ЕСЛИ ТЕХНОЛОГИЧЕСКАЯ МЕТОДОЛОГИЯ ТЕСЛА ВОЗОБЛАДАЕТ, СОВРЕМЕННОЕ ПЛАНЕТАРНОЕ ОБЩЕСТВО ИЗМЕНИТСЯ ДО НЕУЗНАВАЕМОСТИ

Никола Тесла – ученый будущего - еще в 1899 году предсказал и провел принципиальные испытания новой программы развития научной цивилизации на основе публичного и всеобщего раскрытия источников увеличения энергии человечества. Программа изложена Николой Тесла подробно точка за точкой (1899-1906), и в настоящее время составляет единую основу Всемирного информатизационного общества, постепенно становится всеобщей единой наукой планетарного сообщества.

Если мы попытаемся сформулировать Tesla's технологический коммунизм на основе его интеллектуального наследия, это будет следующий комплекс:

- 1. Свободная энергия от окружающей среды,
- 2. Передача человеческой физической работы в область искусственного интеллекта,
- 3. Развитие свободного планетарного сообщества,
- 4. Духовные и этически осведомленные ученые, как элита.

Положительные последствия очевидны: нет необходимости в войне, не нужно бороться за господство на основе силы, нет необходимости в классической бизнес или процентной политике рабства, или преднамеренном обмане или принуждении любого рода. Сам Тесла показал и проложил путь. Индийский гуру Свами Вивекананда был первым, кто постиг Tesla's электрические ритуалы и испытал свою лабораторию как храм новой энергии, пропитанной наукой высокой этической религиозности.

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IF TESLA HAS PREVAILED NOWDAY'S PLANETARY SOCIETY WOULD BE BEYOND RECOGNITION

In 1899 (Colorado Springs research) our scientist of the future already envisaged and fundamentally tested his new scientific civilization development program starting its public disclosure by *The problem of increasing human energy* (1900) and detailed it explicitly, point by point, in his *Worldwide system* (completed 1906), which forever stays the undisputable prophetic basis of the current world *Informational society* progressively becoming the scientific one.

If we try to essentially formulate the Tesla's *technological communism* intellectual legacy, it would comprise:

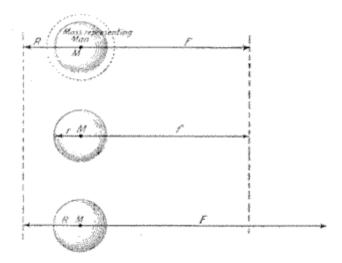
- 1. Free energy from the environment,
- 2. transfer of human physical work to artificial intelligence,
- 3. evolving at ease planetary community by opened individuals, with
- 4. spiritual and ethically knowledgeable scientists, as elite.

Positive consequences are obvious: no need for war, no need for domination based on force, no need for classical business or interest politics slavery or deliberate deception or compulsion of any kind. Tesla himself showed and paved the way. Indian Guru Swami Vivekananda was the first to comprehend Tesla`s electrical rituals and experience his laboratory as the temple of a new, high ethically impregnated scientific religiosity.

On physical and metaphysical meaning of human mass and energy and its potential

In order to avoid reducing Tesla's profound thinking to mere mechanistic physicalism, we are immediately to focus on and analyze Tesla's mathematical notion of the total energy of a *Humanity as a physical system* given once by Leibniz's *v*², *vis viva*, *living force*. Tesla strongly proposed *vis viva* (living force) which is *total force concept* defined in Leibniz's correspondence with Descartes, who, instead, advocated *motion content, mv*, (*mass times velocity*), or *amount of motion*, later used for *momentum*.

Let us look it closely!



According to the DIAGRAM *a*, for Tesla, force is the push or pull that is applied to an object to change its momentum. Newton's second law of motion defines force as the product of mass times acceleration (vs. velocity). Since acceleration is the change in velocity divided by time, the two concepts are connected:

force = mass x (velocity / time) = (mass x velocity) / time = momentum / time

Multiplying both sides of this equation by time, we get:

force x time = momentum

It follows the difference between force and momentum *is time*. And if I may dare to generally conclude, the very fundamental idea of Tesla's whole article is to discuss in what way human consciousness is *to use time* to speed up the evolution of mankind.

