LEVITATING AND MOVING LARGE STONES BY AMBIENT ELECTROMAGNETIC FIELDS PREVALENT AFTER NOAH'S FLOOD

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Abstract

It is suggested that in the centuries following Noah's flood, transient conditions, not in evidence thereafter, would produce large amounts of ambient charge which would give rise to electromagnetic fields which in turn could be tapped so as to move large objects (especially stones) that had been highly charged, and that man had learned to harness these conditions.

Introduction

In the *Bible Science Newsletter* of August 1975 I suggested that the pyramids of Egypt were not quarried and then laboriously sledged many miles and finally lifted to their place by means of an incline, but instead, were conduited and poured into forms just as many concrete buildings of today are constructed. Such an unorthodox suggestion precipitated substantial contrary response. However, I was eventually vindicated twelve years later with the publication of *The Pyramids: An Enigma Solved*, by Davidovits and Morris (Hipocrene Books, NY, 1988). Dr. Davidovits is a chemist specializing in concrete. The authors produce much evidence for showing that the pyramids were poured.

Whereas Dr. Davidovits argued from chemistry and concrete mechanics, I argued from the Bible. It seemed to me that the book of Job alludes to pyramids and also gives eyewitness descriptions of the ambient conditions in the first few centuries after the flood of Noah. I therefore reasoned that the immediate post-flood population would utilize and harness natural conditions as they found them. Specifically, it might have been at the site of the Tower of Babel and in the pyramid region of Egypt that a super abundance of natural liquid concrete was available, having been deposited by the flood and in the process of drying out. Perhaps this dying out period lasted centuries due to rainy conditions that succeeded the flood. This natural liquid concrete could be transported by a network of sluice troughs.

In the ancient world there is indeed evidence of quarrying. The pyramids have lintel stones that are of hard granitic rock. Building sized foundation stones at Baalbeck have been quarried and moved many miles. Megalithic monuments as Stonehenge have been cut out and moved great distances. The same maybe said of ancient walls and monuments in Central and South America.

I wish to suggest a method a method whereby gigantic stones might have been moved. Whereas, after the flood man would most certainly utilize mud and natural concrete for building, he would also utilize the intense electrical environment that may well have attended the post flood centuries wherein colossal storms, lightning, and rain would be common and whose intensity might have dwarfed the conditions as they exist today. Man faced with such an environment would surely figure a way to use it to his advantage.

Let us assume that man in the post flood era had a highly developed technology of capacitors and that he could summon charge from the sky at will. Very many lightning rods wired to capacitors affixed to a large stone might result in charges of 10^5 to 10^7 or more coulombs. In somewhat the same manner he would be able to sustain enormous currents of millions of ohms through conductors of various designed shapes. These conductors would be placed near the highly charged stone and would exert both a magnetic and electrical force, thus causing it to levitate and move.

By controlling that charge Q, on the stone, the current, I, through the conductors, and the conductors orientation, and electric field, $\boldsymbol{E}$, and a magnetic field, $\boldsymbol{B}$, would be produced so as to steer the stone, especially to lift it. The total force produced is given by $\boldsymbol{F} = Q(\boldsymbol{V}\text{x}\boldsymbol{B} + \boldsymbol{E})$ where $\boldsymbol{V}$ is the velocity of the stone. It is even possible that both positive and negative charges could have been manipulated as with a van de Graaf generator.

Post Flood Climatic Conditions

The earth's magnetic field strength is about 0.3 Weber pointing roughly north-south and roughly parallel to the earth's surface. This is the case for the Bible lands now and we might assume this to have been the case there after the Flood about 2400 B.C. (2348 B.C., Ussher). However, the magnetic field strength has decayed exponentially with an half-life of about 1400 years. Thus after the flood, the magnetic field strength was 2.4 Weber. The earth's component of the total magnetic field cannot be altered or turned off, but its effect may be nullified or dwarfed by field strengths arising from controlling atmospheric electricity.

