PBS Admits I am Right

15 years later



cartoon by Elwood H. Smith

by Miles Mathis

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One of my readers just alerted me to <u>a video posted at Youtube</u> of a PBS production on General Relativity. It is from PBS Spacetime, and it was posted June 3, apparently by the producers. It is called "Is Gravity an Illusion?"

The video is misdirection in so many ways I hardly know where to begin. The first misdirection is in the title, which is again trying to sell you the idea that reality is some sort of illusion. This ties into my recent paper on time, where I addressed many recent claims from the mainstream magazines and journals that perhaps **Time is an Illusion**. I showed that time is not an illusion. It is currently misdefined in many ways, but that does not make it an illusion. In the same way, I have shown that gravity is misdefined in many ways, but that does not make it an illusion. Something is obviously going on, so the phenomenon is not an illusion. I have argued that gravity is not a pull, so the idea that gravity is a pull is *mistaken*. But that does not make anything an illusion.

So why are they trying to sell you physics as an illusion? It is not just with time and gravity that we see it. We have also seen it with the idea that black holes—and perhaps all other things and events—are just holograms. Even the hologram itself is sold as some sort of illusion, although it isn't. The hologram exists and is real. It is composed of light, which is real. We have seen it with the observer effect, where you are told that the observer is responsible for what he sees. In current theory,

decoherence—and thereby quantum mechanics—requires an observer. Reality does not exist until someone looks at it. Again, that makes reality misty and illusory Every story in every science magazine reads like a line of inconsistencies and absurdities, all meant to brainwash you into thinking physics is a magic based on nothing but wish fulfillment and subjective experience.

Why are they doing this?

Because they wish to destroy your ability to think critically, and thereby your ability to say "NO" to the the new physics they are selling. They have many billion-dollar projects they wish to bill you for—via the treasury—and they don't want you asking any pertinent questions, much less saying no. So they are turning physics into an analogue of Modern Art—a big squishy, misty pile of contradictions and illogical assertions that no sensible person can make heads or tails of.

But that isn't the most curious thing about this new video, at least not to me. My reader sent me the link because what the announcer Gabe Perez-Giz does most obviously is admit I was right all along. He doesn't mention me by name, of course. It would be beyond these people to give credit where credit is due, as we know. But he takes my idea of a vector reversal and begins selling it as a brilliant idea. That's strange, because when I began writing about that vector reversal in about 2000, everyone in the mainstream dismissed me as a crank. They also viciously attacked others who began writing on the subject at about the same time, including Mark McCutcheon. Now, I didn't know about McCutcheon at the time, and I assume he didn't know about me. But I give him credit for pushing the idea hard for a few years. I also assume neither McCutcheon nor I were the first to think of this. That said, we were among the first to really try to make it work, doing the math and mechanics. To my knowledge, I am the first to have taken it as far as I have, and it looks to me like PBS is doing a direct steal from my papers. I am the one who tied it strongly to Einstein's equivalence principle. I don't think McCutcheon did that. I am definitely the first to work gravity-as-expansion into working unified field equations, ones that unify gravity with charge through the constant G and that explain orbits, the galactic rotation problem, dark matter, the Lagrangian, and so on. I have taken it far beyond where they take it in this PBS video, which is why I am able to pull apart the video so easily.

What they do in this 13-minute video is show that we can reverse the vector of gravity, having the surface of the Earth move up instead of having the apple fall down. Like me, they then tie that to Einstein's equivalence principle. However, instead of giving me credit for that, they try to tell you it was Einstein's idea. Yes, the equivalence principle was Einstein's idea, but he *explicitly* did not reverse the vector. He curved the space instead. He knew a vector reversal would be difficult if not impossible to sell in 1912 or so, and he didn't want to be called a crank. So he *did not* propose the vector reversal, although it now seems like the natural thing to do after showing you the equivalence principle. You see, if you reverse the vector, *you don't have to also curve the space*. Once you reverse the vector, space reverts to a Euclidean field, with no necessary curves. I have shown that is the whole point of reversing the vector: once you do it, you can write all the General Relativity equations in rectilinear space. I can match all of Einstein's numbers without using curved geometry.

But Gabe doesn't tell you that. He basically lies right to your face. He tells you that the vector reversal was thought up by Einstein, and that it segues right into General Relativity. But that simply isn't true. In the video, you are sold a false history. You are sold a history where this vector reversal underlies the current theory of General Relativity. PBS uses this video to further prop up GR. But it doesn't and can't, because that vector reversal isn't used in GR. Rather than use the vector reversal, Einstein imports non-Euclidean geometry and the tensor calculus. This allows him to get the required numbers without reversing the gravity vector. In the math of General Relativity, Einstein doesn't reverse the

vector, he *dissolves* it. Curvature replaces the vector down, it does not reverse it. In the current and historical interpretation of GR, the surface of the Earth is not moving up in any way or by any means. This is exactly why they jumped on my claim that it did fifteen years ago. So to see them reversing field here and claiming the reversal is part of GR is astonishing. I would say it is beyond belief, but having argued with these people for that many years, I can tell you that nothing they can say or do is beyond my belief.

