I needed a challenge, so I have returned to gravity—still the most difficult question in physics. My faithful readers will know I have hit this question several times. The first time was when I reversed all the gravity vectors in the universe, a la Einstein's Equivalence Principle. I did this to simplify the math and theory, which I certainly did. I was able to get Einstein's numbers without the tensor calculus or a curved field. In fact, my numbers were even better than Einstein's, allowing me to correct his Mercury Perihelion math, to solve the Saturn Anomaly, and to solve the Metonic Cycle with relativity math (among many other things).

But since this implied every body in the universe was expanding at a fantastic rate (the Earth would be doubling in size every 19 minutes, for example), this theory was admittedly incomplete. My critics used this to dismiss me, though of course mainstream gravity theory is also very incomplete—and they admit that. I have been saying that mainstream gravity theory is far more incomplete than mine, and that mine is far closer to completion, and we are about to witness more proof of that. Even before today that should have been clear, since I incorporated my gravity into a unified field long ago, unifying not only Newton's, Coulomb's, and Einstein's equations, but also Maxwell's, Laplace's, and Lagrange's. But by the end of this paper, all doubt on that score will be put to rest.

Not satisfied myself with the expansion result, I proposed a second theory to do away with it, using universal spin to give us the vector out, while balancing that vector with the charge field. This gave us the acceleration vector without the expansion. The math and theory to achieve this balancing act still being incomplete, I left the question to move on to other things.

Now I am back with a third idea. We will see where it takes us. Both my previous solutions became topsy-turvy at some point, as we have seen. The first solution, though very satisfying as pure math, left us with a vector pointing out, which seemed to imply real expansion. Plus, it was just the opposite of mainstream Newtonian theory, where the vector points in. Topsy-turvy. The second solution, using universal spin, went topsy-turvy somewhat later, as you can see in my paper on Mach, where I took the local field math a bit further. I seemed to get closer to a solution there, but again the forces on a body on the surface of the Earth went topsy on us at the end. I could explain a force down only by once again reversing the logic of the mainstream field. Contradicting the mainstream isn't what really bothered me there, of course, it was the incomplete math and theory. One, I wasn't able to answer all my own questions; and two, I still was left uneasy about universal spin as the cause of the vector out. It has always appealed to me little more than the expansion idea. So I have admitted I was open to a third possibility.

Readers kept telling me charge pressure as gravity was the answer, but I used charge pressure in that
second theory and wasn't able to make it work. And none of these readers was or is able to give me any useful math or new ideas. So until now I have preferred to keep what I have, for reasons enumerated here.

But today I finally received a new brainstorm. The Muses of science returned in masse, for reasons of their own to which I am not privy. Seeing reversals in both my previous solutions, it occurred to me that what I needed to do here is flip my causes. Right now, in my standing theory we have gravity causing the apparent vector down (as in the mainstream), and recycled charge causing the smaller vector up. In other words, we have gravity causing the number 9.81, pointing down, and charge recycled through the Earth causing the number .009545, pointing up. Giving us the unified field 9.8 we measure. I have shown that charge pressure is not capable of explaining the number 9.81, which is far too large. The field is simply not dense enough in the environs of the Earth to cause that number. But could it cause the number .009545? Actually, it could. But to keep the math, that would mean we have to reverse the mechanics, giving the number 9.81 to charge coming up from below. Possible? Again, yes, because we have the Earth recycling the charge, and in doing so compressing it. Great so far, except for one big problem: if we reverse the numbers, we save the math, but we now have a huge force field coming up from below and a smaller one coming down from above. Shouldn't that lift you quickly up into the atmosphere instead of gluing you to the Earth?

Let us see. Maybe we have had this thing upside down from the beginning.

If you were just an uncharged body, made up of neutral poolballs, say, and if charge was made up of photons, which were like marbles, then yes, you would have to be driven up in such a situation. You wouldn't have a compound vector down, you would have compound vector up, and would accelerate into the sky.

