Key Concepts for the Conversion and Control of GRAVITATIONAL Energy

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PRESENTATION OF RESULTS of PRIVATE RESEARCH in MAGNETICS and ELECTROGRAVITCS, based on UNIVERSITY STUDIES in ELECTRICAL ENGINEERING, alternative studies, and God-given common sense

Introduction

A QUALITATIVE (NON-MATH) EXPLANATION, REVISED SINCE

Since I first wrote this article 5 years ago, I have gained a few further insights into the possible nature of the aberrant inventions of people like Edwin Gray, USA, pre-1975, whose motor ran cold under extensive testing over 200 hours (see end section).

The common feature of all similar inventions was that the device drew heat IN (cooled down) from its surface under load, and in many cases also grew lighter in weight. Though many different terms have been used by commentators in this field, the term "gravitational energy" stands out as the most suitable term to use. This is because such objects seem to lose some of their weight due to gravity under certain conditions, as yet generally unrecognised, implying that a shift in energy density has taken place. In connection with this, no-one has yet been able to explain EXACTLY what Landau (a Russian physicist, Nobel laureate, 1962) meant by the concise formula he derived for gravitational energy density, or for that matter exactly HOW we may engineer it to produce a new method of energy conversion, involving a change in the DIRECTION of heat energy flow within a local environment - i.e. Inwards, (endothermic) to the source of negative energy!

Paraphrasing from older preface

It has long been a practice for electrical engineers to design waveguides so that their geometry will allow electromagnetic waves to propagate in the correct mode and direction. Resonant cavities have also been in use, in which a high "quality factor" enables a large proportion of energy to be stored per cycle, compared with the amount dissipated. Devices like masers also allow coherent electromagnetic transmission of signals from one point to another with minimum attenuation and nearly no Faraday rotation. However, all these devices suffer losses and basically follow the principle of "energy in-energy out" with some left behind on the way through. A "new" type of device is needed for the super-efficient conversion of energy from potential to a useable form in a localized environment, but which is radically different from the classical transformer model.

The normal transformer model is here seen as part of the scheme of things, but only as a means of excitation of the locally contained body of GRAVITATIONal energy (explained later). Suffice it to say, that this gravitational energy density is distinct from (but related to) the "gravitational potential energy" discussed in most textbooks, and is totally independent of mass, thus is not "atomic" but is dependent on the local "g-force", thus called "g-strain energy" [1,2], according to Landau's equation.

$$\text{En. dens.} = -g^2/8\pi G$$

According to Seike/Landau, there are 4 states of energy, including the "occupied" and the "unoccupied" states of negative energy) - not an insignificant amount of energy when calculated out!

Fundamentally, according to this different viewpoint, the basic rules of Electrical Engineering are still to be kept, but are regarded as pointers to indicate what goes on inside the "black box" where measurements can only be made around it, but not inside. It should also be recognized that even a simple block of semiconductor material, "degenerate" or otherwise, can display all the properties of a conventionally wired circuit e.g. resistance, conductance, capacitance and inductance, when saturated by an E/M field. Its interaction with this field can be predicted if all these properties are known, and these can be determined by a variety of measurement techniques. Perhaps the most closely related phenomenon in connection with this is that called GYRO-MAGNETIC resonance.

With these things in mind, a better understanding of many physical effects can be reached, e.g. acoustic resonance in crystals, electrostriction, the HALL effect etc. In practical terms though, losses may be compensated for by applying principles of super-resonance and self-organization - the laws of conservation of energy, thermodynamics etc will still be intact, but energy, usually in heat, will be drawn from the local environment to the center of the system to account for work being done by a load linked around/across the semiconductor transformer block, which acts as an interface. All of its parameters can and should be predicted and controlled by the application of well-worn formulae, but seen and used from a different aspect, e.g. impedance matching.

