
HOW LEIBNIZ CHANGED THE PAST FROM THE FUTURE

The axiom busting power of the catenary principle

By Pierre Beaudry, 9/25/15

INTRODUCTION

The most difficult part of an historical axiomatic change is located in changing a state of mind of the past that has become so dangerous for mankind's survival that without that change, mankind might not survive. This problem is compounded by the fact that the idea of changing such a state of mind seems to be neither possible nor remedial. Therefore, my question is: ***“How can you change the past?”***

Unfortunately, I already hear the likely response from most of you, which is: ***“How can you change the past when it is gone forever and it can never come back?”*** If that is the way you think, then, you may not like the rest of this paper, because you might be inclined to think like Aristotelians and consider that this type of questioning is foolish and useless.

On the other hand, if you think like Plato, that is, like a human being, you will understand that you can change the past by causing the reversal of an old state of mind into a new and improved state of mind that had not existed before, and which is generated from the future. Don't forget that you have a memory which can bring things back in a changed manner, if you wish, and in a form that is different from what you have experienced before. So, yes, you can change your own past.

However, the problem is that most people are Aristotelians and they prefer to live and think like animals; that is, deductively like mathematicians. They don't pay attention to what is going on in their own minds except when they get hit over the head with a two by four. And

then, only then, after they are shocked out of their wits, is there a possibility that they might become willing to abandon the domain of their deceiving sense perception views and become willing to change and let their old past die in peace.

So, unless they get hit hard enough, most people will always believe that their past cannot be improved on and changed, because their minds cannot accept the idea that creative time is reversible. At best, they will accept that the future can change the present, because the present has not yet passed away, but they are incapable of reviving the dead past in the form of a new life, a new past. They can't think like that because they are convinced that change must always go from the past to the future and never from the present to the past. I will show you that Leibniz was thinking otherwise.

The irony is that animals and mathematicians are entirely in agreement with such practical people, because they are also trapped within the fixed time continuum of sense perception. On the other hand, real human beings know they are determined by their future. You can prove the truth of that reality by using the Leibniz geometric method of inversion of tangents, but only performatively as opposed to mathematically; that is, if you set it up like a [mousetrap principle](#) by putting your own life on the line for the future of mankind.

1. HOW LEIBNIZ CHANGED AXIOMS BY TIME-REVERSAL

“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.

Throughout the years, I have come to gradually understand that my actual grasp of a relationship between the human mind and the universe as a whole was proportional to my willingness to change the way people think, but only if they are also willing to change. However, I have found that the biggest stumbling block is always that most people refuse to change. So, in consequence, I decided to devise a method which I have come to adopt as the axiom busting method that Lyn has taught us, and I used it first on myself, performatively, along with two Leibnizian principles: the *principle of proportionality* and the *principle of continuity*. That has become the only reasonable way I could find myself capable of changing the way people think.

I started with the Leibniz *principle of proportionality* between reason and power whereby “*each may understand of what he is capable, and be capable of as much as he understands,*” (*Outline of a Memorandum ...*, (1671), published in *Political Economy of the American Revolution*, EIR, 1995, p. 216), and then I added the Leibniz *principle of continuity*, which states that “*as the data are ordered, so the unknowns are ordered also.*” (Leibniz’s reply to Father Malebranche on the principle of continuity, *Nouvelle de la république des lettres*, July 1687, in *Philosophical Papers and Letters*, ed. Loemker, Vol. 2, p. 351-54)

That second geometric *principle of continuity* can be very fruitful if you learn how to apply it to the transformation of the human mind. Take the catenary-tractrix integral system as a heuristic example and consider the tangents of the catenary and tractrix-curves as inversions of the tangents and radii of the circle. When you take the tangent function to its limit, that is, to infinity, the tangent goes into an inversion, and when it does that, you are able to create something new that did not exist before. In such a case, you become able to create an integration of three different curves from a single complex action: the catenary-curve, the tractrix-curve, and the sine-curve. That new integration is based on a new type of multiply connected action which is superior to simple circular action. All of that can and must be done without trigonometry, without mathematics. If you do it with mathematics, you will fail, because mathematics could only fake such a process. As Lyn emphasized about the evil of mathematics:

“The problem is, that most of our people believe in mathematics. And mathematics has been a force of destruction in the 20th Century and what has been added so far in this new century. And this comes to point that if we applied an algebraic form of policymaking, we would doom ourselves to a great catastrophe; because without that change, that qualification, mankind does not have competent scientific knowledge of the type which is needed.

