The Physics of Dowsing: Body Interactions Part 1

A qualified physicist as well as successful businessman and author, BSD member Jeffrey Keen probes further into the subject of the physics of dowsing.

INTRODUCTION

To assist in understanding the purpose of this article, it is useful to compare dowsing to the history of astronomy. Ignoring the great contribution made by the ancient Greeks, so called "Scientific" progress in understanding astronomy and cosmology started with Copernicus having the vague notion that the Earth revolves round the Sun. This was followed by Tycho Brahe's meticulous but primitive measurement of planetary motion, which led to Johannes Kepler's laws of planetary motion (i.e. geometry involving elliptical orbits), which in turn led to Newton's Law of Gravity. This was over 300 years ago, and today the exact mechanism for gravity and mass is still unknown.

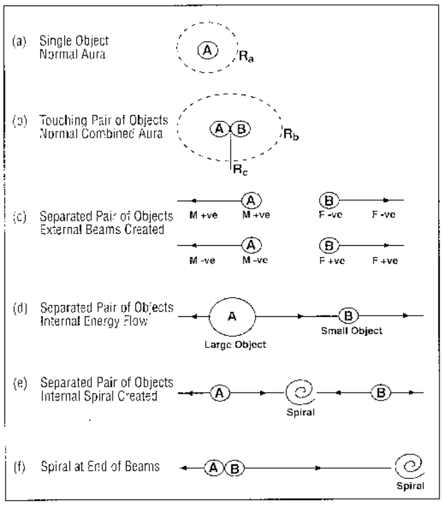

Fig 1. Interaction of two sources of dowsable energy

Present day understanding of dowsing could be comparable to the situation with astronomy about 600 years ago. The time currently seems right for studying dowsing scientifically, as the fascinating and as yet inexplicable aspects of dowsing are no more unbelievable, and they seem to involve similar concepts as other current research topics in mainstream physics, including:- the "weird" effects of quantum theory, multiple universes, ten or eleven dimensional universes, whether time as we perceive it actually exists, quintessence and dark energy, dark matter, the anthropic principle (most of the numerous laws of Nature are such, so that they enable intelligent life to be created thus enabling us to observe those laws of the Universe we happen to live in), and the science of consciousness (Do we see something because it is there or does something exist because we sense it?).

In fact, dowsing seems more plausible than some of the other current ideas in physics mentioned above. In particular, the fact that one can touch and feel dowsing, unlike ten dimensional universes and some of the esoteric effects of quantum theory!

Utilising the above analogy with astronomy, this article (which is open to critical review) contains primitive measurements analogous to, say, Tycho Brahe's contribution, and possibly some tentative laws comparable to the level of Kepler's laws. In other words, there is still a very long way to go in understanding both the mechanism of dowsing and the effects perceived by observers of dowsing.

THE INTERACTION OF TWO OBJECTS EMITTING DOWSABLE ENERGY

This article illustrates some of the benefits of using scientific principles to improve the understanding of dowsing, and particular, the measurement of Range, which is the furthest distance over which an emitted Dowsable Energy Field can be detected. A particularly interesting spin-off is the scientific demonstration of the effects of the interaction between objects emitting dowsable energy. Before investigating multi-object interaction in general, it is initially simpler to isolate just two bodies and study the physics of their interaction. This interaction is strongly

Errata

1) The title of the article by Jeffrey Keen in the December issue (see page 12) of the Journal should have read: "2-body Interactions". Unfortunately the "2" was omitted.

2) Figure 1 (f) only makes sense when Objects A and B are separated and not touching as published.

