
THE PLATONIC SIGNIFICANCE OF EINSTEIN'S THEORY OF GENERAL RELATIVITY

For my friend Ernie Shapiro, in honor of the 100th Anniversary of Einstein's Discovery of Principle

By Pierre Beaudry, 10/16/15

FOREWORD

How do you go about discovering the unknown? What this report is investigating is the epistemological condition under which the discovery of principle of Einstein's General Relativity was made and some of the devastatingly powerful effects his Platonic method has on the human mind. The report not only shows how some of the underlying assumptions of Einstein's discovery relate to Plato's method of "accession to the intelligible region," but also how such an axiom-busting approach of scientific investigation threatens the very existence of the British Empire.

INTRODUCTION

A hundred years ago, on December 2, 1915, an obscure physics professor at the Humboldt University of Berlin, Albert Einstein, published a short axiom-busting paper on the curvature of space-time entitled: "*The Field Equations of Gravitation.*" No one paid any attention to it, except a few specialists on the subject. Four years later, on November 7, 1919, a leading British newspaper, *The Times* of London, published the news of that very same axiom-busting paper in a banner headline which said: "*Revolution in Science – New Theory of the Universe – Newtonian Ideas Overthrown.*"

My question to you is: "Why did *The Times* of London delay the news of Einstein's discovery for so long and what was the true space-time-frame in which Einstein made his

discovery?" What was the British oligarchy so afraid of? Assuming that you might attempt to answer those questions as we go along, I suggest that you try to see, ahead of time, if your answers will be similar to mine.

When you read this report, you will discover that the answer to that second question also provides you with an answer to the first one; because that answer is locked into a time-reversal mode and it depends on the risks you are willing to take in applying this inversion to your effort in discovering the significance of Plato's Cave for the British Empire.

You might also be asking yourself: What does Plato have to do with Albert Einstein's discovery of General Relativity? The answer may not be obvious at first glance, but, if you project Einstein's discovery of principle on the wall of your imagination, you might discover that gravity understood as the effect of the curvature of space-time is the same as the discovery of principle that Plato developed under the guise of the allegory of the Cavern.

This same type of triply-connected manifold was also understood by Bernhard Riemann as the geometric form of a multiply-extended physical universe in its progress of development. As Lyndon LaRouche demonstrated extensively, it is such a triply-connected structure of the mind which determines not only the movements of human society, but also the movements of the heavenly bodies through a process of increasing energy-flux-density in the universe as a whole. In other words, the movements of mind and matter are fundamentally the same, even if one of the two doesn't know about it. And, I am not sure that the one that doesn't know is matter.

SETTING THE STAGE FOR A DISCOVERY OF PRINCIPLE IN PLATO'S CAVE

"The laws of the universe cannot come from the atoms or the molecules of my body, because my atoms and my molecules don't know what I am thinking, and they don't have the time to care about it."

Dehors Debonneheure

In Book VII of *The Republic*, Plato identified three essential elements for setting the stage of his cavern allegory inside of which those who live there have to go through the painful process of acquiring knowledge of principles. 1) He considered that the education of human beings is like that of prisoners who have been chained since birth, feet and necks, with their backs to the light source outside of the cave entrance and the only knowledge they have of the real outside world is through the perception of moving shadows projected on the dimly lit wall of that cave. 2) He imagined someone coming into that cave to break their chains and tell them that all they see are lies and illusions. 3) He discovered that when the freed prisoners are compelled

to turn around and look at the light itself coming from outside of the cave, they find the experience so painful that they turn back to their chains, preferring to live with their illusions as opposed to with the light of truth. Then, Plato added this amazing insight about what happens to those who dare liberate such prisoners:

“And if, said I, someone should drag him thence by force up the ascent which is rough and steep, and not let him go before he had drawn him out into the light of the sun, do you not think that he would find it painful to be so hauled along, and would chafe at it, and when he came out into the light, that his eyes would be filled with its beams so that he would not be able to see even one of the things that we call real ?

“Why, no, not immediately, he said.

“Then there would be need of habituation, I take it, to enable him to see the things higher up. And at first he would most easily discern the shadows and, after that, the likenesses or reflections in water of men and other things, and later, the things themselves, and from these he would go on to contemplate the appearances in the heavens and heaven itself, more easily by night, looking at the light of the stars and the moon, than by day the sun and the sun's light.

“Of course.

“And so, finally, I suppose, he would be able to look upon the sun itself and see its true nature, not by reflections in water or phantasms of it in an alien setting, but in and by itself in its own place.

“Necessarily, he said.

“And at this point he would infer and conclude that this it is that provides the seasons and the courses of the year and presides over all things in the visible region, and is in some sort the cause of all these things that they had seen.

“Obviously, he said, that would be the next step.

“Well then, if he recalled to mind his first habitation and what passed for wisdom there, and his fellow-bondsmen, do you not think that he would count himself happy in the change and pity them ?

“He would indeed.

“And if there had been honors and commendations among them which they bestowed on one another and prizes for the man who is quickest to make out the shadows as they pass and best able to remember their customary precedences, sequences and co-

existences, and so most successful in guessing at what was to come, do you think he would be very keen about such rewards, and that he would envy and emulate those who were honored by these prisoners and lorded it among them, or that he would feel with Homer and greatly prefer while living on earth to be serf of another, a landless man, and endure anything rather than opine with them and live that life ?

“Yes, he said, I think that he would choose to endure anything rather than such a life. And consider this also, said I, if such a one should go down again and take his old place would he not get his eyes full of darkness, thus suddenly coming out of the sunlight?