As in gyromagnetic resonance, where the actual energy source is at the level of the electron and its gyroscopic spin, here the actual source is the all-pervading gravitational energy, whose density is greatest at ground level, for our purposes.

THE NEED FOR A SIMPLIFIED, YET "COMPLEXIFIED" PHYSICS

A typical textbook on semiconductor physics will contain many involved formulae dealing with aspects like dispersion, surface scattering and absorption, charge carrier densities and temperature considerations etc. All of these considerations are valid, but deal with things at the microscopic level. A "macroscopic" view of the semiconductor is needed, where its behaviour as a whole "block" is observed and calculated on. In this monologue, it is assumed that the system starts off at room temperature, while the only variables or "degrees of freedom" are frequency, area, length, angular measure, charge and/or flux. The first and second time derivatives of the last two produce voltages and currents, while all of the above combine to produce a variable impedance (Z). The four quantities mentioned earlier (R, L, C, G) are actually frequency-dependent as well, but at relatively lower frequencies, this fact can be neglected.

After some consideration of various similar happenings in physics, it can be suggested that the following terms are more or less synonymous:

"real/active/cosine/absorptive/longitudinal....

"imaginary/reactive/sine/virtual/dispersive/transverse...

Another way of interpreting this is to say that each quantity has both its own MAGNITUDE and associated PHASE angle, this being either negative or positive.

An extension of this view over all of physics would clarify many obscurities.

EXAMPLES of WELL-KNOWN ORTHOGONAL EFFECTS in PHYSICS

The term "orthogonal" is here used to describe a "complex" quantity, and simply means at "RIGHT ANGLES". High school students should be aware of the "right-hand rule" where a force is produced at right angles to both the direction of current in a conductor and the applied magnetic flux.

As an example, it has long been recognized that inductance and magnetic reluctance depend on the material's permeability to the magnetic field. This quantity is not only frequency-dependent and thus divided into two related vector components, called the "dispersive" and the "absorptive" parts, but also its real/dispersive component may become negative under certain conditions! [4] Following on from this, the well-known solenoid/coil (inductor) with its inductive reactance and series wire resistance combine to produce a vector sum called impedance, in the frequency domain, familiar to electrical engineers.

This situation is duplicated regarding permittivity to an electric field, and its closely-related refractive index [5], and for many other quantities (if not all?) While this situation may at first seem very complicated, it is reflected at the macrocosmic "block" level as being simply "n" or "p" type behaviour, as exhibited by the Hall effect test (output voltage positive or negative) In a.c. theory, "complex numbers" are used to calculate total impedance and power in circuits in the frequency domain. Being much a misnomer, the term "complexify" is thus introduced here to describe the simple analysis of quantities into both their "real and imaginary" parts.

The "Hall effect" is another case, where an output voltage will result at right angles to both the applied field and an input current through a semiconductor. This behaviour is duplicated in plasmas used in the magnetohydrodynamic process, developed in the sixties for alternative power generation [3].

It appears though that this process has only been used in stead-state field applications, whereas pulsed field applications on plasmas, regarded as gaseous semiconductors (with parallel conductance// inductance), would yield different results [4,5].

CONSISTENCY of COMPARISON between MAGNETICS and ELECTROSTATICS

It has been stated that in electromagnetic transmissions, energy is being repeatedly shunted backwards and forwards between the magnetic and the electric fields. While this is fairly easy to visualize regarding transmissions of waves through air or solid media, it is harder to recognize in the standing wave, which will be vital to the subject here. However, using basic equations which form the keylinks between electromagnetism (E/M) and the visible world, a concise mathematical model can be built up - for e.g. with the time derivatives $d\Phi/dt$ and dQ/dt of flux and charge, producing voltage and current respectively. These then need to be converted to the "frequency domain" using the transform $d/dt = \omega$ (standing for frequency in rads/sec) What propagation theory does tell us is that the electric field is polarized at right angles to the "induction" or magnetic field. Taking this further, the E field existing between the plates of a capacitor would appear to be purely an electric (static) field, but in fact a component of magnetic field (H) exists at right angles to it. Likewise the field of a permanent magnet may manifest as being purely magnetic, but has an electric component as well!

