articles

From Banks & Ditches to Dowsing Two-Dimensional Geometry

Jeffrey S. Keen

The UK has numerous Stone Age and Bronze Age sites surrounded by substantial banks and ditches, many of which contain megaliths. The perceived benefits from sites of this type of construction must have been considerable to motivate the relevant population to undertake these vast 'civil engineering projects'.

These benefits not only included a physical defence barrier, but a spiritual and earth energies barrier, (the subject of this article), that the mainly rural population could sense and associate with improved crop cultivation, fertility, protection, priest power, etc.

This paper details the author's original research into banks and ditches, driven by the fact that they produce a plethora of patterns, which are some of the most comprehensive, complex, and interesting that are detectable by dowsing. This phenomenon also warrants further investigation, as experiments and meticulous measurements by the author leads to many remarkable insights, which initially seem unconnected. Most surprising is that a small simple 2-dimensional geometric curve, such as drawn on paper, can produce identical effects as those obtained when dowsing a large 3-dimensional structure. This discovery, in turn, has been used to study the reasons for the well known, but unexplained, variability of measurements when dowsing 'earth energies'. Significant quantified results show how the variations are due to astronomical, seasonal, lunar month, tidal, and daily factors. Exciting conclusions lead to such concepts as the role of geometry in consciousness; the interaction of mind and matter; demonstrations of universal scalar theory; and both gravity and magnetism are factors when measuring some dowsable fields. Original formulae are discovered which lead to good predictions. These involve the universal golden ratio phi (φ), as well as integer ratios.

This article is a summary of the full paper, which can be found on the author's website www.jeffreykeen.org

Protocol and Methodology

Earth energies are naturally occurring subtle energy fields, the nature of which are currently being researched, and are the subject of this article. They emanate not only from the earth's topological or subterranean features, but as will be demonstrated, even from cosmic sources. These fields usually comprise lines and patterns, which can be detected by dowsing. Dowsing and associated intuitive techniques fall into several different categories. Some gifted people are able to visualise earth energies or subtle energies without the use of devices. Other device less dowsers feel a positive sensation in their mind's eye, throat, solar plexus, or fingers. Most dowsers need a rod, pendulum, or other device to amplify the dowsing sensation.

The research for this article was undertaken with angle rods because the author feels they react quickly, respond accurately to boundaries, indicate the direction of flow of the subtle energies being dowsed, and are easy to use on-site, even in the wind or rain.

As always, specifying the protocol and the actual dowsing question is key. To minimise errors, the tape measures used in the experiments were adjacent to the perceived line being investigated thereby avoiding parallax. Once an initial measurement had been made, it was then fine tuned using device less dowsing by moving a sharp pointer adjacent to the tape measure to obtain an accuracy of about 2mm. Only one person dowsed at a time to avoid cross-contamination of information. The intent of each dowser also included the elimination of interactions from all other dowsers, as well as mentally erasing all previous dowsing results produced by themselves or other people. Finally, intent had to be 'now' to avoid time errors. Recording time and date is essential to allow for known lunar and other astronomical perturbations.

Observations

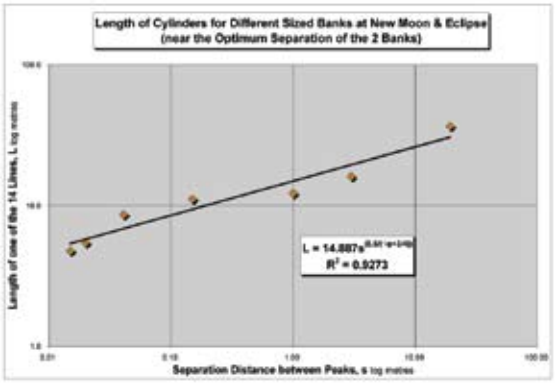
This introductory section is a general overview of the 'earth energies' associated with banks and ditches. A typical example of the latter is the photograph in Figure 1, which shows part of the Double Dykes at Hengistbury Head, Bournemouth, Dorset, UK. These banks and ditches do not have associated megaliths, nor are they the usual torroidal shape, but comprise linear earthworks. This has a great advantage for research, as it eliminates these two variables (megaliths and tori). As will be seen, these two factors, fortuitously, are not greatly significant to the findings in this paper, so Hengistbury Head allows other more important factors to be isolated. It is important to realise that the findings in this article are the same as at other sites in the UK, including Avebury, Stonehenge, Badbury Rings, Maiden Castle, and indeed any other ancient sites with banks and ditches, as observed by the author, members of the Dowsing Research Group (DRG), and Wessex Dowsers, amongst others.