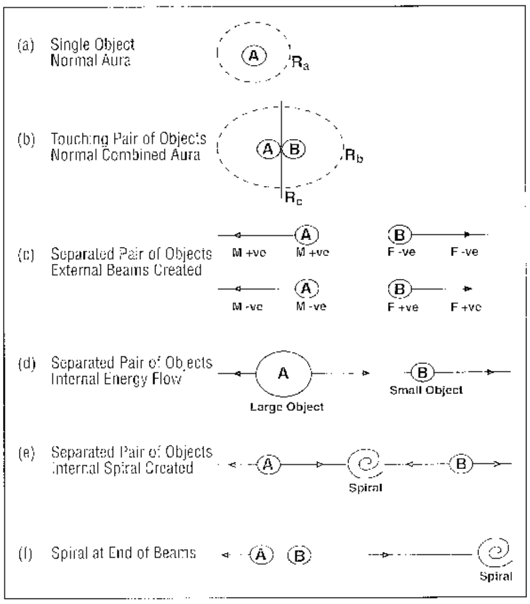

Fig 1. Interaction of two sources of dowsable energy (amended)

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dependent on the separation of the two bodies, when, at critical distances, an appreciable dowsable beam is created. The qualitative results are illustrated in Figure 1.

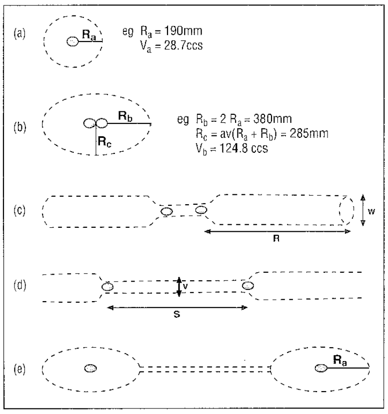

Fig 2. The dowsable energy field of two interacting objects

Figure 1 (a) illustrates a single object, A, with its normal dowsable energy range (aura) R_a, which typically is less than 1 metre, but may extend to about 10 metres for large megaliths. Figure 1(b) illustrates two touching objects, A and B, with a combined ellipsoidal dowsable energy field with radii R_b and R_c, which again are typically 1-2 metres.

However, Figure 1(c) illustrates for two sources of dowsing energy (A and B) that are separated by several centimetres, a dowsable energy beam is created which extends for many metres along each side of the axis of the two objects. In general, the energy flow is outwards either side of the two objects. Depending on the characteristics of the emitting objects, the dowsable beam which is created and emanating from that source will have the same characteristics as the source i.e. male (M) or female (F), positive (+ve) or negative (-ve), or beneficial or detrimental energy for the observer. This effect is not just confined to perceived dowsing emitters such as minerals and crystals, but it equally applies to wood, live plants or a combination of any two objects emitting dowsable energy. If the two objects are too close together, no dowsable energy beam is created.

What happens between objects A and B? As seen in diagram 1(d) if a larger object (A) is separated from a smaller dowsable object (B), the energy between A and B flows from the larger to the smaller object. If, however, the emitting dowsable objects are of similar size as in Figure 1(e), the energy emanating towards each other forms a spiral in the centre. This may be a downwards anti-clockwise spiral, for an example of citrine and rose quartz, or an upwards clockwise vortex, for a combination of two fluorite crystals. (However, the direction of dowsable energy flows can vary from time to time due to changes in the environment, in its widest sense, and from observer to observer.)

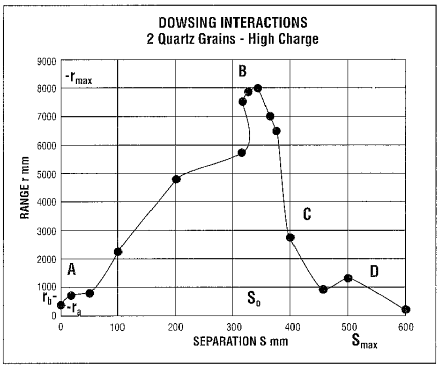

Fig 3.

In general, the dowsable energy line created by the above technique is analogous to a laser beam. However, unlike the usual electro-magnetic laser beams, these "laser beams" created by the interaction of two bodies always end in a spiral, as illustrated in Figure 1 (f).

The effect of two objects interacting and enhancing the dowsable energy produced can be quite dramatic and can increase the size of the dowsable energy field by over fifty-fold. For example, two random pebbles taken from a beach are perceived to emit dowsable energy fields that can be detected up to one metre away. This would apply to each of the two stones measured individually. However, if these two stones are separated, it is possible to detect the dowsable energy from them at over 100 metres away at a certain separation. Figure 3 illustrates in graphical form the relationships between the separation of two objects and the dowsable range. The general effects of the interaction and the shape of the Range-Separation graph are the same for any pair of any sized dowsable objects, be they minerals, crystal, rocks, wood, plants etc.