Not only this, but both fields experience a complex impedance consisting of both real and virtual parts, combining to produce a complex flux/charge ratio (Z). The virtual part in magnets is due to the gyromagnetic tendency (frequency of precession) induced by the field's strength. By a close comparison between this and electrostatics, a GYRO-ELECTRIC frequency can also be predicted and calculated, based on the impedance of free space. These statements can be summed up thus:

- A magnet's equivalent internal "circuitry" tends to be that of a series R-L circuit

- A flat capacitor has an equivalent parallel G/C circuit (G: Conductance)

- Both aspects can be combined into one "monolithic" block

- All aspects can then be tuned to each other to provide a desired resonance for a signal, which is applied to excite an innate sink/source of potential energy.

This is based on a discovery by Faraday in 1831! (Are we really ahead of his times?) He found that a conductive magnetized disc while spinning creates a potential difference between its periphery and its center (see his diary, of Dec.16, 1831 [6]). This enhances the existing E-field, provided the direction of spin is correct.

Super-efficient generators have been built on this principle (B. de Palma) and sponsored at government level in India (P. Tewari) [7].

DISTINCTION BETWEEN ELECTROMAGNETIC AND 'WIRED' CIRCUITS

As indicated above, a "stationary" field experiences an impedance in solid materials polarized by this field, due to the internal structure of the material. This material is usually heterogeneous, consisting of elements which are either more conductive or more insulative to that field, but the macroscopic behaviour of this semiconductor material will tend to be just like that of a two-element wired circuit, with either a leading (capacitive) or a lagging (inductive) power factor (magnetic field lags electric field in the latter). The main distinction here is that the semiconductor block will become more or less a conductor of the FIELD, whereas the wired circuit conducts current.

THE NEED FOR INTERFACING

In order to provide a super-efficient device for transferring energy to/from potential form into useable form, in a predetermined direction, the need for a finely tuned interface arises, which will match the physical container of the source of negative gravitational energy to a conventionally wired circuit containing a load, to either dissipate or sink the energy, depending on whether heating or cooling is desired.

Synonyms for this interface in the relevant literature include:

Transformer/Gate/Impedance Matcher/"Crystal"/ Secondary Source/Collector... [9]

More familiar example of such interfaces includes the "balun" for matching between parallel and co-axial cables, with its semi-bifilar windings over a ferrite bead. It is said that this induces a transverse and a longitudinal component, which combine to produce an impedance match between the two designs. It has been found that ferrites also possess a very high dielectric constant, over 100,000 for Barium ferrite and 7,000,000 for Tin Ferrite! *(For a detailed discussion of this, see: [8]).* Because of this feature, a considerable capacitance is created inside the windings and it becomes possible to achieve a positive/negative/zero reactance in this type of device. A lesser-known type of interface is the "stub" transformer used for tuning transmission lines.

However, the type of transformer proposed here is an essentially wireLESS one, operating internally via E/M induction and its orthorotation. Synonyms for this term include:

"RIGHT Rotation/VIRTUAL Rotation/Translocation..."

Even in formal transmission theory [10], a transformer's impedance must be equal to the GEOMETRIC MEAN of the source impedance and the load impedance, thus the proposed "chip" must be engineered accordingly, by precise doping and shaping. Failure to do so will cause a noticeable loss of efficiency in energy transmission.

