theory of relativity

The Theory of Relativity

Nikola Tesla

“Magnificent mathematical garbage which fascinates, dazzles and makes people blind to the underlying errors. The theory is like a beggar clothed in purple whom ignorant people take for a king.” [Nikola Tesla]

Albert Einstein

When forced to summarize the **general theory of relativity** in one sentence: "*Time and space and gravitation have no separate existence from matter.*" [Albert Einstein]

"*Sit with a beautiful woman for an Hour and it seems like a Minute, sit on a hot stove for a Minute and it seems like an Hour, THAT IS RELATIVITY.*"- Albert Einstein

"Typically, Einstein's **Theory of Relativity** is presented as the farthest extension of Maxwellian "classical" electromagnetic theory. In reality, the theory is a banalization of those first approximations which Riemann used as heurisms upon which to base his actual theoretical achievements. Einstein's **General Theory of Relativity** uses the first approximation curvature tensor derived in Chapter IV. In attempting to unify the gravitational and electromagnetic fields, Einstein overlooked exactly that notion of the increasingly complex topologies of higher-order energy potentiation (syntropy) which is the subject of Riemann's life work. Einstein's unified field explicity denies the notion of a self-developing (syntropic) universe. His "expanding" universe is necessarily doomed to a catastropic end, because he imposes on it the false condition of the conservation of energy.

"It is useful to conclude this work by tracing the interplay between developing notions of light radiation and electromagnetic radiation - if for no other reason than that the establishment of this coherence dominated the thought of leading nineteenth century scientists. **Relativity theory** as expressed by Einstein, even though it banalizes the fundamental discoveries of Riemann, makes on nice point. Not only is the particle properly subsumed by the particle-field collectivity, but its so-called discrete existence, as measured in space and time, is subsumed by the motion of that collectivity. [See Perspective]

"Finally, Einstein's axiomatic assumption of the constant velocity of light properly exphasizes that the throughput of radiant energy has been, to date, the determining factor in the evolution of the biosphere.

"The theory marked the culmination of nearly a century's work which sought to explain the failure of any experiment to detect those changes in the velocity of propagation of light which would be expected according to either ballistic or wave theories of light generation. If light is, in effect, a beam of corpuscles emitted from a source, then, like a ball thrown from a moving train, it should share in the velocity of its source according to the principle of inertia, but it does not. If light is transmitted as a wave impulse, then it must be affected by the interaction of the receiver and the medium. Yet, neither is this the case.

"It is, in fact, the case that metrical relationships within any local section of the electromagnetic field are adjusted to the flow of energy into or out of the field. This is marked by the apparent slowing of time and shrinking of objects as a function of the measured velocity of a system. Any method which we may suggest to determine variations in the speed of light ultimately falls afoul of that series of interlocking relationships which are subsumed under the constancy of the ratio of the electromagnetic to the electrostatic unit of measure by which the speed of light is determined. The electrostatic unit of measures the force exerted by two charged particles "at rest"; the electromagnetic unit measures the additional forces exerted between two collections of these particles in motion. The ratio, is of course, *c*. Commonly, **E** is measured in electrostatic units, **B** in electromagnetic units. This being so,

$$\mathbf{curl}\ E = \tfrac{1}{2}\frac{\delta \mathrm{B}}{\delta \mathrm{t}}$$

"We have already contrasted **relativity theory**, as it was first developed by H. A. Lorentz, to its anticipation by Riemann. It is appropriate to locate the theory in the work of Hendrik Lorentz,

since it was his formulations which gave it shape. To Einstein goes credit for understanding that the theory demanded a new axiomatic foundation for physical geometry which would finally replace the Newtonian conception of "absolute" space and "absolute" time as an empty container in which to place geometry and mechanics. It was a bitter tragedy for the man and unfortunate for the rest of us Bertrand Russell's gang used Einstein's significant contribution to the theory to peddle deliberately pernicious nonsense about cultural relativity - as if a standard for progress rests upon the length of the measure of a second or an hour, or the establishment of the simultaneity of events!

"The gist of the axiomatic superstructure of the **Special Theory of Relativity** rests on the interpretations of the results of Michelson and Morley's experiments to determine the velocity of the earth relative to the velocity of the aether, the medium through which, it was presumed, light was transmitted as a wave impulse. As Maxwell first remarked, the time required for a ray of light to travel from a point A to a point B and back to A must vary by a small magnitude - of the second order - when the two points together undetrgo a displacement with respect to the aether. The Michelson experiment of 1881 and a refinement of it done by Michelson and Morley in 1887 discovered no such effect.

