



## Anomalies and Paradoxes of CE



By Robert J Distinti B.S. EE  
46 Rutland Ave.  
Fairfield Ct 06825.  
(203) 331-9696

contact@distinti.com

### ABSTRACT

This paper contains a **comprehensive collection** of all known anomalies and paradoxes of classical electromagnetic theory (APOCE). This paper chronicles the paradoxes and anomalies originally released in the New Electromagnetism papers and books at the Home of New Electromagnetism [www.Distinti.com](http://www.Distinti.com). New Electromagnetism resolves or eliminates all of the known paradoxes and anomalies.

We define an **anomaly** as a mismatch between what theory predicts and what we see in the laboratory.

We define a **paradox** as a mismatch (contradiction) between accepted models and theories. As an example, see the Classic Magnetic Flux anomaly in number 5 below. Nature does not produce paradoxes (see [Rules of Nature--ron.pdf](#)).

- 1) Classical electromagnetic induction, when applied to self inductance, results in an undefined answer.
- 2) Classical electromagnetic induction does not apply to intrinsic inductance. The classical method to derive intrinsic inductance uses conservation of energy techniques and produces incorrect results.
- 3) Classical electromagnetic induction does not apply to point charges (everything else does).
- 4) Mutual induction is a reciprocal phenomenon (as observed in the lab); however, Faraday's Law fails to predict reciprocity in certain cases.
- 5) Classical flux theory contradicts Ampere's circuital Law in the case of permeable core transformers.
- 6) Maxwell's version of Faraday's law violates Kirchhoff's law.
- 7) Classical electromagnetic theory predicts emfs at the corners of rectangular loops that are not seen in the lab.
- 8) Classical electromagnetic theory does not accurately predict antenna radiation patterns. See the book NIA1 in the New Electromagnetism Application Series.
- 9) Classical electromagnetism does not completely explain the different modes of operation of the Homopolar generator. The Homopolar generator can be operated in modes that seem to contradict Relativity and Classical Electromagnetic Theory.
- 10) All other wave phenomenon, except electromagnetic waves (per classical theory), propagate in both longitudinal and transverse modes. Why? New Electromagnetism teaches us that electromagnetic waves (light for example) also propagate in both longitudinal and transverse modes. In fact, by considering the longitudinal waves we are able to accurately predict antenna radiation patterns. This is demonstrated in item 8 above.
- 11) Classical electromagnetism does not unify with Relativity or Gravity. Relativity and Gravity can be derived from New Electromagnetism.
- 12) Classical Electromagnetic theory is so confusing that most people with degrees in Electrical Engineering and Physics "brain dump" it on or before (usually before) graduation. This is common knowledge. Thankfully, New Electromagnetism is simpler to learn, easier to use and explains much more than classical theory.
- 13) Homopolar Paradox #2: Where's does the back torque come from?

All of the above are addressed in more detail in this publication. The chapter numbers correspond to the line item numbers above.

**Note: We sometimes use the term anomalies to address anomalies and paradoxes collectively.**

Anomalies and Paradoxes of CE



Anomalies and Paradoxes of GE

<b>1 SELF-INDUCTANCE .....</b>	<b>3</b>
<b>2 INTRINSIC-INDUCTANCE.....</b>	<b>5</b>
<b>3 FARADAY'S LAW AND POINT CHARGES .....</b>	<b>7</b>
<b>4 RECIPROCITY .....</b>	<b>9</b>
<b>5 CLASSIC FLUX ANOMALY .....</b>	<b>11</b>
<b>6 MAXWELL VS. KIRCHHOFF .....</b>	<b>12</b>
<b>7 STRANGE CORNER EFFECTS.....</b>	<b>13</b>
<b>8 ANTENNA RADIATION PATTERNS.....</b>	<b>15</b>
<b>9 HOMOPOLAR GENERATOR .....</b>	<b>17</b>
<i>9.1.1 Effect on Relativity.....</i>	<i>18</i>
<b>10 LONGITUDINAL WAVES.....</b>	<b>19</b>
<b>11 UNIFICATION WITH GRAVITY AND RELATIVITY.....</b>	<b>20</b>
<b>12 TOO CONFUSING.....</b>	<b>21</b>
<b>13 HOMOPOLAR PARADOX #2 .....</b>	<b>22</b>
<b>14 THANK YOU .....</b>	<b>23</b>
<b>15 DOCUMENT HISTORY .....</b>	<b>24</b>



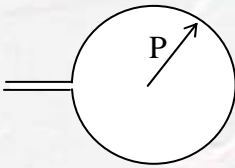
# 1 Self-Inductance

From the Level 5 Test at our site

In the past, when approaching people about New Electromagnetism, we were given the brush off as crackpots before even being able to state our case.