“He would indeed.

“Now if he should be required to contend with these perpetual prisoners in ‘evaluating’ these shadows while his vision was still dim and before his eyes were accustomed to the dark — and this time required for habituation would not be very short — would he not provoke laughter, and would it not be said of him that he had returned from his journey aloft with his eyes ruined and that it was not worth while even to attempt the ascent? And if it were possible to lay hands on and to kill the man who tried to release them and lead them up, would they not kill him.

“They certainly would, he said.

“This image then, dear Glaucon, we must apply as a whole to all that has been said, likening the region revealed through sight to the habitation of the prison, and the light of the fire in it to the power of the sun. And if you assume that the ascent and the contemplation of the things above is the soul's ascension to the intelligible region, you will not miss my surmise, since that is what you desire to hear. But God knows whether it is true.” (Plato, [*Republic*](#), 515e-517b, translated by Paul Shorey)

This is the stage setting for the motion of the truth of the human mind involved in mastering and changing the universe. Unfortunately, it has been to a great extent missing in science for the last hundred years, in spite of Einstein's discovery. Einstein may have been the last modern physicist to have rediscovered the scientific truth of Plato's Cave with his discovery of the principle of General Relativity, but the world has not yet responded in kind to what he has truly accomplished to empower the human mind. In fact, the reason is because the epistemology underlying the discovery that Einstein published in 1915 has not yet been made public. This is why it is good that we celebrate the centennial birthday of Einstein's Theory of General Relativity, today, because it gives us the opportunity to reconstruct properly the underlying epistemological assumptions behind the most important scientific discovery of principle since Kepler.

1. EINSTEIN'S THOUGHT EXPERIMENT OF THE CURVATURE OF SPACE-TIME

“When a blind beetle crawls over the surface of a curved branch, it doesn't notice that the track it has covered is indeed curved. I was lucky enough to notice what the beetle didn't notice.”

Albert Einstein, Letter to Edward.

How did Einstein discover that the stars of the heaven provide us with some of the best experiments demonstrating that the universe as a whole works like the human mind? The answer can be found by discovering that the heavenly cavity of the universe as a whole functions like a perfect Platonic Cave.

It was on December 2, 1915 that Albert Einstein's short paper *Die Feldgleichungen der Gravitation*, ([The Field Equations of Gravitation](#)) was first published and only a few scientists paid attention to it. In fact, even a smaller number understood its implications. In a sense, there should not have been so much negative reactions to this new paper, because Einstein had simply made an axiomatic discovery of the same nature that young children make when they play with building blocks. The proportionality, not the degree of difficulty, was the same.

In reality, the excitement of a child's discovery is also about proportionality; that is, the proportional relationship among his manipulation of building blocks, his visual ability to prevent their fall with his hands, and the discovery that his mind is in control of the whole experiment. The child's excitement, when he cries out: “*Gougoudada!*” is of the same origin as the excitement that Einstein expressed when he said after he had discovered his principle of equivalence: “*This is the happiest thought of my life.*” The difference, however, is that Einstein had discovered the fact that his mind was involved in the process of changing the universe and that he had chosen, instead of his hands, a concept that could do a similar job, the Riemann tensor.

To put it in a nutshell, the tensor idea that Einstein adopted was important not because of its mathematical character, but because of its epistemological value. That tensor was unique by the fact that the metrical relations of physical space-time could be made to deviate and change with the space-time metric itself. That was not just any change; that was an axiomatic change. The measurement was not static, but dynamic and self-developing. In a word, the self-referential quality of the new field equation was performative, because it modified itself as it progressed through the field by inversion; that is to say, the space-time metric of the field became identical with the field of space-time, acting almost like a mind.

That was the beginning of a true revolution in the scientific measuring method. However, this tensor analysis was but a mere shadow of the true performative discovery of principle which underlied it. This is why the true discovery could only be appropriately expressed in a pedagogical device that replicated Plato's "soul's ascension to the intelligible region."

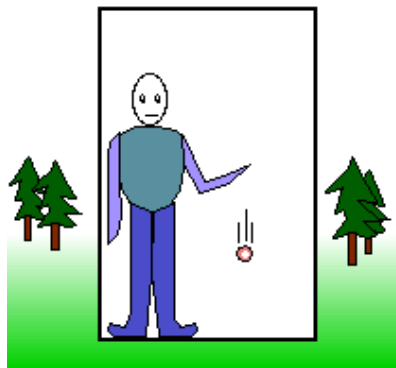
In laymen terms, Einstein had just discovered that our day to day experience of observing



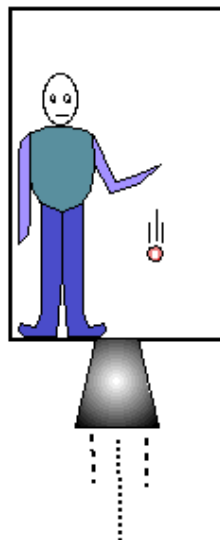
falling objects had nothing to do with a so-called "gravitational force" of the Earth or with the so-called "Newtonian force" of attraction between two masses in distant empty space. He discovered that everything a human being thought about gravity was wrong. He discovered that things don't fall because they are heavy, but because the universe as a whole has a triply-connected Riemannian curvature. What does that mean and how can you demonstrate that?

Figure 1 A triply-connected [Riemann surface](#).

The thought experiment of the windowless elevator, or the *gedankenexperiment* as



Things move the same way in a gravity field as those in a reference frame accelerating upward with the same magnitude.