The BENEFIT of INTERFACING - SYNERGISM

The above term is taken to mean the "introduction of additional energy from another source". Not only does correct interfacing decimate power losses, but orthogonal interfacing allows for the introduction of a power gain derived from the stored energy of gravitons whose combined body of energy may be made to resonate, akin to "gyroscopic resonance interaction" - where it is due to the stored combined energy of unpaired electron axial spins. (Electrons are presented here as an analogy for the less familiar graviton.) It has been noted that the gyroscope has some anomalies such as weight loss [11] and this also applies to the gyroscopic spin of electrons when acted on by a "magnetic wind". Under the influence of such a strong magnetic field, the chaotic behaviour of "Brownian motion" also becomes more orderly, and the laws of thermodynamics appear to go into "remission". Such is also the case inside a superconductor, where dissipative resistance has approached zero. (In fact, a magnet has been described as a room-temperature superconductor in reverse, its magnetism causing cooling, using a type of electron spin resonance to 'tap' reluctance)[12].

Using modern ESR and NMR techniques, a gyromagnetic resonance is achievable, where energy is exchanged [13] between a source of transverse excitation and the crystal lattice of the material, usually a ferrite. Collier's Encyclopedia [14] described it thus: "phase relationships are established and the resultant magnetization will be found to process with the angular velocity of the individual components". An adaptation of this technique can allow the locally defined gravitational field to organize itself into a toroidal vortex, acting kinetically as a medium of synergetic exchange between two wells of potential energy - the outer and the inner.

THE NATURE of the INTERFACE

As stated, the interface block need only be a solid piece of material, preferably an unmagnetised ferrite, ceramic or cermet, possessing considerable resistivity, conductivity, permeability and permittivity. Its consistency and dimensions should be tailored so that its impedance approaches the geometric mean of source and load. It becomes a kind of negotiator between the ultimate insulator, represented by free space, and the ultimate conductor - the "superconductor". A cubic shape will certainly simplify calculations. Depending on whether it is pulsed with an electric or a magnetic excitation field, its internal structure will act either inductively or capacitively - one will predominate over the other, each aligning itself orthogonally to the other. The ideal interface will also have its longitudinal and transverse relaxation components set in balance with each other, allowing a harmonization of the corresponding relaxation time constants (generically described as: L/R and C/G) and the resonant frequencies thus allowed. *(I am indebted to Thomas Bearden for these concepts, though I do not agree with the final conclusions in his monologue "The Final Secret..." op.cit. as they did not stand up to closer analysis).* It may also bring in acoustic and/or mass-aggregate resonances. The result will be the tuning of the complex impedance (Z) and a complex "turns ratio" (n), the square of which transforms the load impedance, as sensed by the source.

PREPARATION AND EXCITATION OF THE INTERFACE

The preparation required involves the doping and shaping of the material block so as to harmonize its four electrical properties, and its pulsation with a vector-zero magnetic field, preferably via a bifilar winding. The frequency of such pulsation needs to also harmonize with both the internal relaxation frequencies, and also be related geometrically to the smallest dimension of the material block. The rationale behind such "vector-zero" stimulation is the mathematical work of E. M. Whitaker [15], involving partial differentiations, concluding that the summed result of two scalar functions becomes a resultant vector function. (It is interesting that even Brailsford, a classical physicist, discusses the "effective response of the ferrite to the two oppositely-rotating magnetic fields...in the medium!" [16] described as "vectors" (also called phasors in Elect.Eng).

Here, the applied bifilar pulsations will create "virtual pairs/phase conjugates" which will cancel each other's vector components out, allowing a scalar pulsation to pressurize the internal structure of the body of gravitational energy within, which itself is also normally a non-polarized scalar quantity. The pulsed pressurization of this scalar quantity (defined and delimited by its material boundaries) by the applied scalar excitation signal, will result in a polarizing and resonating of the said body of energy (production of a "potential gradient"), which may then be enabled to draw/dissipate local heat in/out through the conductance of the prepared load (heat may be dissipated out through the same load). Indeed both the magnitude and the direction of this energy flow may well be controlled by phase changes in the applied excitation signal(s).