“Now, in our history, we start with the Renaissance on this question; particularly Nicholas of Cusa, and it goes on to Leibniz, and from the leap there into the actual modern physical science. And Gauss was the founder of that school in that new form after Leibniz’s death. Everything that’s true about science and related human behavior is absolutely opposed to anything resembling mathematics.

“Mathematics is a poison; it makes people stupid. And therefore, the important thing in this organization, if it’s going to be successful is that it’s got to understand that discrimination.” (Lyndon LaRouche, *NEC Meeting*, Tuesday September 15, 2015.)

So, the discovery of principle I want to show you, here, is geometrically performative as opposed to mathematical, and it is very similar to the inversion of tangents that Leibniz developed in his own construction of the catenary-curve. See my translation of two Leibniz

papers: [GOTTFRIED LEIBNIZ, "TWO PAPERS ON THE CATENARY-CURVE AND LOGARITHMIC CURVE."](#)

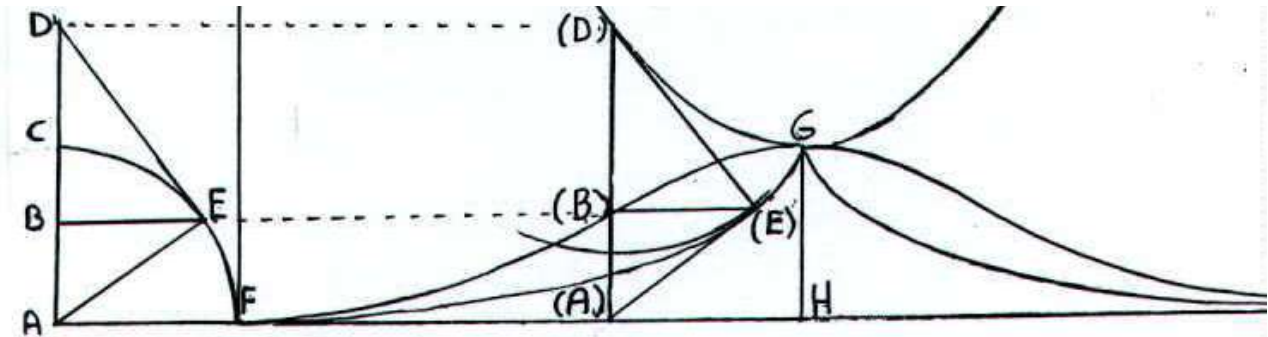


Figure 1 My 2001 pedagogical device for a synthetic geometric construction of the Catenary-Tractrix integral system of three curves using the Leibniz method of inversion of tangents instead of a trigonometric function requires the inversion of the tangent **DE** of the circle **CEF** into the tangent **(D)(E)** of the catenary-curve **(D)G**, and the inversion of the radius **AE** of the circle **CEF** into the tangent **(A)(E)** of the tractrix-curve **G(E)F**. The inverse motion from the future to the past, that is, from **GH** to **CA** also generates the sine-curve **G(B)F**. See my 2014 paper: [LEIBNIZ'S PROMETHEAN PRINCIPLE OF CREATIVITY](#).

Consider the following pedagogical device (**Figure 1**) as representing a process of time going from left to right, as if it were progressing from the past to the future, and look at what happens at the singular interruption of the infinite vertical tangent **F**. This last tangent line is not only located at the endpoint of the circle; it is also identical with the starting point, at infinity, of the first tangent of the catenary-curve. *Here, you must pay attention to the intention behind the fact that a state of axiomatic change has been ascribed to the last moment of a previous state at the same time as to the first moment of a later state.* Therefore, consider patiently what happens before and after that axiomatic blind spot **F** and apply it to the state of change that Leibniz discusses in his *Pacidius to Philalethes* dialogue published recently in *The Labyrinth of the Continuum*, ed. Richard Arthur, Yale University Press, 2001. This is the locus of an identity of the opposites, therefore, as Leibniz might ask: *“How can the last moment of a circular tangent process also be the first moment of a catenary tangent process?”*

This is the way that Leibniz thinks by time-reversal, although he rarely talked about it in temporal terms. When he says “*given the property of the tangent, find the curve,*” Leibniz inverts completely the a priori process of Euclid and discovers a new curve that did not exist before, from the future. This is the kind of process that mathematicians cannot handle, because it is not deductive; it is inferential. The reason why people have difficulties with this process of *changing the past by time-reversal* is because they believe that time has to be based on deductive sense perception and that the passing of time can never be interrupted by anything that counters that perception.