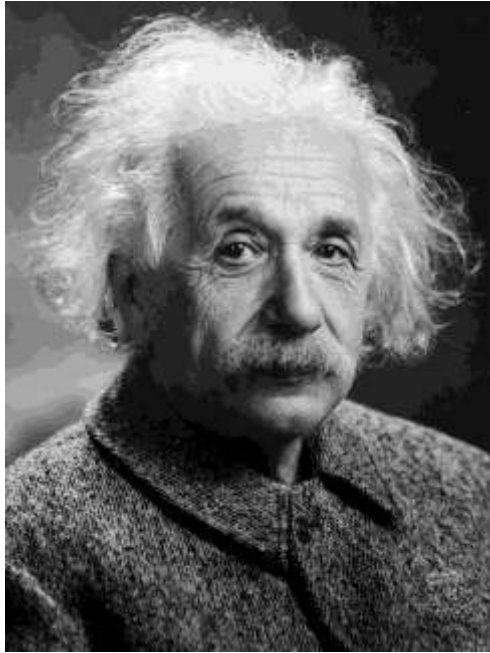


Einstein called it, is an actual Platonic Cave experiment, because it calls for rejecting the fallacy of the shadows projected on the dimly lit wall of sense perception, for breaking free from the chains of fallacious knowledge, and for making a new discovery of principle.

Figure 2 The Windowless Elevator thought experiment.

The beauty of Einstein's elevator thought experiment is that it obeys precisely to the triply-connected epistemological function that is required for making an axiomatic change. That experiment was an actual inferential hypothesis which established that the effects of gravity must be the result of either the elevator being at rest in a local gravitational field or in motion being pulled upward with constant acceleration without gravity. (**Figure 2**) The results are absolutely the same, and there is no way to tell the difference unless you get out

of the box and consider the difference from the proverbial outside. You are, as they say, boxed-in. Therefore, if you want to know the truth, you must turn away from the mathematical shadows on the black board, break with your sense perception chains, and make an epistemological discovery of principle, yourself.



It is this process of discovering the certainty of the mind, in opposition to sense certainty, which makes Einstein's thought experiment a true Platonic discovery of principle. The irony, however, is that it took four years before the discovery could be made public with an empirical experiment, that is, with the photographic plates of an astronomical demonstration in the laboratory of heaven. But, the whole truth behind this experiment is still wanting. It was the British astronomer, Arthur Eddington who was the first to demonstrate the so-called "proof" of Einstein's hypothesis with pictures of the solar eclipse of March 19, 1919.

Figure 3 Albert Einstein (1879-1955)



After that, it took only eight months for *The Times* of London to give its *imprimatur*, on November 7th 1919. Why take so much time to make that discovery public? Because the British elite discovered they could not make public the discovering power of that idea without losing their own power. So, you may want to ask: "What is so powerful about that idea that it would cause the British Empire to fear for their very existence?" In fact, with this unique discovery, Einstein was putting the political power of the British Empire in complete mortal danger. If you don't believe me, ask yourself why Plato said that it was mortally dangerous to take prisoners out of the cave.

Figure 4 Einstein's 1914 sketch of how the curvature of physical space-time bends light around the Sun. Photo Credit: American Institute of Physics.

Undoubtedly, Eddington followed the British elite policy of suppressing the epistemological nature of the Einstein discovery of principle. What he stressed, instead, was the mathematical proof that star light "bends," when it comes close to the Sun. (See **Figure 4**)

Indeed, at the surface level of sense perception, the experiment merely involved an eclipse of the Sun, demonstrating that when starlight passes closest to the Sun, the star cannot be seen, because the ray of light is bent in such a manner that the actual position of the star is hidden behind the Sun. Of course, there was no way to make such an observation during day-time, unless it was under special conditions. So, Eddington devised a camera trick to note the presence of an anomaly from the shadow of the eclipse and infer from it the presence of the unobservable object. Therefore, the real discovery of principle was going to be hidden behind the fallacy of creating night-time conditions during the day, a perfect Platonic Cave condition.

However, at a deeper level, Eddington neglected to identify the truth of that discovery, that is, he left out the fact that the Einstein thought experiment was an effort of the mind to correct the blindness of its own mistaken observations, while it is observing itself seeking the truth behind it. Nobody was told that this was the intention of Einstein, and Eddington was not willing to use astronomy as a heuristic example of Plato's Cave, like Einstein's thought experiment required. Instead, he focused on crunching the numbers, because he knew that mathematics was Einstein's weakness. The way Eddington's mind worked was actually very simple: *"Find someone's weakness, push his button, and you can control him."*

By comparing photos of the different positions of stars during the day-time eclipse with photos taken of the same stars during night-time, Eddington noticed that "the curvature of gravity" had changed the pathway of the starlight in the vicinity of the Sun during the day and had bent the ray of the hidden star to a significant degree. The idea was to put the emphasis on the necessity of devising the mathematical formula that would describe such a process as oppose to the discovery of principle. It was the mathematics that was supposed to provide the proof of the matter, not the constructive power of discovery, itself. **(Figure 5)**

The point to be made, here, is that it is the inference from the error of sense certainty which gives rise to the truth of the thought experiment, not the mathematical difference between the actual and apparent positions of the star during day and night observations. Eddington may have known that, but he never made the case for it. Why not? Because, if people discover where ideas really come from, the British oligarchy will lose all of their power. People should not know that the correction of the error of sense certainty requires that the mind make an adjustment in the process of three essential steps that would free the mind from its shackles: 1) by recognizing that the shadows of the discovery were going to be falsely represented, 2) by shattering the mathematical chains that have control over science, and 3) by discovering that the true principle of curvature of space-time was in the mind and not projected against the dimly lit wall of the heavens.