Also, it will be appropriate for the system to be matched to the impedance of free space (Z = 377 Ohms) preferably via the golden mean ratio, so as to allow for better transfer of gravitational energy from "free space" to the defined space. Thus there will be a cascading of impedances from free space, via load, block and source. It has been suggested by Robert Adams, N.Z. that permanent magnets may act as "gates" between the reservoir of "space/negative" energy and a physical load - while this may be so, and while magnetic and static fields are both manifest aspects of the underlying aetheric energy field, their use should not be necessary when the nature and extent of the gravitational field is recognized - it will become possible to resonate this underlying field directly, without the intermediary action of a magnetic/electric field! However, if a magnetic field is used in the scheme of things, it will be necessary to know its energy density, so as to match it to the underlying field's energy, and to the intended amount of dissipated energy!

PRINCIPLES of INTERFACIAL CONVERSION

The interface may be used as a transformer or as a transducer. The former is defined as a device, which changes the DIRECTION of energy flow; the latter changes its FORM. In most observable cases, such an interface changes the direction of the apparent energy flow by 90 degrees, and directs it to a prepared load. However, if used as a transducer, the interface itself will have to be made into a loaded transformer, standing between two sources of potential energy, one being outer and one inner. In this case it must be physically separated into its capacitive and its inductive parts, in order to let off energy via one or the other. During the potential/kinetic energy flow in either half-cycle towards equilibrium, akin to expansion and contraction, energy may be dissipated or absorbed by the load. Such an arrangement is harder to visualize as it is less conventional, but both parts may be built concentrically into one cylindrical shape. Super-efficient static-to-current converters/transducers of this type have long since been made and used by the Christian Methernitha community in Switzerland (see for e.g. [17] and also: http://members.tripod.it/~testatikmachine/ introindex.htm).

SUCCESSFUL SYNERGETIC CONVERSIONS LAST CENTURY

Apart from the one mentioned above, other noticeable cases have included Tesla of Colorado Springs, who earlier this century transmitted large amounts of power through the ground! to distant locations from a tower on Long Island (see for e.g. [18]).

Incidentally, radio broadcasts were also sent sub-terrestrially around the end of WW1, as evidenced in

the 'Electrical Experimenter' (USA) June, 1919, p. 136, describing the patents of J.H. Rogers of the same year. Such transmissions were sent withOUT interference or fading, being far superior to today's techniques! (Why are still wasting so much energy?) T.H. Moray was an outstanding case of a maverick who repeatedly baffled authorities by drawing many KiloWatts of power out of the atmosphere in various deserted locations of Utah, USA, using only an aerial and earthing point AND a "black box" containing some high-grade germanium! [19,20].

Edwin B. Gray was another inventor whose electric/ magnetic motor broke some of the "rules" under test by engineers, running COLD and failing to discharge after 203 hours under load, while putting out 7460 KW (see patent extracts from US Patent no. 3,890,548, filed June 17th, 1975).

The ''Vacuum Triode Amplifier' was another well-documented achievement of the solid-state type. Built by an elect.eng. graduate of M.I.T. called Floyd Sweet, one version consists of 4"X 6"X 1" magnets with bifilar and monowound coils between the magnets, a video-taped test of 1987 has metering instruments showing up a 10 volt, 300 microwatt signal input producing a 120 volt, 600 watt output, synergistically!

Closer to home, the highly-qualified N.Z. engineer Robert Adams has built 'variable-reluctance pulsed magnetic' motors, one of which was tested by a Ph.D. systems engineering scientist in the USA showing a "VAX computer system analysis of 1,254% efficiency" - see Nexus, vol. 2, no. 19, p. 56 (April-May '94)

See also:
http://www.padrak.com/ine/NEN_4_8_1.html
http://www.aethmogen.com/pubs/app2001/19trans/01txt.shtml

The list could go on, but it is proposed here that a common thread runs through all these achievements, and is related to the paradigms explained above.

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OBJECTIVE:
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