The Double Helix and the Compound Centrifugal Force

Frederick David Tombe
Belfast, Northern Ireland, UK
e-mail: sirius184@hotmail.com

While on the one hand it may seem valid to argue that the wave behavior of light requires the existence of a dense dielectric medium, it is equally valid to counter-argue on the other hand that such a particulate medium would cause friction in planetary motion. The double helix rescues us from this dilemma. This most fundamental pattern in nature converts potential frictional effects into the more ordered inertial effects that we recognize as the centrifugal force and the Coriolis force. A state of Brownian motion, when pervaded by double helix patterns, channels a distinct electrostatic force of attraction directly between unlike magnetic poles in an electrically neutral backdrop, and it can also create a hovercraft effect for the planets orbiting in space.

1. The Physical Medium for Light Propagation

In his 1861 paper "*On Physical Lines of Force*" [1], James Clerk-Maxwell showed that the energy stored in a magnetic field is in fact the rotational kinetic energy of the tiny electric currents that align solenoidally around a larger electric current. Maxwell believed that space is densely packed with such tiny electric currents. He referred to these tiny electric currents as molecular vortices and he considered them to be made partly of aether and partly of ordinary matter. Equation (45) in Part II of Maxwell's paper cites the expression $\mu/8\pi(\alpha^2+\beta^2+\gamma^2)$ in connection with the energy density of the vortex sea, based on the circumferential speed of the electric particles that surround the tiny vortices. Maxwell denotes the circumferential speed in its three Cartesian components α, β, and γ, and this corresponds to the vorticity or magnetic intensity which we will denote as $\mathbf{H}$. At equation (1) in Part I of the same paper, Maxwell equates the density ρ of the aethereal vortices to $\mu/4\pi$, and hence in equation (45) we can see both the standard expression for kinetic energy $\frac{1}{2}mv^2$ as well as the standard equation for the energy stored in a magnetic field $\frac{1}{2}\mu\mathbf{H}^2$. It is often argued that if such a particulate medium were to pervade all of space that this would cause friction and hence retard the motion of the planetary bodies. We therefore require that the tiny rotating entities act as a source of centrifugal pressure. This is so as to provide a mechanism for the propagation of light while simultaneously providing a mechanism that will convert frictional forces into a hovercraft effect.

2. The Double Helix

The tiny electric currents that fill all of space are the fundamental building bricks of the universe. Ideally they should be dipolar, comprising of an electron and a positron in mutual orbit. The positron acts as a source of pressurized aether while the electron acts as an aether sink. These rotating dipoles are stacked in a double helix fashion along their mutual rotation axes. The purpose of the double helix alignment is to channel the aether tension between a magnetic north pole and a magnetic south pole so as to cause a force of attraction. The fundamental principle behind these rotating dipoles is that they act like a miniature Archimedes' screw, in that the aether pressure in the equatorial plane increases when torque is applied. This is the basis of centrifugal force. While a Coulomb tension exists along the axis of a

double helix, regulated in strength by the helix angle, it is prevented from collapsing due to centrifugal pressure acting sideways from the double helix, in conjunction with the solenoidal alignment. The rotation axis of a double helix traces out a single magnetic line of force as shown in Fig. 1. When two north-pole magnets repel each other, the lines of force spread outwards in the space between the two poles, and the lines from each pole press against each other laterally. We can therefore see how centrifugal force in the equatorial plane of the rotating dipoles will cause magnetic repulsion.

Fig. 1. A single magnetic line of force. The electrons are shown in red and the positrons are shown in black. The double helix is rotating about its axis with a circumferential speed in the order of the speed of light, and the rotation axis represents the magnetic intensity or magnetic field strength vector $\mathbf{H}$.

Electromagnetic radiation is a propagation of fine-grained centrifugal aether pressure by virtue of a propagation of angular acceleration through a line of rotating dipoles. This necessarily involves a net flow of pressurized aether between neighboring dipoles. Propagation can be at any orientation in relation to the double helix. When the propagation is in the direction of the double helix axis, the angular acceleration will be precessional and it will involve an axial variation of the centrifugal force that is replicated on the large scale in precessing gyroscopes.

