GOTTFRIED LEIBNIZ AND FRIEDRICH SCHILLER: AN INVESTIGATION INTO THE PRINCIPLE OF THE BENEFIT OF THE OTHER

by Pierre Beaudry, 4/12/2022

FOREWORD

When Leibniz discovered the principle of pre-established harmony behind even and odd numbers, that is, when he found the means of ordering congruence and reciprocity among all counting numbers from the vantage point of a higher unity of principle between power and reason, he had acquired one of the most powerful ways of dealing with conflicting oppositions in war as in peace ever devised by mankind.

In a letter of June 12, 1702 to Sophie, Electress of Hanover, Leibniz wrote: "It is in this way that experience convinces us that the odd numbers continually added together in order to produce the square numbers: 1 + 3 make 4, that is, 2 times 2. And 1 + 3 + 5 makes 9, that is, 3 times 3. And 1 + 3 + 5 + 7 makes 16, that is, 4 times 4. And 1 + 3 + 5 + 7 + 9 makes 25, that is, 5 times 5. And so on."[1] Leibniz established the principle of power behind numbers in the following manner:

> "But I think that the truths of understanding are universal, and that what is true about them with regard to us is also true for the angels and for God himself. These eternal truths are the fixed and immutable points on which everything turns. Such are the truths of numbers in arithmetic and

[1] ***In Leibniz and the Two Sophies: The Philosophical Correspondence***, Edited and translated by LLOYD STRICKLAND, Iter Inc. Centre for Reformation and Renaissance Studies, Toronto 2011, Letter No. 48, March-June 1702, p. 231. Sophie of Hanover was the presumptive heiress to the throne of England and Scotland. See my report: **LEIBNIZ AND FUXI THE EPISTEMOLOGY OF THE PEACE OF WESTPHALIA**

those of figures in geometry and those of motions or weights in mechanics and in astronomy. It is for this reason that it is rightly said that God does everything by number, measure and weight.

"That established, it is right to consider that order and harmony are also something mathematical which consists in certain proportions; and that as justice is nothing other than the maintaining of order with regard to the evil and good of intelligent substances, it follows that God, who is the sovereign substance, immutably maintains the most perfect justice and order that can be maintained. So much so that I believe that if we knew the order of providence well enough, we would find that it is capable of meeting and even surpassing our wishes, and that there is nothing more desirable or more satisfying, not even for us personally."[2]

Numbers can be used for good or for evil depending on whether the purpose of mathematicians is to bully people and abuse them, or it is to teach them how to become creative human beings. As in the case of nuclear power, numbers can be used for construction as well as for destruction, it all depends on the intention behind it. In that sense, numbers are not innocent bystanders and that is why we must look for the reason that God put behind them. Thus, Leibniz investigated the reason why "the odd numbers are consecutively the differences between the square numbers taken in succession.

Numbers multiplied	1 2 3 4 5 6 etc.
by themselves.	1 2 3 4 5 6 etc.
Squared.	1 4 9 16 25 36
Differences.	3 5 7 9 11"[3]

What I intend to demonstrate, here, is that the reason behind the ordering of regular numbers reflects, infinitely, the process of reciprocity and congruence of doubly-connected circular action. It is as if God had created within them, and in

[2] Gottfried Leibniz, Op. Cit., p. 123-124.
[3] Gottfried Leibniz, Op. Cit., p. 308-309.

the human mind, some pre-established cyclical harmonic order of continuity for the purpose of showing mankind how to progress from a lower to a higher manifold. Schiller articulated a similar process to access the principle of reciprocity.

SCHILLER'S IDEA OF RECIPROCITY AND THE *THREE MIND PROBLEM*

> "You can only obtain congruence among three minds by resolving the oppositions between the two others."
>
> Dehors Debonneheure

Plato had developed a process of resolving the difficult problem of the One over the Many by discussing how to make constitutional changes and improving the laws of governing mankind by investigating "Geometrical Numbers."[4] Such an exercise has long been forgotten and world leaders no longer consider such a mental exercise as necessary for conducting world affairs. This is very unfortunate.

Lyndon LaRouche formulated twenty two years ago that man's power of the transfinite is the power of the One over the Many; that is, the power to cause the universe to obey because such a human intervention is generated for the purpose of the Common Good of mankind. As LaRouche said: "So, therefore, only a human society, in which the basis for common action, by human beings, is the improvement in man's ability to survive, in man's power in and over the universe, through the cognitive act of replicating and generating original, valid discoveries of principle; in such a way, that society is able to share these discoveries, and thus act in accordance with the knowledge thus gained and shared."[5]

This means that the so-called unilateral form of action which claims preponderance of power over competitors, as the Thucydides trap for example, can no longer be acceptable in the conflicting world of today. The power of a unipolar

[4] ***PLATO'S GEOMETRICAL NUMBER FOR SOLVING THE PARADOX OF THE ONE AND THE MANY***. See the nine-day cycle for Plato's "geometrical number" where 9 x 24 = 216 hour-intervals of action and where 20,000 x 216 = 12,960,000, a calendar cycle of 1,500 ideal years.

[5] Lyndon LaRouche, ***Storm Over Asia, Take Two: I Told You So, and Now It Is Happening***, EIR, Vol. 27, No. 36, September 15, 2000, p. 33.

world is no longer acceptable, no more than the power of the bully in the school yard. However, how will the conflicts between perception and reason be solved? How can some higher transfinite power of reciprocity resolve oppositions and conflicts between the two sensuous and mental domains for the improvement of mankind as a whole?

Such a power of social reciprocity is an immense challenge to all human beings today, when most people are only satisfied with immediate and ephemeral moments of gratifications. That is the reason why Plato recognized that when human governments were left to their own devices, unless they investigated the geometry of numbers, they would eventually self-destruct because of the lack of congruence among their rulers. Consequently, Plato kept looking for exceptional moments of instantaneous (***exaiphnes***) discoveries of principle as he described the process in the third hypothesis of his *Parmenides* (155e-157b). In his Aesthetical Letter no. 12, Friedrich Schiller expressed a similar intention to examine the human species as having a transfinite spiritual power above and beyond the particular moments of dependency to material moments of sense perception.[6]

On the matter of harmonizing necessity with reality, Schiller articulated the opposition of mind and of perception as two different and opposite experiences of time within the human personality: one is a fleeting moment of change and the other is a transfinite moment of temporal eternity. For our purpose, here, it is necessary to quote Schiller's Letter XII in its entirety:

> "This twofold labour or task, which consists in making the necessary pass into reality in us and in making reality out of us subject to the law of necessity, is urged upon us as a duty by two opposing forces, which are justly styled impulsions or instincts, because they impel us to realize their object. The first of these impulsions, which I shall call the sensuous instinct, issues from the physical existence of man, or from sensuous nature; and it is this instinct which tends to enclose him in the limits of time and to make of

[6] Frederick Schiller did not recognize the Peace of Westphalia as a positive outcome for Europe; however, although he did not see fit to apply the principle of the benefit of the other to Cardinal Mazarin's solution to the Thirty Years War, he nevertheless recognized, as Leibniz did, the necessity of resolving the paradoxical conflict between sense perception and reason into a higher sublime unity of power.

him a material being; I do not say to give him matter, for to do that a certain free activity of the personality would be necessary, which, receiving matter, distinguishes it from the Ego, or what is permanent. By matter I only understand in this place the change or reality that fills time. Consequently the instinct requires that there should be change, and that time should contain something. This simply filled state of time is named sensation, and it is only in this state that physical existence manifests itself.

