

# MIGHT GRAVITY BE AN ELECTROMAGNETIC PHENOMENON? EXAMINING THE “MYSTERY” OF MONATOMIC GOLD

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Abstract. Speculation has long abounded that the Biblical Ark of the Covenant may have been an electrical device, perhaps a capacitor, given its construction as precisely described in the Bible. Its potential association as a container of monatomic gold, recently (re?)discovered accidentally as a potential superconducting powder with seemingly mystical properties, renders this as a possibility. Theories exist that equate gravity with electromagnetic phenomena, such that at least two confirmed observations associated with monatomic gold lend credibility to such theories.

## 1. INTRODUCTION

In the 1981 blockbuster movie, “Raiders of the Lost Ark,” the Ark of the Covenant was featured as a mystical device capable of creating lightning-like electrical discharges despite being filled only with what was identified as “sand” in the film. [1] There has long been speculation that the Ark, for which the exact details of its construction are included in the Bible, was actually an electrical capacitance device, many references to which can be found merely by an internet search on “Ark of the Covenant” and “capacitor.” There is even a video documenting a modern reconstruction of the Ark from the Biblical description and demonstration of its electrical capabilities. [2] The extent to which “Raiders” banked on this anecdotal knowledge of the Ark is speculative, but the inclusion of the “sand” may have turned out to be inadvertently prophetic. Reference [3] postulates that, not only was the Ark an incredibly powerful electrical device, but that at least some of the source of that power arose from its contents – an Orbitally Rearranged Monatomic Element (ORME), specifically high-spin (electron) monatomic gold, which exists in a powder form (“sand”).

Allegedly, this form of gold was known to the ancients, particularly the Sumerians and Egyptians (and, subsequently, the Israelites), but only rediscovered in 1976 accidentally by Hudson in Arizona during sulfuric acid treatment of soil to render it more suitable for crops. A remnant of the treatment, when heat-dried under the hot Arizona sun, “would flare into a great blaze of white light and totally disappear.” [3] Subjected to long-term (several minutes), high-temperature Arc Emission Spectroscopy, this substance exhibited the amazing property of transforming into a white powder with a loss of 4/9 of its weight, accompanied by the same light emission, subsequently recovering the lost weight as it further transformed into a clear glass. This paper examines one possible explanation for the weight loss which suggests a connection between electromagnetism and gravity, not unlike conjecture under Electric Universe Theory. [4, 5]

## 2. HUDSON’S (RE)DISCOVERY

The following has been taken from Hudson’s presentation at the 1995 International Forum on New Science in Fort Collins, Colorado. [6]

“I ... got into producing gold from a natural source, old mining sources ... In the process of recovering gold and silver, I began to recover something else, which was causing losses of the gold and silver ... [which] would not recover at all because of the something else ... [I]t would recover in the molten lead like it was gold and silver ... The mining community refers to this as ‘ghost gold,’ a non-assayable, non-identifiable form of gold.”

“My sample was identified as Iron, Silicon and Aluminum ... [After] finding ways to take away all of the Fe, Si and Al, ... I still had 98% of the sample [which] didn't indicate to be anything ... [A Cornell University] Ph.D. who did X-ray analysis ... said it was 'pure nothing' ... [even though] I could hold it in my hands, weigh it, perform chemistries with it ... [A]ccording to the Soviet Academy of Sciences, the proper analytical tool is to burn the sample in the emission spectroscopic analysis for 300 seconds, not just 15 [as had so far only been done].”

“... When the material was placed on the electrode and the arc was struck, there was no reading at all for 15 seconds ... Finally, after 90 seconds, Palladium (Pd) began to read; after 110 seconds, Platinum (Pt) began to read; at 130 seconds, Ruthenium (Ru); at about 140-150 seconds, Rhodium [Rh]; at 190 seconds, Iridium [Ir]; at 220 seconds, Osmium [Os] began to read. The Russians call this fractional vaporization ... Essentially, all of the emissions from the elements were coming off in the sequence of their increasing boiling temperatures ... (Gold's boiling point is 2600° [C, slightly above Rh.]”