As measuring the effects of even two small pebbles requires a large outdoor area of up to 100 metres long, it is easier to experiment indoors using, for example, small quartz crystals of the size of sand, which produce proportionally smaller "laser" beam Ranges.

Figure 2 expands quantitatively on Figure 1, and illustrates the physics of the interaction starting with Figure 2(a), which shows a single grain of quartz producing a spherical shaped dowsable energy field with a radius of 190mm centred on the quartz grain (R_a = 190).

Illustration 2(b) illustrates the effect when two grains of quartz are placed adjacent to each other. The dowsable energy field becomes ellipsoidal with the major axis coinciding with the axis that joins the centres of the two grains. The dowsable energy Range along the major axis of the two crystals is R_b, which in this particular case is 380 millimetres. This equals the sum of R_a for each of the grains. This is as expected from Reference 3 where objects with relatively low mass have a dowsable Range which is proportional to mass. The minor radius R_c appears to be the average of R_a and R_b. These findings can be generalised as Law A.

LAW A

When 2 dowsable objects with essentially spherical auras touch, the combined aura is essentially ellipsoidal. The Range of this combined aura along the major axis is the sum of the radii of the individual auras ie $R_b = R_{a1} + R_{a2}$, whilst the radius of the minor axis is the average of the single range plus R_b ie $R_c = 3/2 . R_a$

Figure 3 illustrates graphically the quantitative effects of the above interaction. The condition where the two grains are touching each other (i.e. zero separation) corresponds to point 'A' in Figure 3 where the separation is zero mm and the Range is 380 mm. As the separation of the two grains increases towards 300 mm, it is apparent that the Range increases significantly. Area 'B' in the graph, illustrates the dramatic resonance effect between the two quartz crystals when the "laser beam" Range sharply peaks at 320 mm separation. Between points 'A' and 'B' on the graph, the dowsable energy field takes the shape of Figure 2(c).

As the separation increases (between points "B" and "C" on Figure 3 graph) the dowsable Range collapses even faster than it rose between points 'A' and 'B'. The shape of the dowsable energy field of the two interacting particles is illustrated in Figure 2(d), whereby the dowsable energy field between the two objects has shrunk into a long thin cylinder. Eventually when the separation is sufficiently large (in this case about 500 mm), the dowsable Range is back to R_b i.e. 380 mm. This is illustrated in Figure 2(e), which

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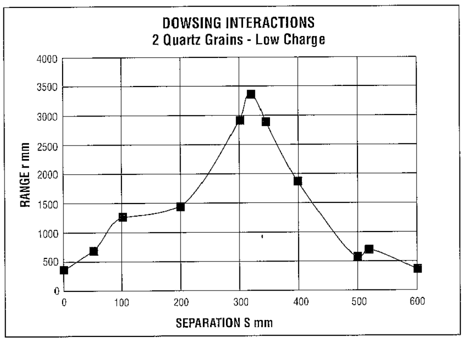

Fig 4.

produces a similar Range R_b as in Figure 2(b), but, in this case, the two particles are very loosely coupled. Eventually, when the separation is in excess of 600 mm, the two particles become totally decoupled and each is reverting to the situation in illustration Figure 2(a), where each particle has a Range R_a of 190 mm. This occurs at about point 'D' on the graph, where the observer is only detecting the effect of one particle emitting dowsable energy.

The dowsable Range of the produced "laser" beam depends on the state of dowsing energy charge of the 2 interactive objects. The graph in Figure 4 is the same experiment as illustrated above in Figure 3, but repeated two months later after the two quartz grains were kept out of sunlight in a totally dark drawer, for two months. It is interesting to note that superficially, there appears to be no reduction in the aura size of either low-charged grains, particularly as R_a remains at 190 mm. Similarly, at zero separation of the two particles, R_b is still 380 mm. However, on repeating the experiment, there is obviously less dowsable energy in the two quartz grains because, although the resonance occurs once again at a separation of 320 mm, the Range of the laser beam is now only 3,350 mm compared to 8,000 mm in the previous experiment, when the quartz particles had been charged up naturally in sunlight. Figure 5 is graphs 3 and 4 superimposed.