"As all that is in time is successive, it follows by that fact alone that something is: all the remainder is excluded. When one note on an instrument is touched, among all those that it virtually offers, this note alone is real. When man is actually modified, the infinite possibility of all his modifications is limited to this single mode of existence. Thus, then, the exclusive action of sensuous impulsion has for its necessary consequence the narrowest limitation. In this state man is only a unity of magnitude, a complete moment in time; or, to speak more correctly, he is not, for his personality is suppressed as long as sensation holds sway over him and carries time along with it."

The fact that Schiller's doubly-connected circular action represents a double self-reflective process is crucial to understand in order to grasp the "twofold labour or task" of bringing unity to the human being as a duty as opposed to a free choice. These two forces are rarely unified inside of a human being because of the degenerate culture in which people live; therefore, society has a great duty to prepare its citizens for such a task, and a great effort is demanded on the part of whoever attempts to unify his and other fellow humans into a unity of power which might resolved that opposition of forces.

Since everything that is in time is attached by succession, there is no possible grasping of a universal or eternal moment in anything that is sensuous; and the domain of sense perception can only tie down the human personality to the here and now. Such is the domain of the finite and of the temporary. For Schiller, this has the effect of losing one's self; that is, of being "*beside oneself*" without being able to restore the unity of the person. In other words, as long as one remains tied down to the domain of emotional and sensual states, one cannot "*get back to oneself*" and restore its original personality as God intended it to be. However, the

power of an independent will enables the person to take steps beyond such limitations of sensuality and gain access to the higher transfinite domain of the spirit. Schiller continues:

> "This instinct extends its domains over the entire sphere of the finite in man, and as form is only revealed in matter, and the absolute by means of its limits, the total manifestation of human nature is connected on a close analysis with the sensuous instinct. But though it is only this instinct that awakens and develops what exists virtually in man, it is nevertheless this very instinct which renders his perfection impossible. It binds down to the world of sense by indestructible ties the spirit that tends higher and it calls back to the limits of the present, abstraction which had its free development in the sphere of the infinite. No doubt, thought can escape it for a moment, and a firm will victoriously resists its exigencies; but soon compressed nature resumes her rights to give an imperious reality to our existence, to give it contents, substance, knowledge, and an aim for our activity."

Thus, when thought escapes this prison of sensuality, there comes a special moment which takes one out of finite time, which defies and transcends all of its limitations; this is a time which first appears as an unconditional subordination of the sensual to the rational. But then again, such an abstraction from true human temporality also condemns man to remain divided forever within himself. Here, Schiller has a moment of genius where he recognizes that subordination of the sensual by the rational must not be in the spirit of the Kantian system, but must be in some form of reciprocity, such that congruence is maintained between the two opposite domains. This is the moment that Lyndon LaRouche identified as the *time of temporal eternity*; that is, when, by a sudden internal exaltation (***exaiphnes***) of the will, the spirit of the self breaks away from such a rationalist domination to release the "*common sense*" in all of us, by calling for mutual reciprocity throughout mankind, whereby both rational and sensual are called to become subordinated to each other to form, as Leibniz identified, a harmonic proportionality between reason and power. Where will that new and higher power come from? Schiller continues:

> "The second impulsion, which may be named the formal instinct, issues from the absolute existence of man, or from his rational nature, and tends to set free, and bring harmony into the diversity of its manifestations, and to maintain personality notwithstanding all the changes of state. As this personality, being an absolute and indivisible unity, can never be in contradiction with itself, as we are ourselves forever, this impulsion, which tends to maintain personality, can never exact in one time anything but what it exacts and requires forever. It therefore decides for always what it decides now, and orders now what it orders forever. Hence it embraces the whole series of times, or what comes to the same thing, it suppresses time and change. It wishes the real to be necessary and eternal, and it wishes the eternal and the necessary to be real; in other terms, it tends to truth and justice.

Maintaining the personality of the sovereign self, however, cannot be confused with maintaining appearances, as centuries of "folie des grandeurs" have demonstrated in European and other societies. After compressing time and change into such a unique form of *temporal eternity*, man suddenly discovers that the danger, here, is the oligarchical trap of law makers who, from time immemorial, have made the claim of determining human laws based on perception; that is, the rule by which only what is perceived is acceptable. If the rulers persist in making laws, as in today's fictitious doctrine of "Rules Based Order", the danger is that both the sensuous and the reasonable shall be ruled by authoritarian regimes.

> "If the sensuous instinct only produces accidents, the formal instinct gives laws, laws for every judgment when it is a question of knowledge, laws for every will when it is a question of action. Whether, therefore, we recognize an object or conceive an objective value to a state of the subject, whether we act in virtue of knowledge or make of the objective the determining principle of our state; in both cases we withdraw this state from the jurisdiction of time, and we attribute to it reality for all men and for all time, that this, universality and necessity.

> "Feeling can only say: 'That is true for this subject and at this moment,' and there may come another moment, another subject, which withdraws the affirmation from the actual feeling. But when once thought pronounces and says: 'That is,' it decides forever and ever, and the validity of its decision is guaranteed by the personality itself, which defies all change. Inclination can only say: 'That is good for your individuality and present necessity;' but the changing current of affairs will sweep them away, and what you ardently desire today will form the object of your aversion tomorrow. But when the moral feeling says: 'That ought to be,' it decides forever. If you confess the truth because it is the truth, and if you practice justice because it is justice, you have made of a particular case the law of all possible cases, and treated one moment of your life as eternity.
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> "Accordingly, when the formal impulse holds sway and the pure object acts in us, the being attains its highest expansion, all barriers disappear, and from the unity of magnitude in which man was enclosed by a narrow sensuousness, he rises to the unity of idea, which embraces and keeps subject the entire sphere of phenomena. During this operation we are no longer in time, but time is in us with its infinite succession. We are no longer individuals but a species; the judgment of all spirits is expressed by our own, and the choice of all hearts is represented by our own act."[7]

Such moments of "*temporal eternity*", as LaRouche identified them, have the power to force the universe to obey. Thus, the call for the defense of the human species has resounded again, but very few have recognized its imperative assignation. Now, the time has come again, when the reciprocal actions of both sensuality and reason must form a unity of the human personality through the *benefit of the other* as in a New Peace of Westphalia; that is to say, when each individual nation must be willing to offer its contribution to the appropriate tempering of other nations, causing reason to become a true power over all of mankind.

[7] ***J. C. Friedrich Von Schiller (1759-1805): Letters Upon The Aesthetic Education of Man, 1794***. Letter XII, Modern History Sourcebook, Fordham University.

In a report I wrote in 2013 on **THE GEOMETRY OF THE PEACE OF WESTPHALIA**, I used the Poinsot-Gauss method of generating congruence of primitive roots as a metaphorical process demonstrating how Cardinal Jules Mazarin used a similar principle for solving the conflicts of the Thirty Years War and, in doing so, he discovered a method for implementing the Peace of Westphalia of 1648.

In the first page of his ***Disquisitiones Arithmeticae***, Carl Gauss identified the functional meaning of such congruence among three numbers. He wrote: **"If a number A divides the difference of the numbers B and C, B and C are said to be *congruent relative to A*; if not, B and C are *noncongruent*."**[8] Apply this rule of congruence to human relations in general and to relations among nations in particular, and treat numbers as peace-seeking entities. The process of the modular-wave-function of **3** (mod **17**) shows, metaphorically, how Mazarin was thinking about resolving conflicting oppositions during the Thirty Years War.