So we changed our approach, we would pay professors, scientist and engineers to “help us” with a simple problem. If they could solve this problem, we would pay them \$50.00 per hour for the time it took to solve this seemingly simple problem (but only if they could solve it). Here is the problem:

Derive an expression for the self-inductance of an air-core, single-turn, circular loop inductor of radius  $P$ .



Single turn loop of radius  $P$

**Note 1:** The inductance of an inductor is comprised of two components. The first is the self-inductance and the second is the intrinsic inductance (some call it the internal inductance). All that is required is the self-inductance component of inductance.

**Note 2:** Use Faraday’s Law and the Biot-Savart law (a.k.a. Ampere’s Law) to derive the expression. If you think that it would be easier with Maxwell’s equations, then give it a try.

**Note 3:** There may be software packages out there that can give you a solution to this problem using empirical methods; however, we need to understand how to do it with electromagnetic field models. It is OK to use math tools (math cad, calculator, integration tables, etc). Most classical Electromagnetic texts show how to apply Faraday’s Law to the above problem; however, none actually work through a solution (if you find one let us know).

The above problem seems like a ridiculously simple problem that any second year engineering student should be able to solve; however, we never parted with any cash.

Anomalies and Paradoxes of GE



This new approach worked; many of the people who tried the problem were sufficiently traumatized into at least listening to our new ideas. These people are now our supporters and colleagues.

Since New Electromagnetism has become successful in its own right, we no longer offer the \$50.00 challenge. The above problem is now posted on our website as our “Level 5 Skill Level” test. The objective of the test is to offer the same “education” to those folks who happen upon our site.

If you want more information about this problem, go to the “Level 5 Test” at our website to see how the test has been re-worded for visitor to our site. At the bottom of the “Level 5 test” page you will find the following link for a pdf document [www.distinti.com/docs/answer.pdf](http://www.distinti.com/docs/answer.pdf) . This document goes into much more detail.

Anomalies and Paradoxes of CE



## 2 Intrinsic-Inductance

This text is assembled from the paper New Induction (ni.pdf) and the Level 5 Test answer (answer.pdf).

Continuing from the previous section, the inductance of an inductor (according to classical theory) is sum of the Self-Inductance (which is derived from the shape of a loop) plus the Intrinsic-Inductance (which is due to the properties of the wire itself). Self-Inductance is discussed in the previous section. This section will focus on Intrinsic-Inductance.

Here is our definition of Intrinsic-Inductance from the paper New Induction:

- **Intrinsic Inductance:** Sometimes called internal inductance; this inductance is the result of changes in the magnetic field produced from the current in the wire itself. It is not the result of magnetic field changes entering the wire from the surroundings. Essentially, the wire itself opposes changes to the current through it. Classical theory claims that intrinsic inductance is  $\frac{\mu}{8\pi}$  Henries per meter. This relationship is linearly proportional to wire length and independent of wire thickness. This relationship is not derived from Faraday's Law because Faraday's Law is impossible to apply to this phenomenon. Furthermore, simple experimentation teaches that intrinsic inductance, unlike the classically derived equation, is a function of wire thickness.

In the above definition, intrinsic inductance of wire is given by the classical relationship:  $\frac{\mu}{8\pi}$  Henries per meter. This common derivation uses the amount of field energy contained in the wire and “reverse-engineers” the expression for inductance. According to the derivation, intrinsic inductance is a linear function of wire length and independent of wire diameter. Thus, according to the classical understanding of inductance, if we construct two circular loops of wire, both with the same loop shape, but with different wire gauge, then both should have the same inductance. But this is not the case as demonstrated by the following experimental data which is found in the paper New Induction (ni.pdf).

Anomalies and Paradoxes of GE



48 inch perimeter shapes	Area (sq. in)	26 AWG wire (Measured)	22 AWG wire (Measured)
Circle	183	<b>2253nH</b>	<b>2055nH</b>
Square	144	<b>2144nH</b>	<b>1950nH</b>

Since the thickness of wire does affect the intrinsic inductance, then the classical model for intrinsic inductance is incorrect.

The paper titled New Induction (ni.pdf) discusses intrinsic inductance from a conceptual standpoint to enable the reader to understand the true mechanism of intrinsic inductance.

The New Electromagnetism Application Series will feature a complete book (not titled yet) devoted to modeling self-inductance, intrinsic-inductance and inductors. The book will include complete derivations of inductive effects along with empirical support. The book is accompanied by software algorithms and PC compatible software.