To complete the Tesla chart of the Man's universal position, we should stress out here his belief that humans are automatons of cosmic forces, endowed with ability of motion, and, of course, the posture, master Nikola considered of utmost importance:

"Prior to the discovery of radio-activity and as a result of years of meditation I came to the *conclusion that there can be no energy in gross matter except that which had been, or is being, received from without*." (*New facts about Cosmic rays*, unfinished article, 1935, Tesla's Archive, Nikola Tesla Museum, Belgrade.)

If it is true that there is no energy in a physical system other than that received from the environment, then it necessary follows:

"When radio-active phenomena were discovered I was prepared to view them merely as secondary effects of an external radiation, and as no trace of such a disturbance could be detected on earth I concluded that the primary activating rays were of cosmic origin and most likely to emanate from suns closely resembling our luminary. as the first step towards clearing up the mystery, I undertook to determine whether it was charged to a potential sufficiently high to produce the tremendous electro-static repulsion which I had found to be the only force in nature capable of accounting for the phenomena. The subject required extended investigation but finally I ascertained with a reasonable degree of certitude, and to my amazement, that the sun was at a constant positive potential of about two hundred and sixteen billions of volts and contains a quantity of free electricity approximately equal to seventeen billion coulombs, which induces at the terrestrial distance one billion volts and generates powerful currents on the earth, thus magnetizing it. Owing to its immense charge the sun imparts to minute positively electrified particles prodigious velocities of free electricity carried by the particles and their mass, some *attaining a speed exceeding fifty times that of light*. I am emphatic in contradicting the contention of Relativists that mass increases with velocity. If this were true nature would have provided means whereby the smallest bit of matter in existence, floating in space, could get so formidable a grip on the whole universe as to offer an infinite resistance to motion. Can anything more absurd be imagined?" (*Ibid.*)

And further, in his famous birthday statement (1937) Tesla finally explained in detail his attidute to Einstein's *energy equals mass times light velocity squared* formula:

"The kinetic and potential energy of a body is the result of motion and determined by the product of its mass and the square of velocity. Let the mass be reduced, the energy is diminished in the same proportion. If it be reduced to zero the energy is likewise zero for any finite velocity. In other words, it is absolutely impossible to convert mass into energy. It would be different if there were forces in nature capable of imparting to a mass infinite velocity. Then the product of zero mass with the square of infinite velocity would represent infinite energy. But we know that there are no such forces and the idea that mass is convertible into energy is rank nonsense.

According to the physical truth I have discovered there is no available energy in atomic structure, and even if there were any, the input will always greatly exceed the output, precluding profitable, practical use of the liberated energy."

Was Tesla terribly wrong in the reasoning above?

I would be very cautious in rejecting his arguments, although the fission energy calculations agree with Einstein. Mathematical objects must be unambiguously interpreted which is not the case in this formula.

Firstly, energy (wave length over time) and velocity (space over time) are both defined in the same way and that is to be discerned, since velocity within the ends of a wave length must be infinite, so the wave sustains in its own space. Which is the shortest wave length? It cannot be mobile dimensionless point simply because it is non-extensive, nonspatial. *Material point*, the term widely used at universities, is even more non-sensible and physically never proved abstraction.

Secondly, Quantum mechanics failed to discover the elementary mass or prime matter (*materia prima*) or prime structuring unit of a substance. What is the explanation to mass converting into energy? What is converting into energy, if we do not know exactly what the mass is and consists of?

At last, to the light velocity squared there is no physical interpretation, so far. It appears to me that in fission we actually have resonant effect (Tesla) based on synchronicity which is for sure precondition for any physical interaction. But, strangely, the understanding of time nature in not seen as the most serious fundamental problem in contemporary science: ontology, mathematics and physics.

My long lasting research showed that the Hypothesis of Time is the logical key not only to Tesla enigmatic technology but more to his missing theory.