Despite a few mathematical mistakes in that 2013 report, I have not yet been proven wrong in assuming that the principle underlying the congruence of numbers holds true for physics as well as for epistemology. However, such an assumption can only be truthful providing that the *three mind problem* be treated metaphorically as opposed to the mechanical way the *three body problem* has been treated by mathematicians.

The three mind problem is comparable to the three body problem which has been posing considerable difficulties in astronomy, especially when a mechanical solution was sought. On the other hand, the epistemological difficulty of the three mind problem points to the impossibility to solve any bilateral problem without solving everybody else's problem at the same time. As Martin Luther King said of the Jewish people: "*Injustice done to one is an injustice done to all*." However, the final cause or reason behind such congruence between minimally three minds, may forever remain beyond our grasp, but any attempt to reach beyond such a limitation should not stop us from accepting the challenge. As Schiller advised in providing harmony between sensual impulsions and the impulsions of reason: "Consequently

[8] Carl Friedrich Gauss, ***Disquisitiones Arithmeticae,*** New Haven and London, Yale University Press, 1966, p. 1.

these two impulsions require limits, and looked upon as forces, they need tempering."[9]

Leibniz taught us that since there is in our minds a source of knowledge which is independent of any physical experience, "this internal light" provides us with ideas that have nothing to do with sense perception: this alone demonstrates that if we do not exercise our minds to act on that source, we shall remain forever stupid. There are steps to be discovered toward that purpose, and one of them can be measured by a performative form of doubly-connected circular reflection, which is quite similar to galactic solar systems.

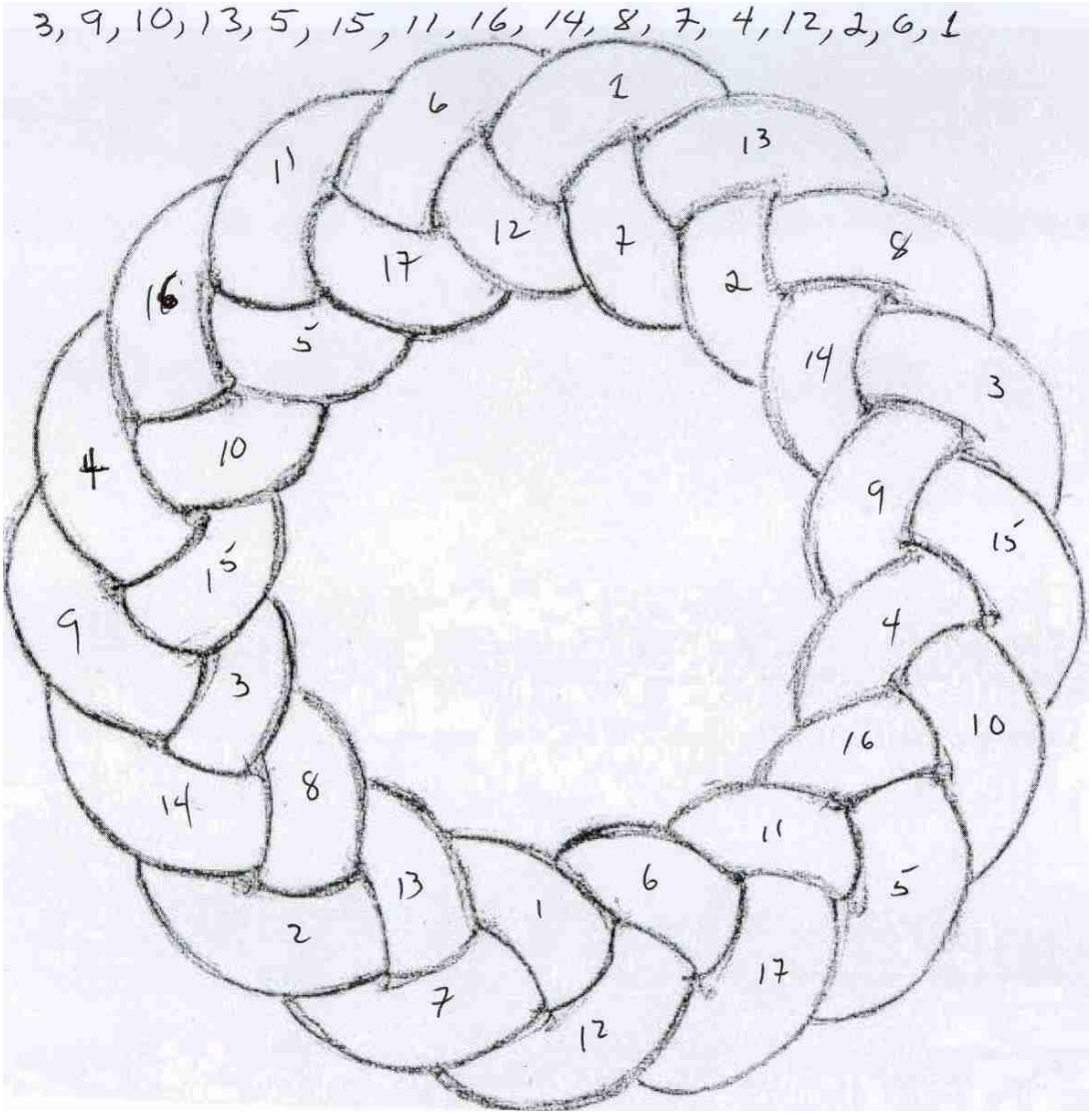
The use of such a doubly-connected metaphorical process may be a little difficult to grasp for people who have not worked out number theory, or have no experience in constructive geometry; however, the process of finding congruence among three opposing ideas exemplifies how to solve a *three mind problem*; whether those entities are numbers, minds, or political entities such as homelands or nation-states. In spite of ethnic or other differences, the universal principle which can bring human minds together is the same for all.

For example, when, during the Peace of Westphalia negotiations, the Ambassador to the Netherlands attempted to solve the conflict between the Netherlands and Spain, Cardinal Mazarin recommended that he concentrate on solving the difference which existed between France and Spain. In other words, the focus was put on the aspects of the peace relations which could best benefit both France and Spain with respect to the Dutch Republic. This turns out to be, ultimately, the best way to solve the *three mind problem* through the elimination of the differences between the other two.

Therefore, imagine that the braided twists of the torus (see figure below) represent the metaphorical process by means of which **C** (German Principalities) established congruence between **A** (France) and the **B** (Austrian Habsburg Empire). The resolution of conflicting oppositions among all three entities can be found by the non-linear intentional and pre-established harmonic resonance of the Poloidal/Toroidal action in such a way that any power increase by the Poloidal

[9] Friedrich Schiller, ***Op. Cit, Letter XIIIS***.

action of **A** with respect to the Toroidal action of **B** can be reduced to a least action minimum by the remainders or residues of **C**.



Number **3** as a primitive root of **17** demonstrates a continuous congruence of all of the **16** residues of the powers of **3** with respect to module **17**.

Start rotating your finger from **1** at the top of the braided torus figure and, following the braid, move one wave down, clockwise, to **3**: that is, **1x3 = 3**. Secondly, move downward again, **3** more waves from **3** to **9,** following the same strand of braid: that is, **3x3=9**. Thirdly, move **9** waves from **9** to **10**: that is, **3x3x3=27,** or **27-17=10**. Fourthly, move **10** waves from **10** to **13**; that is

3x3x3x3=81, or **81-4x17=13**, etc. Thus, the congruence of the *three mind problem* **A, B,** and **C** demonstrates the pathway that the human mind has to take in order to access a higher paradigm by adding a second circular action dimensionality to the first.

LEIBNIZ'S IDEA OF HARMONY OF POWER AND REASON.