Anomalies and Paradoxes of CE



## 3 Faraday's Law and Point Charges

From the paper New Induction (NI.PDF) ([changes in green](#))

Consider two loops of wire. In the first loop (the source) a changing current is applied that generates a changing magnetic field. Using Faraday's law, it is possible to determine the effect of the changing magnetic field on the charges in the other loop (the target loop). Further suppose that it were possible to immobilize (glue down) all the free charges in the target loop except for one solitary charge. With all of the other charges immobilized, it is still possible to determine the effect on the solitary mobile charge with Faraday's Law. Finally, remove the rest of the target loop leaving just the solitary charge sitting in free space. Without the perimeter of the loop to tell us how much flux is linked, it then becomes impossible to use Faraday's Law. This raises an interesting question: Does nature require a closed area defined by a physical object (such as a conductor) for Induction to work? If so then how does light propagate? Since we know that induction is an integral mechanism of the propagation of light and that light propagates without any such artifices, then there must be another relationship that allows us to determine the effect on the solitary charge mentioned above.

All electromagnetic laws, except induction, can be stated as an interaction between charged particles in free space. For example: Static charges are related by Coulomb's Law; charges moving in a magnetic field are modeled by the [Classical Motional Electric Law \(CMEL\)](#); magnetic fields are produced by moving charges (Biot-Savart); the Lorentz Force Equation relates the force on a charged particle to its position and velocity, etc. Why is there no point charge expression for induction?

[Note: Some try and claim that Maxwell's Equations apply to point charges since Maxwell's equations are point equations; however Maxwell's equation for inductance relates the E and B field at a point. In the paper New Induction we show that this point relation of Maxwell is invalid unless other conditions are met. Furthermore, Maxwell's version of Faraday's Law is derived from Faraday's Law. If Faraday's Law is not complete, then Maxwell's Equation is incomplete. In general, Except for the displacement current term, Maxwell's equations do not describe more than what was](#)



known prior to Maxwell; except that Maxwell “unified” electricity and magnetism.

We know that a changing magnetic field will induce an emf in a conductive loop. If a changing magnetic field is due to a changing current, and a changing current is a condition where charges are accelerating, then why is there no corresponding mathematical relationship for the effects of accelerating charges? Why must induction only work if charges are contained in closed loops of wire?

Nature is full of second order systems, such as the spring-mass-dashpot system, where the properties of position, velocity, and acceleration each contribute a component of force toward the behavior of the system. This is also true for to RLC circuits where charge position and its two time derivatives are used to model circuit behavior. Again, why is there no equation that relates point charge acceleration to some force or field?

Symmetry suggests that there should exist a free space charge equation that relates the force on a charge to charge acceleration.

The paper [New Induction \(NI.PDF\)](#) describes this new model between point charges in free space.

Anomalies and Paradoxes of CE





## 4 Reciprocity

This section condensed from the papers "The Quintessential Argument for New Induction" (newindarg.pdf) and "Rules of Nature" (ron.pdf).

Well known to scientists and engineers, for more than 100 years, is the fact that the forward mutual inductive linkage between two mutually coupled circuits is the same as the reverse linkage ( $M_{12} = M_{21}$ ). This phenomenon is called reciprocity.

Reciprocity should be predicted, in ALL cases, by our model(s) of electromagnetic induction; however, Faraday's Law (the classical model of induction) fails this test under the following condition:

Suppose we wanted to know the effect of a current change in a small length of an arbitrary loop that we will call loop1 (a fragment) on a second loop (see Figure 4-1). For the sake of discussion we refer to this as the "Forward Linkage"