2. THE REAL POWER OF IDEAS IS TO GO BEYOND THE LIMIT

“Only Geometry can provide a thread for the Labyrinth of the Composition of the Continuum,…”

Gottfried Leibniz, *De usu geometriae*, 1676

Why are people afraid to investigate limits? Because they fear they are going to lose everything in the end. They think that limits are actual dead ends. They don't realize that limits are opportunities for their minds to go beyond them and grow. Limits to growth, limits to resources, limits to free speech, etc., people think that everything must be limited by some boundary condition that you can never transgress and go beyond. They think like the road blocker: “*Hey buddy, this is the end of the road, you can't go any further. You have to turn back.*”

That is really silly, because when you assume that greenie state of mind, you can't see that the real power of ideas is to go beyond the limit of everything; you can't see that man can transform the so called limits of almost anything into an opening to something better. And the beauty is that the only creature capable of doing that is man. And, when a single individual succeeds in breaking through limits, it is freedom for the whole of humanity.

Take the case of the unity of the opposites in the Leibniz dialogue entitled *Placidius and Philalethes* in *The Labyrinth of the Continuum*, edited by R. Arthur. The labyrinth that Leibniz brings you into gives no guarantee that you can come out of it unscathed once you have taken the decision to enter into it. However, when you enter into such a (k)no(w)-where, you really don't know where you are going to end up, but you may discover how to maneuver your way through it, along the way.

If so, then, let's enter into the axiomatic limit that Leibniz poses with respect to the notion of change within a continuum. Take the case of death and consider it from the vantage point of the condition that Leibniz set with respect to his principle of continuity. How do you solve the perplexing question that he posed in the dialogue: "*Is the last moment of living the same as the first moment of non-living?*" (*The Labyrinth of the Continuum*, p. 147).

For someone who can handle the idea of the identity of the opposites, this question poses no real difficulty. However, for a deductive mind, this question is an absurdity, a complete impossibility. This is how, in a typical Socratic dialogue in which one discovers one's knowledge through a series of rigorous questions, Leibniz lets Charinus fall into his own trap of sense perception. Charinus concluded that the question was completely absurd and assumed that the way to solve it was by using the Aristotelian trick of establishing two contiguous points, as in the case of the contact of a sphere placed on a perfectly flat table. The point on the sphere and the point on the table are two different points, which cannot be identical but only contiguous.

Here, Pacidius (Gottfried in Latin) leads Charinus to discover a way to solve the issue by actually avoiding conceptualizing the limit case of an instantaneous transformation, and by rushing to the conclusion that such an instant cannot exist and not exist at the same time. So, without warning about the dangers of sense perception, Leibniz sets the following Aristotelian trap for the reader to fall into. Theophilus says:

"Th.: Remember that Aristotle, too, distinguishes the continuous from the continuous in such a way that those things are *continuous* whose extrema are one, and *contiguous* whose extrema are together. (Aristotle, *Physics V*, (3), 227a.)

"Pa.: In the same way, therefore, we will say with Charinus that the state of being alive and that of being dead are merely contiguous, and have no extrema in common.

"Ch.: It is very polite of you to cite me as the author of what you have brought into being in my soul.

"Pa.: I have already told you that you owe your opinions to yourself, and the occasion for them to me. But this will be confirmed in the larger view, although it is the same through the stages." (*The Labyrinth of the Continuum*, p. 149.)

The argument of Pacidius became so obvious to everyone in the dialogue that Gallutius also fell into the same trap of sense perception as did Charinus, but became offended when he discovered he could not get something more substantial out of Pacidius. Here is the interesting exchange of Gallutius's disappointment and the surprise ending of Pacidius:

“Ga.: To be clear, then, I would like to know whether you think anything of particular moment [sic] can be deduced from this.