3. The Centrifugal Field

In a magnetic field, the centrifugal force that acts on a moving element is in actual fact a compound centrifugal force resulting from the differential centrifugal pressure acting on each side of the element. A similar compound effect arises in a radial field, such as a gravitational field, where the large scale radial inflow of the aether causes linear polarization of the electron-positron dipoles. In a non-circular orbit, a transverse compound centrifugal force is induced due to a planet undergoing both radial and transverse motion simultaneously. This transverse force is better known as the Coriolis force and it is related to the conservation of angular momentum. In either the solenoidal case or the radial case, the differential pressure coming from the dipoles on either

side of the moving element causes the path of motion to deflect. The general formula for compound centrifugal force is $\mathbf{F} = 2m\mathbf{v} \times \boldsymbol{\omega}$ where m is mass and $\boldsymbol{\omega}$ is the angular velocity. For a particle undergoing circular motion, it is a standard result that the vorticity $\mathbf{H}$ is equal to $2\boldsymbol{\omega}$. According to equation (77) in Maxwell's 1861 paper, the electromotive force per unit volume acting on a current element in a magnetic field can be written as $\mathbf{E} = \mu\mathbf{v} \times \mathbf{H}$, hence we are clearly dealing with a compound centrifugal force.

4. Conclusion

The official denial of centrifugal force in modern physics is a considerably more sinister development than Einstein's theories of relativity are. At least with relativity, there are many who can see right through the deception. Unfortunately this is not the case with the centrifugal force deception. Most physicists, whether pro-relativity or anti-relativity, have been deceived by the lie that centrifugal force does not exist as a real force. It is nevertheless an indisputable fact that every material object that moves transversely relative to every other material object will experience a repulsive centrifugal force acting along the line joining the two objects. Generally this centrifugal force goes unnoticed because the result is merely the standard inertial path. They say that there is no actual physical force involved and that the centrifugal acceleration is merely an illusion of the geometry of space. But if we try to resist this centrifugal acceleration, we will surely feel a real force. This real force can pull a string taut and cause it to snap. It can also press a *'wall of death'* rider against the wall. Centrifugal force is clearly a product of the aether pressure in the sea of tiny dipolar vortices that fills all of space, and it is this which determines geometry, rather than vice-versa. Motion through the sea of dipoles causes the tiny vortices to angularly accelerate and this generates excess centrifugal (or inertial) pressure, otherwise known as kinetic energy. When the pressure is asymmetrical as in the case of motion through a radial field, motion through a solenoidal field, a precessing gyroscope, or a rotating rattleback, then a net inertial force will be clearly manifested, and it will be capable of defying gravity, deflecting the path of motion, or in the case of a rattleback, reversing the angular momentum. The kinetic energy of a moving element extends into the space beyond in the form of a centrifugal force field, and the magnetic field is a specific example of this.

The question should never have been *'what is the aether made of?'*. The question should have been *'how do we structure the aether to account for the electromagnetic field?'*. We need the tiny vortices in order to account for the electromagnetic wave propagation mechanism, as well as the magnetic forces, and as well as the inertial forces. [2, 3, 4]

References

[1]   J. Clerk-Maxwell, **"On Physical Lines of Force"**, *Philosophical Magazine* **XXI**, 4th Series (London, 1861), http://www.vacuum-physics.com/Maxwell/maxwell_oplf.pdf

[2]   E. T. Whittaker, **"A History of the Theories of Aether and Electricity",** Chapter 4, pages 100-102, (1910), "… *All space, according to the younger [John] Bernoulli, is permeated by a fluid Aether, containing an immense number of excessively small whirlpools. The elasticity which the Aether appears to possess, and in virtue of which it is able to transmit vibrations, is really due to the presence of these whirlpools; for, owing to centrifugal force, each whirlpool is continually striving to dilate, and so presses against the neighbouring whirlpools…*"

[3]   John J. O'Neill, **"Prodigal Genius: Biography of Nikola Tesla"** Freeport, Long Island, New York, 15th July 1944 (Angriff Press), contains an unpublished article by Tesla entitled **"Man's Greatest Achievement"** in which it is stated, "*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.*"

[4]   Encyclopaedia Britannica, Volume 8, pages 751-755, (1937), article entitled **"Ether (in Physics)"** states, "*POSSIBLE STRUCTURE.—The question arises as to what that velocity can be due to. The most probable surmise or guess at present is that the ether is a perfectly incompressible continuous fluid, in a state of fine-grained vortex motion, circulating with that same enormous speed. For it has been partly, though as yet incompletely, shown that such a vortex fluid would transmit waves of the same general nature as light waves—i.e., periodic disturbances across the line of propagation—and would transmit them at a rate of the order of magnitude as the vortex or circulation speed…*" This encyclopaedia article was written by Sir Oliver Lodge.
http://www.wbabin.net/Science-Journals/Historical%20Papers-Mechanics%20/%20Electrodynamics/Download/4105.