Lightning strokes may move from cloud to ground, ground to cloud, or from cloud to cloud and accompany cumulonibus and nimbostratus clouds, active volcanoes, snowstorms, and dust storms. Potentials of 10^8 volts and currents of 10^5 amps are observed. Lightning strokes can tear away blocks weighing tons and hurl large stones substantial distances. Charge transfers of 10^3 coulombs are observed. In the post flood world these numbers might have been many orders of magnitude larger due to the more tumultuous climatic conditions. Martin A. Ulman's *Lightning*, (Dover Publications) provides much data and theory on lightning. Also see *The Lightning Book*, by Peter Viemeister, MIT Press.

Herodotus (484-425 B.C.), writing about 2,000 years after the flood, reports on the climatic conditions in early Egypt and upon the construction of the pyramids. He cites earlier authorities showing parts of Egypt and Libya yet underwater, and large parts of Egypt yet marsh and mud, and that the Nile seemed to have flowed into the Red Sea. He claims barges and dragging were used to move the pyramid stones.[1]

Conductor Geometry

We see from $\boldsymbol{F} = Q(\boldsymbol{V}\text{x}\boldsymbol{B} + \boldsymbol{E})$ that $Q\boldsymbol{V}\text{x}\boldsymbol{B}$ gives maximum lift when the direction of motion is perpendicular to the directions of the magnetic field and $\boldsymbol{V}$ and $\boldsymbol{B}$, $\boldsymbol{B}$ also lying parallel to the earth's surface. Also, $\boldsymbol{E}$ should point upward. A long straight-line horizontal conductor would accomplish this where $E = k \lambda r^{-1}$ and where the direction of $\boldsymbol{E}$ is vertical (perpendicular to the conductor) and where λ is the charge per unit length, r the distance from the conductor to the moving object, and the

1. A. D. Godley's translation, 1966. *Herodotus*, (Harvard University Press).

constant $k = 9 \times 10^9$ newton-meter^2-coulomb^{-2}. The associated magnetic field is horizontal and is given by $B = \mu\, I\, (2\,\pi\, r)^{-1}$ where $\mu = 4\,\pi \times 10^{-7}$ weber-amp^{-1}-meter^{-1}. The presence of a circular conductor (radius = a) might prove useful in tailoring the appropriate $\boldsymbol{E}$ and $\boldsymbol{B}$. In this case $\boldsymbol{E}$ and $\boldsymbol{B}$ are perpendicular to the plane of the circle and have magnitudes

$$E = k\, Q\, r(r^2 + a^2)^{-3/2}$$

and

$$B = 0.5\, \mu\, I\, a^2(r^2 + a^2)^{-3/2}.$$

The Motion

The equation of motion for our moving stone is

$$m(\ddot{x},\ddot{y},\ddot{z}) = Q((\dot{x},\dot{y},\dot{z})\mathrm{x}(B_x,B_y,B_z) + (E_x,E_y,E_z)) - mg(0,0,1)$$

where m is the stone's mass in kilograms and $g = 9.8$ meter sec.$^{-2}$ is the acceleration due to gravity. In order to simplify the analysis let $\boldsymbol{B}$ and $\boldsymbol{E}$ be constant (i.e. not dependent upon r) and confine the motion to the x,y plane. Set $B_z = 0$, $B_y = B$ and $E_y = 0$. Let the z axis point to the zenith, and use initial conditions $x(0)=0$, $\dot{x}(0)=\dot{x}_0$, $z(0)=0$, and $\dot{z}(0)=\dot{z}_0$. The solution is found to be

$$x(t) = A^{-1}(C_1 + C^2t + C^3\sin(At + \beta_x))$$

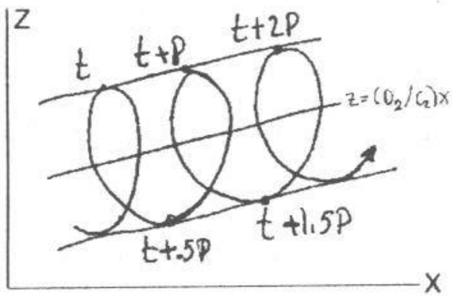
$$z(t) = A^{-1}(D_1 + D^2t + D^3\sin(At + \beta_y))$$