"The theory which they tested asserted that the aether was at rest relative to the earth. It is clear that any geocentric theory which assumed that the aether traveled with exactly the velocity of the earth throughout the entire universe could only be acceptable to such absolutists as otherwise favored the Hapsburg Inquisition. It was Thomas Young and Augustin Fresnel which first raised the question of the relationship of the velocity of the aether to the velocity of the earth. It is necessary to bear in mind that the term "aether" implies the attempt to conceptualize the electromagnetic field. Initially questions about the drift of the aether were not raised to dispose of uncomfortable questions about the measurability of light. On the contrary, light was the appropriate means by which these scientists hoped to be able to measure and, therefore, determine the behavior of the field." [(White, Carol; "Energy Potential: Toward a New Electromagnetic Field Theory," (with essays by Bernhard Riemann trans. from German by J. J. Cleary, Jr.), Campaigner Publications, New York, 1977.)]

Special Relativity
Special relativity is a theory of the structure of spacetime. It was introduced in Albert Einstein's 1905 paper "On the Electrodynamics of Moving Bodies" (for the contributions of many other physicists see History of special relativity). **Special relativity** is based on two postulates which are contradictory in classical mechanics:

The laws of physics are the same for all observers in uniform motion relative to one another (principle of relativity),
The speed of light in a vacuum is the same for all observers, regardless of their relative motion or of the motion of the source of the light. (Wikipedia)

General Relativity
General relativity is a theory of gravitation developed by Albert Einstein in the years 1907â€“1915. The development of **general relativity** began with the equivalence principle, under which the states of accelerated motion and being at rest in a gravitational field (for example when standing on the surface of the Earth) are physically identical. The upshot of this is that free fall is inertial motion; an object in free fall is falling because that is how objects move when there is no force being exerted on them, instead of this being due to the force of gravity as is the case in classical mechanics. This is incompatible with classical mechanics and **special relativity** because in those theories inertially moving objects cannot accelerate with respect to each other, but objects in free fall do so. To resolve this difficulty Albert Einstein first proposed that spacetime is curved. In 1915, he devised the Einstein field equations which relate the curvature of spacetime with the mass, energy, and momentum within it. (Wikipedia)

Albert Einstein

"My opinion about Dayton Miller's experiments is the following. ... Should the positive result be confirmed, then the special **theory of relativity** and with it the **general theory of relativity**, in its current form, would be

invalid. Experimentum summus judex. Only the equivalence of inertia and gravitation would remain, however, they would have to lead to a significantly different theory."
Albert Einstein, in a letter to Edwin E. Slosson, July 1925

"I believe that I have really found the relationship between gravitation and electricity, assuming that the Dayton Miller experiments are based on a fundamental error. Otherwise, the whole **relativity theory** collapses like a house of cards." [Albert Einstein, in a letter to Robert Millikan, June 1921 (in Clark 1971, p.328)]

"You imagine that I look back on my life's work with calm satisfaction. But from nearby it looks quite different. There is not a single concept of which I am convinced that it will stand firm, and I feel uncertain whether I am in general on the right track." [Albert Einstein, on his 70th birthday, in a letter to Maurice Solovine, 28 March 1949 (in B. Hoffman Albert Einstein: Creator and Rebel 1972, p.328)]

Nikola Tesla
"... 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[1], 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]

"*Einstein's relativity work is a magnificent mathematical garb which fascinates, dazzles and makes people blind to the underlying errors. The theory is like a beggar clothed in purple whom ignorant people take for a king... its exponents are brilliant men but they are metaphysicists rather than scientists.*" [Nikola Tesla — New York Times (11 July 1935), p. 23, c.8]

SVP
Personally, I can't see any validity in or necessity for the idea of curved spacetime. Keely's work with fractal (nested) forces more than satisfactorily accounts for just about everything we see. The concepts behind relativity of forces (perspective) however is common sense.

[1] Tesla apparently didn't read Keely's work but then Keely's work never appeared in the "scientific records".

See Also

6.13 - Density Differentiation
atomic intermolecular and molecular density
Density
first condition in the first ratio
first condition in the third ratio
first condition of the second ratio
motion
movement
Ramsay - PLATE V - Proximate and Differential Oscillations
ratio
relativity
space

time