> **"**We use the external senses as a blind man uses his stick, and they make us know their particular objects, which are colors, sounds, odors, flavors, and tactile qualities. But they do not make us know what these sensible qualities are …" Leibniz, Letter 48 to Sophie, Electress of Hanover, June 1702.

Leibniz designed his project for the institution of an Academy of Art and Science, in 1671 for the purpose of improving on the principle of the *Benefit of the other* of the Peace of Westphalia; that is, more precisely, for the purpose of solving the problem of cultural differences and conflicts of power which exist between the West and the East, more specifically between Christian European Nations and the Confucian Chinese ways of thinking. For that task, Leibniz made use of Cusa's "*posse ipsum*" (potential itself); that is, the creative potential that man has for understanding mankind as a species. Leibniz found such a power in the love of "the beauty or excellence of another," which he posed as follows:

> "Thus hope and faith are founded on love, and all three on knowledge. Love is a joy of the mind arising out of contemplation of the beauty or excellence of another. All beauty consists in a harmony and proportion; the beauty of minds, or of creatures who possess reason, is a proportion between reason and power, which in this life is also the foundation of the justice, the order, and the merits and even the form of the Republic, that each may understand of what he is capable, and be capable of as much as he understands. If power is greater than reason, then the one who has that is either a simple sheep (in the case where he does not know how to use his power), or a wolf and a tyrant (in the case where he does not know how to

use it well). If reason is greater than power, then he who has that is to be regarded as oppressed. Both are useless, indeed even harmful."[10]

Leibniz put forward a principle of proportionality which depended on a metaphysical reason and could not be explained by physical force, mechanical or otherwise; that is, which is solely generated by the power of human creativity in the image of God. As he wrote to Sophie, Electress of Hanover: "This makes us resemble the divinity in miniature, as much through knowledge of order as through the order that we ourselves have given to things within our power, in imitation of the order God gives to the universe. And it is also in this that our virtue and perfection consists, just as our happiness consists in the pleasure we take in it."[11]

Such a principle of proportionality between power and reason was what Cardinal Jules Mazarin had in mind when he organized the Peace of Westphalia. He applied this principle to all of the Princes and Electors of the Habsburg Empire and he used this power to put in check the false idea of power that was prevalent during the war.

During the Westphalia negotiations, Mazarin asked the negotiators the questions that would put them in a state of perplexity: What do you gain by putting aside your own self-interest? How can you increase your own power by increasing the power of someone else? Most had no understanding of what Mazarin meant by these questions, because the only idea of power they had in mind was the personal power of gaining and increasing their own territory and wealth. Most replied that what Mazarin was asking of them did not make any sense, because they could not conceive that anyone could win anything by losing their advantage to other. This was an insurmountable paradox until they were made to discover that the *benefit of the other* was to be the guarantor of a new social order which was to replace force, might, and self-interest by love of mankind, reciprocity of the Common Good, and the concern for the future of mankind as a priority.

[10] Gottfried Leibniz, ***On the Establishment of a Society in Germany for the Promotion of the Arts and Sciences (1671)***, The Schiller Institute.
[11] Leibniz, Op. Cit., p. 235.

Cardinal Mazarin addressed these questions in all sorts of ways, until the moment when, such intolerable stresses of war fighting and future loses became too much to bear and when the negotiations began to show how these questions could be turned around: Why would anyone believe he could increase his power by killing more and more people or by risking being killed himself? Is anyone really capable of increasing his power by decreasing population? What is the purpose of power? What is the power of mankind as a species? Is power domination or collaboration and reciprocal development? What is the difference between power and force? Is power the same as might? To all of these questions, no matter how they were formulated, Mazarin's answer was always the same: *You can increase your power only by parting with your own "folie des grandeurs"; that is, you can only increase your power by applying the principle of the Benefit, Honor, and Advantage of the other; otherwise, you increase suspicion and attract hatred and animosity against yourself; and that is how you become a loser.* That was the most difficult question for people to figure out: How can you increase your own power by increasing the power of someone else for the benefit of the whole? And somehow, that had to be done through the power of love for the purpose of improving humanity as a whole. This question was the epistemological equivalent of figuring out what the curvature adjustment of a point was going to be while moving on the surface of the Earth at the same time that it is rotating around the Sun inside of the moving Galaxy.

Lyndon LaRouche once said about mind: "What you have to do is you have to have the idea of a larger mind, that each individual is a part of a larger mind. And the resources that they represent come together. And therefore, they are constantly correcting themselves, a constant correction process." (Lyndon LaRouche, Executive Meeting, September 24, 2013) It is also in this way that Carl Gauss defined congruence among three numbers within the complex domain. It is the only way that the problems of power can be resolved; that is, through looking for the power behind a doubly-connected self-reflective reason behind the Peace of Westphalia.[12]

[12] See Lyndon LaRouche, ***The Power of Reason***, Washington D. C. Executive Intelligence Review, 1987. See also: Lyndon LaRouche, ***The Principle of 'Power'***, EIR, Vol. 32, No. 49, December 23, 2005. Calling for a return to the

THE POWER OF THE PEACE OF WESTPHALIA IS RECIPROCAL DEVELOPMENT

The power of credit, as Lyndon LaRouche identified it, is the power of transforming the universe from an immaterial idea to a material good for the betterment of mankind. This power is not simply the Pythagorean idea of doubling or of tripling with numbers from higher dimensionalities; it is also the power of changing the universe in such a manner that the universe obeys the human command, from the top down. That power of ideas, that is, the power of labor of the Noosphere over the Biosphere, is the power that American President Franklin Delano Roosevelt, for example, gave to Congress in his command to build a new national economic order through a provision of the Federal Constitution. As LaRouche demonstrated:

> "Roosevelt used the power of the state, as expressed by the relevant provisions of the U.S. Federal Constitution, to generate long-term, low-cost credit for building the sinews of what rose to be the greatest economy the world had ever known, an achievement which could never have occurred had Roosevelt not beaten back the predatory, neo-Venetian financier cabals of, chiefly, Wall Street and London."[13]

Such an idea of power changed the world for the better in the 1930's. Now, let me give you another example of how this idea of power can be used. Let **2** mod

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"power" of the American System, LaRouche stated: "In a world monetarist system, such as that of the post-August 1971 interval to date, the power of credit is controlled by the methods which are the intrinsically usurious practice of predatory financier cartels. Under a monetarist system, the power to create, and to regulate the price of credit, even for so-called sovereign national governments, is in the dictatorial hands of a usurious money-interest which operates outside, and often largely independent of the control by governments, as under the form of usury intrinsic to a so-called 'free trade' system." p. 6.

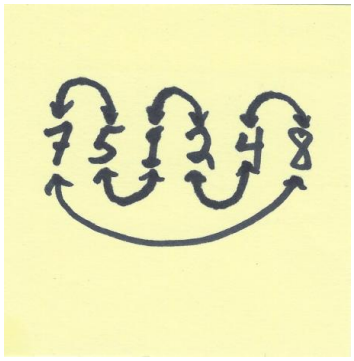
[13] Lyndon LaRouche, ***The Principle of 'Power'***, p. 6 LaRouche further argues the lack of such a power is comparable to the British failure in scientific education to go beyond the teaching of a Euclidean flat universe in the small: "That is to say, in other words, that the standard Euclidean sets of definitions, axioms, and postulates which have supplied the logically "hereditary" basis for usually taught mathematics today, include "traditional" sets of aprioristic assumptions which are implicitly, functionally assumptions that the natural state of the physical universe is the quality of "flatness," and that curved systems must be explained from the starting point of flatness, as all of the earlier parts of Euclid's Elements do." (p. 9.) "In short, it is urgent to emphasize the role of the principle of power, as I have emphasized the correct scientific significance of the term power here. The national and world economies must be managed by the respective, cooperating, sovereign authorities of what is consciously understood to be a Noosphere, as I have broadly outlined that definition's application here." (p. 82.)