“Pa.: If I didn't know who you were, Gallutius, I would have been surprised you hadn't asked me this long ago. For I know that otherwise, to men who are versed in the investigation of nature and the light of experiments, these things seem either foolish or at any rate useless. But you will acquiesce, I believe, upon considering that when principles are at stake, nothing ought to be regarded as insignificant.

“Ga.: Actually, I am not a stranger to abstract matters that I do not recognize that the elements of all the sciences are tenuous things, like the first threads of a larger warp. It is just that since I know you usually build a road to larger concerns gradually, I was expecting to get a foretaste of this which would throw light on the things you have said and are about to say.

“Pa.: I cannot satisfy your desire at this point, Gallutius, and nor ought I do it, if I could. I cannot do so because, just as hunters do not always chase a certain designated wild animal, but are often content with whatever prey they come upon, so we should force ourselves to snatch up truths as they come...” (*Ibidem*)

It should not be surprising for the reader to discover that Leibniz has so abruptly cut the dialogue at this point, because the point of cutting with sense perception was the point to be made. However, the question remains: Could there not be some other answer from the standpoint of mind as opposed to from the practicalities of sense perception? At that point in time, it seems that Leibniz had no other answer. However, as a Platonist, Leibniz was fully versed in Plato's ideas of the nature of an instantaneous change that it has to be conceived as being neither in motion nor at rest. In *The Parmenides*, Plato wrote:

“When it (instantaneous change) passes from being in existence to ceasing to exist, or from being nonexistent to coming into existence, it is then between certain motions and states; it is then neither existent nor nonexistent, and it is neither coming into existence nor ceasing to exist. By the same reasoning, when it passes from one to many or from many to one, it is not either one or many, and it is not being separated or being combined.” (Plato, *The Parmenides*, trans., F. M. Cornford, 157a)

But, what is the significance of conceiving such a state of inbetweenness? If it is the case that when something changes, it has to pass into the inbetweenness of an intermediate state of limbo, that is, between motion and rest, then, how could such an intermediate state be of any significance for science?

Take the case of an axiomatic change in which everything that existed before in your mind gets transformed and no longer exists in the old form after a new principle eliminated the previous axioms of your belief. Not only is the past state of mind no-longer living, but a new state of mind is alive and the mind is significantly improved after that change, as if it had passed from non-life to life. Here you have an interesting inversion in which a new life comes after the death of the old one. Is that death and life changing process not similar to the life and death changing process we have considered above? How do you explain that sort of change? What's the difference between a renaissance and the death of a living being?

The point that Leibniz made is neither about death and life or life and death, as such; it is about the ability of the mind to ascribe discontinuities to a continuum. *How can the last moment of an earlier state become continuous with the first moment of a new state of existence?* In other words, in an axiomatic transformation of the mind, how can the past be changed and transformed into an improved state of existence from the future? How can something be transformed into something else by means of discontinuities within a continuum? This is how, for Plato and Leibniz, the contradictory state is admissible. So, the question really is: *What is the nature of discontinuities in a continuum?* That is the question of the transfinite.

Leibniz solved this exquisite problem in a letter to Father Malebranche in July of 1687 in which the axiomatic conundrum that he had developed in his dialogue, eleven years earlier, was presented geometrically as the singularity of an ellipse becoming transformed continuously into a parabola. This is where Leibniz defined for the first time his *principle of continuity* as being based on geometrical discontinuities within the continuum. In this case, the discontinuity must always be a geometrical blind spot at infinity that is clearly understood by the mind only.

I say “geometrical,” because it cannot be “mathematical.” And, I say “at infinity” because it cannot be “finite.” In other words, the last point of a previous domain projected at infinity becomes the first point of a new domain at that infinity. This Leibnizian discovery has tremendous significance for the future of science; that is, for the future of mankind and, as Lyn recognized, only the school of Gauss and of Riemann was able to grasp its full significance, before Twentieth Century science began to degenerate into Bertrand Russell mathemagics. Here is how Leibniz solved the problem:

