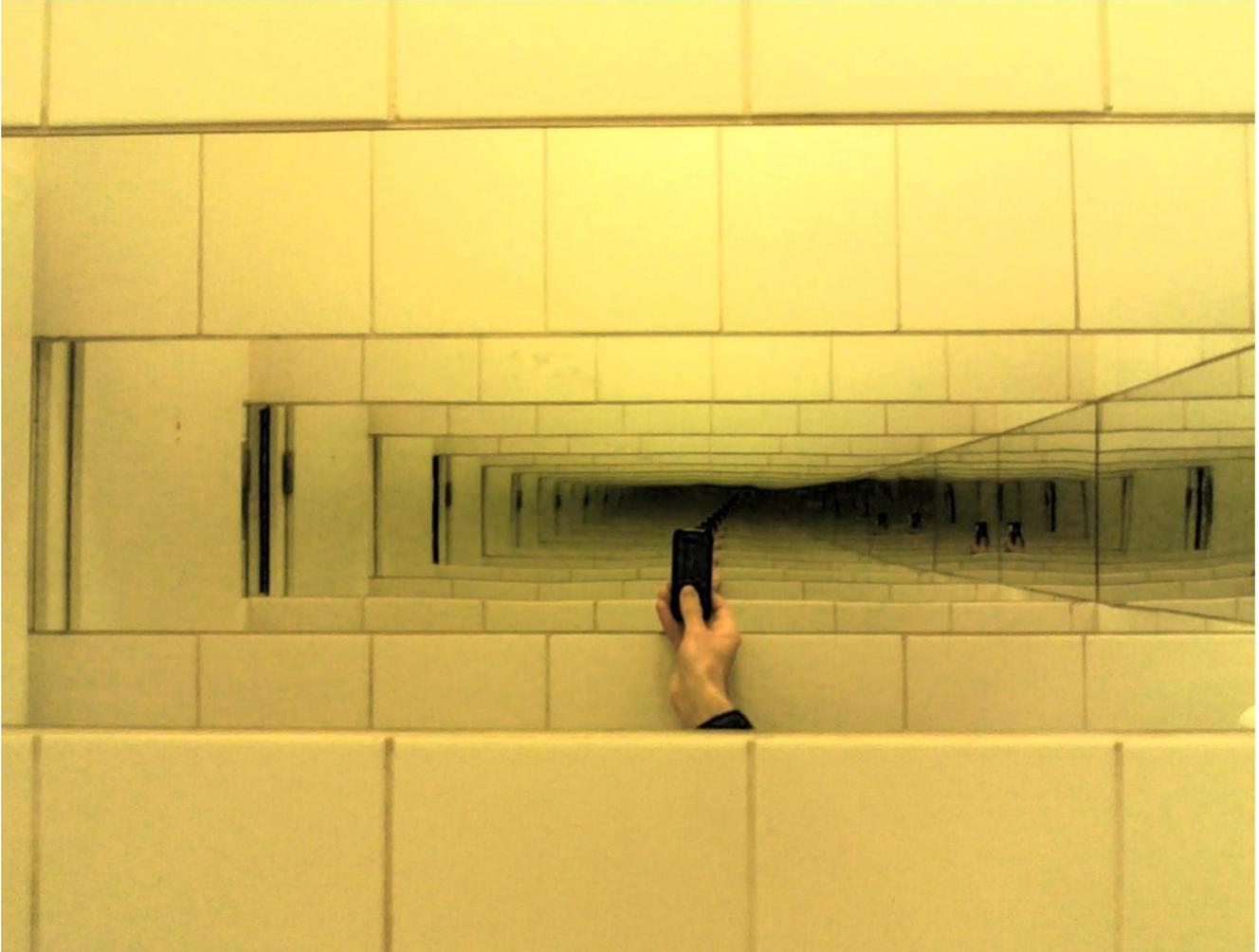


## Infinity is Weird Even in Infinite Reactance

*Harmonic Series yields Infinite Energy in a Finite World*



Infinity mirrors is an interesting topic, along with [Gabriel's Horn](#), since both provide a generalized mathematical representation of the process by which our use of finite energy arises from infinite reactance. Or else, finite energy disappears altogether without any trace of having obeyed the Law of Conservation. Yet, this disappearance is not unlike that of an invisible, naked creature who remains standing before us despite our ignorance of its presence.

Consider not where energy comes from since that merely looks at the thermodynamic process of the movement of energy as it converts from one format to another. Instead...

Consider the structural formation of energy arising from time, capacitive reactance and inductive reactance and assume, for the moment, that each of these three ingredients of energy in general – and electrical energy in particular – are all three infinite in scope when considered, individually – not when they are combined together as energetic phenomena localized, such as they are, in space.