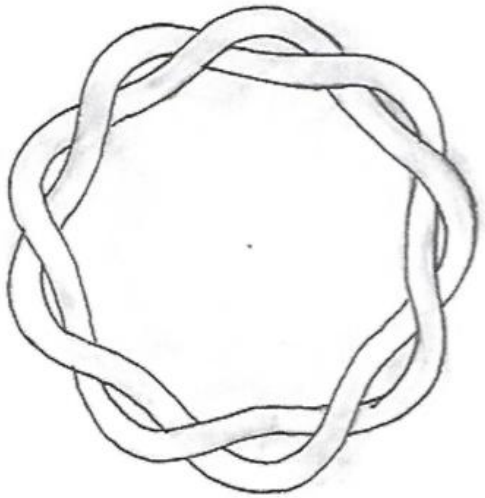
9, or a Poloidal/Toroidal module ratio of **2/9,** be the idea of a metaphorical model for the development of the human species.

Take, for instance, the indefinite and natural series of the power of two, which underlies the octaves of the well-tempered musical system, centered on middle **C-256**, and add up the multiple digits of each number such that they correspond to single numbers as in the ordering of the following numbers: **7, 5, 1, 2, 4, 8**. Thus, for instance, **16** is **1+6** = **7** and **32** is **3+2 = 5**, etc:

1, 2, 4, 8,	**16,**	**32,**	**64,**	**128,**	**256,**	**512,**	**1024,**	**etc…**
	1+6	**3+2**	**6+4**	**1+2+8**	**2+5+6**	**5+1+2**	**1+0+2+4**	**etc…**
	7	**5**	**1+0**	**1+1**	**1+3**	**8**	**7**	**etc…**
	7	**5**	**1**	**2**	**4**	**8**	**7**	**etc…**

Note that the series **5, 1, 2, [4], 8, 7, 5** forms the six octaves of your piano keyboard with **256** [**4**] as middle **C**. The ordering of those octaves forms a unique musical range which, when put into a doubly-connected cyclical form, generates a higher transfinite modality of creative thinking. How do you inscribe those numbers into the following torus cycle such that they represent an actual infinite cycle which integrates all possible regular integers into a shared universal congruence and reciprocity?

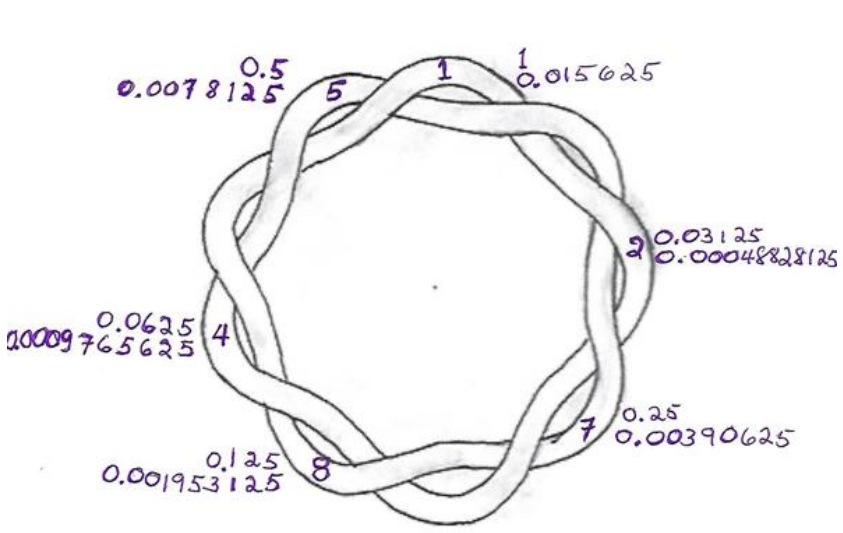




Follow a backward counterclockwise motion of the numbers from end to end, **8, 4, 2, 1, 5, 7**, repeatedly, and you can discover the principle of this continuously rotating torus modular cycle. Inscribe number **1** anywhere inside of the torus and start counting your steps backward, one wave per step counterclockwise, starting from **1** going back to **5,** then back to **7,** then back to **8,** then back to **4,** then back to **2,** and then back to **1**.

At this point, you might have the impression, given this already prepared figure, that your footprints had been pre-ordained, ahead of time, before you took the first step. You are not wrong. In other words, it is as if a pre-established harmony had already been set before you started counting your steps by half, and half the half, as you walked backward. What you won't realize, until after the fact, however, is that your steps have become smaller and smaller, as if you were going toward an absolute minimum. Fill in the following torus with numbers and add up the multiple digits for each number. The addition of all of the digits must correspond to a single number, and all of the numbers to a single module:

1 = 1
0.5 = 5
0.25 =7
0.125=8
0.0625 =4
0.03125 =2
0.015625 = 1
0.0078125 = 5
0.00390625 = 7
0.001953125 = 8
0.0009765625 = 4
0.00048828125 = 2, etc.

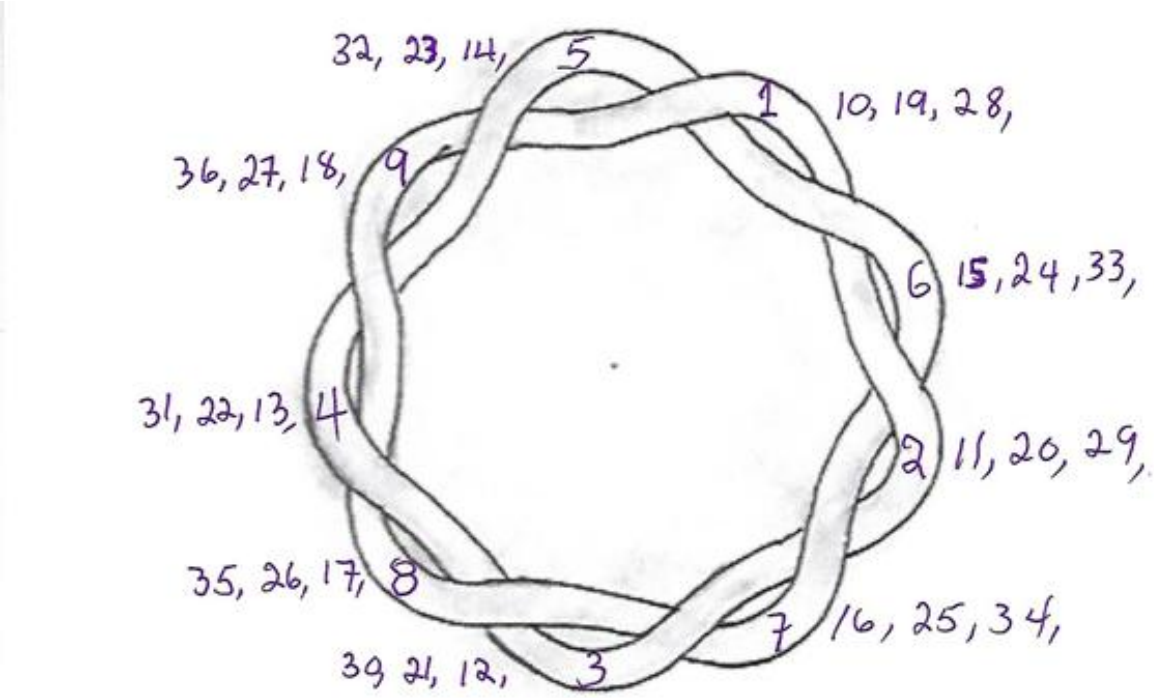


The counterclockwise number of wave counts **1, 5, 7, 8, 4, 2**, **1** etc.
correspond to an indefinite halving process.