“This principle has its origin in the *infinite* and is absolutely necessary in geometry, but it is effective in physics as well, because the sovereign wisdom, the source of all things, acts as a perfect geometrician, observing a harmony to which nothing can be added. This is why the principle serves me as a test or criterion by which to reveal the error of an ill-conceived opinion at once and from the outside, even before a penetrating internal examination has begun. It can be formulated as follows. *When the difference*

between two instances in a given series or that which is presupposed can be diminished until it becomes smaller than any given quantity whatsoever, the corresponding difference in what is sought or in their results must of necessity also be diminished or become less than any given quantity whatsoever. Or to put it more commonly, when two instances or data approach each other continuously, so that one at last passes over into the other, it is necessary for their consequences or results (or the unknown) to do so also. This depends on a more general principle: that, as the data are ordered, so the unknowns are ordered also. ” (Gottfried Leibniz, *LETTER OF MR. LEIBNIZ ON A GENERAL PRINCIPLE USEFUL IN EXPLAINING THE LAWS OF NATURE THROUGH A CONSIDERATION OF THE DIVINE WISDOM; TO SERVE AS A REPLY TO THE RESPONSE OF THE REV. FATHER MALEBRANCHE*, July, 1687, in *THE PHILOSOPHICAL PAPERS AND LETTERS*, ed., E. Loemker, , Kluwer Academic Publishers, Vol. 2, Boston, 1989, p. 351)

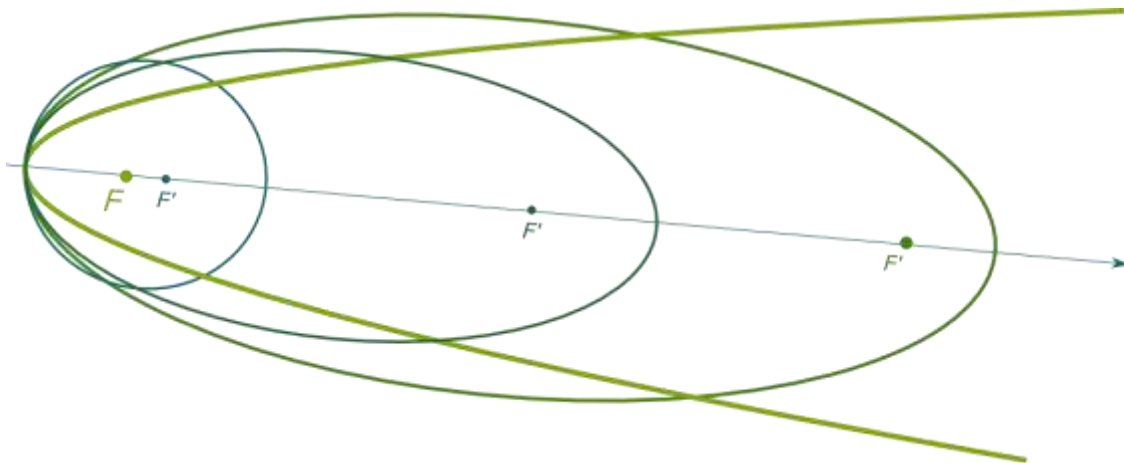


Figure 2 As the second focus goes to infinity, the ellipse becomes a parabola.

The heuristic example Leibniz gave is that of an ellipse changing into a parabola. (**Figure 2**) In such a changing motion, the second focus of the ellipse goes to infinity and the ellipse becomes transformed from the future into something that never existed before. Leibniz will again, return to the same example, five years later, in his *CRITICAL THOUGHTS ON THE GENERAL PART OF THE PRINCIPLES OF DESCARTES*, (Ibidem). The point that he made, then, about this fundamental principle was that “*Geometry is full of examples of this*

kind, but nature, whose most wise Author uses the most perfect geometry, observes the same rule; otherwise it could not follow any orderly progress.” (Ibid, p. 398)

As Lyn has been demonstrating for more than fifty years, these are the kinds of changes that the human mind goes through in order to achieve increasing levels of energy-flux-density. That is the pathway of scientific progress. The irony, therefore, is that for animal life, Aristotelians, and mathematicians, the first moment of non-life is death, but, for human beings, the first moment of non-life is immortality.

3. THE PRINCIPLE OF “AGAPE” OR HOW TO CHANGE PAST HISTORY

“The last shall be the first ...”

Matthew, 20.16

How do you apply these Leibniz principles to living history? The important thing to understand about changing the past is to consider the force embodying the long waves of history in the development of ideas; that is, to internalize the fact that, although they are immortal, historical axiomatic ideas, or principles, may have a slow start in life, after they have first been discovered, and may take centuries, even millennia, to develop into full maturity. When the mind creates a principle, as opposed to spinning a perception, it is not always immediately understood and the principle may not be adopted immediately by the ignorant human population that receives it. So, the new principle can remain alive, but dormant, for a very long period of time, until it is ready to spring out suddenly and be adopted by the totality of the human species.