But we now know that isn't the case. All problems are charge problems, so we have to treat this as one. You are made up of charged particles. All your atoms are recycling charge, and about 95% of your body is made up of charge. You probably know you are about 60% water, but you may not be aware you are 95% light.* Therefore, the photons coming up from below don't just bounce off the bottom of your feet, driving you up. No, they recycle through your body. It is known that light works this way, and I am not proposing anything revolutionary here. See Feynman's sumovers in many light problems, for instance. So you can already see that this isn't strictly a poolball problem, although I love those. I have been selling poolball mechanics for almost twenty years, to counter the rise of mysticism in mainstream physics, so you can see why I was fooled by this one as well. We will keep it mechanical, but it isn't a naïve poolball mechanics. It is a charge mechanics. Charge mechanics is still poolball mechanics at the fundamental level, but it has many complexities we have to be aware of. These complexities are spin complexities, and as we have seen many times, they are easy to miss if you don't really push yourself.

Still, if charge is coming up from below you in large amounts, shouldn't it drive you up via simple collisions? “Simple collisions” is what most people think of when you say poolball mechanics. Well... no. I have been selling that idea for several years now, since that is what the original math seemed to imply, but now that I go deeper I see that isn't so. We know that charge is actually what binds things together. Liquids are denser than gasses because they are more tightly bound by charge, and solids are denser still for the same reason. Solids are recycling far more charge through the nuclei than gasses, because there are more nuclei. Charge is the glue that binds all matter, via this process of charge recycling by the nucleus.
Which is another reason I didn't get this completely right the first time. I wrote and published my old gravity papers (Third Wave) before I got to my charge papers. So I didn't know about this charge and nuclear stuff until more recently. It never occurred to me to treat gravity as a charge problem. Or, it did, but not in this way. I tried to explain gravity as charge pressure several times, and my readers have been hounding me in that direction for years. But as you see, that wasn't the right answer. It isn't charge pressure that finally solves this, it is charge binding. Gravity isn't explained by charge coming down, it is caused by charge coming up from below. Wow.

Sorry, I just had my first hop-up-and-down moment in several years. I started this paper with only the reversal idea, and came up with the binding idea while writing. That is how I work, you know. I write these things as you read them, in a blur of inspiration.

But didn't I say in a previous paper that gravity cannot be a magnetic effect, since if it were, ball bearings couldn't roll so easily, etc.? Yes, which means I was wrong about that as well. I had assumed that if gravity were a charge phenomenon, it would show heavy spin residue, but I didn't take into account the fact that it was caused by charge moving up, not down. I was still trying to answer gravity as charge pressure from above there. But now that we see it is caused by charge binding from below, we can explain the spin loss quite easily. For one thing, we don't have to explain a total spin loss, since we know there are magnetic fields on the surface of the Earth, and this must be where they come from. See my paper on the Equatorial Anomaly, etc. But that these effects aren't much larger can be explained by the fact that the recycled charge field has to pass through the Earth. During this recycling, charge and anticharge have to cross, despinning both.

It isn't a total spin-down or magnetic loss, but it must be considerable. This is actually doubly welcoming, because before now we couldn't explain the strength of the Earth's magnetic field on the surface, in problems like the Equatorial Anomaly. I explained the mechanics in that paper, but not the raw field strength. Using the number .009545 for rising charge doesn't get us there. I haven't even addressed that problem previously, but this paper solves that as well.

Don't I have to rewrite a lot of other papers as well, if this is true? Like Lift on a Wing, for instance? If charge coming up is binding instead of lifting, that paper is out the window, right? Well... no. Yes, it requires the same sort of reversal we saw here, but not a complete jettison or rewrite. We now have to explain lift as a loss of binding, but that isn't hard to do. We still have a pre-existing charge gradient to use either way, so nothing much changes. It was the charge gradient that was my addition to the
historical dialog of lift, so reversing it doesn't tarnish my legacy at all. In other words, by moving sideways to the field, the airplane still hits more of the charge field, creating an increased force in some direction. But now we can see that it hits both more of the uprising field AND more of the downcoming field. Since the plane has a height in the field, and since the field is convex from below, the plane will hit more of the downcoming field, causing a loss of binding. You can already see how this plays into the Coanda Effect, explaining it by a reversal as well. It is not that the plane is binding to the field above... it is that the plane is unbinding to the field below. So this new finding makes that paper stronger, not weaker.

What about my paper on *Atmospheric Pressure*? Doesn't this destroy that? No, it requires the same reversal we just saw in the *Lift on a Wing* paper, but nothing like a destruction. All the numbers and math remain the same; we only have to flip the mechanics.

