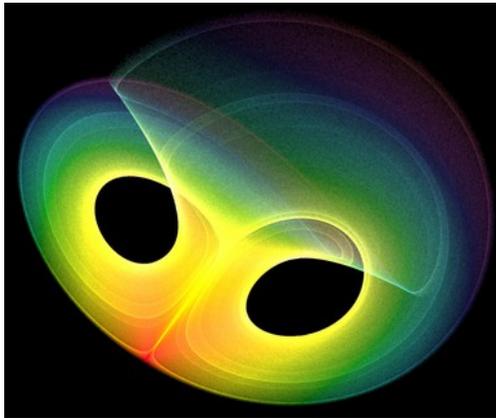


MATHEMATICAL ANALYSIS



by Miles Mathis

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This is going to be a big one, folks, so strap yourselves in. The math department is really going to hate this one. And not only the math department. It has taken me about two decades to come to this realization I am about to share with you, but I excuse my tardiness by pointing out that I have kept busy with physics. I have never been very interested in math except as a tool of physics or engineering. “Math for its own sake” is meaningless, as is pure math. There is no such thing. It is math without variable assignments, which is no more than a flight of fancy. I have had better things to do. The work I have done in this period, including [diagramming the atomic nucleus](#), [unifying the field equations](#), and [redefining the charge field](#), was much more important than any disembodied math I could have been doing. But for some reason, today the Muses poked my little head and told me it was time to drop the bomb on the math department that has been hanging over it since [I first wrote my paper on the calculus 20 years ago](#). There I redefined the calculus based on a somewhat novel reading of finite differences, and threw out limits and infinitesimals as needlessly confusing and imprecise. But it took me until today to fully understand why that paper was never published by the mainstream, and why it still has gotten so little traction two decades later. To be blunt, mainstream mathematicians hated it. I could see that it threatened them, and I could sort of see why, but to be honest I had no idea until now the depths of that threat. It is because that paper doesn't just bring down Cauchy's foundations of the calculus, **it brings down all of mathematical analysis based on the power series since Euler.**

How did I finally see that? In my usual serendipitous manner. I was watching an old University Challenge [on youtube from years ago](#), just to decompress after [another week of rewriting history](#). I was watching a compilation of science and math questions, since I am not too interested in questions about flags or European football or Welsh counties. A question came up about a Swiss mathematician, I answered Bernoulli and the team from Oxford answered Euler. The answer was Bernoulli. After calling them losers, I laughed at myself and decided to look up Euler, to be sure I wasn't missing something. I look up a lot of stuff while watching University Challenge, since I like to keep my learning curve high, even at age 58. Plus, [I have given Euler a plug in a recent paper](#). I was pointing out there that my output has now surpassed 100 volumes, putting me in pretty rare company, and one in that company is Euler. I dismissed most others in that company, who are pulp fiction writers, but nodded to Euler as “worth reading”. That was a prejudice, I later realized, since I have only read small

parts of his 92 volumes of work. I know his most famous works on physics (celestial mechanics), but that is about it. And I know nothing about his bio.

Until now. Reading his Wiki bio just now I realized it was full of the usual red flags. He was from wealth and privilege, was absurdly connected, and obviously Jewish, though crypto. There is therefore every reason to question the rest of his bio, including the inflated claims of his importance. In EVERY other instance I have researched I have found these people to be frauds. [See my expose of von Neumann](#), as just one example. No reason to prejudice Euler based only on that, but every reason to put him to the usual tests.

Beyond that, we see other red flags immediately, including the admission that Frederick the Great thought Euler was fool, one who couldn't even solve a simple gardening problem. Voltaire also thought he was a fool. A trip to JewornotJew reminds us one the most famous problems he solved was the seven bridges of Konigsberg, not exactly an advanced math problem. But even there we have a clue, since Konigsberg [is a pointer to the Phoenicians](#). It looks like a marker someone inserted into his bio to tell us who he really was.