Then, and only, when we combine these three infinite ingredients into a finite conjunction of measurable qualities of voltage, current, resistance and frequency (which are subject to the Laws of

Thermodynamics and Conservation) do we – should we – ask the pressing question: “From where does energy come and to where does it go?” if we are to make any sense out of the balance of energy transfer to which these laws of physics pertains. These laws are all very well and good, but what use are they if we should bypass them in favor of organic laws governing rates of growth and decay?

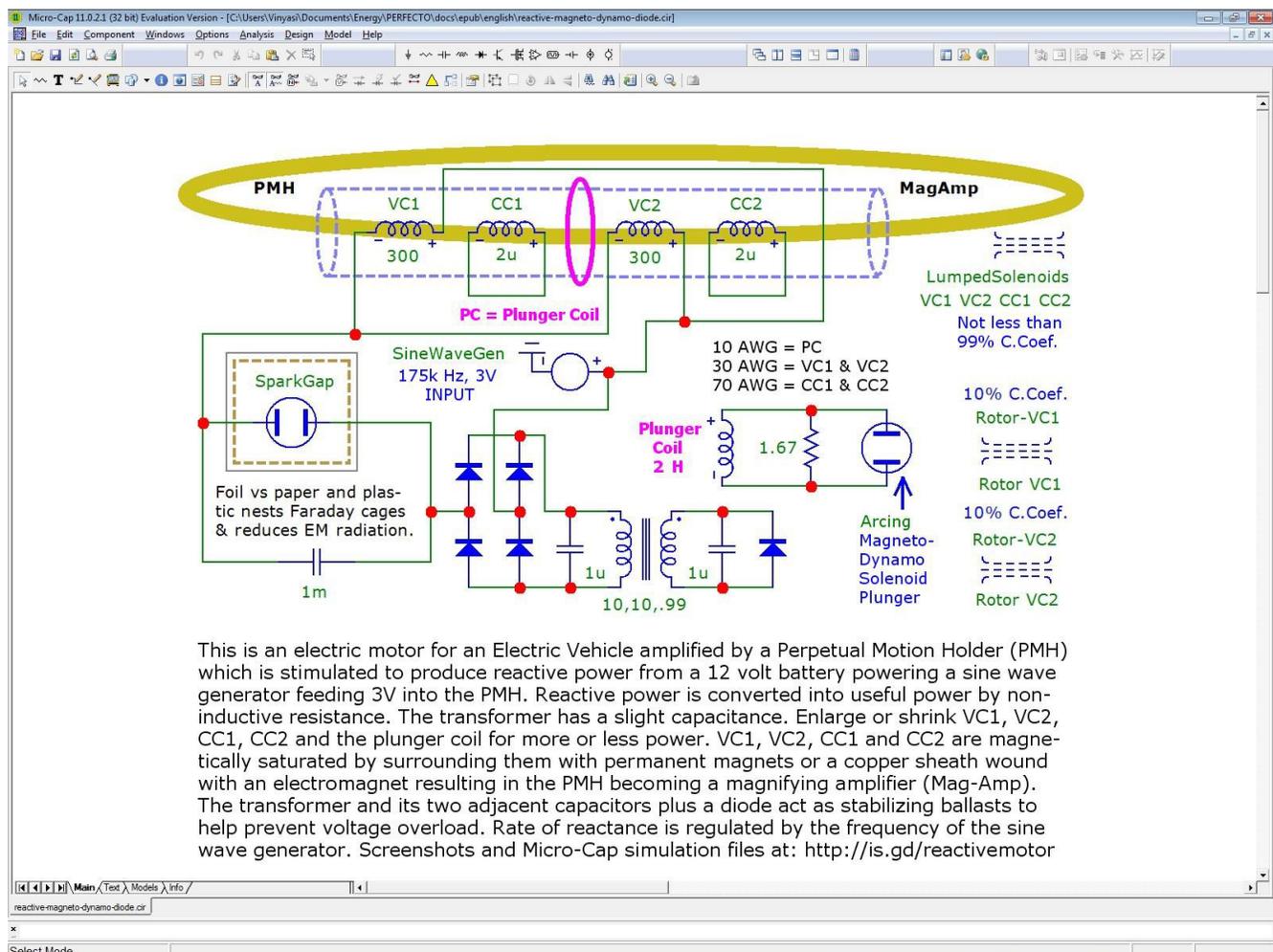
All we have to do is accentuate one of the two infinite ingredients of finite electricity using its complimentary opposite ingredient as a reference (towards the first ingredient) to either decompose or synthesize electricity – within a framework of time – without violating any law since we've superseded these laws which merely define the expression of energy while ignoring their root cause. These laws pertain to the finite conjunction of infinite ingredients and their finite movements and finite changes within a finite Universe. These laws do not address the infinite source of energetic conditions which presupposes energy and are boundless in their primordial scope.