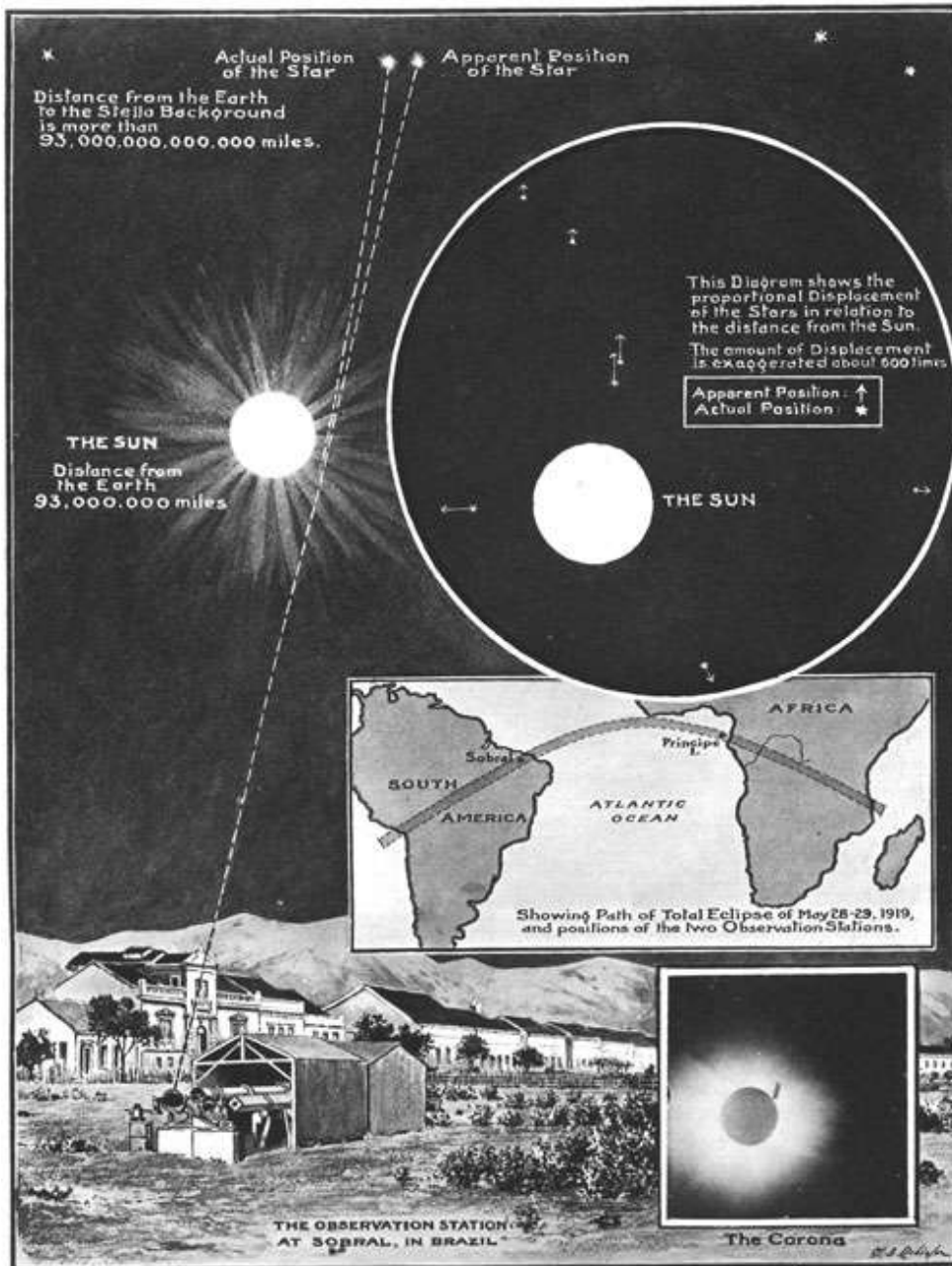


Figure 5 “*The original caption for the graphical explanation of the experiment read as follows: ‘The results obtained by the British expeditions to observe the total eclipse of the sun last May verified Professor Einstein’s theory that light is subject to gravitation. Writing in our issue of November 15 [1919], Dr. A.C. Crommelin, one of the British observers, said: ‘The eclipse was specially favourable for the purpose, there being no fewer than twelve fairly bright stars near the limb of the sun. The process of observation consisted in taking photographs of these stars during totality, and comparing them with other plates of the*

same region taken when the sun was not in the neighbourhood. Then if the starlight is bent by the sun’s attraction, the stars on the eclipse plates would seem to be pushed outward compared with those on the other plates.... The second Sobral camera and the one used at Principe agree in supporting Einstein’s theory.... It is of profound philosophical interest. Straight lines in Einstein’s space cannot exist; they are parts of gigantic curves.’ From the [Illustrated London News of November 22, 1919.](#)”

2. THE PRINCIPLE OF INCREASING-ENERGY-FLUX-DENSITY

“Never lose a holy curiosity. Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop questioning.”

Albert Einstein

So, as the reader can surmise, the result of the Einstein thought experiment was much more than simply the destruction of Newton's ideas. The surprise conclusion in this process is that, as a result of the increase in energy-flux-density of the triply-connected process of Plato's Cave, the discovery of principle of the third step becomes the unknown cause of a time-reversal release of the compressed energy that is built-up through the first two steps. How does this process work?

