gradually expand its wave length. What starts as light becomes red shifted into microwaves, sound waves, and ultimately long wave gravity beams. As mentioned all waves provide some gravitation but the greater force is from the longer wave. As they lengthen, the total gravitation increases. But, while this paragraph focused on discussing the increase of gravitation across the universe, there is an offset.

The whole offset is what we have examined here as the "netting" out of gravity forces when beams penetrate masses. We lose total local gravitation as weaker beams exit earth and fill the surface and nearby space with weaker force.

Pushing gravity beams recycle. Light from distant stars gradually fades out as the wave lengths get longer. The lengthening is caused by the retention pull of the source and the forward pull of the destination body. Light stretches into infrared, microwaves, sound waves and finally gravity waves. This gravity rebuilding is needed as the beams that penetrate matter locally lose some of their energy. That energy loss is the gravity we recognize here on earth and for other planets.

So gravity force diminishes as beams pass through matter and increase as beams flow across space! The situations offset and the total gravity force in the universe remains constant!

Physics theories mistakenly view gravity forces as different in galaxies. Theoretically the cause is missing mass. To compensate for the "needed" mass they invented dark matter and dark energy. Nobody promoting that understands our solar system. The orbiting is a function of the central body sun, which is essentially 99% of all the mass. The central body is the motive for orbiting.

The galaxies, as we examine them, are regions of similar mass stars throughout. Therefore no star is the central body and all stars affect others depending on their distance of separation. There is no missing gravity in galaxies. The section on galaxies details that issue. There is no dark matter due to galaxies and no dark energy for a bounded universe.

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