As you see, this flip is just what we needed. I had previously flipped everything when I used Einstein's Equivalence Principle to reverse the gravity field, and this flips it back, in a way. It doesn't actually flip it back, it adds a second flip, but it takes us back to a point where we don't need either expansion or universal spin to explain anything. Those ideas really can be jettisoned. Which makes me very happy.

This is why I had resisted input from readers and critics for years. My gut told me they weren't right, and that there was something we were all missing. I knew I had to be patient and wait for my Muses.

Now, I know many will still not understand why charge would bind in this problem instead of propel. Once again, it is because we don't have a naïve vector mechanics of straight collisions here, we have a complex spin mechanics. Charge can't be understood as a hail of marbles only. In one sense, it is a hail of marbles, since photons are real, with real radii and masses. But in a problem like this, we have to go deeper, studying the way these marbles—or this photon wind—pass into a body and recycle through it. We start with the fact that the body is composed of semi-spherical nuclei. These nuclei are spinning, and this spin sets up north and south pole vortices, just like on the Earth. These vortices pull photons through the nucleus, creating a charge engine. With many elements the charge releases on the nuclear equator, again like the Earth. With others, like Group I and II elements and Iron, charge releases out the other pole, creating through charge and current. More can be said about that, but I have said it before, and if you don't already know it you can consult previous papers. Here, the important thing has already been said: the nuclear vortices pull photons through the nucleons. [Yes, that is an apparent pull, caused by field potentials. Mechanically, it is actually a push, since there is no such thing as a real pull in physics. But the word “pull” remains highly descriptive, and I do not disallow myself from using it.] Again, photons are recycled through nuclei via field vortices, creating an apparent pull. This “pull” is what creates the “bind”. This pull is why nucleons come together into nuclei and why atoms come together into molecules. This pull creates the binding energy of both the nucleus and the molecule. It also creates the binding energy of the gas, the liquid, and the solid. *Everywhere charge goes, this binding potential goes.*

So the fact that this is where the bulk of charge in your environs first hits you is not beside the point. By our new mechanics, over 99% of the field you encounter comes up at you from below. This charge not only binds you together, it binds you to the surface. So my readers were right in one very important sense: gravity IS a disguised charge effect. The field remains dual in the sense that it is split, coming both up and down, being both photonic and antiphotonic. But it is now unified in yet another way. I have now unified gravity and charge not only in the equations, but in the definitions. Gravity, as such, not longer exists as a separate or separable force. Gravity is simply the binding energy of the charge field, given a vector by that field.
Two things, other than the prodding of the Muses, led me to this realization today. One, I would like to thank Dennis, Jared, and Josh at Cutting through the Fog for leading me into this today. Two, my work this week on the Kuiper Cliff was also crucial, since in tying the Kuiper Cliff to the Bohr Radius, I could see a further downgrade of gravity in the Unified Field equations. I was able to solve that problem without looking at gravity at all. I could see the Kuiper Belt as a straight analogy of the proton's capture of the electron, pretty much removing gravity from Celestial Mechanics. Yes, the variables Newton assigned to gravity are still there, pretty much in their original form, but—given this paper—we no longer need a mysterious and non-mechanical centripetal pull to explain any of them. The Sun isn't pulling on the Kuiper Belt with a mystical centripetal force, it is pulling on it with a real vortex of real photons. This is simply the distance at which the Solar vortex begins to fail. Notice that this would explain why the orbit of Eris is so eccentric: at that distance, the Solar vortex is quite eccentric, isn't it? Since the vortex comes from the Solar poles, it can't be spherical. Therefore, it has to act on Eris as a vortex, not a sphere. Meaning, the forces over the span of an Eris' year have to be very unequal. When Eris passes through the vortex, it feels a greater tug; when it passes out of it, it feels much less. Much closer to the Sun, eccentricity has to be explained in other ways, which I have done. But at the limit of the Sun's charge field, Eris' eccentricity can probably be explained in this straightforward way, without involving any other major bodies.

As you can see, this new information helps us explain a raft of other things as well, starting with why people get struck by lightning more often than you would think, why people shock one another and themselves far more often than you would think (just static electricity?—I don't think so), and so on. It ties into many previous papers.