The underlying process shows that the counterclockwise motion reflects a decreasing ordering with the division by half; that is, when you start moving your finger counterclockwise through the above knot, counting **5** waves starting from **1**,

then counting **7** waves from **5**, then **8** waves from **7**, then **4** waves from **8,** then **2** waves from **4**, and then finally **1** wave from **2**. As if this process of halving were not amazing enough, then and only then, ask yourself: why are numbers **3, 6**, and **9** excluded from this motion? Mark the waves from **1** to **10** clockwise, one number per wave, and you will be able to discover the answer.

Next, count all of the waves again, clockwise, from **1** to **36,** and identify each step as a unit of action. Some of them represent the remainders or residues of all of the powers of **2**. Additionally, note that the sum of all of the digits will always correspond to a single number. Thus: **1x2=2, 2x2=4**, **2x2x2=8, 2x2x2x2=16**, or **1+6=7, 2x2x2x2x2=32**, or **3+2=5**, and **2x2x2x2x2x2=64**, or **6+4=10** and **1+0=1**. The remainders or residues **1, 2, 4, 8, 7, 5, 1**, can be counted as follows:



The **6** remainders of **2** mod **9** are **1, 2, 4, 8, 7, 5, 1.** Numbers **3, 6,** and **9** are not remainders or residues of this modular wave function.

Start at **1** and count **1** wave to get to **2**, from **2** count **2** waves to get to **4**, from **4** count **4** waves to get to **8**, from **8** count **8** waves to get to **7**, from **7** count **7**

waves to get to **5**, and from **5** count **5** waves to get back to **1**. It is your steps which tell you where to go next. Thus, you have found all of the remainders (residues) of **2** modulus **9** (**2** mod**. 9**). If you wish to know how to get from **8** to **7**, you have to consider **7** as the remainder of the fourth power of **2** with respect to **9**. In other words: **2x2x2x2**=**16 - 9 = 7.**

In this way, the mystery of the underlying ordering of numbers disappears; the solution is nothing else but the ordering cycles of **2** mod. **9,** which gives you all of the regular integers of the decimal system as integrating the whole of the well-tempered musical system, including **3, 6,** and **9**, within a single knot of reciprocity; that is, the solution to the problem where **9** is the toroidal wave (large circumference) and **2** is the poloidal wave (small circumference).

1 = 10, 19, 28,	**6 = 15, 24, 33,**
2 = 11, 20, 29,	**7 = 16, 25, 34,**
3 = 12, 21, 30,	**8 = 17, 26, 35,**
4 = 13, 22, 31,	**9 = 18, 27, 36,**
5 = 14, 23, 32	**etc.**

Therefore, give me any number whatsoever, and I will tell you where it is located on this modular wave torus. Its place has already been prepared ahead of time, as if it were in the *simultaneity of temporal eternity*. In other words, the distinctions among the doubling powers reside in the physical and geometrical location of such numbers because numbers cannot exist independently of position. Let's pursue this little puzzle a little further.

THE SINGULARITIES OF NUMBERS THREE, SIX, AND NINE

Beware of mathemagicians who might come out from behind a puff of smoke with the idea that what is important about number **9** is that it is the number of Satan, or it is the magical number behind the universe; that is to say, where **3x3x3 = 27** and **2 + 7 = 9**, or when **6x6x6 = 216**, and therefore **2 + 1 + 6 = 9**. This is pure smoke and mirror deception; you should not let yourself be deceived by the wrong idea of power. Let your resistance to this metaphor be your warning signal.

Furthermore, this way of speculating has nothing to do with Plato's "Geometrical Number"[14] **216**, which he required for solving the paradox of the One and the Many. The question to focus on is: why are **3, 6,** and **9** excluded from the previous ordering process? The answer can be found in number **9** itself, because it is the expression of the boundary condition of the decimal system. That is the reason why **9** is the only number which, when multiplied by itself or by two, or subtracted from and added to itself, always has all of its digits total the sum of **9**; that is because **9** is the module where the digits of all three numbers, **3, 6**, and **9** always come to **9.** Thus:

3x3 = 9 **6x6 = 36 or 3+6 = 9**
3x3x3 = 27 or 2+7 = 9 **6x6x6 = 216 or 2+1+6 = 9**
3x3x3x3 = 81 or 8+1 = 9 **6x6x6x6 =1296 or 1+2+9+6 = 18 or 1+8 = 9**

And then, for number **9**:

9x2 = 18 or 1+8 = 9 **9/2 = 4.5 or 4+5 = 9**
9x2x2 = 36 or 3+6 = 9 **9/2/2 = 2.25 or 2+2+5 = 9**
9x2x2x2 = 72 or 7+2 = 9 **9/2/2/2 = 1.125 or 1+1+2+5 = 9, etc.**

There is no magic to this, because, as Leibniz showed, this is the characteristic behavior of all numbers of the decimal system when they are considered from a higher standpoint. The fact that the same ordering appears in the two inversed orders, clockwise and counterclockwise, repeatedly, and without end, in the small as in the large, with the same numbers, is because all numbers have been ordered in accordance with a pre-established harmony. The question to ask is: Why? What is the reason behind such a well-ordered and well-tempered series? Why is it that such an ordering repeats itself like the days of the week, months after months, and year after year, indefinitely, inside of the Solar system as well as in the Galaxy? The answer is: this is the way the human mind develops to a higher from a lower manifold.

[14] Se my report: **PLATO'S 'GEOMETRICAL NUMBER' FOR SOLVING THE PARADOX OF THE ONE AND THE MANY**

So, don't be fooled by a false idea of power. The solution to the problem of the special case of **9** can simply be found in the fact that **9** is the natural limit of the decimal system, where the next higher number **10** must repeat a new cycle of numbers going from **1** to **9,** again and again. If you create a base-**7** number system, number **6** will have the same effect as **9** has in base-**10**.[15]

Those three missing numbers, **3, 6,** and **9,** are no exceptions to the rule of number theory, when they are properly understood in accordance with their doubly-connected cyclical principle, which follows the same rule of adding digits as do the octave numbers of the well-tempered musical system. Jason Ross demonstrated this when he showed me that:

> "Modulus 9 has the power where various integers create periods of different lengths:
>
> 2 — a period of **6: 2, 4, 8, 7, 5, 1**
> 3 — no period at all (goes right to zero)
> 4 — a period of **3: 4, 7, 1**
> 5 — a period of **6: 5, 7, 8, 4, 2, 1**
> 6 — no period at all (goes right to zero)
> 7 — a period of **3: 7, 4, 1**
> 8 — a period of **2: 8, 1**"[16]

However, you have to leave behind the flat Earth process of adding digits by simple circular action and construct an *analysis situs* of higher dimensionality by adding a second circular action to understand the process of generating powers. The geometrical way to discover the cycle of modulus remainders (residues) can easily explain the exclusion of numbers **3, 6,** and **9** from the vantage point of torus

[15] See: ***The Number 9, Not So Magic After All.*** A lot of kooky people have turned numbers into mystical mumbo-jumbo and astrological nonsense, such as the case of Tesla who encouraged a sort of magical raving about numbers with his so-called "**3-6-9** ***Vortex***" (: **https://www.youtube.com/watch?v=6ZrO90AI0c8**), which he concocted in order to make believe that he had discovered the secret "key to understanding the Universe." Tesla and his followers have been pushing mathematics as a science known only to a secret elite, as if there were some Masonic code hidden behind numbers, which could only be understood by the High Priests of the City of London and of Wall Street. Well, no such luck.