So far, that is all weak circumstantial evidence, as I will admit. But then I reminded myself that most of his famous work was work of the same basic sort, using infinite series to solve problems. He solved a wide variety of problems, but he used the same basic trick over and over. Then I reminded myself that I have shown that trick is a cheat. Not just because the mainstream proof of the calculus is badly fudged and has been since the beginning, but for even more obvious reasons. The calculus does work, and it can be done without cheating, so it doesn't really matter how you prove it. Or, it doesn't matter as a concern of end-math, but it does matter as a concern of history, theory, and application. As it turns out, it matters a lot in applied math, since this mistake in the foundations affects most later answers in physics and engineering. It proves all these famous people didn't really understand where the calculus was coming from or how or why it worked, because if they had they would have corrected it like I did. They would never have proved it or taught it for centuries based on limits or infinitesimals or infinite series. If Euler and Cauchy and the rest cheated on that, what would stop them from cheating on actual mathematical analysis?

Well, I have proved [they did cheat](#). [As I have corrected much of the physics](#) of the past two centuries, I have tripped across [thousands of prominent fudges](#) by famous physicists and mathematicians, and [many of these have been based on infinite series](#) like the power series or Taylor series. As one example, see my destruction of Einstein's use of the Taylor series in Special Relativity, where he expands the field equation and then assigns the first term to Newton's field and the other terms to his corrections. [That comes from a square root in gamma that shouldn't even be there](#), making the whole field of parameterized post-Newtonian formalisms a hash. But even if the square root had been right, the usual push there would still be a push, since they treat terms in the expansion as if they have some sort of independent existence. They don't. A series isn't the same as a sequence and they should know that. These terms in the series are separated by plus signs, not by commas, so they have no independent existence of the sort these theorists claim they do. You can't assign one term to a field in one theory and another to another field. It is beyond absurd.

They did a similar thing long before Einstein came along, in the same field equations. Laplace, Lagrange, and others, [including Euler](#), [couldn't get multi-body problems to resolve using Newton's field, since it lacked at least one necessary degree of freedom](#). This seemed to introduce chaos into the equations. These 18th century mathematicians used infinite series to expand the equations and then push them, in very hamhanded ways. Unfortunately for them, [I finally caught them at](#). I caught them

because I finally found the missing degree of freedom in the charge field, showing Newton's equations were based on two fields, not one—these fields being in opposition. [This allowed for a total rewriting of the Lagrangian and Hamiltonian](#), dissolving the chaos, but it also showed that [the infinite series math of all these guys was nothing but hocus-pocus](#).

[If you think this paper is just handwaving, with no real math in it, **take the links**. I have put dozens in this paper, and they are links to my own papers, not links to dictionary.com or something.]

I later tripped across famous mathematician Cardano, since he was a precursor of many of the Modern mathematicians I was looking at. He invented complex numbers, [leading to related fudges still being used by the same people](#). He was a thoroughly nasty character, and that is admitted. Another nasty character, sold as the opposite of who he was, is Bolzano. Here is a characteristic quote, straight from his current Wiki page:

His overall philosophical stance was that, contrary to much of the prevailing mathematics of the era, it was better not to introduce intuitive ideas such as time and motion into mathematics. [14] To this end, he was one of the earliest mathematicians to begin instilling rigor into mathematical analysis with his three chief mathematical works . . .

He is correctly sold as one of the first Modern mathematicians, along with Bolyai, Lobachevsky, and Gauss, and that is why. That entire sentence is upside down, though maybe my contemporaries can't see that—since they are also Moderns. Bolzano was teaching his students not to introduce intuitive ideas such as time and motion into mathematics, and then selling that as “rigor”. It is the opposite of rigor, because—as we have seen a thousand times, *and are about to see again*—it is precisely this loss of “intuitive ideas” that keeps Modern math from being checked or criticized. Math can only be tested in the real world, but Bolzano is flipping that on its head. The closer we get to the present, the more powerful and exaggerated Bolzano's conjob has become, and physicists and mathematicians have now completely separated from the real world, even denying it exists. In such a situation, there is no physical check on mathematics. It has become utterly unmoored and fanciful. And mathematicians have unmoored it on purpose: the purpose being the better to hide from you. They want you to think they are smart and important, but as it turns out they aren't. They are frauds. So of course they have to hide behind veils, telling you the veils are all that exist.