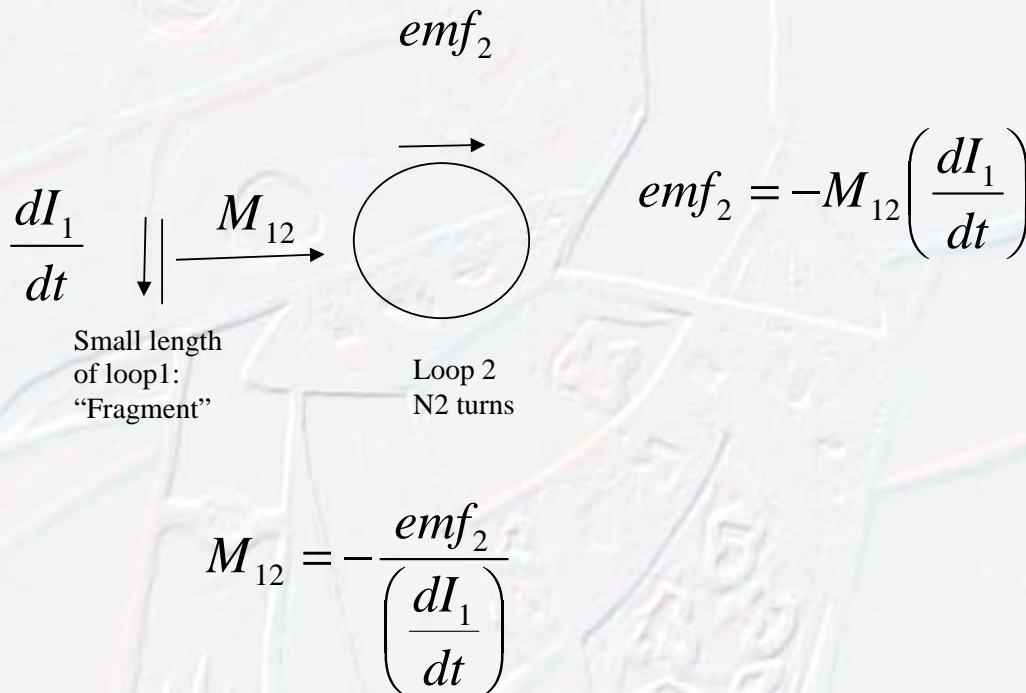


Figure 4-1: Fragment-to-loop Forward Linkage

Anomalies and Paradoxes of CE



In this example, both Faraday's Law and New Induction are capable of calculating the inductive linkage ( $M_{12}$ ) from the fragment to the loop (Fragment-to-Loop linkage). Complete derivation and examples are found in the paper listed at the top of this section.

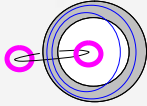
From our understanding of reciprocity, we surmise that the reverse linkage (from the loop to the fragment) must be the same ( $M_{12} = M_{21}$ ); however, it is impossible to use Faraday's Law to confirm this. One may argue that Maxwell's equations can be used to determine the reverse linkage; however, we must remember that Maxwell's Equations are derived from Faraday's Law (and others); therefore, if Faraday's law is proven not to be a complete description of Electromagnetic Induction, then Maxwell's equations are not a complete description of electromagnetic wave phenomenon.

This is only one of many arguments which suggest that Faraday's Law is not a complete description of the phenomenon of electromagnetic induction. See the paper "Classic Flux Anomaly" for a contradiction of classical induction with regard to magnetic cores.

The New Induction Model confirms (as shown in the above paper) that the forward and reverse linkages of the Fragment-to-Loop example are identical (as it should be).



## 5 Classic Flux Anomaly



See the paper [Classic Flux Anomaly \(classfluxan.pdf\)](#) for full details and complete derivations.

In the classical explanation of permeable core transformers, it is asserted that the flux produced by the current of a transformer primary, which links the secondary, is completely contained in the core.

The classical flux theory does not explain how the flux “gets into” (we use the term engage) the core. How does flux engage the core?

By analysis of various possible methods, we find that the only method by which flux could engage the core without violating Ampere’s Circuital Law requires that the flux begin completely outside the core and then “Fall in” or engage.

This New Flux model (which was derived from New Magnetism research) allows us to (for the first time) derive transformer theory from the classical motional electric law (CMEL). The result of which is identical to Faraday’s law (previously the only explanation of transformer theory).

The paper ([classfluxan.pdf](#)) shows (using classical models) that Faraday’s law is only a subset of all the possible inductive interactions within the set predicted by the classical toroidal magnetic model. Since Maxwell’s equations are derived in part from Faraday’s law, then Maxwell’s Equations represent only a subset of all electromagnetic interactions.

New Induction and New Magnetism further extend magnetic theory to a spherical model which resolves the other anomalies and paradoxes outlined in this paper.



## 6 Maxwell vs. Kirchhoff

This text condensed from the paper New Induction (ni.pdf)

Kirchhoff's Law states that the path integral (some say line integral) of an electric field around a closed path is equal to zero:  $\oint \mathbf{E} \cdot d\mathbf{L} = 0$ . In circuit theory we say that the sum of the voltages around a closed loop equals zero.

However, Maxwell sets Kirchhoff's Law equal to Faraday's Law:

$$\oint \mathbf{E} \cdot d\mathbf{L} = -d\phi / dt \text{ then applies Stokes' theorem to arrive at: } \nabla \times \mathbf{E} = -\partial \mathbf{B} / \partial t$$

The equation  $\nabla \times \mathbf{E} = -\partial \mathbf{B} / \partial t$  is one of the 4 famous equations that comprise what is known as Maxwell's equations. It has been used for over 120 years to describe the propagation of light and other electromagnetic radiation effects; however it is based on a contradiction. If Kirchhoff's law is correct, then the curl of an electric field ( $\nabla \times \mathbf{E}$ ) must always be zero.