[16] Jason Ross, Email.

doubly-connected circular action. This finally then takes us to the beauty of the peace of Peace of Westphalia reciprocity.

THE UNITY OF THE MEMORY MODULAR MONAD

There is a pre-established harmony in the ordering of numbers as demonstrated above. Is this what Leibniz means by a lawful ordering of the Universe? Is this an expression of Leibniz's idea of the best of all possible worlds? Much mystery has been made about numbers instead of explaining how the theory of numbers works with toroidal doubly-connected circular action and of delighting everyone in the pleasure of showing the beauty of reciprocity for the benefit of all. Are mathematicians afraid that people might become curious about the true nature of their own minds? Are they afraid that the discovery of reciprocity in numbers might lead people to understand the full significance of something like the power of the Peace of Westphalia? What is the harmonic reciprocity ordering of the entire species of whole numbers?

Look at all of the reciprocals **[5+5]**, **[9+1], [4+6], [8+2], [3+7]** presented across the P/T modular ratio **2/9** and you can discover the true cyclical beauty behind numbers. Take any pair of reciprocal numbers at random across the module (see page 17), say, **[3+7].** Note that by lining up all of the integers of each number **3, 12, 21**, for example, you will always get **3**, while on the other side, all of the integers of the reciprocals, **7, 16, 25, 34**, will always be equal to **7;** and the total of their reciprocity will always be **10,** indefinitely:

3 + 7 = 10
12 + 16 = 28 or 2+8 = 10
21 + 25 = 46 or 4+6 = 10
30 + 34 = 64 or 6+4 = 10

The exception, here, is **5** because this number is the only remainder or residue which has both "itself" and its own digits as reciprocals of **10!**

5 +5 = 10
5 + 14 = 19 or 1 + 9 = 10
5 + 23 = 28 or 2 + 8 = 10
14 + 23 = 37 or 3+7 = 10
14 + 32 = 46 or 4+6 = 10
23 + 32 = 55 or 5+5 = 10

5 + 32 = 37 or 3 + 7 = 10

Furthermore, a curious thing happens when you look at the ordering of the powers of **5**: they give the counterclockwise ordering series of the halves, which are **5, 7, 8, 4, 2, 1**. Fascinating. Could this be simply because **5** is the half of **10**?

5 x1 = 5
5x5 = 25 or 2+5 = 7
5x5x5 = 125 or 1+2+5 = 8
5x5x5x5 = 625 or 6 +2+5 = 13 or 1+3 = 4
5x5x5x5x5 = 3125 or 3+1+2+5 = 11 or 1+1 = 2
5x5x5x5x5x5 =15625 or 1+5+6+2+5 = 19 or 1+9 = 10 or 1+0 = 1

Thus, all of the whole numbers can be infinitely distributed on such a closed cycle of congruence and reciprocity which distributes them everywhere equally and without any obstacle or insurmountable oppositions: everyone in its place and a place for everyone. Conclusively, you will always get reciprocity and congruence whenever you treat all numbers as equals and when you give them the benefit of being able to rotate and orbit in the higher domain of doubly-connected circular action; that is, Poloidal/Toroidal action. Isn't that a wonderful galactic way of solving problems?

This closed cycle knot called **2** mod. **9** has epistemological implications (not mystical): this is a Leibnizian monad, a simple spiritual unity which expresses a *coincidence of opposites* that unites the infinitely small with the infinitely large; it is changing all the time and yet it is always the same; it is a *One over the Many*, because it is a unity of substance which includes everything and it is not divisible because it has no parts; it is not numerable either, yet it includes all numbers; each step knows and forecasts where the next step should go; the cycle has a memory of your footprints, because it retains the traces where you passed through; it has no size and yet in includes all magnitudes; finally, any number whatsoever has a pre-established location inside of one of its nine waves, which can be found in a flash. Why? Because this is how a Leibnizian *memory modular monad* works.

In a draft copy of a letter dated Mid-October (?), 1696, and probably intended for Sophie Charlotte, Leibniz emphasized the significance of the unity of such a monad, but without using the term "monad." He wrote:

> "However, just as all numbers consist of one and one, all pluralities must consist of unities. Consequently, unities are the real root and seat of all being, all power, and all sensation: and these unities are souls. Therefore one has in this an irrefutable proof, not only that souls exist, but also that everything must be full of souls, and of what a soul really consists, and finally why every soul is indestructible. For unities have no parts, otherwise they would be pluralities; but that which has no parts is indestructible."[17]

THE BEST OF ALL POSSIBLE WORLDS

In early September of 1694, Leibniz wrote to Electress Sophie: "I content myself with knowing in general that because of the wisdom and immense goodness of the author of things, everything is so well ordered, and will go so well, even after this life, for those who love God, that they could wish for nothing further."[18] Leibniz is convinced that before God's supreme justice, the virtuous man will draw complete satisfaction from his life, because the best order of the universe does not permit a reasonable mind to be otherwise but in God's Grace, and to have the opportunity to taste a bit of Heaven before he dies.

In his Letter of February 11, 1676, he confirmed this idea of the best of all possible worlds by writing to Sophie, again: "I know no one happier than I am, because God gave me this understanding, as a result of which I envy no king; and I am certain that God takes special care of me, that is, that he has destined my mind for immense joys, in that he has opened to me such a certain and easy way of happiness."[19] This is the pathway of least action that Leibniz always used in his method of *analysis situs*.

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[17] Leibniz, Op. Cit., p. 137.

[18] ***In Leibniz and the Two Sophies: The Philosophical Correspondence***, Edited and translated by LLOYD STRICKLAND, Iter Inc. Centre for Reformation and Renaissance Studies, Toronto 2011, Letter No. 48, March-June 1702, p. 41.

[19] Leibniz, Op. Cit., p. 41.

For Leibniz, this discovery of principle is a subjective and performative way of discovering the underlying ordering of the best possible world. In several occasions between 1670 and 1714, Leibniz emphasized that point to both Electress Sophie and her daughter Sophie Charlotte, Queen of Bohemia. For instance, in August of 1702, he wrote to Sophie Charlotte:

> "But one should also not obstinately resist and be concerned about the destiny of providence [*fatis accede Diisque* – 'submit to the fates and the Gods'] for one should always be convinced that God does everything for the best, although in our present state, in which we see only a small part of things, it is impossible for us to judge what best suits the universal harmony. And this trust in God, which makes us content, and makes us believe that he makes everything happen for the greatest good of good people, is what could properly be termed the faith of natural religion, which reaches as far beyond what is evident to us as does revealed faith."[20]

The fact that Leibniz recognized this discovery of principle as a reflection of the "faith of natural religion" is what convinced him that the Chinese had also discovered an understanding of how the universe could be best ordered without having access to revealed religion. Leibniz concluded:

> "And since every time we penetrate into the heart of things we find there the most beautiful order that could be wished for, beyond even what we imagined in it, as all those who have gone deeply into the sciences know, we can conclude that it is the same with everything else, and that not only do immaterial substances always subsist, but also that their lives, progress, and changes are adjusted in order to lead them to a certain goal, or rather, adjusted in order to approach it more and more, as asymptotes do. And although we sometimes move backwards, as do lines that inflect, the advance still ultimately prevails and wins. The natural light of reason is not sufficient for knowing the detail of this, and our experiences are still too limited for us to catch a glimpse of the laws of this order. In the meantime the revealed light guides us through faith, although there are grounds to think that in time we will know more of this order by experience itself, and that there are minds which already know more of it than we do.