It is also worth pointing out that Bolzano was a [Nepomuk from Bohemia](#), tying him tightly to all those

I have exposed on my history site. Metternich was a famous Nepomuk, for instance, and his mother was a Maurer. Mozart's wife von Weber was a Nepomuk. They are crypto-Jewish princes of the highest levels of German/Austrian nobility. Which means Bolzano's philosophy was not upside down by accident. Like his current cousins, he flipped all definitions on purpose, in order to better control his field and all others. Also remember that Bolzano was pretending to be a Catholic priest, like so many others I have exposed. He never preached or lectured on religion, and when he had an opinion on the topic, it was not pro-Catholic or even pro-Christian. We have seen a lot of priests of this period who were actually atheists. Bolzano impresses me as another of them.

In support of that, we find Bolzano linked forward to the logical positivists by **Alois** Hofler, another Jew. The positivists are yet another wildly flapping red flag, since they created the same sort of mist that Bolzano did, in the various fields of philosophy. They were all Jews driving forward Operation Chaos by selling [some billionaire moron like Wittgenstein](#). You can read an overview of Bolzano's philosophy at Wikipedia, if you are inclined. It may be instructive. It is the usual schist. It reminds me of Russell and Whitehead: thousands of pages of nothing passing for something. That is what these people specialize in.

For a long time I just assumed all my discoveries of fraud and fudged equations were isolated and rare cases. I thought someone, somewhere must have been a real mathematician, doing real math. But regarding these people since Newton, they aren't. As in every other field, [math has fallen to corruption](#), a corruption that is now complete. And it started way back in history. You will tell me “such is the world”, and while that is true, the corruption went into overdrive in the 18th century, and has accelerated since then. Because the calculus has always been corrupt, a large proportion of the current [mess comes out of that corruption](#). Mathematicians graduate into the big time once they learn calculus, since that is what everything in physics is now based on. But since they all learn calculus as a fudge, they get the impression that is what math is. Calculus lacks all rigor in the foundations, seeming to give Modern mathematicians a pass on fudging. They figure that if Newton and Leibniz got away with it, they can too. If Euler and Lagrange and Laplace were able to push terms in an infinite expansion to match needed holes and solve problems, why can't they? Isn't that what math is?

No, it definitely isn't what math is, or should be. Math should be a series of logical steps, and the field left that path long ago. In my experience new math is just a gigantic fudge from top to bottom, from your first day in calculus class to the its misuse in a Nobel Prize winning paper.

Just as I have no use for operators (see previous papers), I also have no use for infinite series. This is because I could see from the beginning both were fantastic cheats. I am not interested in pushing equations, so what use were these things to me? I came into physics to solve real problems, not to blow smoke and fill blackboards. I could see that what physics needed was **better visualization** and a *closer* tie to reality. It needed a re-infusion of the intuitive ideas of time and space and length and velocity and force: all the things that had been jettisoned by the Moderns like Bolzano and those that came after. They had been talking about dynamics and mechanics without doing any. Most modern physicists and mathematicians can't even do highschool-level math or physics, since they rush into specialization as fast as possible, before the words can even penetrate their skulls. My readers have watched as I have picked apart highschool and college textbooks line for line, showing the current state of the art. It isn't pretty.

I now see that the whole idea of a function was just a dodge from the beginning. I didn't understand that until [I unwound the tensor calculus](#), where their favorite trick is switching from one set to another every time they get in a bind. Start by creating an undefined set with subscripts or superscripts, then

make up a passel of misty rules. Whenever you think your audience might be suspecting a con, switch sets on them and change your subscripts. In other words, keep changing cloaks. Well, that idea comes straight from Euler, who invented modern set theory and functions, just for that reason. If you want to solve a problem and win a prize (Euler was a genius at winning math prizes), you have to convince your judges you have done a better job than the other guy, despite the fact none of you have solved anything. Euler saw that the best way to do that was with veils, and the primary veil was the function. It got the minds of your judges off the first set by shifting your eyes to a second set. They then forgot to question the initial assumptions, because those assumptions all applied to the first set. It is math as sleight of hand, as a magic trick, which is what all Modern math is. [I have caught these guys](#) [p. 6] differentiating equations *after* admitting there is no dependence. So they ignore their own definition of function whenever they need to.

