All About 1

Part 2: The Sine Also Rises

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How does “1” start a revolution?

When darkness is overwhelming, how do you find the light?

Captains and kings? On the battlefield, everyone’s equal.
So, where to begin...

Abstract: An allegory of modern science.

Long live the pioneers Rebels and mutineers
Go forth and have no fear

Today, my friends, let me be frank. Effectively, in no part of the world is there a magic formula that can be applied to rid ourselves of the corrupt, evil globalist regimes. It simply doesn't exist. Many would say there is physical force, military intervention. Yes, but at what cost?
We know corrupt regimes have arms and are prepared to use them. So how to go up against the tyranny of goose-stepping armies of brutal, totalitarian dictators and despotic regimes that have reigned supreme with their deceptive doctrines? How do you break the chains of violence and oppression without spilling one drop of innocent blood? I'll tell you something from my heart: I believe that without hope there is no battle, and without battle there is resignation, surrender. And this is what the globalists desire: that we convince ourselves resistance is futile, fall victim to the Giant of Despair, comply with their lies, and meekly acquiesce to their remaining in power. But it's not going to be that way. No, not today! Not ever! And until the mighty hand of God releases the hosts of heaven to battle on our behalf, we hope. Because we know that the good vastly outnumber the bad, and that liberty, justice, freedom, peace, and truth—yes, we want them all restored, now—are ours, not by might, but by right!

1. The French Connection (We'll Always Have Paris?)

When will you realize, Vienna waits for you…

A castle by a river on an emerald hill, a spare orchard, a crumbling rock wall, the dappled light of the warm Italian sun, Venice, Rome, fly-fishing in the Pyrenees, running with the bulls in Pamplona. It rained the whole time in Vienna. Bohemian, bon vivant, par excellence?
Yeah, I know I gotta grow up. But one magical afternoon in Paris (*Ooh, la, la, what a burg!*), sitting in the Café du Mars…it all changed.

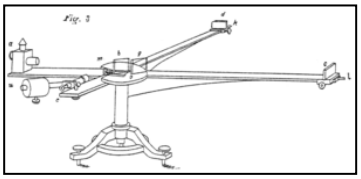
What if one postcard-perfect day you realized everything you'd ever believed and been taught (well, almost everything) had all been a pack of lies…and you knew exactly why?

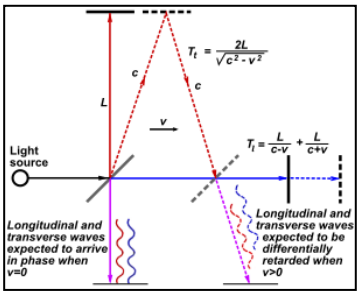
My first thought: conspiracy? Were all the Intellectual Giants in on it? Or, were they, too, just duped victims of the same lie? Well, it really doesn't matter. The point is to try to reveal the truth. Like they say, the truth will set you free. So where did the Big Lie start?
Well, you could argue that it goes back to the Garden of Eden—the fruit of deception.
Yep, the serpent told Eve one lie, and see what happened?
But the Lie that held the whole world captive for over a century? What a story.
I'm on the night train to Lisbon, so I have some time….

Hate to jump right into the middle of it. ("*Porter, un verre de votre meilleur…Merci.*")
Where was I ? Oh, yeah. Once upon a time, Aristotle proposed space was filled with a "fifth element"—a weightless, incorruptible substance he called the "aether" or "quintessence." Then, Christiaan Huygens (that debonair, Dutch Renaissance man-about-town) theorized light traveled by means of a mysterious, invisible substance that permeated all space (also dubbed "aether"). And, in the late 1800s, Albert Michelson and Edward Morley ("M&M" by their devoted fans) hypothesized—by comparing the Earth's movement *relative* to light—they could measure and *quantify* this invisible "substance" (hence the terms quanta and relativity).

My critique? (Should I get out the scalpel or chainsaw?)
Don't get me wrong. I'm not faulting M&M for trying to discover what's out there; that's what science is all about. But, like putting the invisible man in a police lineup, assigning an imaginary, invisible substance—a hypothetical—as a given in an experiment, and trying to prove something exists by *assuming* it exists? Well, last I heard, that's what logicians call *petitio principii* (a classic case of circular reasoning). But I'm getting ahead of myself.

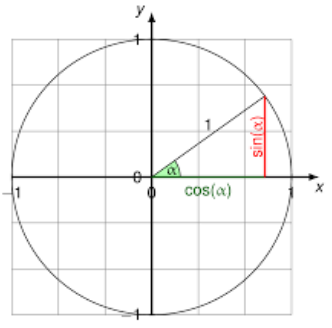
So, M&M's "groundbreaking" experiment? A ray of light was reflected from one mirror to another along the lengths of right-angled arms of an interferometer; the apparatus was rotated 90°, and the experiment repeated. But their hope to find a difference in the time of travel of light (and proof of the imaginary) was never realized. Stop right there.





