APPENDIX 2

MEMORY FUNCTION IN MATERIALS

BY
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ABSTRACT

In the paper “Longitudinal electric waves created by the solar wind and the Earth magnetic field” it's assumed that the low frequency longitudinal electric wave consists of propagating and oscillating electrons and ions. When the longitudinal electric wave propagates through objects like a stone, a rock crystal or a copper coil, the object will memorize the exact content of the longitudinal electric wave in four dimensions, x, y, z and time. When the object is moved to another position it will radiate the same longitudinal electric wave, we have taken an exact “picture”. We can move such an object relative to a longitudinal electric wave and in that way demonstrate the Doppler Effect and Einstein’s bent space. It's assumed that the longitudinal electric wave changes the spin of the electrons in the objects atoms, this constitutes the memory function.

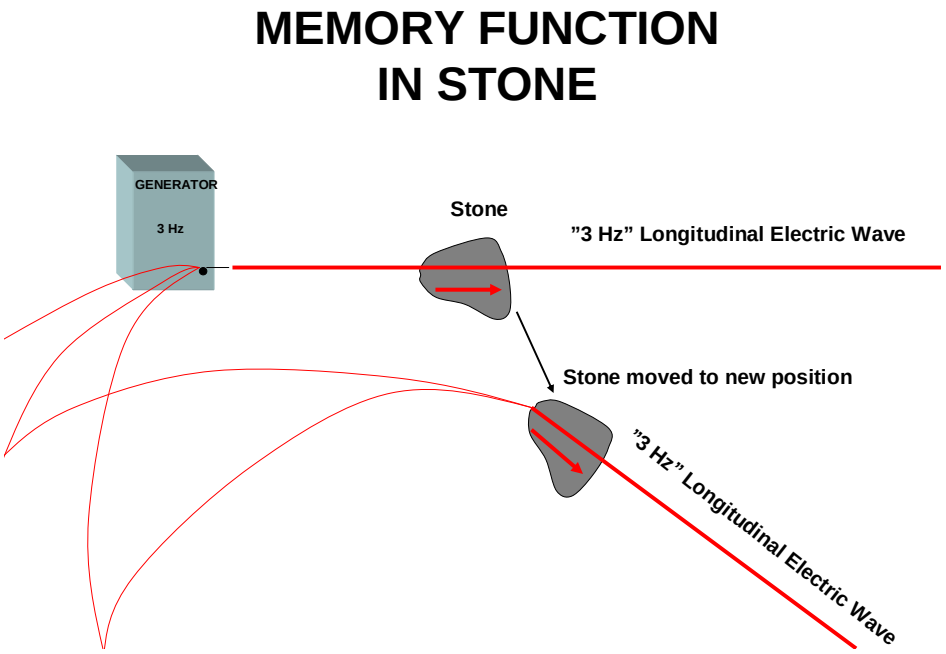
1. INTRODUCTION

Many objects such as a stone, a rock crystal and a coil of copper have the ability to memorize the position and content of a low frequency longitudinal electric wave. We can place such an object close to a longitudinal electric wave and it will memorize the content of the longitudinal electric wave. When we remove the object it will memorize and radiate exactly the same longitudinal electric wave. It gives us an efficient instrument which we can use to analyse the longitudinal electric wave. The first part of this paper describes how this memory function works. The second part shows how we can use this memory function to take a “picture” of a given situation. Afterwards we can analyse the “picture”, i.e. determine the state of the longitudinal electric wave at that particular moment.

2. MEMORY FUNCTION

In this experiment we take a stone (most stones will work) and place it inside or close to a longitudinal electric wave. We mark the direction of the longitudinal electric wave on the stone. We remove the stone and put it down a few meters away. It will radiate a copy of the previous longitudinal electric wave, it radiates in the direction that is marked on the stone. If