where $A = QB/m$ and

$C_1 = A^{-1}C_x - \dot{z}_0$ $\quad$ $D_1 = A^{-1}C_z + \dot{x}_0$
$C_2 = -A^{-1}C_z$ $\quad$ $D_2 = A^{-1}C_x$
$C_z = m^{-1}(QE_z - mg)$ $\quad$ $C_x = m^{-1}\,QE_x$

$$C_3 = D_3 = A^{-1}((\dot{x}_0+A^{-1}C_z)^2+(\dot{z}_0-A^{-1}C_x)^2)^{1/2}$$
$$\beta_x = \tan^{-1}((\dot{x}_0 + A^{-1}C_z)/(\dot{z}_0 - A^{-1}C_x))$$
$$\beta_z = \tan^{-1}(-(\dot{z}_0 + A^{-1}C_x)/(\dot{x}_0 + A^{-1}C_z))$$

Qualitatively this motion is as shown below



The maxima and minima of the motion occur when $dz/dx = z/x = 0$, i.e., at

$$t_m = A^{-1}(\cos(-C_x/(AD_3)) - \beta_z \pm n\pi),\ \ n = 0, 1, ...$$

The period P (time between successive maxima or minima) is obtained by subtracting t_m for n from t_m for n+2,

$$P = 2\pi A^{-1} = 2\pi m/(QB).$$

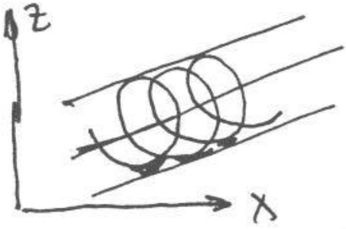
The amplitude of the sinusoidal component is approximated by D_3 and the slope, α, of the mean motion is D_2/C_2

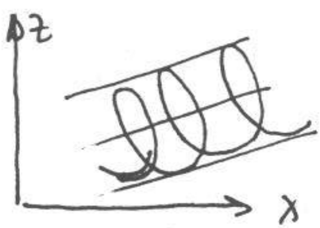
$$\alpha = D_2/C_2 = -QE_x/(QE_z\text{-}mg)$$

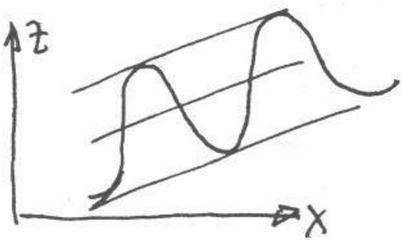
Recall that Q, E_x, and E_z may be positive or negative. From the expression for α it is seen that in the absence of an electric field the motion would be looping but with no net change in z over time. However, if $QE_z = mg$ then the looping rises along the z-direction with no net change in x.

Analysis of Motion

The looping may overlap or be strung out as shown on the next page. The motion may proceed from left to right or right to left. It may show a net up or down motion. It might be advantageous to use only a portion of a loop and to forego the linear component so that the ***B*** and ***E*** fields would have needed to be maintained for a short period of time, say on the







order of a second. In this manner mainly vertical motion would be realized (see figures on the next page).

In the two cases shown, t_1 is near the bottom of the loop at which time ***E*** and ***B*** are turned on and t_2 is near the top of the loop at which time ***E*** and ***B*** are turned off, thus landing the stone at (x_1, z_1) and realizing a levitation of $z_1 - z_0$. A terminal velocity, $\boldsymbol{v}_1$, would have to be accommodated.