Is there a way to reconcile this dilemma without invalidating either Maxwell or Kirchhoff? The answer is yes; in fact, the solution to the dilemma yields a much greater level of understanding of both electrical and magnetic fields. The above dilemma is discussed in great detail in "New Induction" (ni.pdf). It is also referenced in "Rules of Nature" (ron.pdf)

Anomalies and Paradoxes of CE



## 7 Strange corner effects

This section is condensed from the New Magnetism Proof which is contained in the book New Magnetism. This anomaly enabled us prove that magnetic fields must be spherical.

Consider a square loop of wire that contains a constant current. The current at the corners changes direction 90 degrees; this is effectively a changing current.

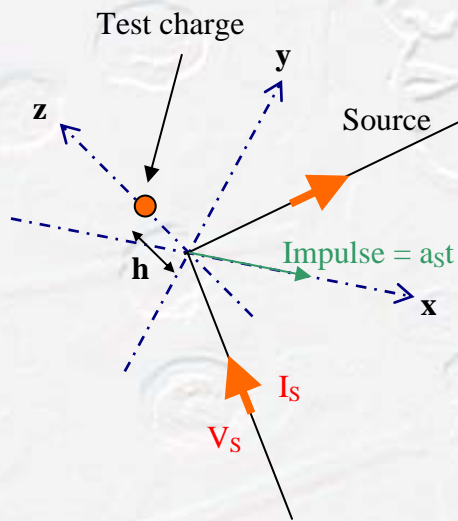


Figure 7-1

By applying classical electromagnetic equations, we derive the effect of this current change on a test charge located just above the corner. The relationship is:

$$\mathbf{E} = K_M I_s V_s \sqrt{2} \left( -\frac{1}{h} \right) \mathbf{ax}$$

Where

1.  $V_s$  is drift velocity of mobile carriers
2.  $\mathbf{ax}$  is direction vector of x-axis
3.  $\mathbf{E}$  is force per charge

Anomalies and Paradoxes of GE



Experimentation shows that there are no detectable corner effects. New Magnetism shows that the spherical field completely cancels these corner effects.



Anomalies and Paradoxes of GE



## 8 Antenna Radiation Patterns

The following is condensed from the New Electromagnetism Application Series book NIA1.

The toroidal magnetic field of classical electromagnetism does not predict the existence of longitudinal electromagnetic propagation. As such, the classical models do not predict reception off the ends of a dipole antenna.

In fact, without longitudinal waves, the classical models are not even close to the measured radiation patterns. The following example compares measured dipole radiation to New Electromagnetic and Classical Predictions (both using the same source current approximation).

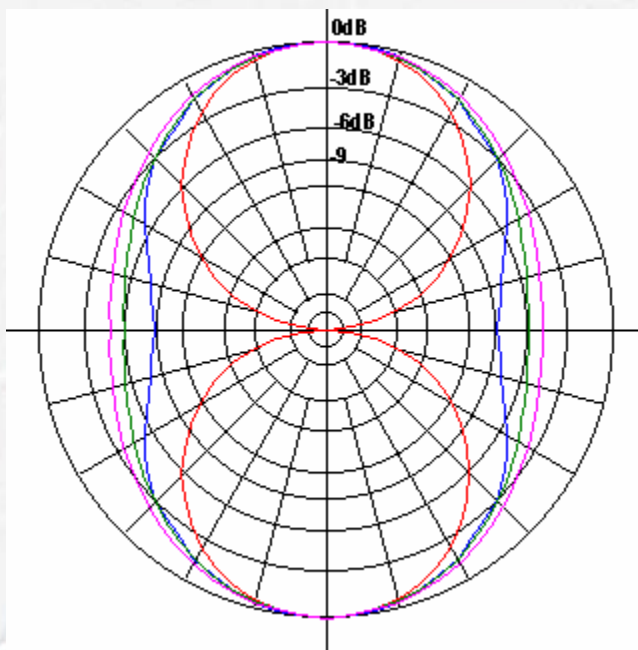


Figure 8-1 Far-Field half-wave Dipole radiation patterns of various models

Here are the definitions of the various traces

- The **red** plot is the predicted radiation pattern from classical electromagnetic models (Maxwell's Equations).
- The **blue** trace is the ARRL measured pattern.
- The **green** trace is the results predicted from New Induction without ground effects.
- The **pink** trace is the New Induction prediction with ground effects approximated using ARRL ground effect model.

