# Tesla's Dynamic Theory of Gravity

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The **Dynamic Theory of Gravity** of Nikola Tesla explains the relation between gravitation and electromagnetic force as a unified field theory (a model over matter, the aether, and energy). It is a unified field theory to unify all the fundamental forces (such as the force between all masses) and particle responses into a single theoretical framework.

## Introduction

Tesla's proposition that gravity is a field effect is being given more serious consideration by researchers. At the time of his announcement, his critique on Einstein's work was considered by the scientific establishment to exceed the bounds of reason. While this theory is disputed by some or simply ignored by others, it does not change the clear indication of the resurfacing of many supposedly "new" ether based theories by current scientists. Initially developed between 1892 and 1894 during the period in which he was conducting experiments with high frequency and high potential currents and electromagnetism, it was subsequently never officially published. Though these principles guided his future research and experiments, Tesla did not announce his theory until near the end of his life after he had been disillusioned by the war efforts. The *Dynamic Theory of Gravity* neither appears nor is mentioned anywhere in standard Tesla informative sites and reportedly, is still classified and unavailable under the FOIA.

## **Dynamic theory of gravity**

Tesla published a prepared statement on his 81st birthday (July 10, 1937) critiquing Albert Einstein's theory of relativity. The following is a portion of that statement:

"... Supposing that the bodies act upon the surrounding space causing curving of the same, it appears to my simple mind that the curved spaces must react on the bodies, and producing the opposite effects, straightening out the curves. Since action and reaction are coexistent, it follows that the supposed curvature of space is entirely impossible - But even if it existed it would not explain the motions of the bodies as observed. Only the existence of a field of force can account for the motions of the bodies as observed, and its assumption dispenses with space curvature. All literature on this subject is futile and destined to oblivion. So are all attempts to explain the workings of the universe without recognizing the existence of the ether and the indispensable function it plays in the phenomena."

"My second discovery was of a physical truth of the greatest importance. As I have searched the entire scientific records in more than a half dozen languages for a long time without finding the least anticipation, I consider myself the original discoverer of this truth, which can be expressed by the statement: There is no energy in matter other than that received from the environment." — Nikola Tesla

While this statement asserted that Tesla had "worked out a dynamic theory of gravity" that he soon hoped to give to the world, he reportedly died before he publicized the details. There is still a halo of mystery around his death - even the exact date is not certain. It is speculated that his death may have been caused by too much "pressure" by agents in order to extract and obtain the secret documents regarding this theory.

Unfortunately few details were publicly revealed by Tesla about his theory. Available details argument against space being curved by gravitational effects, which leads some to believe Tesla failed to understand Einstein's theory is not about curved space at all, but curved space-time. However, there is disagreement about Tesla's exact understanding of Einstein's theories; Tesla was actively conducting tangible experiments during the time of Einstein's theoretical research. He underlined that time was a mere man-made reference used for convenience and as such the idea of a "curved space-time" was delusional, hence there was no basis for the Relativistic "space-time" binomium concept.

### Tesla's aether concept

It is important to correctly comprehend Tesla's unique aether concept as several popular researchers in the field have not done. Tesla's aether is analogous to the classical aether "gas" theory.

"Long ago he recognized that all perceptible matter comes from a primary substance, or tenuity beyond conception, filling all space, the Akasha or luminiferous ether, acted upon by the life giving Prana or creative force, calling into existence, in never ending cycles all things and phenomena. The primary substance, thrown into infinitesimal whirls of prodigious velocity, becomes gross matter; the force subsiding, the motion ceases and matter disappears, reverting to the primary substance." (Grotz, 1997)

Tesla's aether is a rarefied gas having extreme elasticity. It allows ponderable matter to pass almost freely through it, waves in it are electromagnetic waves and electrostatic, gravitational and magnetic forces are all directly related to the aether. It is important to note that there are major errors in the works of several major Tesla researchers, they have incorrectly deduced from Tesla's pre-1900 lectures on alternate currents of high potential that Tesla said his aether could be "polarized" and made "rigid" through a particular high frequency alternator and single terminal coil (ex. 1892 lecture in London) and 2 metal plates which he "suspended" in the air making the space between them rigid "privately" on one another (ed. the Tesla Effect). Tesla believed his aether to be an insulating medium and after studying the lectures in detail it becomes apparent that he is in fact talking about polarizing and solidifying the air, not the aether. Also his aether is said to be carriers immersed in an insulating medium as supposedly quoted from one of his high frequency lectures. This is incorrect as reading it properly it states that the air is the carriers and the insulating medium is the aether. In 1894, Tesla invented a special bulb (which was the ultimate result of his research in vacuum tubes; the unipolar "targetless" bulb) which augmented this technology to create "tubes of force" which could be used for motive power (what Tesla later cited as "veritable ropes of air").