Sure, I, too, used to follow the well-trodden path of the hypothetical math (as in the diagram to the right). I'd call the velocity of light, c (the hypotenuse), the velocity of the earth in its orbit, v (the base), and the length of the interferometer arm, L (the height), theorize a Pythagorean equation of $L^2 + v^2 = c^2$ or $L^2 = c^2 - v^2$, and subsequently, develop relativity's $E = mc^2$ or $c^2 = E/m$.

But that was then. Since the café in Paris, I could see the truth:

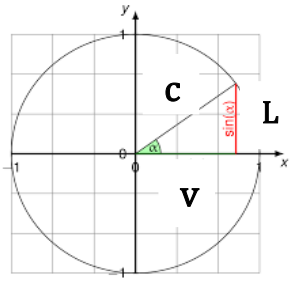


- When you remove the imagined, invisible hypothetical, all you're left with is the interferometer and a ray of light.
- So, by rotating the interferometer, all M&M were doing was creating a unit circle with light as the radius-hypotenuse (the 1)!

The truth will set you free? You see it too, right?
This flips the configuration of the right triangle, and thus, the math of relativity on its head!
Talk about a "revolutionary" revelation!
Without the imagined hypothetical, relativity is just the unit circle!

So the great mystery of the "null" results of the Michelson-Morley experiment is finally solved! M&M never found a difference in the distance and time of travel of light because all they ever measured were the same distances (the lengths of the arms of the interferometer). And like M&Ms that melt in your mouth, *and* not in your hand, their theory vanishes into the aether.

But to back up the train a bit: Remember, the unit circle has a radius of 1. And any point on the circumference of the unit circle (x, y) creates a right triangle whose hypotenuse is also the radius (the 1). So thinking of the right-angled "arms" of M&M's interferometer as the x and y axes of a Cartesian grid: rotating the interferometer creates a unit circle and right triangle. And with the radius-hypotenuse as the velocity of light, c, the height L, and the base v, voilà! I get relativity's same ol' right triangle equation, $L^2 + v^2 = c^2$.



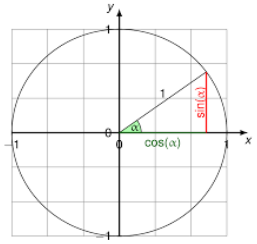
And that, *mes amis*, was my "*Eureka!*" (or Eyeful) moment at that Parisian café: ***The unit circle plus the Pythagorean theorem equals relativity!*** Whoa! Who coulda figured? Relativity just the sides of the right triangle (of the unit circle) "relative" to each other?! Sure, the entire theory is all right there, smack dab in front of you, easy to "c":

1. As the height, L, and base, v, are always less than the radius-hypotenuse, c, that creates relativity's infamous limit that ***nothing can exceed the speed of light, c***.

2. And rotating the radius of the unit circle, as the length of the hypotenuse (the speed of light, c) always stays the same, and the length of the base of the triangle (the velocity, v) changes, there's relativity's postulate that ***the speed of light is the same for all velocities***!

3. Also, when rotating the radius, as the base, v, gets longer, the height, L, gets shorter (and vice versa). That is to say, as velocity increases, length decreases. So there you have relativity's famous ***theory of length contraction***!

4. Finally, the most ridiculous and delicious of all—the blueberry atop the *gâteau au fromage:* Length divided by velocity results in time. (As an example, 20 miles divided by 20 mph equals 1 hour.) So whether one calculates the tangent (the *length* of the height of the triangle divided by the *velocity* of the base, L/v) or the sine (the *length* of the height divided by the *velocity* of the hypotenuse, L/c), the angle at the origin becomes the dimension of time! "Sine" of the times? Power of the hour? By rotating the radius, as the height and base of the right triangle, L and v, change relative to each other—as the angle at the origin changes—time changes, too! And there's relativity's ***theory of time dilation***!



So forget about welding together an acre of junk.
Put away the blow torch! Get out the compass and straight edge!
With just the unit circle and the Pythagorean theorem, you, too, can transform M&M's interferometer (and the unit circle) into your very own time machine!

Epilogue

Back at that Parisian café, pouring a little Perrier in my Pernod, watching it turn cloudy with uncertainty and contemplating another piece of cheesecake (should I or shouldn't I?), gotta admit, I was a bit disillusioned. I thought a time machine would have more *pizzazz*—more bells and whistles!—akin to the flux capacitor in Dr. Emmett Brown's DeLorean, or H.G. Wells' fantabulous machine: *a glittering metallic framework, a transparent, twinkling crystalline substance, with a sort of seat or saddle, and a smooth ivory lever to send you gliding into the future or the past!* But relativity's interferometer/right triangle/unit circle gizmo? What a colossal letdown. Like a woman going on a blind date, hoping to meet Harrison Ford/ Mel Gibson/George Clooney, only to end up with Woody Allen…That's no fun at all!

(But anyway, stay tuned for Part 3!)