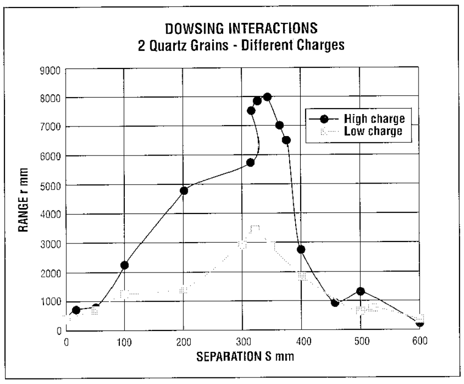

Fig 5.

LAW B

This experiment suggests there is a qualitative law, which states that electro-magnetic energy increases the Range of dowsable objects, and depriving objects of electro-magnetic energy reduces their Range. Future work is required to measure this effect and produce a mathematical relationship.

In repeating this experiment for two interacting objects of different substances, there are six key measurements common to all situations; three relate to separation and three relate to Range.

Separation

1. At zero separation there is no interaction or resonance.
2. S_0 is the optimum separation that occurs at peak resonance: i.e. the longest laser beam.
3. S_{max} is the maximum separation of the two particles where there is still an interaction.

At separations greater than S_{max} the objects are not interacting and appear as if they were isolated.

Range

1. R_a is the Range of a single particle in isolation.
2. When the two particles are touching with zero separation, the dowsable Range is R_b.
3. When the two particles are at optimal separation, the maximum Range of the dowsable energy of the lase beam produced is R_{max}.

Repeating this experiment for different substances, leads t various Laws.

LAW C

The ratio of S_0/R_a is between 1.5 and 1.7. This figure i tantalisingly close to the Fibonacchi constant of 1.61803 (also known as Phi (φ), or the Golden Ratio) whic frequently occurs in other applications of dowsing. Thi suggests further research, with more samples and to greater degree of accuracy, is called for, to establish if th ratio is, in fact, 1.618034.

(The Fibonacchi series is a series of numbers startin with 0 and 1, where the next in the series is the sum of th previous two numbers i.e. 0, 1, 1, 2, 3, 5, 8 ..... Th Fibonacchi Constant of 1.618034 is obtained by dividin any number in this series by its previous number especially higher orders. This constant *Phi (φ)* is als obtained from the geometry of a pentagon where all corners that lie on a circle are joined. Pentagons produc interesting dowsing effects. The layout of many pre-histori and historically built sites is based on a geometry an trigonometry that involves this Fibonacchi constant. Othe interesting properties relating to this constant is th subtracting 1 from it (0.618304) also produces its ow reciprocal, whilst adding 1 to it (2.618034) gives its ow square.) (Further general information on *Phi (φ)* may b found in references 1 and 2 in the bibliography.)

Law D

The ratio R_{max}/R_a obviously depends on the state c dowsing charge of the two objects, but in general, seems t fall between 3 and 43.

LAW E

The ratio of S_{max}/R_a lies between 1.8 and 2.6.

In attempting to understand the physics of the tw body interactions discussed above, it is instructive t examine some basic conservation laws. For example, doe the energy density of the dowsable energy field vary as th two objects separate? In measuring the energy density in a the combinations illustrated in Figure 2, it seems to b constant. If this is so, it is instructive to look at the volum of the dowsable energy fields as illustrated in Figure 2.

Assuming the dowsable energy in Figure 2(a) is sphere and the dowsable energy in Figure 2(b) is a ellipsoid, it is possible to work out accurately the volume the energy for both single and double objects depicted Figures 2(a) and 2(b). As the particles separate, a fir approximation is that the total volume of dowsable energ comprises (i) a central cylinder whose length is equal to th

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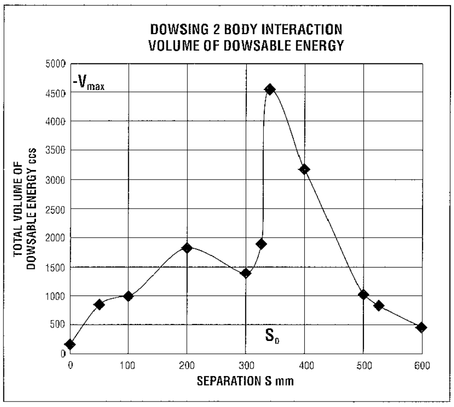