[20] Leibniz, Op. Cit., p. 427.

> "However philosophers and poets, through a lack of this knowledge, have thrown themselves into the fictions of metempsychosis or the Elysian Fields in order to come up with some ideas which might make an impact on ordinary people. But the consideration of the perfection of things, or (what is the same) of the sovereign power, wisdom, and goodness of God, who does everything for the best, that is, in the greatest order, is sufficient to bring contentment to all those who are reasonable, and to convince them that contentment should be greater to the extent that we are disposed to follow order or reason."[21]

THE PERFORMATIVE MONAD OF THE HUMAN MIND

> "What is immediately known to us is known through itself." Leibniz, Letter to Sophie, No 51. August-early November, 1702.

As Leibniz acknowledged in a paper which accompanied his letter to Sophie, Electress of Hannover[22], dated June 12, 1702, it is rare that mathematics and philosophy collaborate in bringing about a conclusive demonstration of truth about the nature of the universe and of the human mind. There is only one occasion in his entire correspondence with the two Sophies where Leibniz mentioned his idea of Monad and it is with respect to the ordering of numbers. The difficulties involve the notions that come to mind without having been affected by the external senses, such as counting numbers, reasoning, truth, justice, goodness, will power, etc., because, generally speaking, such ideas cannot be visually represented. Leibniz especially emphasized the difference between a material and immaterial substance and his main argument was as follows:

> "In order to judge by reason whether the soul is material or immaterial, we need to understand what the soul is and what matter is. Everyone agrees that matter has parts and consequently is a multitude of many substances, as would be a flock of sheep. But because every multitude presupposes true unities, it is clear that these unities could not be made from

[21] Leibniz, Op. Cit., p. 247.
[22] Leibniz had a lengthy correspondence (1691-1714) with both Sophie, Electress of Hanover (1630–1714), and her daughter, Queen Sophie Charlotte of Bohemia (1668–1705).

matter, otherwise they would still be multitudes and certainly not true and pure unities, such as are ultimately needed to make a multitude from them. So unities are, strictly speaking, separate substances, which are not divisible, nor, consequently, perishable. For everything which is divisible has parts that can be distinguished in it even before separation. However since it is a matter of unities of substance, it must be the case that there be some force and perception in these unities themselves, for without that there wouldn't be any force or perception in anything which is formed from them, which can only contain repetitions and relations of what is already in the unities. Therefore in bodies which have sensation there must be unique substances, or unities which have perception, and it is this simple substance, this unity of substance, or this Monad, that we call soul; and consequently souls, like all other unities of substance, are immaterial, indivisible, and imperishable; every destruction of substantial things can only be a dissolution."[23]

Sophie Charlotte (1668-1705), Queen of Bohemia and G. W. Leibniz (1646-1716). By Johann Philipp Albert Vogel after Adolph Menzel.

Such an appraisal of the unique substance of the human mind led Leibniz to the following heuristic demonstration of relating three series of numbers and their congruence:

"It is good to give an example. Let us take in order the numbers: 0 1 2 3 4 5 6 7 8 9 10 etc. and then their squares: 0 1 4 9 16 25 36 49 64 81 100 etc., and the differences between these squares: 1 3 5 7 9 11 13 15 17 19 etc. We find that the differences between the squares of the numbers taken in order are the odd numbers, again in order; and after having tested a long

[23] ***In Leibniz and the Two Sophies: The Philosophical Correspondence***, Edited and translated by LLOYD STRICKLAND, Iter Inc. Centre for Reformation and Renaissance Studies, Toronto 2011, p. 198-99.

> sequence of numbers, and found that this holds good, we justifiably presume that it will always continue to hold good to infinity; but we do not thereby see either the necessity or the cause of it, which depends on certain demonstrative reasons taken from the source, or *a priori*. Souls capable of these reasonings are called 'minds,' and it can be rightly said of them that they are made in the image of God, and that there is a society between God and them, so that with regard to them, God is not only what an architect is to his building, but also what a Prince is to his subjects."[24]

Why such a pre-established harmony? What can the human mind ever hope to gain and understand from the necessity of such a divine *a priori* ordering? What is the purpose and reason for it and what sort of certainty does it give us? It seems that God might have had a purpose to influence us all and to prompt us to look for a pre-established state of affairs in the universe for the same reason that we can be assured with the certainty of truth when we think of ourselves as thinkers in opposition to our sensual experience. In Letter 49 of June 1702 to Sophie Charlotte, Leibniz wrote:

> "Being itself and truth are not grasped entirely through the senses. For it would not be impossible that a creature have long and well-ordered dreams resembling our life, so that everything it thought it perceived through the senses were nothing but sheer appearances. Therefore there has to be something beyond the senses which distinguishes the true from the apparent. But the truth of the demonstrative sciences is exempt from these doubts, and must even serve to judge the truth of sensible things. For as able ancient and modern philosophers have already rightly pointed out, even if everything I think I see were only a dream, it would still be true that I, who thinks while dreaming, would be something, and would indeed think in many ways, for which there will always have to be some reason.
>
> "So what the ancient Platonists have said is very true, and very worthy of consideration, namely, that the existence of intelligible things, and especially of this self which thinks and which is called the mind or soul, is incomparably more certain than the existence of sensible things, and that therefore it would not be impossible, speaking in metaphysical rigor, that there should ultimately be only these intelligible substances, and that

[24] Leibniz, Op. Cit., p. 200.

sensible things should be nothing but appearances. Whereas our inattention makes us take sensible things for the only real things. It is also right to note that if while dreaming I discovered some demonstrative truth, mathematical or otherwise (as can indeed be done), it would be just as certain as if I were not asleep. This shows the extent to which intelligible truth is independent of the truth or the existence outside of us of sensible and material things.

"This conception of being and truth is therefore found in this 'self' and in the understanding rather than in the external senses and in the perception of external objects."[25]

Thus, if one doesn't pay attention to what lies behind the perceptions of what appears to be reality, one cannot distinguish what is true or false, and therefore, one cannot identify what is the cause of being sidetracked into not thinking or what is the cause of the joy which comes with the discoveries of thinking. In other words, if you know your mind only through your body, you are in real trouble. Sophie Charlotte's grandson, Frederick II, captured the true meaning of this situation when he described the genius of his "Philosopher Queen" grandmother:

"She was a princess of distinguished merit, who combined all the charms of her sex with the graces of wit and the lights of reason… This princess brought to Prussia the spirit of good society, true politeness, and the love of arts and sciences… She summoned Leibniz and many other learned men to her court; her curiosity wanted to grasp the first principles of things. One day she pressed Leibniz on this subject, and he said to her; 'Madam, there is no way to satisfy you: you want to know the reason for the reason.'"[26]

FIN

[25] Leibniz, Op. Cit., p. 241.

[26] Frederick II, King of Prussia, ***Mémoires pour servir a l'histoire de Brandebourg***, (Berlin, 1750), 177–78. Quoted from, ***In Leibniz and the Two Sophies: The Philosophical Correspondence***, Edited and translated by LLOYD STRICKLAND, Iter Inc. Centre for Reformation and Renaissance Studies, Toronto 2011, Letter No. 48, March-June 1702, p. 3.