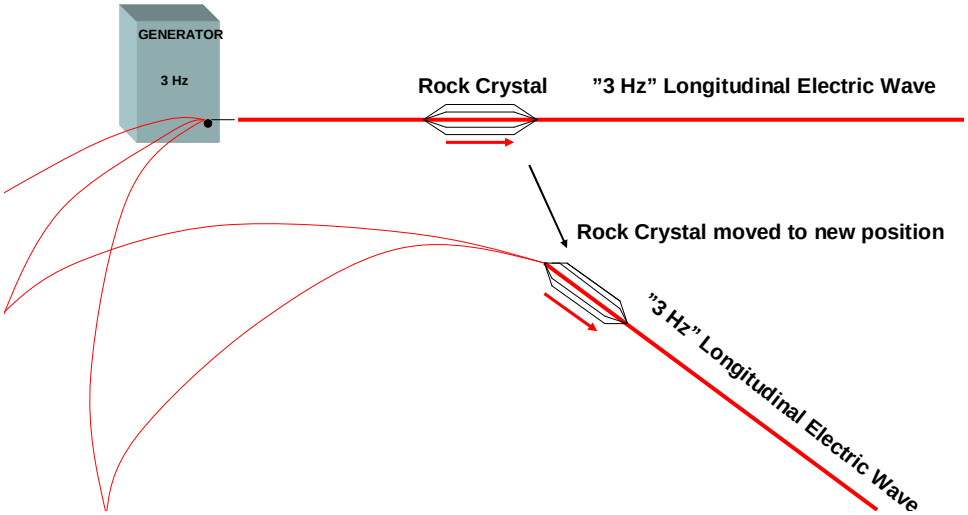
we turn the stone, it will radiate in any direction we choose, also upwards and downwards.



When we move the stone the frequency, wavelength, phase, amplitude and polarization plane are the same as the previous longitudinal electric wave. It's an exact four dimensional copy (within the accuracy of our measurement), x, y, z and time. The stone memorizes this information but it decays linearly with time, i.e. the amplitude or the size of the pattern decreases linearly with time (the time dimension such as the wavelength will not change). This decay takes a day or two. We notice that at the back of the stone one or many longitudinal waves connect to the stone. The stone attracts the longitudinal electric waves from the surrounding 24 & 8 hour grids. The stored information in the stone influences the electrons in these longitudinal electric waves. It changes their speed and direction into a new longitudinal electric wave which has a new content, the content of the memorized wave(s). The memory function in the stone does not produce any longitudinal electric waves in itself, it only changes the information content of the surrounding longitudinal electric waves.

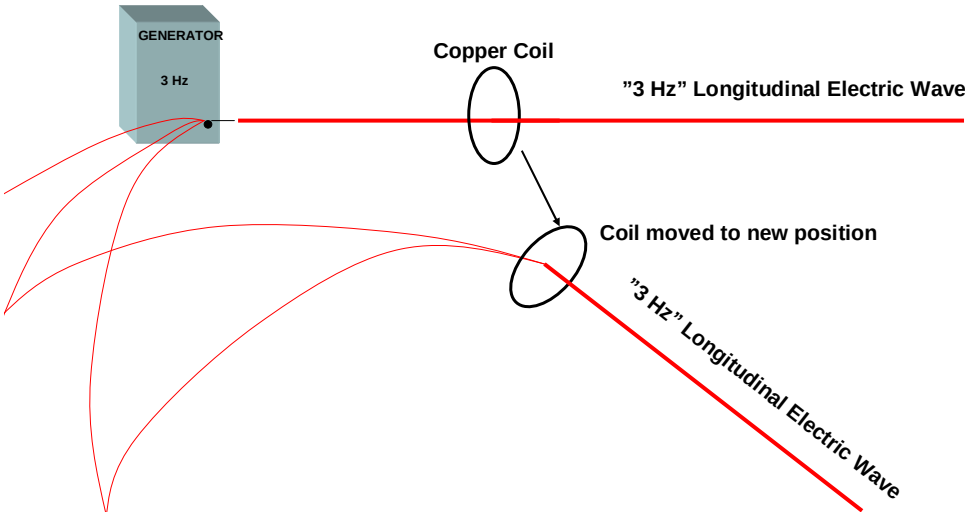
We don’t know the nature of this memory function. However, let’s assume that when we put the stone inside a longitudinal electric wave, the field of the electrons within the longitudinal electric wave will influence the spin of the electrons of the atoms in the stone. The atoms in the stone have memorized the content of the longitudinal electric wave. When we move the stone to a new position it will attract longitudinal electric waves, the spin of the atoms change the speed and direction of the electrons within the longitudinal electric wave. The spin of the electrons are continuously subjected to external forces, the stored information will gradually degrade. This causes the decay of the memory function. When we put the stone close to a longitudinal electric wave, that field is strong and it will change the electron spin, it will be reprogrammed. When we place the stone at a distance it will attract longitudinal electric waves, the fields of these waves are weak and it will not change the spin. On the contrary, the spin will change theses fields.