HENGISTBURY HEAD

Having obtained detailed on-site measurements from numerous banks and ditches, including those mentioned above, research evolved to smaller laboratory experiments using sand, plastic profiles, and other materials to simulate banks and ditches of different sizes. This allowed physical parameters to be varied, and resultant observations measured scientifically. In all cases, the same dowsable patterns were obtained. A number of independent researchers, including the DRG, have confirmed the results.

In general, the dowsable pattern comprises 17 different lines, cylinders, and numerous spirals, which fall into four different categories each with differing properties. Figure 2 graphically illustrates how the length of these lines can increase from less than 5 metres (for small laboratory models) to over 40 metres, as the two banks become further apart.

LINE LENGTH FOR ANY SIZED BANKS AND DITCH



Analysis

This section analyses the variables involved in the experiments that produced the above findings, starting by extracting those factors that are not involved.

Factors not Involved

Originally, the author, in common with other people, thought that the effects described in this paper were related to the megaliths forming part of ancient sites. However, ancient sites such as Maiden Castle, Badbury Rings, Basing Castle, and many others have the same effects, but no stones are present, only banks and ditches. Torus shaped banks and ditches such as at Stonehenge or Avebury was the next factor thought to be producing these effects. However, Hengistbury Head is not a torus, but produces identical effects. Many researchers have claimed that chalk is a significant factor. As experiments using banks and ditches made of sand give identical results, chalk must be irrelevant. An alternative explanation is that ancient sites are relevant. However, wind-blown sand dunes, for example, on a beach in the south of Spain, or on the north coast of Venezuela, produce an identical effect.

Although many people have believed that silica/sand is an important component of dowsing earth energies, the fact that plastic produces identical effects suggests silica in this context is irrelevant.

Some people have claimed that the angles of the slopes are relevant. These may have a minor effect, but it has not been observed from these experiments. In measuring earth energies and auras associated with megaliths and crystals, there is a high correlation between the mass of the source object and the range of its aura. This led the author originally to believe that the mass of the banks was the main cause of the associated dowsable fields. However, from the author's experiments, mass seems to be an irrelevant factor. Finally, although intuition may suggest that the length of the banks and ditches is important, experiments have proven otherwise, and length is therefore irrelevant.

Factors that are Involved

We now know what is not involved. What about something positive? Measurements and experiments suggest that the major factors are:-

The Width of the banks

The Height of banks above ground level

The Separation distance between the two banks

All of these relate to geometry, nothing else seems significant. Of these three factors, separation seems to be the most important, with width and height being the physical means of achieving large separations.

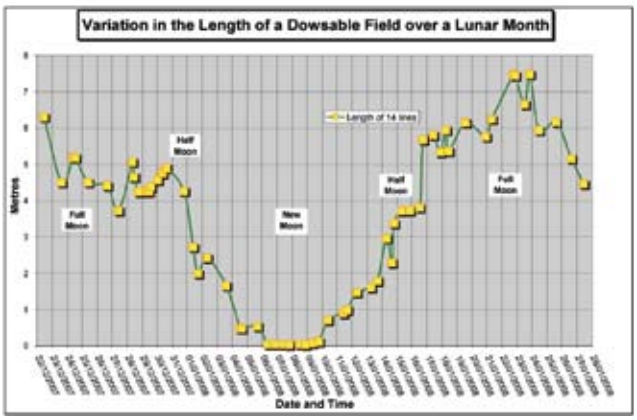
2-Dimensional Geometry

As mass and length are not involved, this research has led to the exciting conclusion that dowsing a 2-dimensional curve, representing a vertical cross-section through two asymmetrical banks and a ditch, (such as that drawn on a sheet of A4 paper, or chalk on a wall) provides exactly the same results as dowsing on-site. After allowing for the different scales, the pattern is identical to on-site dowsing, exactly the same as, for example, at Hengistbury Head. This suggests the following type of mind-matter model is involved in producing the dowsing mechanism:-

Mass	0%
Geometry	10%
Mind	90%

These numbers do not relate to any specific physical measures, but as a result of this research are purely subjective to illustrate the relative emphasis of the factors involved.

THE MOON'S EFFECT ON DOWSING MEASUREMENTS



Variable not Absolute Measurements

Unlike mass or length, it is well known that measurements made whilst dowsing are not absolute, but vary because of several factors, including changing over time. One of many examples of variability is illustrated in Figure 3, which is a graphical representation of how the length of a dowsed line generated by banks and ditches changes over a lunar month. The main obvious features in Figure 3 are that at full moon the readings are maxima, whilst at new moon they are minima. Using the terminology of General Relativity, it is postulated that the Information Field (i.e. the fabric of the universe which the dowser taps into and perceives patterns and information) 'is distorted by the moon's mass and gravitation'. The implication is that a reduced gravitational field on the local Information Field at full moon (caused by the sun and moon being on opposite sides of the earth) produces a larger dowsed length than at new moon when the Information Field is more distorted by the combined sun's and moon's gravity acting in the same direction. It is interesting to note that only dimensions, not angles are affected by this variability.