Take an infinitely long line. Now, take another one. Each is infinite in length. Now, cross these two lines of infinite length. What do we get? A finite point wherein they intersect. And if, perchance, our eyes cannot see where these two infinitely lengthy lines terminate due to their being made of ultra-fine fairy dust to which our eyes are not accustomed, then we'll miss out on perceiving, and appreciating, their non-physical causation of the physical point at which they cross.

In other words, these fairy-lines epitomize reactance while their crossing point exemplifies the physicality of electricity. We know the world to be physical. Yet, it is merely a shadow of its root cause.

“We are shadow people living in a shadow world.” – Plato

Now, take this circuit...



The capacitance resulting from the 10% loose, mutual coupling of the **Plunger Coil** (in the schematic, above) and the two Voltage Coils: VC1 and VC2, underneath it invokes capacitive reactance within the context of their self-inductance used as their reference. A similar phenomenon also occurs at capacitors, C2 and C3, since they are being force-fed through a full diode bridge rectifying their Alternating Current into Direct Current. This begins to create an imbalanced wave form since the current is forced to remain unwaveringly D/C while the voltage is allowed to alternate in polarity. To further add to this mischief, these capacitors and their associated ballasts (including the transformer in the lower right of this circuit) have nowhere to dump their accumulation of voltage charge. Nor are they given the opportunity to do so. Hence, these capacitances have no choice but to reverse their voltage polarity as a reaction to their being forced to buildup voltage charge (more than what they have already become saturated with) during every other half of an A/C cycle when the diodes are likewise being forced by entry into them of forward current. The result is the separation of current from voltage by a full half-cycle of 180° with the *apparent* formation of negative current. This separation insures a lossless condition for these reflecting waves of reactionary power as well as insuring their continued generation since the resulting power factor maintains itself as a negative value. A rapid series of reflections are induced between these two end-points serving as a miniature transmission line with a terminus at either end. If not for the spark gap periodically shorting out these reflections, a surge of infinite self-destruction would annihilate this circuit serving as host to these surges.

This sparking condition is repeated to the right of the **Plunger Coil**, as a modeling technique, but in real life would merely be a sparking rotor similar to a magneto-dynamo. These sparks will reassemble the fragments of electricity (the capacitive and inductive reactance) which have been echoing and escalating elsewhere throughout the circuit at an exponential rate of their recirculation. But as electricity, we know it can only be spent once and that's it....it's gone for good. Yet, as the fragments of electricity, they can only be recirculated and never spent as fragments unless first reassembled into wholistic electricity.

This is the paradox of electricity subject to our manmade “Malthusian Laws Intended to Conserve our Belief in Limited Resources”, yet fashioned out of fragments which are infinitely recirculatable. This is the illusion of “free energy”: that we could take a finite quantity of electricity per finite duration, and apparently increase it by first converting it into its fragments. These fragments cannot be spent. They can only grow or decay at exponential rates of recirculation obeying organic laws analogous to growth and decay to which all living creatures are subject to. Then, we may take this acceleration of circulation (masquerading as an increase of population of fragments) and convert only a fixed amount of them into usable energy per fixed duration to be spent at a fixed rate. Thus, could an overload condition occur if not shut down, periodically, by the spark gap on the left side of this circuit.

This electric motor would best service the need for providing motion to an electric vehicle, not by rotation of its motor shaft, but by its reciprocation similar to the action of an ultrasonic plunger.

By fashioning this motor as a solenoid with a plunger, a conduit of water could be agitated at a frequency higher than conventional motors. The vessel containing this water could be connected to one of Tesla's patents, his: valvular conduit, which is a solid-state series of one-way valves. This would force the water to move down the length of the conduit rather than merely shake while standing in one place. Then another Tesla invention, his patented bladeless turbine, could be attached to the drive shaft engaging the wheels of this vehicle to provide both gearing down and rotary motion. [Scroll to bottom.]