When that compressed state of high degree of singularities gets rejected and the process of discovery is diverted away or forced to break down, the third step turns to a violent resentment against the new principle and a defensive rampart of fear and hatred is erected against the new discovery. A new discovery always threatens the very existence of the power in place. On the other hand, when that compressed state goes into an inversion of time-reversal, an axiomatic jump takes place and a much greater amount of energy-flux-density gets released back into the first two steps. In the end, a new and higher form of energy, which never existed before, is recognizable when it breaks out into some form of Rabelaisian laughter.

It can be further hypothesized that such might also have been the triply-connected action that Einstein considered in 1916 with the Schwarzschild radius. Indeed, what if the mathematical singularity of the Schwarzschild radius had been in Einstein's mind a complete diversion of his attempt to express a non-linear axiomatic change in the curvature of cosmic-space-time? Why was the causing nature of such a space-time reversal of the curvature made to be diverted toward mathematical entities such as black holes?

The point to understand is that, every step of the way for a hundred years, the fundamental discovery of Einstein was always diverted toward some new mathematical trick instead of being replicated in the essential three steps of Plato's Cave. Why such diversions? Because, each of those three steps is necessary for a discovery of principle for the liberation of mankind, and each is acting on the other two by generating the curvature of space-time as the true source-cause of gravity, as opposed to action at a distance. That's what is included in the all inclusive win-win policy of the BRICS nations, today.

This is why it is not the Sun which bends the light, but the galactic process generating the curvature which bends the immediate space-time region around the Sun. The effect is not the result of one, or two, but of minimally three actions that must act simultaneously to effect and transform one another. This can only be coherent with an epistemological tensor establishing, as Einstein did, that our space-time universe is a matter of mind in eternal proportion with the curvature of change from God's Mind; that is, from the top down. That was the power of Einstein's genius that the British oligarchy feared as the most deadly threat to their own security. Here, you might want to recall the initial question that I posed in the introduction of this report: "Why did *The Times* of London delay the news of Einstein's discovery for so long and what was the true time-frame in which Einstein made his discovery?" Indeed, why was there such resistance to its making this revolution public? Why wait four long years?

In 1919, *The Times* of London discovered that the whole edifice of British control of the world was in a process of disintegrating, and that the only way to save the British Empire was to control science and the scientific community through mathematics. The last hundred years have provided us with the opportunity to discover that most of what I have said about Plato's Cave, above, had been ignored by scientists and that science, as Lyn identified, had been lost to the Davis Hilbert and Bertrand Russell fallacy of mathematics.

No, Einstein did not discover that the universe could be mathematized as most people were made to believe. Einstein discovered that your mind has the power to change the direction of the universe. It was the British Intelligence Service which imposed mathematics on the world in both science and banking, and thus, established their "*ascendancy principle*" over the world. (For some insightful reading on the matter, see, Jason Ross, [A PARTICULARLY EVIL ASPECT OF BERTRAND RUSSELL](#))

Einstein's achievements have not been understood and the so-called new mathematized fields of study, which are falsely attributed to him, are, in fact, all fallacies of composition fabricated in the basement of the British Intelligence Service to serve that oligarchical "*ascendancy principle*." Forget about the "big bang theory," the "inflationary theory," the "dark matter theory", the "black holes theory", the "string theory", and the rest. These are all population control mechanisms.

Unless you have taken into account how British Intelligence manipulates the human mind and prevents it from functioning rationally, you haven't made a single step toward understanding how the British Empire hates Einstein's discovery as well as everything that is human. Indeed, the British oligarchy hates Einstein because he was actually forecasting the failure of the British Empire, when he said: "*Only two things are infinite, the universe and human stupidity; and I am not sure about the universe.*"

The sad thing about scientists who came after Einstein is that they did not see their own stupidity. They lost the pathway in their attempts to follow Einstein in his footsteps, because they wore the wrong shoes and looked through the wrong looking glass. Scientists have turned Einstein's view of the world into a mixture of Picasso and Kafka, and that distorted image of Einstein is the image people have of him today. This stupidity was confirmed very early on in a very interesting quip that Charlie Chaplin said when he met Einstein for the first time. In a delightful moment of insight, Chaplin said to Einstein: ***"The people applaud me because everybody understands me, and they applaud you because no one understands you."***

The real question, therefore, is what is the time-frame of Einstein's discovery? When and how did the real proof of Einstein's thought experiment take place? Was the discovery made inside of the elevator or during an Eclipse that showed the bending of the light ray around the Sun? The answer is neither. The proof of the thought experiment does not lie in the empirical elevator or in the Eddington experiment, as such. It lies in the mind; that is, in the discovery of the "equivalence" between the curvature of light in space-time and the curvature of the human mind seeking the power of changing the curvature of the universe as a whole.

And, the proof lays in the construction of the discovery of the discontinuity that bridges the gap between the two components of this equivalence. In other words, both curvatures have the same source and causality, and that is the true nature of the discovery of Einstein's ***"principle of equivalence."*** The problem is that people believe that things are merely what they appear to be and not what the mind knows about them. Therefore, the important thing is to consider how your mind should fit into the picture from the top down, because the situation from the bottom up is never explicable or resolvable.