For Tesla, the Universe is oneness, and its all-pervading medium is Louminoferous Ether and the mass becomes from and returns to it:

"In the early part of the Nineteenth Century it was clearly recognized that virtually every motion on earth was caused by the sun and that the energy of all terrestrial bodies came from that source. But I am interpreting the statement in a much broader philosophical sense reaching back to the very formation of ponderable matter from the ether or primary substance pervading the universe. There are evidences that this process is going on continuously while, at the same time gross matter is dissolving into ether. It may be linked to the winding up and unwinding of a clock and from a fundamental discovery, which I intend to make known in the near future, it appears that the first of these operations exceeds the second. That is to say, *a slow but steady increase in the amount of perceptible matter and its energy is taking place* contrary to the classical theory of Lord Kelvin heretofore generally accepted as one of the great truths of science." (*Ibid.*)

Truly. if "a slow but steady increase in the amount of perceptible matter and its energy is taking place" and if the universal karma equation unmercifully regulates mass-energy balance it would be general explanation for cosmic catastrophes as well as the cause for birth and aging of stars.

For Tesla the whole Universe is a Being, alive as the Earth itself, and energy is *living force* acting upon gross matter, normally, from outside, but, if it acts from

within, like in the case of biological systems, than the creative movements are produced by inherent *internal time principle* or individual consciousness, or personal awareness acting on mass intrinsically as human free will or intention in concurrence with physical laws. We may further derive from here that human *free will*, just because it is *free*, belongs to the realm of metaphysical principles, which is not too much astonishing, if we take into account that entire mathematics, geometry as well as numbers, is extrasensory altogether with pure physical laws. No direct perception of physical laws is possible, but, by visions it is (Tesla's electromagnetic visionary mind laboratory). Thoughts are electromagnetic images mainly produced by human brain and individual consciousness is capable of choosing the initial frequency on which the brain works forth accordingly and that is how the free will operates on the level of thinking).

Living being (self-organized system) is accumulating time and that is why it can postpone the reaction to external stimuli. Consequently, humans have certain degree of freedom and becoming aware by deepening of knowledge, every human can diminish the friction caused by ignorance and stupidity represented by wars and intentional lying, above all. On the other hand, humans can magnify the friction by doing inappropriately to universal order that is negative doing which is in every case nothing else but one's own free will erroneously directed to activate energy and matter to perform feed-back disharmonious processes in surrounding nature inevitably resulting in feed-back destructive effects on those who have decided to act wrongly. It is a natural retorsion law applied to everyday life, *Dharma of Upanishads or Karma realized*.

These underlying points of his Mind, initially exposed in the *Problem of Increase*... Tesla never abandoned, lately supplementing them only.

The Non –Hertzian waves and the new concept of simultaneity

Tesla's experiments in Colorado Springs and on Long Island (1899-1905) showed the electromagnetic induction changes of space and time exceed velocity of light c, (Tesla's Non-Hertzian waves which he described as Induction standing waves).

"The most essential requirement is, however, that irrespective of frequency the wave or wave-train should continue for a certain interval of time, which I have estimated to be *not less then one-twelfth or probably 0.08484 of a second and which is taken in passing to and returning from the region diametrically opposite the pole over the earth's surface with a mean velocity of about four hundred and seventy-one thousand two hundred and forty kilometers per second.*" (Art of transmitting electrical energy through the natural mediums, Nikola Tesla, USA Patent No. 787,412. Application May 16, 1900, patented April 18, 1905.)

His further experimenting (1905-1908) proved that for certain conditions the Non-Hertzian disturbance (produced by induction, only) could be effected through natural media at any distance by infinite velocity. If it is so, we need a new understanding of simultaneity of the different wavelengths that constitute Electromagnetic Spectrum. For Tesla, given wave-length is also the time measure $t = \lambda t_1, \lambda = 1$ and that is why frequency of light is constant, while its velocity varies with optical mediums. To every electromagnetic wave belongs his eigentime.