The idea of the function wasn't invented to clarify any problem, it was invented to adumbrate it, to hide it in the shadows. When I do my own math, I never use functions or sets. If you aren't fudging equations, there is no reason to. In rewriting the calculus, I threw functions in the trash along with limits, series to zero, infinitesimals, and all the rest. None of it is useful. What is useful is precisely what Euler and Bolzano and Bohr and everyone else steered you away from: visualizations, intuition, motions, lengths, time, extension, cause and effect. In other words, REALITY.

This means that the entire math department at your university is just a vast sinecure. It is busywork. It is mystification and promotion of nothing. They make up non-problems, solve them by pushing hundreds of pages of equations, then give themselves prizes for it. Those people haven't solved any real problems in centuries, which is why when I came along there was so much left to do. If Euler had really written 100 volumes of important analysis, he would have all but finished off the physics of his time. Instead, on closer examination, I find that like Bolzano and Russell, Euler published 100 volumes of nothing. That is pretty easy to see, since if he had solved anything important, his bio at Wiki would definitely tell you what that was. We wouldn't have to hear about the seven bridges problem.

To be specific, the most important thing Euler is said to have solved is Newton's field equations, and 10 of his 92 volumes were on that, the *Mechanica*. Except that I have proved he was wrong about everything there, since he never saw that Newton's field was actually two fields stacked, and included the charge field. Without that realization, his solutions could only be fudge, and that's what they were. Two volumes and hundreds of pages of fudges, most of them based on illegal infinite series bashing. It was the work of Euler and these others like Lagrange and Laplace and many others that buried Newton's fairly simple fields and maths under thousands of pages of bad math and analysis, making it almost impossible to correct. The long and extravagant praise and promotion of these mathematicians by the math departments worldwide have prevented progress in their own field, by making correction and extension of Newton impossible. Until I came along, no one had dared to do it in over 300 years.

Euler is given credit for being the first to use π as the circle ratio, but he wasn't. They now admit William Jones was the first. But I guess Euler outranked him. It doesn't matter, because π **isn't** the circle ratio. It is another thing that has been oversold by these people. See below.

Also interesting is that Euler became blind in one eye at age 38, and totally blind later. So his story is almost like a Greek tragedy, isn't it, with the Muses of science signaling his blindness to mechanics and kinematics by actual blindness.



Not sure what that mess is on his head or why anyone would want to be painted like that. He does look like a complete fool though, you have to admit, being painted in his pajamas, with a dishtowel on his head. Whatever else he was, he wasn't a visual man.

Euler supposedly proved the infinitude of primes using the divergence of the harmonic series, which also proves my point: we don't need a proof of the infinitude of primes, since it is self-evident. Primes are defined relative to integers or natural numbers, which are infinite, therefore primes must be infinite. Besides, Euclid had already proven this 2000 years earlier. Did anyone really think that if you went big enough with numbers, you would quit getting primes? Seriously? And yet most of Euler's proofs are of this Nature: they are number games, and tell us nothing about the world, or even about natural numbers. Why would anyone even waste a moment proving something like that, when there is work to do in physics?