Fig 6.

separation distance (s) and diameter (v) plus (ii) two cylinders of smaller diameter (w) either side, whose lengths each equal the Range (r). The total volume of dowsable energy, as the two objects separate, is illustrated in Figure 6, which, like the previous graphs in Figure 5, forms a sharp peak at the resonance separation of 320mm. The three key measurements in relation to the volume of the created dowsing energy fields are:

(i) The maximum dowsable volume V_{max} at optimum separation S_0

(ii) The dowsable volume of the combined objects at zero separation (V_b) and

(iii) The dowsable volume of a single object in isolation V_a (as illustrated in Figure 2a). This leads to:

Law F

The volume of the dowsable energy fields generated by two objects has a similar relationship as the Range-Separation distance, and forms a resonance peak maximum at a similar optimum separation. The magnification of volume ratio is

$V_{max}/V_a = 158.4$

$V_{max}/V_b = 36.5$

Measurements of the generated dowsable energy, as any two objects separate, suggest that the dowsable energy density remains constant and uniform. Assuming dowsable energy adheres to the normal conservation of energy laws, as the dowsable energy field's volume increases by a factor of over 36, where has all this additional energy come from? One possible explanation is that the resonance effect produces increased dowsable energy so that the energy density remains constant by draining dowsable energy from the source objects. Assuming the conservation of energy, which must be a sensible starting point, one way of testing this theory, is to measure the decay of dowsable energy over a period of time, when (a) the two objects are left at their optimum separation distance S_0, and compare this to (b) when the two objects are left touching, so that there is no separation. In both cases, sunlight and other ways of charging the objects must be avoided.

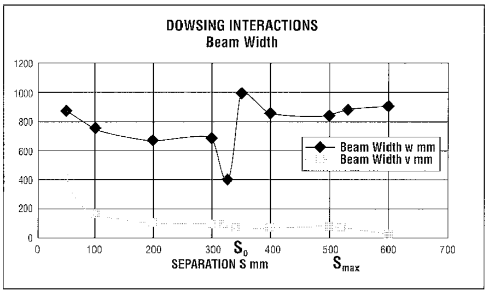

Fig 7.

The Graph in Figure 7 illustrates how the beam width ((w) in the upper graph of Figure 2(c)) changes with separation. As the two source objects separate, the generated external "laser beam" dowsable energy field decreases in diameter until the beam width is a minimum around the optimum separation distance (S_0). The width of the generated beam then increases to a maximum, levelling off to its initial value.

The diameter of the dowsable energy field between the two source objects (v) is depicted in the lower graph in Figure 7, and, as is apparent, the diameter of the internal field declines to zero at S_{max}

SUMMARY

In Summary, this paper demonstrates that two dowsable objects resonate strongly at a critical separation, and generate a greatly magnified "laser beam" effect of dowsable energy. However, unlike a laser beam, this dowsable beam does not obey the inverse square law, but ends abruptly in a spiral. (The observations described above related to quartz crystals, but the same effect applies to most dowsable objects including living specimens such as plants). At separations greater than a certain distance, the two objects ceased to interact. This experiment also illustrates that dowsing is fundamentally linked to energy fields that vibrate with specific frequencies, which some how relate to mass. A spin-off from this experiment suggests that electromagnetic radiation "charges up""dowsable objects. Once again Phi (ϕ) tentatively seems to enter into dowsing. Furthermore, some challenging experiments are suggested to confirm that the conservation of energy applies to dowsing.

Bibliography

1. Jim Lyons, Page 5, EEG Newsletter Volume 7 Issue 25 March 2002

2. Grahame Gardner, Page 14, EEG Newsletter Volume 7 Issue 25 March 2002

3. Keen, Jeffrey: Measuring Dowsing, September 2001, Vol 39 No. 273, The Journal of the British Society of Dowsers

(To be concluded. Part 2 will cover theoretical considerations).