Thus, in 1915, the old notion of space and time, that is, the impotent Aristotelian and Newtonian forms of space and time, had come to an end. What Einstein found the most important but difficult thing to get across about the curvature of space-time was to get scientists to see that they simply had to be willing to put their minds to it.

What is exciting about the Einstein discovery of principle is that things in the universe are no longer perceived as floating around in empty space and time, but are held together by the self-generating curvature of change, and the universe as a whole is subject to the same curvature of space-time change as the human mind. With the discovery of Einstein, the time had come when the human mind and the universe had to recognize they had the same causal process of determination ruling over them. The time had come for mankind as a whole to grow up and dump British geopolitics once and for all.

What Einstein discovered in his ***"principle of equivalence"*** was the unity of effect between the curvature of the human mind and the physical universe. This meant that the universe

no longer existed independently of the human mind and that the subjective human mind had the power to determine the direction of events in the universe as a whole. It is the human mind which determines the curvature of space-time and which dictates the contour of that curvature that light must follow, because it is the curvature of the process which causes the event, not the event which causes the curvature of the process. ***The irony is that such an intention is already built-into the physical nature of light.*** That is the reason why what had to be discovered was that the curvature that generated the process was, performatively, nothing but the process that generated the curvature. That's why the idea of the Riemannian performative tensor was so useful.

While Einstein was looking through a Cusa type of mental looking glass, other scientists kept looking for effects through a sense perception lens and came up with all sorts of distorted effects, space-time bending tricks, and mind-warping gadgets, all without consideration of principles. What scientists failed to understand was that Einstein was a Platonic and Riemannian thinker, not a mathemagician.

Einstein adopted Riemannian principles of non-Euclidean geometry that his classmate and friend, geometer Marcel Grossmann, had introduced to him as early as 1900. According to Einstein's Princeton colleague, Abraham Pais, it was Grossman who tutored Einstein in Riemannian tensor analysis and who became instrumental in solving Einstein's mathematical measurements in General Relativity. For example, in his 1913 publication, Einstein wrote the physical part of the report and Grossman wrote the mathematical part. Einstein made it clear that he was using the "Riemann Differential Tensor" because of its epistemological quality, as opposed to measuring with rods and clocks. This change of measuring instruments was absolutely critical. (See, *Einstein, A.; Grossmann, M. (1913). "Entwurf einer verallgemeinerten Relativitätstheorie und einer Theorie der Gravitation" [[Outline of a Generalized Theory of Relativity and of a Theory of Gravitation](#)]. *Zeitschrift für Mathematik und Physik* 62: 225–261. [English translation](#))*

Einstein also discovered that the Riemann Differential Tensor required anti-Euclidean Geometry as it was applied in Riemann's 1854 Habilitation Dissertation: [On the Hypotheses which Lie at the Foundation of Geometry](#). By taking the anti-Euclidean axiom busting route of Riemann, Einstein discovered that he could use the included Riemann tensor and apply it to so-called gravity as well as to acceleration. This is what Einstein had earlier called the "***principle of general covariance;***" that is, a principle which can be applied in a non-linear fashion because the chosen Riemannian equations were changing at the same time that the objects they were measuring.

However, what Einstein and Riemann before him had realized is that the mathematical nature of tensor covariance is not real physical reality. Reality is based on axiomatic gaps,

singularities that mathematics cannot deal with. Reality could only be reached if one went outside of the domain of mathematics, as such; that is, into physics, like Riemann had recommended at the end of his 1854 Dissertation. Similarly, as I identified it in my last report on [HOW LEIBNIZ CHANGED THE PAST FROM THE FUTURE](#), Einstein applied the same Leibniz principle of proportionality to his “*principle of equivalence.*” As he stated, explicitly, in the opening paragraph of his 1913 work with Grossmann:

“The theory expounded in what follows derives from the conviction that the proportionality between the inertial and the gravitational mass of bodies is an exactly valid law of nature that must already find expression in the very foundation of theoretical physics. I already sought to give expression to this conviction in several earlier papers by seeking to reduce the *gravitational* mass to the *inertial* mass; this endeavor led me to the hypothesis that, from a physical point of view, an (infinitesimally extended, homogeneous) gravitational field can be completely replaced by a state of acceleration of the reference system. This hypothesis can be expressed pictorially in the following way: An observer enclosed in a box can in no way decide whether the box is at rest in a static gravitational field, or whether it is in accelerated motion, maintained by forces acting on the box, in a space that is free of gravitational fields (equivalence hypothesis).” *Albert Einstein, [Outline of a Generalized Theory of Relativity and of a Theory of Gravitation](#)*, Princeton University Press, New Jersey, 1913, p. 151)

Indeed, if the effects of gravity and of acceleration are the same in the two cases, what is startling in this Einstein axiom busting statement is not the perceptible warps and turns of objects in space-time and the uncertainties of what can happen to you in a moving closed elevator, but the simple fact that from a higher standpoint of a Riemannian geometry, gravitational mass and inertial mass are the same. In other words, the so-called equivalence equation between the two masses comes from the proportion between mind and matter. And, it is the proportion that counts, not the mathematical measurement.

In other words, in order to better understand this revolution in physics, one must shift one's attention away from the physical experiment with objects, as such, and concentrate on the changes that take place in the mind of the physicist by way of proportionality between reason and power. It is the causality of that proportionality which is important to understand and not the measuring effects on objects; because proportionality implies that it is the geometry of the process of change which causes the effects of gravity, not the measuring of individual things that dent their surrounding environments or go bang in the night when they fall.