An iron-cored transformer along with two capacitors plus a resistor or, in the alternative: one or two diodes, are used as an “LRC Tank Circuit” to serve as “Ballast” – an anchor weight of sorts – to stabilize the reactionary behavior of the PMH. Positioned, such as they are, behind the four diode full rectifying bridge, they are shielded from any consideration of becoming the second of two dipoles. In

other words, they are a virtual end of a transmission line. The other end of this transmission line is the PMH. These ballasts are invisible to the PMH in the sense that they do not contribute any activity to the building up of reactionary power. Again, they merely stabilize the imbalancing consequence of this amplification process and retain a certain neutrality toward this reactionary process without interjecting any further modifications of their own. This makes the PMH, in this circuit, a Tesla Magnifying Transmitter in as much as it is: a monopole emitting a standing wave of reactionary power whose electric and magnetic fields are separated by an A/C half cycle of 180°. This power is predominantly of a negative power factor born of its two complimentary parents: capacitive and inductive reactance.

As you may already know, negative power factor signifies the generation of power rather than its consumption. Hence, this device produces “free energy” since reactionary power is readily converted into usable power by passing it through an illuminative resistor, ie. a spark gap. Hence, the application of free energy to the charging of a motor's coils is a simple and efficient use of reactionary power. This makes this circuit somewhat analogous to the Prius hybrid concept since there will be plenty of energy to spare for all of the other electrical requirements of the car's circuitry (such as: headlights, radio, etc) while cruising along on level ground or accelerating up a steep incline. What sets this configuration apart from a conventional hybrid is its in-house amplification of energy limited only by the mass of the motor's coils without any need for a battery pack within plug-in EVs. Hence, there is no need for a gasoline engine. This circuitry provides all that is needed to run a full sized battleship, luxury cruise liner, or submarine if you are so inclined!



To be sure, we must never mistake a storehouse of energy for the energy which is stored inside it. For, this contributes to the utter nonsense of always assuming that the source of energy – its reactionary ingredients – can never be conjoined nor decomposed under the same preposition that energy, itself, can never be created nor destroyed.

We may measure electricity's finite qualities, such as: its voltage, its current, its resistance and its frequency, but can we measure capacitive or inductive reactance? Or, must we infer these reactances with mathematical formulae derived from the direct measurements of voltage, current, resistance and frequency without ever being able to measure these reactances, directly, with the use of a physical meter?

$$Reactance_{Capacitant} = \frac{1}{2\pi \times Capacitance \times Negative (Series) Resistance \times Frequency}$$

$$Reactance_{Inductant} = 2\pi \times Inductance \times Positive (Series) Resistance \times Frequency$$

Only frequency, resistance, capacitance and inductance are relevant in these formulae. Neither voltage, nor current, have any relevance refuting the significance of energy IN versus energy OUT. Yet, frequency and resistance are relevant – especially the placement of resistance determining its positive or negative value as a consumer or generator of current, respectively. Reactance is not bound by energy.

If the answer is: “No. These two types of reactances cannot be measured, directly. But they *can be* mathematically derived from the direct measurements of inductance, capacitance, resistance and frequency by their calculation with reactance formulae”, then we cannot assume that the Universe is limited in its ability to react. For all we know, reactance may possess an infinite capacity to react, or *appear to be infinitely reactant*, while energy may be finite, or *appear to be finite* for all intents and purposes outside of their actuality.

This apparent incarnation of infinity, within the confines of an electrical circuit, turns out to be true if we consider the mathematics of infinity mirrors (and Gabriel's Horn) to help us grasp this paradox of perception.

The infinite summation of the square area of each and every reflection of the infinite repetition of two-dimensional images, resulting from standing in the exact center between two opposing mirrors, is a finite summation modeled by this equation...

$$\sum_{n=0}^{\infty} \left( \frac{(-1)^n}{2n+1} \right)^2 \quad \dots\text{or, put more simply...} \quad \sum_{n=1}^{\infty} \frac{1}{2n-1^2} \quad \text{Eq. \#1}$$

Expanded, it becomes an [infinite series summation](#) for  $\pi$  (related to the [Gregory–Leibniz formula](#))...

$$\frac{1}{1^2} + \frac{1}{3^2} + \frac{1}{5^2} + \frac{1}{7^2} + \frac{1}{9^2} + \frac{1}{11^2} + \frac{1}{13^2} + \dots = \frac{\pi^2}{8}$$

But if we restrict ourselves to just the width – or exclusively restrict ourselves to merely the height – as the result of standing a little off-center between an infinite series of reflected images between two opposing mirrors, then we get an infinite result defined by the harmonic series...

$$\sum_{n=1}^{\infty} \frac{1}{2n-1} \quad \text{Eq. \#2}$$

Expanded, this becomes...

$$1 + \frac{1}{3} + \frac{1}{5} + \frac{1}{7} + \frac{1}{9} + \frac{1}{11} + \frac{1}{13} + \dots = \infty$$

Equation #1 represents – in our world of physicality – energy of any type: electrical, mechanical, optical, etc, for it also represents the finite conjunction of capacitive and inductive reactances generating electrical energy (for example) within a framework of time giving us various relations akin to Ohms Law...