As stated above, velocity and frequency both are given as space over time formula. If propagation path of velocity equals wavelength of frequency then velocity/frequency = 1, and we get Non-Hertzian induction waves which are propagating instantaneously at any distance, in zero time (or Constant Present Time). Further consideration led Tesla to the conclusion there is no at all empty space; Electromagnetic spectrum and Space are one and the same entity – Luminoferous Ether.

In support of non-metrical or zero Constant present time, we are to redefine the concept of motion as displacement in Time. The motion of physical body is mere the displacement. Its travelling period is *Zero Time*, since present time isn't change. Let us put it in simple words: Imagine we are traveling Washington – New York distance in one hour. We start from Washington at 4 o'clock arriving to New York at 5. In the moment we are in New York, what is the time in Washington? Of course, it is also 5 o'clock. 5 - 5 = 0.

Time is the most profound change principle of space and mass and it is not a measure of a self-change, as it is widely, but incorrectly taken in physics. In between space positions A and B time also isn't differ, it constantly stays 0 time.

That is why the problem of force – time relation in physics is still unsettled. The moment of force and the effect of force are not occurring at the same point in space, but at the very same *now* of time. The constant Present zero time is the only time of Physical reality.

Comments on actuality of the 1900 Tesla's concrete propositions to speed up the evolution of Mankind

1. Burning the nitrogen of the atmosphere by the electrical pressure alternating one hundred thousand times per second *which excites the normally inert nitrogen, causing it to combine with the oxygen. "In this manner many compounds of nitrogen may be manufactured all over the world, at a small cost, and in any desired amount, and by means of these compounds the soil can be fertilized and its productiveness indefinitely increased. An abundance of cheap and healthful food, not artificial, but such as we are accustomed to, may thus be obtained." No doubt, this nature like, direct, cleanest and cheapest way of soil treatment is yet to be applied in our days.*

2. Ozone production in large amounts to be used as very cheap ideal disinfectant is still to be achieved. Obstacles to that happy solution are mainly business run ideological and in favor of dirty chemical industries.

3. To cease raising the cattle as a means of providing food because it seriously decelerates evolving of the human race and preferable start raising vegetables. The vegetarianism is a commendable departure from the established barbarous habit. Tesla did not hesitate to fully argue his at the time avant-garde plea: *That we can subsist on plant food and perform our work even to advantage is not a theory, but a well-demonstrated fact. Many races living almost exclusively on vegetables are of superior physique and strength.*

Driven by his extremely brilliant cosmic morality, Tesla reached the final solution to the problem of ethical nutrition: *"There seems to be no philosophical necessity for food. We can conceive of organized beings living without nourishment, and deriving all the energy they need for the performance of their life functions from the ambient medium."*

4. Whether we can thrive on artificial food (genetically modified, for example), Tesla found very doubtful. "We are the result of ages of continuous adaptation, and we cannot radically change without unforeseen and, in all probability, disastrous consequences... So uncertain an experiment should not be tried. At least, not for the present... What it is that made the soil is still a mystery. To explain its origin is probably equivalent to explaining the origin of life itself." True. Only by chemically imitating the soil composition we do not understand it.

5. Teaching us how to overcome a *negative force activity which always implies some quality, not infrequently a high one*, Tesla trusted the words of Buddha: "Ignorance is the greatest evil in the world." The one that most retards human movement is ignorance manifested as organized warfare. We may look at war as existential and emotional tragedy or as the phenomenon caused by unknown cosmic principles. If we take the second, scientific approach, then we may avoid whatever disaster getting the accurate knowledge of the subject. Knowing the law which creates certain process we have just to choose its desirable consequences. Even at present poor state of universal knowledge, if **it would be naturally** *easier to build than destroy, man would go on unresisted, creating without limit.*

What is the next phase in the liberation of wars? Machines are to fight machines turning the battle **into a mere spectacle, a play,** a contest without loss of blood. It is realizing these days by interactive media and internet which are dragging out and consuming big amounts of destructive energy that way stabilizing the physical plane.