The entire idea of the limit is another fudge at the foundational level, though I guess no one has ever seen that before me, or felt like admitting it. *$f(x)$ tends to L as x tends to c* . I pointed out in my first calculus paper that the epsilon-delta proof, which came through Euler and Weierstrauss, had to be dealing with lengths, and amazingly the Wikipedia pages on that now admit it. In other words, x has to be a length in that last definition. I don't think the textbooks did admit that twenty years ago, so they may be responding to my paper. They admit delta is a length and epsilon an error, and that the old guys including Cauchy wrote it like that. It isn't taught that way anymore, or wasn't when I was going to school. At any rate, no one has seen that that, by itself, dooms all analysis since Euler. Why? Because I have shown that when using calculus, the function of x doesn't "tend" to the limit as x tends to p . Don't you see how criminally squishy that language is? Numbers tend to approach some other number? That's just crap. In my calculus, numbers don't tend to anything, or approach anything, since we aren't headed to zero. We aren't "headed" anywhere. All numbers, considered as real lengths, have definite derivatives based on their exponents. The numbers and exponents fully determine any derivative or integral, so there is no "tending", "approaching", or other room for movement. The exponent tells us how many rates of change the function is below the given variable, and that number is a small number, not infinity and not zero. So calculus has absolutely nothing to do with either zero or infinite series or approaching or tending or arrows.

So why continue to teach us it does? I am telling you it is all the usual conjob. Once you have defined

calculus this way, using limits and infinite series and approaches to zero, you have blown the whole field from the inside, opening it up to infinite fraud. You can prove anything once you have an epsilon connected to your delta with a rubberband. In my calculus, these small lengths like epsilon and delta are defined and definite and immovable. But in the current calculus, both those lengths are just bracketed by greater-than and less-than signs.

For every real $\epsilon > 0$, there exists a real $\delta > 0$ such that for all real x , $0 < |x - p| < \delta$ implies that $|f(x) - L| < \epsilon$.

For example, ask yourself this: **how much** less than δ is $|x - p|$? Could be anything, down to zero, right? So even if δ is fixed at a given number, you have room for movement with $|x - p|$. Never thought of it that way, did you? That's because they don't want you to notice that. That gives away their con. To say it another way, they say that δ , ϵ , and x are real there, making you think this is all connected to reality. But ϵ , δ , and x are not connected firmly *to one another* because p is undefined. It could be anything, making it a fudge factor. If you want to start pushing equations based on these field definitions, you can easily do so by letting p vary to your heart's content. You can push $|x - p|$ closer to δ or to 0. Even if p is a constant, you can push this by choosing a larger or smaller p . Saying p is a constant just means it is constant among terms, but by choosing a larger or smaller constant you can move things around to suit yourself. That is the beauty of infinite series. That is why they are loved. You can't do that with my calculus, which is why they aren't interested in it.

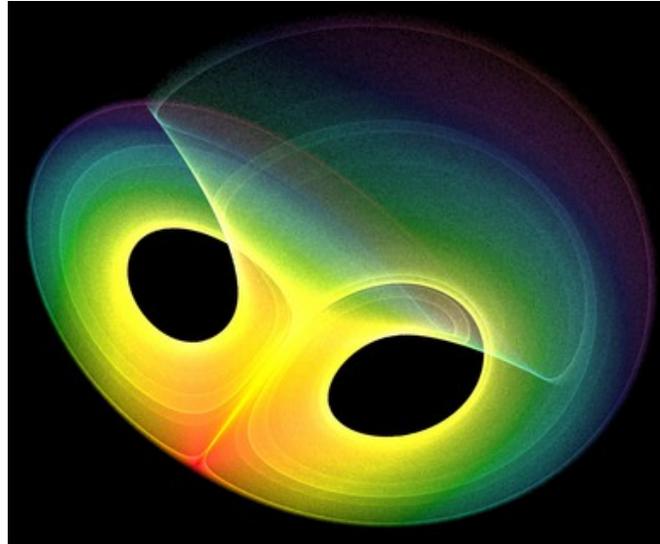
Same reason current politicians on both sides love voting machines.

You will say they get the right answers, but they don't. Yes, they are often able to push their results to known answers—answers that are known from doing real-life experiments. But when they are writing equations for unknowns, they are often very wrong. We see that whenever they try to solve circles or orbits, since they try to push polygons into circles by approaching infinite sides. This means they badly miscalculate curves and accelerations, and I have shown that is what caused them to miss the Moon back in the 1950s. It wasn't a small miss, either, [since they were wrong by about 20%](#). Which shows you the amount of room they have for fudging. They can push simple equations by 20% just by fudging these calculus equations. See more below, where I prove that again in this paper.