“Gold has the 5d 6s1 electron structure (the single s electron ...) and is thus explosively reactive. Except that, in the case of gold, it's gold reacting with gold ... [I]n volcanoes, nature is producing monatomic gold. When it comes out, 98% is monatomic, 2% is metal ... [W]hen we get monatomic gold, it never goes back to yellow ... [I]t is not metallic, has none of the metallic qualities of gold ... When you heat it, it goes to a snow white powder! It loses 4/9 of its weight ... But mass is never left ... [A]pproaching absolute zero, you have a superconductor ... [Monatomic gold is a superconductor at room temperature] ... The electrons going into the superconductor have to pair ... When they pair, they become light ... Superconductivity responds to magnetic fields ... When it goes to white powder and loses 4/9 of its weight, it's flowing light within it, in response to earth's magnetic field. And it flows so much current that it levitates 4/9 of its weight on the earth's magnetic field ... Sounds pretty far out. Most groups don't receive this very well. [my emphasis]”

## 2.1 ORMES

The following has been taken from Reference [7].

“... ORME elements are identified by their ... monatomic form, which suggests that they are found as a singular atom and do not need to share or exchange electrons with other atoms to become stable ... ORME's atoms' electrons show more of the characteristics of photons ... or a hybrid of light and physical [T]hey are not bound [and] can bend the laws of electron stability ... 'Precious Metals' ... include ruthenium, rhodium, palladium and silver (known as the 'light platinum group'), osmium, iridium, platinum and gold (known as the 'heavy platinum group'). These eight Transition Group Elements ... can, in a monatomic, super deformed, high-spin and low energy state, lose their chemical reactivity and metallic nature – thereby resulting in a state of Superconductivity ... These precious metals have the unique ability to remain stable in the monatomic form, which can then lead to effects ranging from Levitation (weight loss) to Zero-Point Energy ... Of particular importance is that all of these precious metals have a strong affinity for and are almost always found in their natural state in combination with gold ... [which] has a history of being the most precious of all commodities ... Monatomic Gold is the non-metallic, non-toxic, zero-valence form of Gold.”

## 2.2 Weight Loss

Weight loss precisely in the amount of 4/9 has been observed during the “manufacture” of monatomic gold, later to be recovered in the form of a clear glass. The theory behind this 4/9 weight loss derives from

the work of Puthoff, who theorizes that gravity arises as a manifestation of a zero-point-fluctuation (ZPF) force, i.e., it “is not a separately existing fundamental force, but rather a residuum force from ZPFs of other fields, ... [in particular] as the van der Waals force associated with the long-range radiation fields ... generated by ... particle-motion response to the ZPF of the electromagnetic field.” [8] Gravitational mass contributes to the ZPF energy in an electromagnetic form, necessitating that mass must be characterized by an electromagnetic-field-generating function. Puthoff contends that “charged and neutral matter [i.e., protons and neutrons] participate equally in the gravitational interaction, based on underlying charge ... interactions.” [8] A particle’s rest-mass energy originates in its motion in response to the electromagnetic ZPF of a vacuum, such that the internal kinetic energy of a system contributes to the system’s effective mass. This motion generates an electromagnetic field near the mass that is half electric and half magnetic. Puthoff summarizes his theory as follows. [8]

“... [O]f the many inferences that can be drawn from this study, the most important is simply the fact that it is possible ... to uncover a basis for gravity in the ZPF of other (non-gravitational) fields. In particular, we have been able to explicate a first-order model based on the ZPF of the vacuum electromagnetic field alone, once we take into account its effects on particle motion. The model thus details an electromagnetic basis for gravity.”