MEMORY FUNCTION
IN ROCK CRYSTAL



We can substitute the stone with a rock crystal, it memorizes in the same way as the stone. The rock crystal is superior to the stone in one way, it memorizes much longer. We charge the rock crystal and then place the rock crystal at a place which is not close to other longitudinal waves (i.e. from the 24 & 8 hour grids). In this case it memorizes for weeks with small decay. It takes a second to program the rock crystal, it memorizes for weeks.

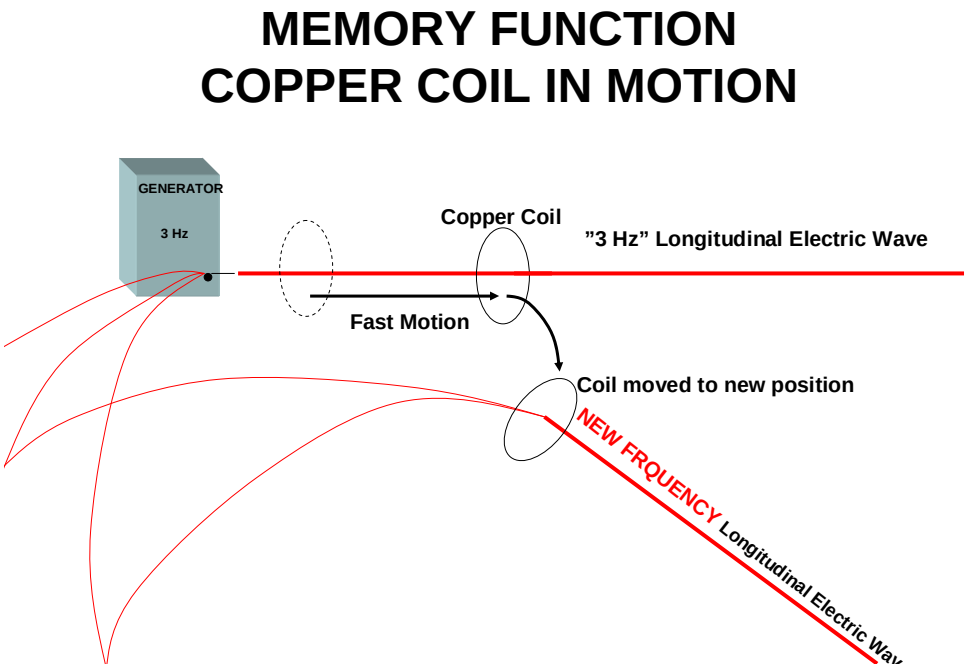
MEMORY FUNCTION
IN COPPER COIL



A copper wire (approx 20 cm long, 0.3 mm diameter) made to a coil, where the ends are connected, does the same job. It memorizes for a day or two with small loss. The decay is linear. If the ends are separated the information is lost immediately.

3. FREQUENCY AND PATTERN CHANGES WITH RELATIVE SPEED

When we put the coil in a longitudinal electric wave and then pull it out, we have stored the information in that spot at that particular time. We have taken a “picture”. We know from (1) that the electrons inside the longitudinal electric wave propagate, the wave has a velocity. We can move the coil with a certain speed, v, parallel to the wave. In that case the relative speed of the wave, as seen from the coil, decreases. We can move the coil along the longitudinal wave with the speed v(coil) and then pull the coil out of the wave. Then we measure the wavelength, L(coil), of the longitudinal electric wave that radiates from the coil, i.e. the memorized wave.



As an example we get the following values at 5 Hz generator frequency and a coil speed, v(coil), of 2 m/s (i.e. we move the coil with 2 m/s):

The wavelength of the generated longitudinal electric wave, L(wave) = 4.6 m
The wavelength of the memorized wave from the coil, L(coil) = 2.4 m