Gabe then pulls another whammy on your brain, by trying to convince you that objects in freefall "establish the standard of non-acceleration." He says that at minute 6:30. It is right after he scoffs at Newton for requiring a frame of reference. Gabe says, "Really, Newton, *Really*?" in a whiney modern voice, you know, like a Valley Girl. But please re-read what Gabe just said about objects in freefall several times, until it sinks in. He has just stated an obvious contradiction. He has admitted they are falling, and the definition of "fall" includes the idea of motion. So they are accelerating, and he has admitted it. How can accelerating objects "establish the standard of non-acceleration"?

He will answer that it is not the objects accelerating, but the surface of the Earth. OK, since the two are coming together, it must be one or the other, right? Let us say the surface of the Earth is accelerating up. This would make his statement true. The falling object is now the non-accelerating one. But if the surface of the Earth is accelerating up, then we *do* still have a frame of reference, and that frame of reference is *not* the object in freefall. Because the Earth is a sphere, the frame of reference is **the center of the Earth.**

Gabe misdirects you away from that realization, because he doesn't admit that the Earth's surface also requires a frame of reference. It is accelerating compared to what? It can't be accelerating relative to the falling object, although that is what he implies. He tries to make the falling object **the standard**, but that can't work for obvious reasons. In any given problem, it would work only for the surface right below the falling object. That surface is moving right at the object. But the Earth has a lot of surface, and all other points on the surface *aren't* moving at the falling object. In fact, the surface on the far side of the Earth would be moving directly *away* from the falling object.

Since we feel gravity everywhere on the surface of the sphere, all points on the surface must be moving straight up at g. Since they are all arrayed about the center of the Earth, the center of the Earth is the frame of reference for g. The object in freefall is then at rest relative to the center of the Earth, which is also at rest. But of course this means the Earth must be expanding at an astonishing rate. It must be doubling in size about every 19 minutes. In my theory, I admit that and try to deal with. Gabe at PBS drives you right past it. It is the whole reason Einstein didn't pursue the vector reversal in the first place. He didn't wish to propose *expansion*.

Gabe actually misdirects you furiously just when the question should come up. Instead of asking that question, he drives you into a discussion of inertial and non-inertial frames. It is where he shows that falling bodies should move closer as they fall, because they are following spokes. It is at minute 8:00. He also says that since satellites accelerate relative to objects in freefall, we have a problem. Inertial frames aren't supposed to accelerate relative to one another. He solves those problem with a "loophole". He says that those rules apply only in Euclidean frames. In non-Euclidean frames, objects don't have to obey those rule.

So many problems there. One, notice that you have just been misdirected away from the main question about expansion. Gabe draws the spokes but then forgets to ask the important question about the expanding Earth. Two, orbiting satellites *aren't* accelerating, according to the theory he just proposed.

Once you reverse the vector, the orbiting satellite only has a sideways motion to an object in freefall. As with the pull of gravity, the curve is only *apparent*. So Gabe is actually answering questions he does not need to answer in order to avoid answering questions he does need to answer. Three, to solve the inertial problem, Gabe diverts you into curved space. But as I already showed you, once you reverse the vector, **you don't need curved space**. Gabe is pushing you into curved space simply because he needs to take you back to the current math and theory of GR. But it is either one or the other: in order to solve gravity field problems, you need either the vector reversal *or* curved space. You don't need both. I have solved all the famous problems of GR by reversing the vector and then doing Euclidean math. I get the same numbers Einstein gets—or actually I get even better numbers. I can do everything he can do, and then some things he can't do.

In conclusion, what this video is doing is trying to steal my idea without giving me credit and then work it into mainstream theory. They are trying to make you think Einstein had the idea first, and that it has been part of GR from the beginning. But if that is so, then why is this the first we are hearing about it? Why hasn't expansion been an integral part of GR since 1916? And if expansion has been part of GR since the beginning, why did the mainstream throw such a hissy fit 15 years ago when McCutcheon and I began popularizing the idea? Why did they censor us both from Wikipedia and most physics forums? Why have they been viciously attacking us all over the web for years? Why are they still doing it to me (I don't know what is going on with McCutcheon these days)?

And if this vector reversal was Einstein's idea and is part of mainstream theory, why haven't these famous mathematicians and physicists figured out the math? They appear to think GR contains both this vector reversal and curved space, when it doesn't. As I said, to solve any problem with field equations, you need either curved space and tensors, or you need my vector reversal. If you have both, you have a doubled math and you get the wrong answer. Do they really not understand that?

I assume they understand it, but are just trying to work my idea into GR in an underhanded way, so they don't have to admit I was right all along. I think you can see why I have no love of the mainstream or these people in it. They are slimy in the extreme and seem to be accelerating into ever greater levels of slime.

My only question is, when and how are they going to work my <u>pi=4 idea</u> into the mainstream? It will be interesting to see how they manage that. I predict they will give the idea to Hilbert and say it has been part of mainstream math all along. From there they will have to claim Newton knew that <u>G</u> contained the charge field, that Lagrange knew the <u>Lagrangian was unified</u>, that Coulomb knew the Coulomb equation was unified, and that Maxwell knew <u>his equations were unified</u>. Then they will have to claim they knew that <u>the photon had mass</u>, that <u>the quark didn't exist</u>, and that the <u>rainbow was caused by the Sun's corona</u>. They will claim they knew <u>dark matter was charge</u>, that the electron was not <u>the field particle of E/M</u>, and that charge was the mediator <u>of flow in the xylem</u>. They will claim they already knew that <u>the nucleus recycled charge</u> and that the <u>strong force was a ghost</u>. They will make cute little Youtube videos to sell all these ideas as their very own.