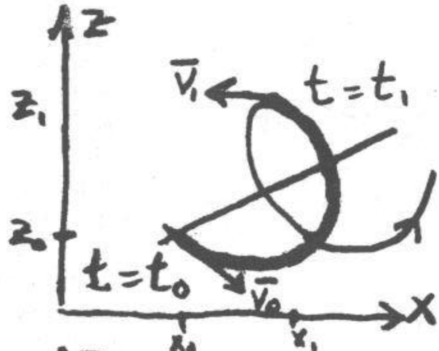
If the linear component of the motion is small then the amplitude of $z(x)$ would be well approximated by the amplitude D_3 of $z(t)$. In order to apply numbers to the formulae let the same assumptions and approximations be employed,

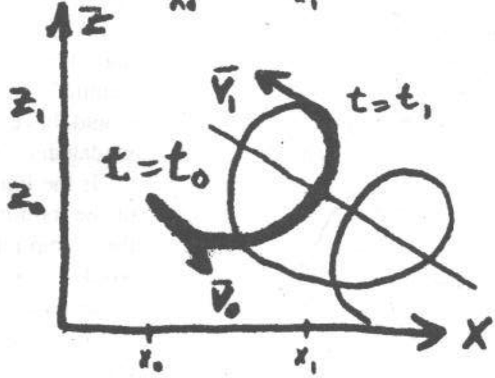
$$D_3 = (m/QB)[(\dot{z}_0 - E_x/B)^2 + (\dot{x}_0 + E_z/B - mg/QB)^2]^{1/2}.$$

Let $\dot{x}_0$ and $\dot{z}_0$ be small, $E/B >> 1$, $E_x = E_z = E$ and set $mg/QB = 1$, then

$$D_3 \sim 0.14\ E/B$$

which for $E = 10^6$ volt-meter^{-1} and $B = 10^4$ Weber-meter^{-2} gives $D_3 \sim 14$ meter which for a charge $Q = 10$ coulomb accommodates a mass $m = 10^4$ kilograms. The associated linear slope and period are $\alpha \sim 0.6$ and $P \sim 1$ second.



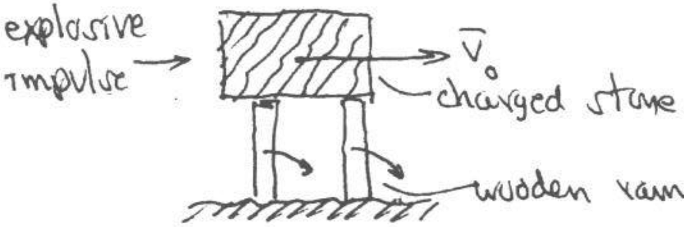


Initial Conditions

For $\boldsymbol{B}$ to act on the stone initially, $\dot{x}_0$ and $\dot{z}_0$ cannot be zero. Hence it would be advantageous to make $\dot{x}_0$ as large as possible. Perhaps the stone could have been cast down as indicated by the direction of v_0 in the last figure. The stone must have been mounted on a nonconducting mount such as a wooden support (see figure on page 13).

If the ramparts were caused to fall then an initial velocity parallel to the ground results. Once in motion the effect of $\boldsymbol{B}$ begins to act. Of course, the action of $\boldsymbol{E}$ is always present, not being dependent upon the motion of the charged stone.

If, indeed, natural electricity were summoned at will in those times, it might have been a large part of v_0 were caused explosively. IF a very large pulse of lightning were directed so as to dissipate its energy in



water contained in a cylinder, then the water would explosively turn to steam which could impact against the stone. Lightning strokes presently dissipate 10^5 joules or more. Let W be the energy in a lightning stroke and let this energy be perfectly converted to kinetic energy of the stone, then

$$W = mv_0^2/2 = m\dot{x}_0^2/2$$

Using our test figure of $m=10^4$ kilograms, and setting $W=10^{10}$ joules we obtain $\dot{x}_0 \approx 10^3$ meter-second^{-1}. One might even speculate that they had the ability to produce and control ball lightning. Many have witnessed how a small ball of lightning has instantaneously converted a barrel of downspout water to steam.