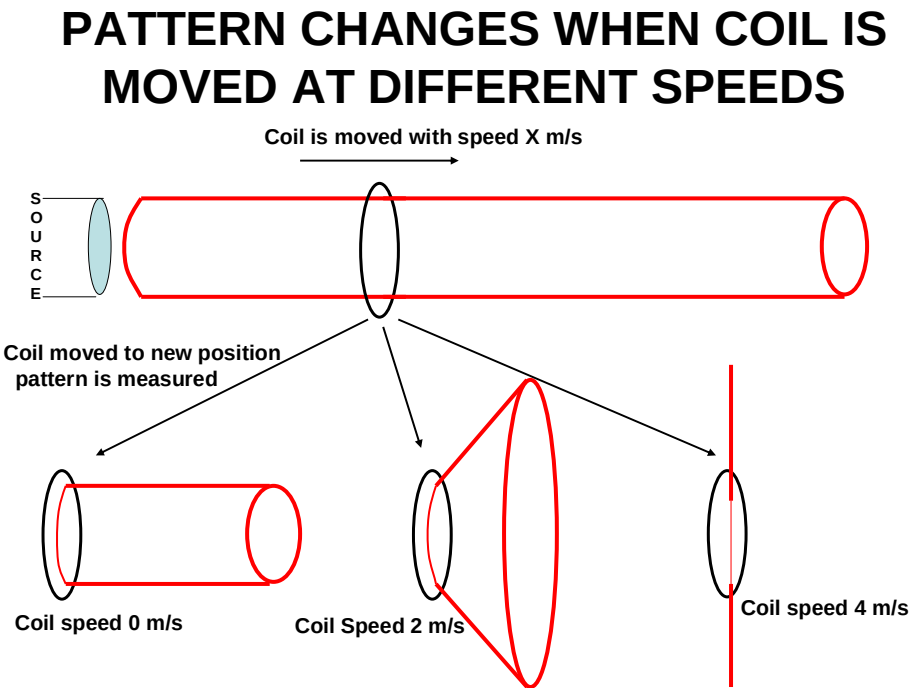
We measure the Doppler Effect and we can use the following formula:

f(coil)=f(wave)*v(wave)/(v(wave)-v(coil)

The speed, v(wave), of the (generated) longitudinal electric wave is calculated to approx. 4 m/s. In other words the information within the longitudinal electric wave propagates with 4 m/s. Please note that this measurement is approximate. The coil is moved by hand and the speed is estimated, not measured. We shall also note that in (1) we have measured the phase velocity of the longitudinal electric wave. These values are different, however in the same magnitude.

In the above experiment we see that when the coil is moved along the longitudinal electric wave, the wavelength of the stored information is influenced by the speed of motion, i.e. the relative speed of the coil in relation to the wave. It is assumed that it applies to the Doppler Effect. See note 1.

Einstein described how space will bend when someone travels through space, with a speed close to light. In this experiment the coil is our space ship, we can take a picture of the surroundings at any time. We can take a picture and memorize the four dimensions x, y, z and time. We can make the coil travel with longitudinal “light speed”.



We move the coil inside a field that consists of many longitudinal waves that propagate in helixes, it looks like a cylinder of longitudinal electric waves (see explanation below). We move the coil inside the “cylinder” and then pull it out. Then we measure the pattern that radiates from the coil. When the coil speed is zero it radiates the same pattern, i.e. a cylinder shaped pattern. When we increase the speed of the coil it radiates a cone and the wavelength of the longitudinal waves have increased. When we move the coil with 4 m/s the longitudinal waves radiate in 90 degrees relative to the direction of movement. The space has bent completely and the wavelength increases very much.

Einstein’s crew will never be able to travel with the speed of light. Our coil will easily travel with longitudinal “light speed”. It registers and memorizes what happens.

Those who are not familiar with longitudinal electric waves might find it strange that we can create helix shaped patterns of longitudinal electric waves. In fact it's very easy. The longitudinal electric waves of the 24 & 8 hour grids are coherent. They will create resonance pattern when they are mixed and subjected to nonlinearity and at the same time interacts with the geomagnetic field. We place a piece of iron where two longitudinal waves of the 24 or 8 hour grid cross. It will create a pattern consisting of many longitudinal electric waves shaped like helixes, they form a “cylinder”. The size of the pattern is proportional to the mass of the

iron piece. In the above experiment the coil is moved inside such a field. It's possible to create a large number of different fields, it's just a question of how experienced you are. Another way to mix two coherent waves can be made in the following way; charge a rock crystal in front of the tone generator, then move it and direct its longitudinal electric wave perpendicular to the wave of the tone generator. Put an iron piece at this spot, it will radiate a “cylinder” pattern consisting of helixes.

4. CONCLUSIONS

Many objects such as a stone, a rock crystal and a copper coil will memorise the exact pattern of the field of longitudinal electric waves. The object will memorize it in four dimensions; x, y, z and time. In this way we can take a picture of a particular state. This state is “frozen”, we can afterwards analyse it from every angle. We can move the object inside a field of longitudinal waves and in that way demonstrate the Doppler Effect and parts of Einstein’s relativity theory.

Reference 1; Longitudinal electric waves created by the solar wind and the Earth magnetic field. Hans Giertz

Note 1; Thord Nilsson, Stockholm, Sweden, made the discovery that this type of energy can be memorized in a copper coil, he also discovered that it can be used to measure the Doppler Effect.

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