The question, then, is not how you calculate that proportion, but how your mind acquires the power of that proportionality. On this subject, there is a singular interesting question that I would like to pose to physics professor, Palle Yourgrau, about his book, [A World Without Time: The](#)

[Forgotten Legacy of Gödel and Einstein](#) , and that is: “Why does your physics exclude the human subject and his creative experience of time? Why did you cancel the human mind at the same time that you cancelled time? What did time ever do to you?” I think that the human mind has been left out of physics because of the relationship the mind has with infinity. Yourgrau identified this point when he addressed the case of Cantor and the transfinite, but he only made the mathematical case of it. As he said:

“By generalizing his argument, Cantor was able to show that the power set of any set is always larger than the original set, and therefore, for any number, including a transfinite one, there will always exist another that is strictly greater. Thus, not only is infinity an actual number, but there is an infinity of infinities. Needless to say, infinity is not accessible to the five senses, and an infinity of infinities was clearly too much for any self-respecting empirically minded positivist to bear.” (Palle Yourgrau, [A World Without Time: The Forgotten Legacy of Gödel and Einstein](#), p. 33)

The issue, here is not mathematics, but the fact that the human mind is not merely capable of generating ideas that go beyond the infinite, but that the human mind is only truly human when it lives in the domain of the infinite; that is, in its proportional relationship with the creative power of God the Creator. This is where physicists have lost their Lantern by assuming that mathematics was capable of replacing the transfinite power of the human mind. Cantor failed, just as Russell and Hilbert failed after him.

However, Yourgrau is right on one thing; the Russell paradox was the “*coup de grace*” of mathematics, and that is why the point that Riemann had made at the end of his 1854 Dissertation is still the only valid outcome. As Lyn emphasized that Riemannian point, again and again, the geometer has to leave mathematics to go into physics. Thus, how must scientists behave if the creative process of mind, and not mathematics, is to be the true source of measurement in the universe? After all, only a mind can determine measure. By understanding that measurement is never a quantity but a proportion; and by discovering that all proportions relate ultimately to the power of God’s “*moving image of eternity*,” there may be hope for future progress in modern physics.

3. IS THE TRUE SENSE OF TIME NOT IN THE SIMULTANEITY OF ETERNITY BETWEEN THE MIND AND THE UNIVERSE?

“Now the nature of the ideal being was everlasting, but to bestow this attribute in its fullness upon a creature was impossible. Wherefore He resolved to have a moving image of eternity, and when He set in order the heaven, He made this image eternal but moving according to number, while eternity itself rests in unity; and this image we call time.”

Plato, *Timaeus*, 37d

It was time, not space that posed to Einstein the greatest challenge, because he knew that the measuring rod of clock-time was a terrible limitation. This is the reason why Einstein was so fascinated by the logical tricks that his good friend Gödel would pull on him during their walks throughout the town of Princeton, New Jersey. However, Einstein did not get out of Gödel what he expected to find on the question of time.

It was Lyndon LaRouche that Einstein should have consulted on this one. Lyn had the right notion of time, even as a young man, when he related it to the creative process of Raphael in [The School of Athens](#). For Lyn, creative time had always coincided with the Platonic idea of time as “*the moving image of eternity*”; that is, what Lyn called “*the simultaneity of physical eternity*” in the field of economics. This is the same notion of time that Nicholas of Cusa had developed for the Holy Trinity from Saint Augustine and from Charlemagne’s economic application of the notion of the *filioque* to the Commonwealth of Europe. Why is this real human time as opposed to clock-time?

At the turn of the century, when I started pondering on the nature of time as Lyn had advised us to work on, the most fascinating aspect I found was that there was something eternal about it, which was simultaneous with constant change. Like change, time was as though it had never started and could never end; it was simultaneous to it, but never immediately present with it. You could always rely on time; it was always there for you, even when you were out of it, or didn’t have time for it. But that was not enough to make time the active function that I was looking for. There had to be something more than eternity to it; there had to be some causal function. Then, I discovered the Rabelaisian notion of time in Lanternland and the dodecahedral insight of Raphael in [The School of Athens](#)’ architectonic intention; and that’s when the causal relationship between time and change hit me from the vantage point of geometry. See my report: [LANTERNLAND](#). As Rabelais reported in *Book Five* of his writings:

“So, when you philosophers, with God’s guidance and in the company of some clear Lantern, give yourselves up to that careful study and investigation which is the proper duty of man – and it is for this reason that men are called *alphestes*, that is to say researchers and discoverers, by Homer and Hesiod – they will find the truth of the sage Thales’s reply to Amasis, King of the Egyptians. When asked wherein the greatest wisdom lay, Thales replied: ‘In Time.’ For it is in time that are discovered, or in due course will be discovered, all things which lie hidden: and that is the reason why the ancients called Saturn, or Time, the father of Truth, or Truth the Daughter of Time. They will also infallibly find that all men’s knowledge, both theirs and their forefathers’, is hardly an infinitesimal fraction of all that exists, and that they do not know.” (Francois Rabelais, *Gargantua and Pantagruel*, Penguin Classics, Translation J. M. Cohen, 1955, Book Five, p. 710)

Although time ultimately ends up unveiling everything that is concealed and hidden, it is the most difficult instrument to control and to master as a causal instrument, because it is fleeting and it always escapes your grasp as “justice rolling down like waters, and righteousness like an ever-flowing stream.” (*Amos 5:25*) And, I said to myself: “Isn’t that the reason why that seemingly obvious fugitive aspect of time makes it the best companion of change?” Why? Because, like change, time modifies and transforms everything, leaves nothing unscathed. It either destroys everything or it increases benefits for mankind. That’s where the secret of time lied. This is why, in due course, time has to bring justice to mankind.