Anomalies and Paradoxes of CE



The above diagram shows the radiation pattern predictions of various models compared to the measured results found in the ARRL antenna book ([www.arrl.org](http://www.arrl.org)). The source dipole is located at the center of the diagram parallel to the horizontal axis of the graph. For ground effect considerations, the dipole is  $\frac{1}{4}$  lambdas above the ground. All data (measured or calculated) has the target antenna residing at more than 100 lambda distance and 25 degrees above the source. The target antenna is always parallel to the source.

The New Induction radiation pattern is predicted using the same approximation for source dipole current used in classical texts (which assumes negligible loss in the source). The reader will note that the results of New Induction are much more precise than the predictions made with classical electromagnetic models which do not predict reception off the ends of the source. The reason is that the classical models do not predict magnetic effects in the longitudinal direction because the Biot-Savart field model of magnetism is a transverse only model. New Induction and New Magnetism are spherical magnetic field models which readily predict transmission off the ends of a dipole antenna. In fact, the New Electromagnetic derivations are much simpler than the classical derivations.

**The book NIA1 releases advanced applications of New Electromagnetism that are either impossible or impractical to develop from classical electromagnetic theory. The techniques released in this book can be adapted to a wide range of technological development; enabling the engineer, scientist and inventor to exploit realms of innovation that are oblivious to classical theory and techniques.**





## 9 Homopolar Generator

This text is from Faraday's Final Riddle (hompolar.pdf)

Faraday developed a generator consisting of a disk magnet coaxial to a conductive disk similar to the diagram shown in Figure 9-1. This generator is called a Homopolar generator because it only uses one pole of the magnet.

There are 4 modes of operation of the Homopolar Generator (HPG); the results of which comprise what is known as Faraday's Final Riddle: Does a magnetic field move with the magnet.

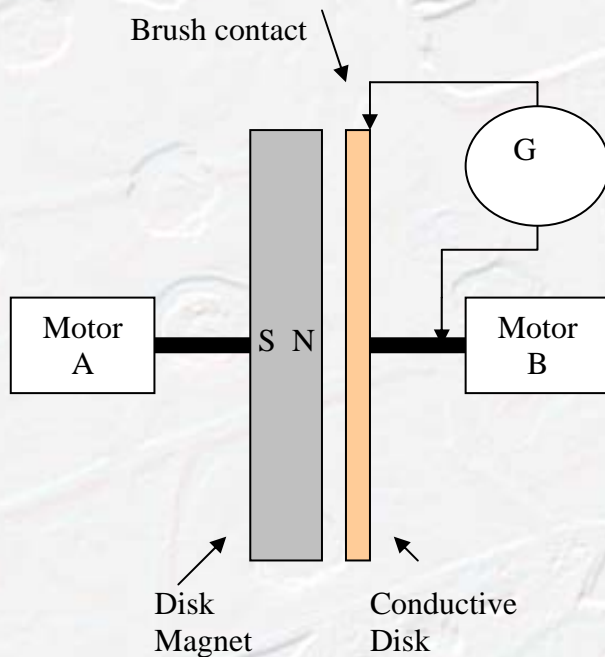


Figure 9-1: Faraday's homo-polar generator

The generator in Figure 9-1 is comprised of a disk magnet attached to a motor (A) and a conductive copper disk attached to motor (B). The disks are placed next to each other to allow them to rotate coaxial to each other. A stationary galvanometer is connected between the edge of the conductive disk and the shaft of motor B with brush contacts. The Galvanometer enables the operator to detect radial current generated in the disk (An indication that power is being generated).

Anomalies and Paradoxes of GE



There are four modes of operation of the Homopolar generator. Some of the modes of operation are not discussed in text books since there is no accepted explanation for the seemingly paradoxical behavior of the HPG. In the following descriptions, the disk magnet is referred to as the magnet and the conductive copper disk is referred to as the disk.

In the first mode of operation, both the disk and the magnet are stationary. In this mode of operation, the Galvanometer does not detect the flow of current and thus we conclude that there is no power generated in the disk.

In the second mode of operation, the magnet is stationary and the disk is rotated by motor B. In this mode, the galvanometer detects power generated in the disk. A normal reaction is to conclude that power is generated when there is relative motion between the disk and the magnet.

In the third mode of operation, the magnet is rotated by motor A and the disk is stationary. One might try to predict that power should be generated since there is relative motion between the disk and the magnet (such as in mode 2); however, no power is detected.

In the fourth mode of operation, both the magnet and the disk are rotated together. Again one may conclude that since there is no relative motion between the disk and the magnet (such as in mode 1) that there should be no power generated; however, power is generated.