“But”, you will ask, “does it still explain an object in freefall accelerating toward the Earth? We have a force of 9.8 m/s² rising out of the Earth. How does that explain freefall?” Well, we need one final big tweak to this theory to finish it. The first step in that is noticing that since this rising charge will dissipate as it rises (since it is moving into larger areas) it will fall off by the square (simply due to the spherical nature of the field). As you see, the gradient matches the current one, with stronger binding near the surface and less higher up. If we fill that gradient in the right way, we can still explain an acceleration downwards.

The next step is noticing that our photon field seems to be acting the precise opposite of a ballistic field, since particles moving up cause an acceleration down. And greater photon densities near the surface—which would normally cause slowing (in the case of poolballs, say)—actually cause acceleration. Of course, the counter-intuitive nature of the field is why it wasn't unwound before. Plus, remember that 9.8 is simply telling us the relative strength of the rising photon field compared to the falling photon field. It isn't telling us the photons have that acceleration themselves. The number 9.8 applies to the body in freefall, or the body being pulled, not to the rising photon field. No photon or field of photons is accelerating at 9.8, obviously. Fields don't have accelerations, they create accelerations. And they must create them with gradients. The only question is, can a rising photon field cause a gradient down?

It can, but only with a final piece of the puzzle. In my 2013 paper on blackbody radiation, we saw that charge fields can either cause repulsion or attraction. The mainstream now admits this, and that paper was in response to their own experiments with blackbodies, showing attraction. This also came up in my more recent paper on Cool Moonlight, where we saw the mainstream admitting incoming light can cause cooling rather than heating. I showed in both places that this is not due to a “compression of velocity distribution” or due to messenger photons telling quanta to move closer or move further away.
It is due to photon spins, and specifically the presence of antiphotons in the field. When photon and antiphoton fields meet, we do not get the sort of annihilations they sell us when matter meets antimatter (which are also false). Rather, we get photon spin-downs. These spin-downs are an energy loss, which causes cooling as well as attraction. Normally when particles meet, we get spin ups and an increase in heat; but when antiphotons are involved, we get the opposite. Well, in our current problem, we have an antiphoton field created. Since one charge field is moving up and the other down, and since they came from the same place (the Sun), one field has to be upside down to the other. As I have shown, this flips all our expectations, creating attraction where we would expect repulsion or bombardment, and creating cooling where we would expect heating [see my paper on Rayleigh scattering for more on this question]. In our current problem, it acts to reverse our expectation of a repulsion. So although we keep the gradient we just found, it is a rising gradient of attraction rather than of repulsion. To use the mainstream term, it is Anti-Stokes. Although we have a denser field low, we find more attraction low. On the surface, this creates what I have called binding, but with an object in freefall it creates a gradient down. So if you didn't see the bind by my previous explanation, maybe this will help you visualize the vector down.

In that sense, gravity definitely IS a magnetic effect, since it relies on photon spins. In fact, the effect might be much greater if large parts of the magnetic component hadn't been previously cancelled. We have seen that the field has a much greater magnetic potential, and if the polar streams could be recycled without crossing in the Earth's interior, gravity would be far higher than what we see.

![Diagram showing antiphotons and photons with gradients](image)

Higher spin speeds might create such a situation, explaining gravitational anomalies on exotic bodies. Much greater spin speeds than the Earth enjoys might force incoming north polar charge off the pole more quickly, making it exit above the equator rather than below it. In that case it would not have to cross the south pole stream in the interior, keeping its full spin and full magnetic component, you see.

But let's back up a bit. I mentioned my papers on Rayleigh Scattering and Anti-Stokes above. Those papers confirm I am on the right track here, since I did the same thing there, using opposing charge fields to create antiphotons, which then flipped the field and flipped normal expectations. So if you didn't get enough information here, I recommend you revisit those papers. That is where I first confirmed the mechanics I am using here, though I didn't think then to relate it to the question of gravity. But it is reassuring that the Rayleigh problem demanded the exact same sort of solution, and the same gradient in the atmosphere, including a reversal of the same sort. That is one paper I won't
have to rewrite after today.