When deriving the ZPF interaction potential, Puthoff works in three dimensions, such that the potential is proportional to the quantity  $(\eta_x^2 + \eta_y^2 + \eta_z^2)$ , where each  $\eta$  term arises from the standard formula for an oscillating dipole. To convert to two-dimensional motions, the nine coupling factors for the dipoles oriented in each axial direction, i.e., x-x, x-y, x-z, y-x, y-y, y-z, z-x, z-y and z-z (think of the nine elements of a 3 x3 matrix), reduce by 2/3 each. As a result, the two-dimensional motions of interest are proportional to  $(\left[\frac{2\eta_x}{3}\right]^2 + \left[\frac{2\eta_y}{3}\right]^2 + \left[\frac{2\eta_z}{3}\right]^2) = 4/9 (\eta_x^2 + \eta_y^2 + \eta_z^2)$ , yielding the 4/9 reduction factor. [8] As Gardner subsequently points out: [3]

“In his studies of zero-point energy and gravity as a ZPF force, Puthoff has determined that when matter begins to react in two dimensions (as Hudson’s samples were doing), it should theoretically lose about 4/9 of its gravitational weight, ... precisely as discovered in the white powder experiments. Hudson was therefore able to confirm Puthoff’s theory in practice, explaining that when entering a superconductive state, the monatomic powder registers only 56%  $[1 - \frac{4}{9} = \frac{5}{9}]$  of its previous weight ...”

### 3. MASS-ENERGY TRANSFORMATION?

Puthoff develops the theory behind the observed reduction in mass by 4/9 when monatomic gold is “manufactured,” as confirmed by Hudson’s experiments. But just where does that mass go? Clearly, it has a gravitational effect, with levitation in response to earth’s magnetic field having been observed. Using Puthoff’s work to show that gravity is a manifestation of electromagnetic force, consistent with Electric Universe Theory [4, 5], might it be that 4/9 of the mass in the gold atoms is converted to electromagnetic energy in the form of photons, as exhibited by the “blaze of white light” occurring in conjunction with the “manufacture” of monatomic gold?

A photon has an energy  $E = h\nu = \frac{hc}{\lambda}$ , where  $h$  = Planck’s constant ( $6.63 \times 10^{-34}$  J-s),  $c$  = light speed ( $3.00 \times 10^8$  m/s),  $\nu$  = frequency ( $s^{-1}$ ) and  $\lambda$  = wavelength (m). If a particle of mass  $m$  were to generate a photon of energy  $E$  via  $E = mc^2$ , the amount of mass needed would be  $m = \frac{h}{\lambda c}$ . Table 1 calculates the required fraction of mass from a proton ( $m = 1.673 \times 10^{-27}$  kg), neutron ( $m = 1.675 \times 10^{-27}$  kg) and electron ( $m = 9.11 \times 10^{-31}$  kg) needed to generate each photon across the electromagnetic spectrum, from gamma rays to radio waves of extreme low frequency (wavelengths from Reference [9]).

**Table1. Fraction of Particle Needed to Produce One Photon across Electromagnetic (E/M) Spectrum (Yellow indicates range for visible light)**

E/M Ray	Lambda (m)	Photon (kg)	Fraction of P <sup>+</sup>	Fraction of N <sup>0</sup>	Fraction of e <sup>-</sup>
<b>Gamma</b>	1.E-12	2.21E-30	1.32E-03	1.32E-03	2.43E+00
<b>Hard X</b>	1.E-11	2.21E-31	1.32E-04	1.32E-04	2.43E-01
	1.E-10	2.21E-32	1.32E-05	1.32E-05	2.43E-02
<b>Soft X</b>	1.E-09	2.21E-33	1.32E-06	1.32E-06	2.43E-03
<b>Extreme UV</b>	1.E-08	2.21E-34	1.32E-07	1.32E-07	2.43E-04
<b>Near UV</b>	1.E-07	2.21E-35	1.32E-08	1.32E-08	2.43E-05
<b>Near IR</b>	1.E-06	2.21E-36	1.32E-09	1.32E-09	2.43E-06
<b>Mid IR</b>	1.E-05	2.21E-37	1.32E-10	1.32E-10	2.43E-07
<b>Far IR</b>	1.E-04	2.21E-38	1.32E-11	1.32E-11	2.43E-08
<b>Extreme HF</b>	1.E-03	2.21E-39	1.32E-12	1.32E-12	2.43E-09
<b>Super HF</b>	1.E-02	2.21E-40	1.32E-13	1.32E-13	2.43E-10
<b>Ultra HF</b>	1.E-01	2.21E-41	1.32E-14	1.32E-14	2.43E-11
<b>Very HF</b>	1.E+00	2.21E-42	1.32E-15	1.32E-15	2.43E-12
<b>High Freq</b>	1.E+01	2.21E-43	1.32E-16	1.32E-16	2.43E-13
<b>Med Freq</b>	1.E+02	2.21E-44	1.32E-17	1.32E-17	2.43E-14
<b>Low freq</b>	1.E+03	2.21E-45	1.32E-18	1.32E-18	2.43E-15
<b>Very LF</b>	1.E+04	2.21E-46	1.32E-19	1.32E-19	2.43E-16
<b>Ultra LF</b>	1.E+05	2.21E-47	1.32E-20	1.32E-20	2.43E-17
<b>Super LF</b>	1.E+06	2.21E-48	1.32E-21	1.32E-21	2.43E-18
	1.E+07	2.21E-49	1.32E-22	1.32E-22	2.43E-19
<b>Extreme LF</b>	1.E+08	2.21E-50	1.32E-23	1.32E-23	2.43E-20