### 9.1.1 Effect on Relativity

Einstein predicted from his Theory of Relativity that a magnetic field must move with the magnet. From observation of the HPG we find that the generated power is totally independent of the rotational velocity of the magnet. The generated power is only proportional to the rotational velocity of the disk. In order to reconcile the observations of the HPG with classical electromagnetism we must conclude that the flux lines are stationary regardless of the motion of the magnet. This contradicts Einstein's prediction that the flux lines must move with the magnet. New Magnetism shows that Einstein is correct; the flux lines are in motion when the magnet is rotated. New Magnetism explains all of the modes of operation of the Homopolar generator without contradiction to Einstein's Relativity.



## 10 Longitudinal Waves

In the classical electromagnetic theory of light (Maxwell's Equations) only transverse electromagnetic waves are anticipated. Yet in all other media in which waves propagate, they propagate in both longitudinal and transverse modes. Why does classical electromagnetism only predict transverse waves?

The answer is that classical electromagnetism views magnetism as a transverse only field phenomenon. New Electromagnetism (specifically New Induction and New Magnetism) reveal that magnetism is a spherical field phenomenon. This spherical field model readily predicts wave propagation in both longitudinal and transverse modes. This is why New Electromagnetism more accurately predicts dipole antenna radiation patterns which show significant energy in the longitudinal direction; whereas, classical theory does not (see Section 8).

In a future text devoted to advanced wave mechanics, we will show that it is impossible to have transverse propagation without longitudinal propagation.

Anomalies and Paradoxes of CE



## 11 Unification with Gravity and Relativity

Einstein spent the remainder of his life looking for a connection between gravity and electromagnetism. His task was made impossible by the incomplete and ambiguous models of classical electromagnetism.

In the third New Electromagnetism paper titled “New Gravity”, a new model for the old concept of the ether is developed by extending the logic of Einstein’s Principle of Equivalence.

This new model (abstraction) for ether satisfies both the results of the Michelson-Moorley experiment as well as the precepts of Einstein’s Relativity.

This new abstraction for free space enables us to show that gravity, inertia and New Induction are all one and the same. This derivation uses simple logical reasoning; you do not have to be a math wizard to understand it.

From this same abstraction, time dilation and the black hole equations are derived completely from New Electromagnetism.

Faster than light starships are discussed in the conclusion of the paper.

You can read more about this in the most popular (and free) paper at our site titled “New Gravity” (ng.pdf).

Anomalies and Paradoxes of GE



## 12 Too confusing

Prior to developing New Electromagnetism, we helped institutions, corporations, and even inventors apply classical electromagnetic theory. We found very few classically trained individuals who understood how to properly apply classical field theory.

As an example, we found engineers at a prestigious national laboratory who honestly believed that there was such a thing as conservation of flux. After some heated debate and chest pounding, we finally asked: how do transformers work if flux were never created or destroyed?

The majority of problems we encountered arose from incorrect perception of the properties and limitations of the electric and magnetic flux models.

Needles to say, New Electromagnetism allows an engineer to determine the effect of one charge on another without the need to understand field theory. This is due to the fact that New Electromagnetism resolves all interactions to one charge on another. This is not the case with classical field theory (specifically magnetism) where one must determine the B field from Biot-Savart before it is possible to calculate the effect on a target charge.

Anomalies and Paradoxes of CE



## 13 Homopolar Paradox #2

“Customary physics don’t prescribe how the forces produced by the closing wire on the magnet are distributed on its bulk, which make impossible the direct calculation of the relevant torque”

--- Jorge Guala-Valverde & J.A. Tramaglia

**See [jgv\\_bf.pdf](#) in our Homopolar Technology Section for the complete text of Jorge’s paper. It is our opinion that Jorge’s work is of the best application of classical electromagnetic physics to explaining the seemingly paradoxical behavior of Homopolar Devices.**

Jorge’s paper shows that conservation of energy techniques explain that a back torque must exist in a Homopolar generator when the magnet and disk move together; however, classical physics fails to explain how and where the force manifests itself. We talk more about Homopolar back torque with regard to New Electromagnetism in the sections 4.5.2 and 4.5.3 of the updated Rules of Nature ([ron.pdf](#)).

Thanks to Jorge for bringing us this New Paradox to add to our growing list.

Anomalies and Paradoxes of CE



## 14 Thank you

Thank you for taking the time to read our free publications. We give away many free papers to help people see and understand the beauty, depth, and simplicity of the New Electromagnetic equations and principles.