The Platonic principle of *agape*, or love of mankind, is such an idea that has the potential to come to full maturity, today, that is, after having gone through a long dormant religious phase under the early period of Christianity, the Charlemagne Economic revolution, Louis XI's Nation State, Nicholas of Cusa's Italian Renaissance, Jean-Baptiste Colbert's Industrial Revolution, Jules Mazarin's Peace of Westphalia, Alexander Hamilton's American Revolution and Constitution, Lyndon LaRouche's Science of Christian Economics, and finally the recent Win-Win policy of Xi-Jinping.

This is a principle whose origin may have been first recorded historically with Plato in the West and with Confucius in the East, and which has had its first crucial impact on the world in the Middle East with the Crucifixion of Christ two thousand years ago. The Christian martyrs that followed in Christ's footsteps were a continuation of the living embodiment of that principle

and the lives of Saints have all been examples of the same idea of giving one's life for the love of God in order to save humanity.

As I indicated in my previous report on [SYNARCHIST FASCISM AND TIME-REVERSAL](#), the Jeanne d'Arc mission which gave rise to the Italian Renaissance of Nicholas of Cusa and the Nation-State of Louis XI in France, during the fifteenth century, was another such case of an action done in the name of mankind. The point I want to make, here, is that the complex geometry of this living principle of *agape* is not simply a matter of faith; it is a matter of divine geometry of the infinite as Leibniz understood in his *principle of continuity*; that is, a transfinite Theo-geometry for the creative development of the human mind.

This is how a matter of soul can be transformed into a matter of mind. In other words, the time has come for the historical principle of *agape* to be changed axiomatically and to become established as the primary principle of the future of mankind, as reflecting the common interest of mankind. With this principle, the time has come for humanity to grow up and to unify faith with reason. That's the necessary historical renaissance the world has to go through today.

An example of how this principle has been prevented from taking form in the last thousand years of European history is the Treaty of Troyes of 1420 compared with the Oath of Strasbourg of 842. Although there are 578 years separating the two events, they are a continuation of each other from the standpoint of principle. They are both explicitly *anti-agapic* treaties that have dominated and divided the nations of Europe for more than a thousand years and are still a *causus belli* dividing Europe to this day.

The first anti-agapic alliance, the Oath of 842, was established by the two grandsons of Charlemagne, Charles the Bald and Louis of Germany, against their third brother Lothar, when they swore to an agreement that the Kingdom of Charlemagne shall become permanently divided geographically into three parts, Germania, Lotharingia, and Francia. See my report: [JEANNE D'ARC AND THE BURGUNDIAN QUESTION](#)

The second anti-agapic event was the 1420 Treaty of Troyes which was executed by Henry V of England and Charles VI of France, agreeing that the King of England shall rule over France and that, implicitly, the previous three parts of Europe divided by the grandsons of Charlemagne shall remain permanently. In order to buttress that idea, an agreement had been reached, a few years earlier in order to acknowledge the English claim to France, between Sigismund, Emperor of Germany and Henry V at the Treaty of Canterbury (1416) after the French defeat at Agincourt. Compare the language and the intentions of the two texts:

The Oath of Strasbourg (842)

« For the love of God, for the salvation of the Christian people, and for both our salvation, from this day forward, as long as God gives me knowledge and power, I will defend this brother of mine, as it must be and is just to help one's brother, under the condition that he does the same for me, and I shall not come to any agreement with my brother Lothar which would be willfully detrimental to him.» ([*Serment de Strasbourg.*](#))

The Treaty of Troyes (1420)

« 29. Item, considering the horrible and enormous crimes and misdemeanors committed against the kingdom of France by Charles, the so-called dauphin of Vienna, it is agreed among us that neither our son Henry, neither our very dear Philippe, Duke of Burgundy, shall discuss any peace or concordance with the said Charles, and will not sign any treaty, unless all three of us and our three states of the two stated Kingdoms shall come in council and achieve consent ...» (Translation P. B. Le *Traite de Troyes (1420)* dans [*Les grands traités de la Guerre de cent ans,*](#) Éditeur Cosneau, Paris, 1889, p. 102-113)