Now that we see the right answer, we can understand why Newton and Einstein didn't solve this one. They knew very little about the charge field and photons. Actually, Newton came closer to this solution than anyone since, to his credit. Although very little work had been done on the electromagnetic field at the time, *Newton did have a working Lagrangian equation***, as well as spinning corpuscles (what we call photons). So he was ahead of current physicists in many ways. But, like them, he didn't see that his Lagrangian was unified, so he didn't see charge as the major player here. This is why Modern physics still hasn't come near solving this, and is more in the dark than Newton ever was. He didn't have the cards in his hand to solve it, so we shouldn't be surprised he didn't. But the mainstream has been playing with a full deck (in this sense) for almost a century, and could have solved this decades ago. The reason they didn't is that they got thrown offtrack by Bohr and his minions, who preferred to bury the charge field under a huge pile of fake and mystifying math. Because they got in a jam early, failing to answer some of the first mysteries of the charge field, they gave up and went virtual. They have been assuring their students these questions are answerable since the 1920s. Which, ironically, left them to me.

In this case, I can't claim the solution was easy. The full solution evaded me for at least 15 years. As you just saw, it required a series of non-intuitive flips in the field, flips that no one who had not delved very deeply into the charge field could be expected to see. It required a fine understanding of spin mechanics and an advanced ability to visualize. I won't say the complexity was very great, since it wasn't. Every manipulation was easily visualizable, and I was able to do all this in my head. No computers were necessary, so complexity isn't the right word. But the field mechanics is admittedly quite convoluted, requiring many steps that had to be taken in the right order. It is not a problem that could be solved with poorly defined operators. It could only be solved by understanding the mechanics at every step. It required following our photons through the maze and understanding what they must do in each and every event. This solution to gravity didn't utilize my nuclear diagrams, but it did utilize the basic fact that the nucleus must be a charge engine. So, as you have seen, I had to know a lot about the charge field before I could solve the gravity problem. No one before me would have predicted that, and even I didn't predict it. Yes, I knew the field was unified, and I always suspected that gravity was a nearer cohort of charge than we knew, but until I wrote this paper I didn't suspect that gravity was just a straight outcome of binding energy.

I suppose it bears repeating that this theory is not a variant of push gravity. About the only thing Le Sage got right was proposing a field of corpuscles (photons). He was completely right there. Well, to be honest, he also got some other things right, such as that gravity is not a pull and that the mainstream was wrong. So in general he was on the right track. But the theory of blocking was far too naïve to answer data, which is why his theory never made much headway. *However*, the current mainstream theory of gravity (Newton's) is also far too naïve to answer data, and they have known that for centuries. As a field theory, it is nearly as oversimplified as Le Sage's.

Yes, Newton's starting premise—that the same phenomenon that kept the Moon in orbit also glued you to the ground—was correct. And his equations were a nice start on the problem. Unfortunately, his failure to see that his equations implied *two* fields in opposition doomed physics for centuries. We now see that they were *both* charge fields, but they were charge fields that had been split, reversed, and compressed, giving them different rates of change and gradients. They couldn't be compared directly without field transforms. Not relativity transforms, mind. That isn't what I am talking about here. I am talking about transforms like \( G \) or \( k \), or like the second term in the Lagrangian (most commonly \( T \)). These terms or constants were misdefined for centuries, and no one before me saw them as what they
are: field transforms. They scale one field to the other, allowing us to put them in the same equation.

Some will say I haven't provided any new equations here, so this is all just “handwaving”. But if you think this is handwaving, you need to check your dosages. You aren't properly grounded. I haven't provided equations here because I have corrected Newton's and Einstein's equations in many previous papers. That wasn't the problem to be solved. What was left to do was to sort through the field mechanics, making sense of the real motions. Most of that I had also done in previous papers, as when I broke down the Lagrangian. But the big thing I hadn't done is assign the centripetal vector of gravity. Until today, that vector was as mysterious in my math and theory as in the mainstream's. As either an attraction, an expansion, or a universal spin, it was far more mysterious than it needed to be.

Obviously, this new theory requires a lot more work. It requires tweaks to a lot of previous papers, as well as a lot more basic explication and tinkering. It may be I have some things wrong here still. No doubt I do. But I am confident I have tripped across something important, and that I will be able to perfect it in the months and years to come.

*The trolls will respond that gives us a total of 155%, but the water is also made of light.
**Take that link for my paper on Perturbation Theory, which is one of my most important overlooked papers. It ties into this paper strongly, and may clarify some points for you.