In the same way, they can fudge field equations by completely reversing them. We saw this in the [C-orbit asteroid problem](#), where they were able to make gravity—a *pulling* force—make asteroids turn around and go away from the Earth. That can be done by just flipping a minus to a plus in the differentials and burying it under the normal piles of equations—which nobody reads.

I say this is new to me because I when I wrote that calculus paper back in 2002, I had no idea this is what was going on. I knew there was a problem with epsilon-delta, and my mother (who is a mathematician) and I went around and around on it. It never occurred to me to look even closer at that definition, as I just did. Even coming into this paper I hadn't seen that, and that is not what got me started today. I only saw it once I got into it. As I told you, the Muse pushes me into things and I have no idea what I will find. She gives me the hint and tells me to go to work, I get a hunch, and I end up like this. Every paper is like this and I can hardly tell you how fun it is.

Here's something else I tripped upon by accident today. If you go to the Wiki page on mathematical analysis, this is the first visual you see:



Now that you are down the rabbit hole, maybe you can see that for what it is. They tell us it is “a strange attractor arising from a differential equation”. What else is it? An owl. Just an accident? You have to be kidding me.

But let's go back to the math. My discovery about curved motion and π from many years ago is still sifting through my head. It still dumbfounds me this was never seen before I came along. If you don't know what I am talking about, I will quickly gloss it for you. If you are a mathematician or scientist of any kind, you shouldn't be able to take another step forward until you understand it. **In short, the circumference equation is wrong and always has been.**

You will say, “how can it be wrong? It can easily be checked with a tape measure, and it is known to be right to extremely high accuracy.” But that is just the problem. And this problem takes us right back to Bolzano and what he said about mathematics **not being the proper realm for motion or time**. The circumference was solved by mathematicians, not by physicists, and they solved it by ignoring time and motion. When you wrap that string around a curved object, it is not moving, is it? The string is stationary and it hits all points along the circumference *at the same time*. So it is not a kinematic or dynamic problem, is it? It is geometry.

When we talk about a circumference, we have always been talking about that length that we measure with a string or tape or something. But that is the wrong way to measure it. In fact, you *can't* measure it that way in real life, because you could never travel that circumference the way the string does. You can't hit all points at once, like the string. You have to hit them one by one.

Despite that, physicists and mathematicians have always tried to solve orbital equations by applying old circumference math to them. Although the two problems of static circumference and orbit are completely different, the mainstream has always applied the same basic analysis to both, and the same basic calculus.

Which shows you how disastrously wrong Bolzano and all the rest have been. By burying their heads in “pure math”, they mismeasured the circumference and all real curves by something like 20%. If you still don't see it, keep reading.

Since real life is kinematic and dynamic, not just geometric, you should have to measure all distances by including time and motion. Since time is another parameter, it obviously adds a degree of freedom and another variable to the problem. It turns every 3-vector into a 4-vector.

Already, the only way you could answer me at this point is to say, “Sure, it is a four vector, but the 4th vector adds nothing to the math or solution. The answer is the same in any possible field of any possible number of vectors, and adding time to a problem doesn't change the solution”. I hope you see how illogical that is. If that were true, there would never be any reason to have a 4-vector. If time doesn't matter to any solutions, why even have a mathematical variable for it?

Instead of measuring the circumference with a tape, you should have to measure it by moving some object along it, and solving it with 4-vector equations. But that has never been done. The way they currently solve 4-vector equations in physics is to import geometric numbers like the circumference and π into them. But this is sloppy in the extreme as a matter of applied math, since it is or should be illegal to do that. Those numbers were found in 3-vector fields with 3-vector math, so they can't be imported into 4-vector math. **Those numbers don't include time or motion, so they can't be imported into equations or fields that do.**

You will say, “This is just cavilling. What possible difference does it make?” It makes a huge difference, as I have shown. In orbital equations, the difference is the difference between π and 4, which is not slight.