6. Non-Hertzian teleautomatics or wireless communication by instantaneously transmitted signals on distances at will. This could be easily reached by Non-Hertzian waves which are *following a path of least resistance, however curved*. From my point of view, this is to be realized one very day when physicists start understanding Time, Space, Magnetism, Ether, Light and atomic structure in completely new, *teslian* way. The Tesla visions resembling the true nature of things are to be clarified in the New Cosmology, or better, Physics of Time.

7. In the manner of a clairvoyant Tesla envisaged the future planetary community when *all darkness shall be dissipated by the light of science, when all nations shall be merged into one, and patriotism shall be identical with religion, when there shall be one language, one country, one end, then the dream will have become reality.*

8. The harnessing of the Sun's energy. Inspired both by Christianity and Science Tesla proposed three ways of drawing energy from the Sun of which the second is very original and presupposes radical change in up to date thinking and that is *the efficient utilization of the energy of the ambient medium*. Tesla considered Sun as electrode, anode, and found the possibility how to use the Sun's induction along with enormous electrical radiation the Earth is constantly receiving from that source. The Ocean of free energy.

9.Predicting the age of Aluminum, Tesla strongly recommended: Stop enormous wasting in iron manufacture and usage! *The negative force of war greatly retarding human movement is almost wholly represented in iron*. To support the peaceful reform in iron industry he suggested the new process in which *electric currents derived from the energy of a waterfall should not be directly used for smelting the ore, but for decomposing water*. The liberated hydrogen was to be burned or recombined with oxygen of the atmosphere. Thus very nearly the total electrical energy used up in the water electrolysis would be recovered in the form of heat to be applied to the smelting of ore. This method is not used anywhere so far.

10. Investigating the ambient sources of energy Tesla warned us that it is not necessary to generate electricity merely by steam power, which, by the way, the nuclear plants still do. He at the time also recommended the gas engine, solar engine and the windmill to obtain heating and motive power which are still worldwide in operation because we didn't follow the Tesla later advancement in free-energy thinking. He also found possible applying forces such as magnetism or gravity for driving machinery without using any other means. As the best solution to the problem Tesla finally suggested intensive research in construction of *self acting machine, inanimate yet capable, like a living being, of deriving energy from the medium.*

11. Pointing out the errors in Hertzian investigations Tesla experimentally demonstrated supplying the electrical energy through single wire without return and transmission through the earth without any wire. Who and where on our planet is transmitting electricity that way?

12. Not using at all differential calculus in his work Tesla followed simple Pythagorean mathematics and evaluating the Hertz's method of transmission, he

noted: I have long ago ceased to look upon his results as being an experimental verification of the poetical conceptions of Maxwell.

13. Concerning Hertz's famous investigations which formed a kind of *electromagnetic ideology* Tesla objected to scientific community what is today to be severely repeated addressing it to the CERN inventors of Higgs's Boson, awkwardly named God's particle, and that is deficiency of the mind openness and objectivism: *The work of the great German physicist (Hertz) has acted as an immense stimulus to contemporary electrical research, but it has likewise, in a measure, by its fascination, paralyzed the scientific mind, and thus hampered independent inquiry. Every new phenomenon which was discovered was made to fit the theory, and so very often the truth has been unconsciously distorted.*

0. The most astonishing facts the *Increase*... contains are Tesla's early but pretty clear indications of his last experiment done with The Wardencliff Tower: I mean the 1908 Tunguska explosion. Already in this 1900 article he announced the production and the transmission of immense electrical movements: the phenomena known as "stationary" waves —that are waves with fixed nodal and ventral regions, are not only suitable for communication without wires, but, likewise, for the transmission of energy in great amounts to any distance. *Using Stationary waves in the earth we may produce at will, from a sending-station, huge electrical effects in any particular region of the globe*.

We know from history that when scientific thought finds itself at crossroads, the scientists address the past seeking support and inspiration. Tesla, up to his death, preferred to work alone, far from people's sight. This period was full with new discoveries. Being a mature scientist, he came to fundamental conclusions, which are now days becoming a new milestone of future science.

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