Conclusions

These experiments highlight the importance of measurement when dowsing, as they lead to a connection between 1, 2, and 3 dimensional geometry and consciousness. A connection between mind and matter is also demonstrated as the mind focusing just on two parallel lines can produce the identical pattern as say the banks at an ancient site comprising a vast amount of matter. Because very small source objects give, *pro rata*, the same patterns as very large source objects with similar geometries, this research also leads to a good demonstration of universal scalar theory. The benefit of using simple 2-dimensional geometry as source objects to produce identical dowsable images as 3-dimensional sources is another important conclusion.

For example, it is now possible to do sophisticated laboratory research that is not limited to travelling onsite, restricted to daylight, and being hampered by the vagaries of weather etc. Another benefit is that the effect of magnetism on banks and ditches, by screening a sheet of paper in a Faraday cage, can now be studied – an impossible line of research on-site. As is apparent, when producing measurements, dowsing geometry is a powerful technique that is sensitive, accurate, innovative, and convenient.

The findings also suggest that when dowsing earth or subtle energies, what the dowser observes, and believes he perceives, is not always a physical line on the ground, but is all in the mind. An analogy is to sight being a model in the brain – not just an image on the retina, but a perception in brain cells via the eyes' retina, rods and cones, stereo vision, colour separation, and information transmissions along the optic nerve. This personal perception may account for some of the variability when measuring the length of a dowsable field at different times, and between different people.

These are significant results not only in investigating how dowsing works, but possibly more importantly, for adopting the use of dowsing in scientific research, and furthering the study of consciousness and the structure of the universe. For example, this line of research has demonstrated that the moon has a strong influence in dowsing and hence on the mind. Using similar techniques it is hoped to determine if known daily variations are due to the tides or hormone levels. Similarly, current research should determine what cosmic forces cause annual variations in dowsable fields. As all the above astronomical factors influence people's perceptions, further research is justified into whether there are linked health implications as well.

Other research using the techniques described here has demonstrated that some of the lines observed in the banks and ditches pattern are generated by the Earth's magnetic field. Dowsing 2-dimensional geometry has also shown that gravity can not only change dimensions, but can also influence the presence of lines in certain patterns. Again, there may be biological or health implications caused by magnetism and gravity warranting further research.

Another conclusion is that there is a mind and matter implication. The fact that the mind generates exactly the same result from a sheet of paper inscribed with 2-dimensional geometry, as on-site with two banks composed of a massive quantity of matter, cannot be coincidence. Similarly, a non-local mind-matter connection is suggested, as the moon affects the mind's perception of dimensions.

In trying to interpret these complex results and understand dowsing and the Information Field, another line of research is to use an analogy to X-ray crystallography (e.g. determining the 3-dimensional structure of DNA), as this seems to be a promising tool. Answers may result from searching for mathematical transformations between the geometry of 0, 1, and 2 dimensional source objects, and the resulting 3-dimensional dowsable patterns, which, on the surface, seem to bear little resemblance to their source.

This article is only a summary. The full scientific paper containing all the figures, graphs, tables, protocols, technical details, and mathematical support can be found on the author's website www.jeffreykeen.org via home/current research/banks & ditches.

Acknowledgements

Acknowledgements are due to the UK Dowsing Research Group (DRG) members who assisted in this avenue of research, and following their enthusiastic review of the author's lectures, encouraged its documentation. In particular, recognition is due to Jim Lyons for his suggestions, and identifying some of the mathematical ratios.

Bibliography

The British Society of Dowsers, Earth Energies Group : *An Encyclopaedia of Terms*

Keen, Jeffrey : *Consciousness, Intent, and the Structure of the Universe*, Trafford, 2005, 1-4120-4512-6, http://www.trafford.com/robots/04-2320.html

Various authors : The Dowsing Research Group; The First 10 Years, *Magdalena*, 2003, 0952369516

Various authors : *The Journal of the British Society of Dowsers, Volume 39 No. 273*, September 2001

Jeffrey Keen *has a background in physics and industry, and is the author of* Consciousness, Intent, and the Structure of the Universe. *His particular interests are at the micro and macro levels of physics, using dowsing as a research tool. He has received the Bell Essay Award from the British Society of Dowsers and has published 17 scientific papers in journals in the UK, Canada and the USA.*