If you are still saying, “How can this be! It makes no sense”, let me continue. Think of it this way: the reason you can't measure the circumference with a tape is very simple. Although the number you find with the tape is fine in a static 3-vector field, it simply doesn't apply to most real-life situations, since the problems you will be solving will include time and motion. So, again, you have to move an object along the circumference, and measure it that way. Only then will your math work. Only then will you get the correct kinematic circumference, or orbit. Now, instead of using the tape, think of making your circle very large and actually walking it. So, contra Bolzano and the rest, **it is a problem of motion.** You can't solve a problem of motion by ignoring time, pretending it doesn't exist, or importing numbers from static solutions.

In the current equations, the circle curves, meaning it goes two directions at the same time. It has an x and a y component, for instance. But you can't walk it like that, can you? **You can't walk north and east at the same time.** You will no doubt say, “sure I can, I just walk northeast.” But if you look closely, that isn't what curved motion is. According to the calculus you are defending here, curved motion is an **integration** of two motions. Integrating north and east in calculus doesn't give you a straight northeast vector, because that would imply integration was just a vector addition of some sort. It isn't. You can't just make a little triangle and walk the third leg of it, since that is to utterly ignore both curvature and integration. It is to ignore the whole rate of change concept that lies at the heart of calculus and the derivative. To integrate the two motions, you have to keep the two motions at all times. If you start walking northeast, you haven't done that, because northeast is neither north nor east. You aren't then walking both north and east, you are walking neither.

If you want me to use your limit language, you have to keep the north and east vectors *all the way to the limit*. Currently, the mainstream solution is this: we push a polygon to a circle by increasing the number of sides to infinity. As we approach that limit, north and east approach becoming northeast, so we can just sum all those northeast vectors to get the circumference. But hopefully you see how disastrously wrong that was, since that isn't what happens at a limit. At a limit, your vectors don't just

magically become unmoored, changing lengths and directions. The short sides of a triangle don't just magically become the hypotenuse. The short sides are the short sides, all the way to the limit.

Which of course means that the limit concept is not only useless here, it is wrong. We don't need to take those vectors to a limit to add them, since we can add them at any size and get the same answer. The kinematic circumference is just $4d$. That's why Hilbert had to import the Manhattan metric into quantum mechanics to solve problems there. In the Manhattan metric, π is 4, which clears out a whole nest of errors in that field.

Which is also why Euler couldn't solve Frederick's garden problem. That problem had to do with real curves. My guess is he was off by at least 20%, making Frederick mad.

You will say the current math works on the static circumference, and that is true. So the math is right. Maybe, but it has very limited application in physics, since it would apply only to static, planar physics, and there is no such thing. In the real world there is no such thing as an area, a plane, or a 2D surface. Every surface is actually 3D, or 4D if we include time. Every real thing has width, even a photon. So nothing is an area and everything is a volume. Since volumes are not just geometric either, **since they contain things in motion**, they can't be described by the current calculus. The mathematical analysis of volumes is all wrong. So is the analysis of topography, since it treats surfaces as geometrical instead of kinematic. This one mistake has doomed all of current applied math in almost all fields.

You will say, "I see what you are saying, but why does the current calculus work on the static circumference? It still seems amazing that it would get the right answer, even if it has little real-world application in physics." It works because the current calculus applies to the static string around the circle, which *isn't* trying to move in two ways at once. Because of that, north and east don't have to be integrated in the same way. There is no rate of change of that sort, because nothing is changing, you see. The string isn't moving either north or east, and there are no vectors. So it is a completely different problem. In some ways it is a much more difficult problem, as you have seen, but that is almost beside the point. The point is that mathematicians have spent all their time solving planar problems, not realizing they were planar only. Physicists then imported their math into real 4-vector fields without any analysis, creating massive problems. All of science is infected with this idiotic 2 or 3-vector calculus, and no one will admit a mistake has been made. They could have said, "Gee, thanks Miles, that really helps", which it does, but instead they have just gotten mad at me, calling me names and telling me to go play somewhere else. In other words, they started this war, not me. I was just solving problems. But if they want a war, I will be happy to oblige them. I will bring the entire edifice down around their ears. And I have.