Note that the tubes of force is only a theory and without proof should not be taken seriously.

## Theory structure

Tesla said he had fully developed his Dynamic Theory of Gravity and "worked it out in all the details". This aether-based theory, which initially was developed between 1893-94, explained gravity and directly linked it to electromagnetic phenomena, explaining also that the sun and all stars emit "primary solar rays" which in turn produce secondary radiations. Tesla's theory states that the phenomena produced by electromagnetic forces is the most important phenomenon in the universe. According to portions from his theory, mechanical motions are universally a result of electromagnetic force acting upon and through media. Unfortunately, no mathematical details of the theory have officially surfaced.

Tesla demonstrated that all bodies have electrical content and as such, are all moving charges as our earth hurls through space at incredible speed (hence 'dynamic'). He demonstrated, through the use of his particular evacuated tubes and high voltage coils powered by specifically designed high frequency alternators, how earth emanates "*microwaves*" and how it behaves as a charged sphere. Based on these discoveries and their confirmation at Colorado Springs, he developed and tested his first electromagnetic machine that could fly "*devoid of sustaining wings*, *propellers or gas bags*".

#### Non-hertzian waves

It is reported that Tesla's concept of "electromagnetic momentum" appears to have been gleamed from Maxwell's original work (ed. the equation usually referred to as the Maxwell's equation in use today were written by Oliver Heaviside and could rightly then be called the "Maxwell-Heaviside equations"). Tesla was familiar with the quaternion notation in Maxwell's work and often referred to Maxwell's books. Tesla also conveyed the notion of J. Zenneck's longitudal ground wave as the non-Hertzian wave he was talking about. These are now known today in microwave field theory as "surface waves". Tesla calls attention to a "field of force" being indispensable for explaining the movements of astronomical objects (a concept that fields model the phenomenon more precisely). Heaviside himself offered "a gravitational and electromagnetic analogy" (The Electrician, 1893). Others have continued this line of work. Oleg D. Jefimenko wrote the book "Causality, electromagnetic induction, and gravitation: a different approach to the theory of electromagnetic and gravitational fields".

## Components

This theory is a logical extension of the rotating magnetic field model. According to the Swami Vivekananda,

"the Vedantic Prana and Akasha and the Kalpas, which according to [Tesla was] the only theories modern science can entertain [... he] thinks he can

demonstrate that mathematically that force and matter are reducible to potential energy" (Grotz, 1997)

Tesla electromagnetics are composed of potentials and their corresponding motion. This potential's motion causes in the surrounding medium an equivalent and opposite effect (determining the positive and negative character of the medium). Some elements of the theory may include:

- All ponderable bodies are constantly in motion in through space.
  - Absence of a medium would result in no electromagnetic forces (the space-vacuum fabric is a medium, the aether (the ultimate medium))
  - Ponderable bodies and other media filling space all possess a dielectric level.
  - Motion through space produces the "illusion of time".
  - Mechanical effects are produced by electromagnetic forces acting through media (i.e., momentum and inertia is electromagnetic in nature; Energy is force over time)
  - A media exposed to resonant vibrations of electromagnetic force interact
- Electromagnetic energy fills all space (referred to as radiant energy).
  - Electromagnetic force is a phenomenon produced through the medium in space (eg., the result of the medium acting upon ponderable matter).
  - Modulating Wideband frequencies of electromagnetic phenomenon permeate through all media (akin to spread spectrums).
  - Self-regenerative hetrodyning electromagnetic fields condense through the medium in space.
  - Electromagnetic potentials arrange themselves in groups according to the medium's polarization and the medium's dielectric resistance.
  - Electromagnetic fields interact and produce rotating fields.
  - Electromagnetic entropy returns energy to potentials.
  - Electromagnetic potentials of high frequency produce: [a] lower environmental interaction, [b] uniform movement without rotation through space-time, and [c] electromagnetic saturation [i.e., plasmas]
  - Stationary low frequency electromagnetics behave as waves.
- Medium's electromagnetic fields creates attractive forces from negative polarity [or what is commonly referred to as "gravity"].

Tesla **never** referred to "space-time" directly, referring instead to the concept of the "primary substance". He also never used this relativistic "twin" term. He considered time as a mere man-made "measure" of the rate at which events occur such as a distance travelled (in miles or kms) in a certain period of time, for a frame of reference. He considered the "curving" of space to be absurd (putting it in gentle terms) saying that if a moving body curved space the "equal and opposite" reaction of space on the body would "straighten space back out".