New Electromagnetism (which includes New Induction and New Magnetism) was discovered in Fairfield Connecticut by Robert J. Distinti. The discovery is protected by a number of schemes to include issued and pending patents, copyrights, trademarks and trade secrets.

The name New Electromagnetism was chosen because Connecticut is part of "New England", which is part of the "New World". Connecticut has many towns with names like "New Brittan", "New Haven", "Newtown", etc. This document is written with a "New World English Dictionary" and "New Math" (what ever that is). So the names "New Magnetism", "New Induction", and "New Electromagnetism" are quite appropriate.

Anomalies and Paradoxes of GE

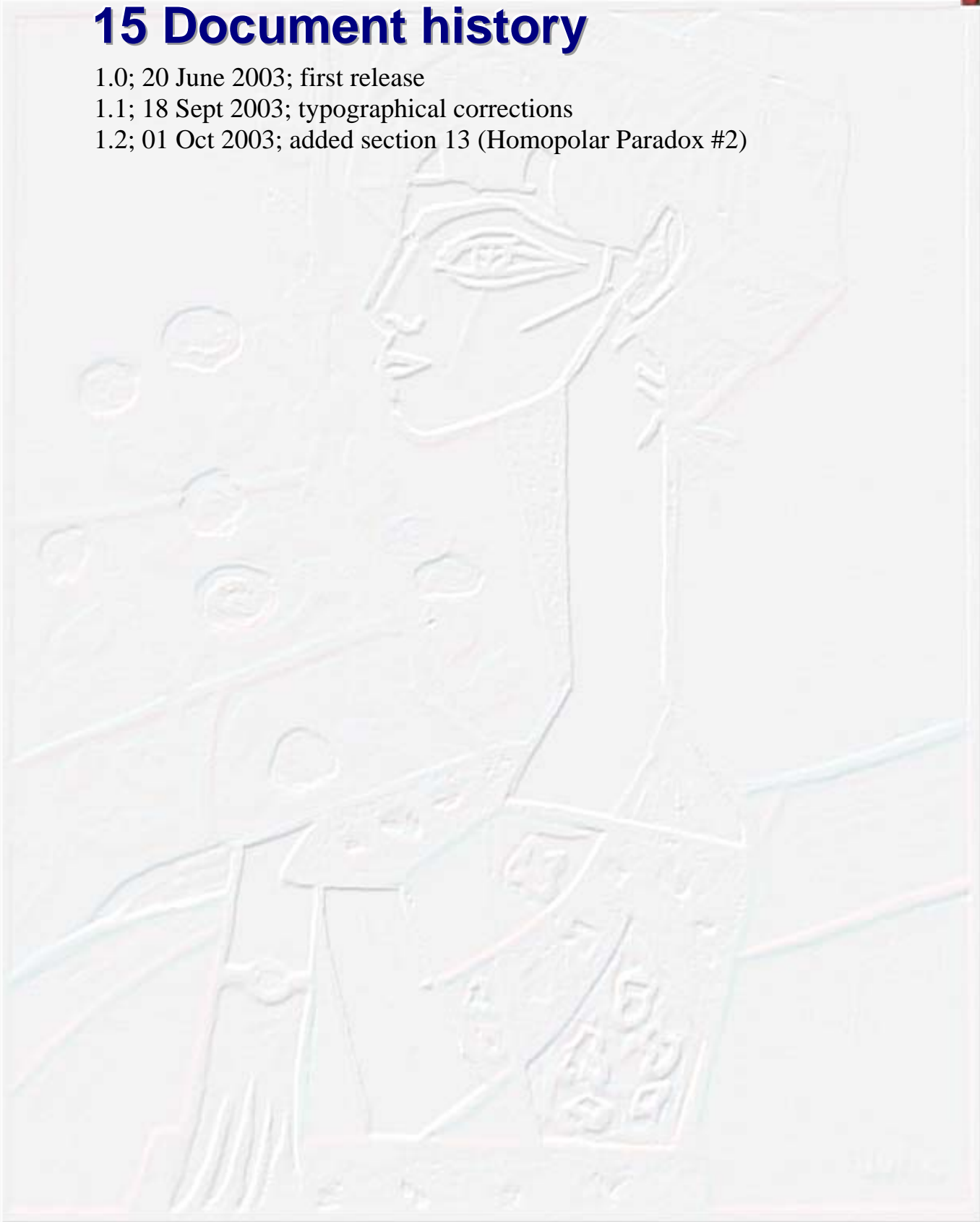


## 15 Document history

1.0; 20 June 2003; first release

1.1; 18 Sept 2003; typographical corrections

1.2; 01 Oct 2003; added section 13 (Homopolar Paradox #2)



Anomalies and Paradoxes of GE