Except for an electron producing a gamma ray (fraction > 1), it is at least theoretically possible for each particle to produce each photon by converting some fraction of its mass to energy in the form of light. Since “white” (visible) light is seen in the “manufacture” of monatomic gold, one photon of such could arise from a very small fraction of the mass of any of these particles.

However, what has been observed is a “blaze of white light” and a reduction in gold mass by 4/9, clearly the result of any mass-energy conversion for many more photons than just one. A gold atom has an atomic number of 79 and atomic weight of 197, arising from 79 protons and 118 neutrons in the nucleus. If neutral, it also has 79 electrons. Thus, one atom of gold, which weighs  $197 \times 1.66 \times 10^{-27} \text{ kg} = 3.27 \times 10^{-25} \text{ kg}$ , consists of  $79 \times 1.673 \times 10^{-27} \text{ kg} = 1.32 \times 10^{-25} \text{ kg}$  mass of protons,  $118 \times 1.675 \times 10^{-27} \text{ kg} = 1.98 \times 10^{-25} \text{ kg}$  mass of neutrons and  $79 \times 9.11 \times 10^{-31} \text{ kg} = 7.20 \times 10^{-29} \text{ kg}$  mass of electrons (the sum is slightly more than the total calculated directly from the atomic weight since the individual calculations do not account for any mass “conversion” into binding energy). If 4/9 of the total gold atom mass ( $\frac{4}{9} \times 3.27 \times 10^{-25} \text{ kg} = 1.45 \times 10^{-25} \text{ kg}$ ) were to be converted to photons, the corresponding fractions if this were to arise solely from each particle type would be 1.10 for the protons (an impossibility), 2020 for electrons (an extreme impossibility) and 0.736 from neutrons. If arising solely from the nucleus, this fraction reduces to 0.441 (slightly less than 4/9 due to the slight difference between the actual weight of the gold atom and the weight from the sum of the 79 protons and 118 neutrons).

#### 4. CONCLUSION

“Sounds pretty far out. Most groups don’t receive this very well.” [6] I must admit, when first reading the material from Gardner [3] and Hudson [6, 7], I reacted as would most of the proverbial “groups.”

However, remembering Electric Universe Theory [4] and my own analysis regarding the possibility that gravity is merely an electromagnetic manifestation [5], based on Electric Universe Theory, I could see at least a possible explanation for the apparently confirmed phenomena that “sound pretty far out.” Mass reduction, with the release of a “blaze of white light” in the “manufacture” of monatomic gold, causing levitation (anti-gravity?), may not be so far-fetched if, indeed, gravity is truly an electromagnetic phenomenon. Mass-to-energy conversion within a gold atom (and vice-versa when the mass is recovered) would not be implausible if all atomic phenomena were truly electromagnetic in nature, including gravity. Especially hard to dismiss is the observed 4/9 reduction in mass, corresponding precisely to Puthoff’s analyses which also argue for gravity relating to an electromagnetic manifestation.

## 5. REFERENCES

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