*Voltage* × *Current* = *Electrical Power* ...Ohm's Law.

*Positive Power Factor* × *Inductive Reactance* = *Capacitive Reactance* ...the consumption of power.

*Negative Power Factor* × *Inductive Reactance* = –*Capacitive Reactance* ...the generation of power.

*Resistance* × *Current* = *Voltage*

*Speed of Light* × *Magnetism* = *Electrostatic Charge*

*Speed of Light*<sup>2</sup> × *Magnetism*<sup>2</sup> = *Electrostatic Charge*<sup>2</sup>

*Speed of Light*<sup>2</sup> × *Mass* = *Energy* ...I'll let you draw your own conclusions!

And since equivalences can be found among all of the various types of energy that we are aware of, these mathematical relationships apply to the entire scope of energy imparting a finite limit to the consumption of energy and no limit to the apparent generation of energy regardless of the type of energy we wish to consider.

Equation #2 represents either capacitive or inductive reactance, but not both at the same time, since the value of the denominator is not squared. It fails to cross-interfere, or conjoin, a union of two opposites, namely: fails to intersect capacitive with inductive reactance and, thus, fails to produce the illusion of electrical energy, or any of its energetic analogues, manifesting out of thin air. Thus, these separate reactive ingredients of proto-energy remain infinite when considered apart from each other.

Thus, is born a mathematical paradox, that...

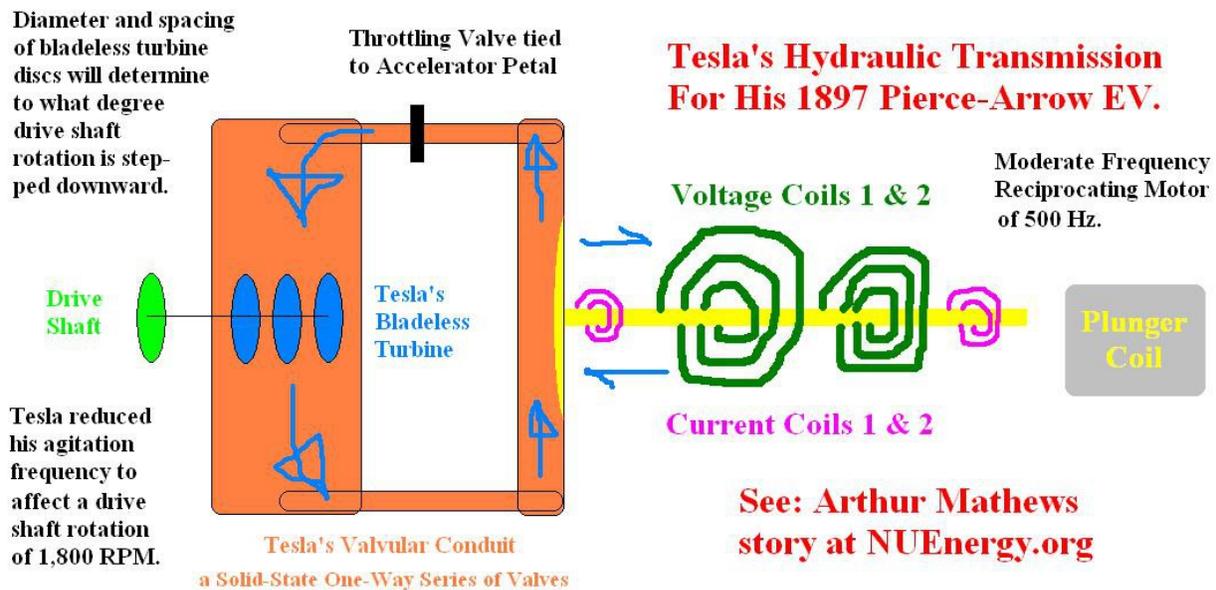
Energy IN must equal energy OUT so long as no intervening transformation takes place involving their apparently infinite ingredients.

Or, expressed another way...

Finite energy equals the appearance of infinite potential for energy OUT not equaling energy IN if we make allowance for reactance to infinitely reflect inside a circuit resulting in a surge developing to the destruction of its host if not suppressed nor regulated within tolerable limits of endurance.



This transmission is perfect for the circuit, above, since that circuit creates an output of triangular waves suitable for reciprocating a plunger rather than attempting to rotate a motor shaft.



Be sure and read my eBook on Amazon: [“The Heaviside Solution to the Ferranti Effect”](#).

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