Indeed, if you adopt time for the benefit of others, as Rabelais suggested, you will discover that the greatest power of time resides in its reversal dynamic, that is, in the dynamic which comes back in the form of remembrance by the prisoners that you have forced out of Plato’s Cave. As Gargantua said to the vanquished: “*Time, which gnaws and fritters all things away, only augments and increases the value of benefits. For one good turn freely done to an intelligent man grows continuously by his generous thoughts and remembrances.*” (Ibidem., p. 145) But, how can time increase and not decrease something?

Consider the following process. As time rolls and the “*moving image of eternity*” proceeds from the future, it changes everything and never comes back in the same garb. Time changes and change transforms time continuously. Time and change are like two old friends who must depend on each other to increase the benefits of mankind throughout eternity and can never be without each other. They don’t simply look out for each other, they both look for axiomatic transformations everywhere they go and they seek to make them happen for others. They have the same mission; that is, *agape*. In fact, they are so close to each other in that task that if one were to die, the other could not survive. It is as if time and change had been created together and made to exist forever with each other with the intention of continuously improving mankind. If

that is the time you live by, then you are immortal because you are living for the Good of mankind. It is the Good which makes time a principle of growth.

That generous Rabelaisian quality of inversion by time-reversal represented for me the best means of generating axiomatic transformations in the way people think, because it answered the conditions of the Good that Lyn had initially identified as the power of increasing relative-population-density, and which he later identified as the power of increasing-energy-flux-density in the universe as a whole. That's also the principle that Einstein was trying to get at.

Now, you might wish to ask: "What about Einstein's time as the fourth dimension? What characteristics does that time have?" In brief, that's merely a shadow of the real creative time that Einstein needed to develop in order to go beyond simply measuring, synchronizing, or separating events with clock-time. Time had to be relative to the frame of reference of the creative human mind with reference to the Good. That is why; if Einstein had projected the simultaneity of local and relative clock-time measurements from the integral of simultaneity of physical eternity, as Lyn did, he would have been able to discover that time-reversal in the simultaneity of physical eternity had nothing to do with the logic of Gödel's idea of time.

This means that for the creative individual, time and change must reflect the coming into being of something that has never existed before because it is being generated from the future. And, since time and change always walk together toward greater anti-entropy, as Rabelais showed, time must have essentially been created from the future in order to return to the future as the "*moving image of eternity.*" In other words, the Platonic idea of simultaneity of physical eternity is the complete inversion of the simultaneity of synchronized clocks. This must be the reason why Plato's "*moving image of eternity*" is nothing but the becoming of that "*eternal image of change.*"

CONCLUSION

Such heavy ideas require that we pause, here, for a concluding moment and reflect on the significance of the relationship among change, time-reversal, and eternity. Is there any correspondence among those three dimensionalities? *Couldn't there be some unknown axiomatic connection between those three universals?* And, if there were, could there be some special space-time relationship in which all three could exist together in some higher form of simultaneity of eternity? If that connection existed, then, shouldn't there also have to be an actual present point of identity or convergence among all three or, did that possibility disappear with Einstein's Theory of General Relativity? What am I missing, here? What is missing, is the "here and now" of the universe as a whole.

In 1905, Einstein had already shown in his Theory of Special Relativity that the present in the universe did not exist. And, according to the Theory of General Relativity, there cannot be

such a thing as a “now” of the universe either. *The present state of the universe as a whole cannot exist; there can only exist a covariance of simultaneity of different relative time-frames.* As Einstein put it: "The four-dimensional continuum is now no longer resolvable objectively into sections, all of which contain simultaneous events; 'now' loses for the spatially extended world its objective meaning." (Quoted from [*A World Without Time: The Forgotten Legacy of Gödel and Einstein*](#) by Palle Yourgrau, 2005)

The interesting thing is that if the “now” does not exist for Einstein’s Theory of General Relativity, it does not exist either for the idea of simultaneity of physical eternity. However, simultaneity of physical eternity is not merely as it appears in [*The School of Athens*](#) where Plato and Aristotle are represented at the same time in the same “here and now” as the one of Archimedes and Averroes. Because, it is not time that brings things from different periods of history and makes them coexist at the same time; it is the human imagination. The question is: “Why would the Platonic idea of *‘moving image of eternity’* be important for physics?” And, what is important for science is to replicate a true idea of the *space-time-gaps* between different axiomatic levels of reality as a thought experiment in Plato’s Cave.

Thus, in ending, I propose the following hypothesis: If you project against the dimly lit wall of Plato’s Cave the idea of a triply-connected-universe in which different axiomatic levels, notably the a-biotic, the biotic, and the noetic, all co-exist, simultaneously, in the same being, but with different space-time-gaps, as Vernadsky estimated, what sort of simultaneity of eternity is that when the atoms of your body don’t know what your molecules are doing, anymore than your molecules know what you are thinking, yet they maintain some mode of communication in space-time among all three? How can the three of you live together, simultaneously, and have three axiomatically different space-time frames in a single integrated atomic, circadian, and cognitive being? What sort of *ménage à trois* is that? How do you explain the *simultaneity of such macrosynchronic gaps in the same continuum of mindspacetime?*



Now, that wasn’t too hard, was it? As Clouseau would reply: “No, but much harder than during the Resistance.”

Figure 6 Peter Sellers as Chief Inspector Clouseau.

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