## Contrasts and knowledge

Tesla's theory put him in direct contrast with the re-emerging Relativity theory, which is that energy does not directly originate from matter or vice versa, but that matter behaves as a medium for forces to act upon or to act through, and that without matter there is no Energy (nor Force) and vice versa (he said a body without force is like a body without a mind).

All this energy (sometimes viewed as "Zero Point Energy") comes from the environment (through aether or the "medium") and reverts back to the environment giving life to matter, forming a "closed circuit" through one way or the other (being "accessed" more efficiently or less based on the methodology). It is omnipresent, day or night, and is "re-emitted" by every star in our universe naturally including our sun. Tesla knew every "ponderable body" had an electrical content, and as such, proportionally interacted with the surrounding aether. The earth is like a charged sphere hurling through space (thus a current, hence magnetic field), around the sun powered by it's primary rays (and giant electric currents along "frozen magnetic lines of force", according to the works of Hannes Alfven mentioned in Lehrner's "The Big Bang Never Happened").

The observed effects of solar flares through earth's magnetic field, and auroras at the poles, also manifest themselves through high voltage distribution overloads in certain areas due to these high energy/radiation "bursts". As the Earth rotates and revolves around the sun at great speed, a portion of the aether is polarized (is "rigidified" by "rapidly varying electrostatic forces" emitted by the Earth) and carried along by the electric field of the Earth which decreases with the inverse square of the distance from the Earth. Tesla measured these electrostatic emissions with a particular partially evacuated tube which he could orient as desired and watch the wave patterns change shape.

Here come into play the "tubes of force" (Faraday, Lord Kelvin, Maxwell, J.J. Thomson) that - due to independent charge ratio depending on density and electrical content - are absorbed by bodies and impart a downward momentum (thus "gravity" is a downward push, not a pull) creating the sensation of a "gravity field". It is the interaction between the electrical content of every "dynamic" body with aether carriers (comprising tubes of force) that results in momentum being imparted to a body (an electromagnetic to mechanical interconversion). It is an endless "circuit loop" that continuously keeps everything in motion in our universe (Tesla's "Wheelwork of Nature") which if understood can give the ability to achieve "any desired result".

This "carrier exchange" is constant, but can be artificially manipulated using high voltage direct current brush and appropriate high voltage high frequency alternating current potentials in order to block or reduce it. Every moving body in our universe transverses this omni-directional radiation and interacts with the aether since all media have electrical content. The important fact is that the aether can convert the weaker, mechanical force, to the much stronger electromagnetic one. This holds the key to increasing "work" over a period of time. This exchange is constantly occurring in our universe and is it's unlimited "prime mover".

## Einstein and relativity

As an alternative to Einstein's general relativity (the original relativity theory came from R. Boscovich, [1711-1787]), the Dynamic Theory of Gravity explained the fields of gravity through electrodynamics. Tesla stated that there was no energy in matter other than that received from its environment: he did not accept the massenergy equivalence as delineated by special relativity. Tesla rejected this concept from Einstein, as the special relativity theory's principles ignored gravitional effects.

One must keep in mind that Einstein was involved with aether theories of the time (one of his first papers was titled, "*The Investigation of the State of Aether in Magnetic Fields*"). He had access to patents and documentation as he worked as a library clerk at the Swiss patent office since 1902 and undoubtly gave more than a good look at them, before the Relativistic theory popped up for the second time (the original being the theory of Boscovich). Einstein himself said,

"The secret to creativity is knowing how to hide your sources".

Einstein has been accused, by his detractors (historically and even recently), of plagiarizing other people's work without giving them any credit. Einstrein's work at the patent office early in his career gave him plenty of information, also. Aether is the "ultimate" medium (Tesla often interchanged the term "medium" with "aether") - being a perfect fluid and transporting independent carriers. Tesla said that electromagnetic radiation was propagated, like sound waves in the ether.

## Related works

## **Primary solar rays**

An important related concept connected to his aether theory and Dynamic Theory of Gravity are his "primary solar rays". Overall, the sun acts as a "generator" for our solar system. It emits enormous amounts of radiation, which Tesla called "primary solar rays" (and lead to modern concept of cosmic rays). These rays in turn, hit various particles in space which give rise to much weaker secondary radiations. The primary solar rays reach the various planets imparting momentum to them which is constantly at right angles in respect to their trajectory from the sun (this explains why planets revolve around stars, a theory later proven by Hannes Alfven). Tesla often repeated that nothing in the universe is standing still (this is why the theory was called "dynamic") because if it were, all matter would "decay" back to the aether (everything on the Earth is hurling through space at incredible speed because the Earth and the solar system are moving through space). Tesla stated that if any radioactive element were to be shielded from these rays, the material would cease to be radioactive.