In the long waves of European history, what was prevented to happen was the establishment of a unity of purpose of Charlemagne's Europe among the French, the Burgundians, and the Germans, etc. In 1420, while maintaining the same geopolitical division as in 842, the only difference was that the English were to be in control of France. That was the true origin of British geopolitics, and it was this division of Europe that gave rise to the mission of Jeanne d'Arc. This is the millennial period of geopolitical history that is today coming to an end. In the first instance (842), Germania and Francia allied against Lotharingia, and in the second instance (1420), England, with the support of Germany (Emperor Sigismund) and Lotharingia (Philippe the Good, Duke of Burgundy), was to become the ruler over France.

The ironic twist of the situation, however, was the inclusion of Sigismund in the whole combination. In fact, Sigismund claimed he wanted to unify the Catholic Church by putting an end to the papal schism; but, he considered that the war between France and England was an obstacle to his plan. In reality, he wanted to create a German-French-English alliance to launch a new crusade against the Turks. As a result of his alliance with England, Sigismund guaranteed another five hundred years of wars in Europe. That's the sort of past that has to be changed, because that is the geopolitical madness that is intent on destroying the world today.

With the change already initiated with the Putin military intervention in Syria and the positive German reaction to the Syrian refugee invasion of Europe, you have a return to the spirit of the Peace of Westphalia and of Charlemagne. As Lyn put it in reference to the present refugee crisis:

“Because, what has happened, it started with Germany, and Germany took a policy which said they're not going to blockade those people who are running out of fear and desperation, into Europe, and Europe officially *turned the policy around*. They now have a new policy, and the German policy, which is a reform, is now coming into effect. We're not sure about how all the nations are going to respond to this. But Germany is a very important part of this thing.

“And Germany is on the basis of moving toward cooperation with Russia. That's only behind the scenes, but that's there. So suddenly there has been a turn, within the past two weeks, a sudden turn in European policies, on every respect you can imagine. I mean, two weeks ago, you had the whole German population was seemingly about to kill all the immigrants that tried to get into Europe. Now, that's over; it's not completely over, there're still holdouts and so forth, but the policy of Germany has changed.

“Now, at the same time, the policy has changed for Putin, in respect to what's going on in that part of the network. So there are fundamental changes, and the fact of what the United Nations conference is going to be in the coming week or so, this is going to be a very decisive consideration.” (Lyndon LaRouche, *Morning Briefing for September 12, 2015*)

So, as a result of this powerful long wave of history, you are now going to find that people inside of the Obama administration will begin to consider using Amendment 25 to remove Obama as the only way to diffuse the present crisis. Although that will not solve the problem caused by the required axiomatic change, it will nonetheless have the effect of diffusing the detonator of World War III. What must happen next, however, is to create a sudden axiomatic turn in the direction of history, a shift that will make visible to the entire world how the past has to be changed.

CONCLUSION

Therefore, what I am trying to do is to demonstrate to you the uniqueness of an axiomatic epistemological experiment; that is, an experiment whereby a catenary-curve can be constructed geometrically as a heuristic device representing how the human mind increases its power by changing from a lower to a higher manifold from the future. That, to me, reflects my understanding of Leibniz from LaRouche's standpoint. See my report: [BRUNELLESCHI'S MIND AND THE CATENARY PRINCIPLE](#)

You can do that catenary-curve experiment by using the very same tangents as those of a circle and apply them to the catenary-curve. However, that can be done only by inversion; that is, from the reverse side of the same tangents. Consequently, the two sides of such a unique axiomatic tangent represent two different manifolds, two different dimensionalities that have nothing in common; yet, they are continuous through that discontinuity, because the last tangent of the circle is the first tangent of the catenary, as per the *continuity principle* of Leibniz.

That is precisely what happens when the human mind makes the discovery of a new principle. The reason I am doing this for you is to prove to you that it cannot be done mathematically. It's to show you that you cannot use mathematics to understand such mental transformations. For example, Fourier analysis could never do this for you, because Fourier cannot deal with such transfinite singularities. In fact, trigonometry prevents you from thinking like that.

Therefore, a continuously changing universe, like Lyn and Leibniz conceived of it, must be filled with well-ordered singularities that increase the energy-flux-density of the human mind, and must imply that such a universal progress cannot exist without continuously producing discontinuous singularities.

FIN