# 2-Body Interaction with Space-time and the Effects on the Mind's Perception 

by

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#### Abstract

Using the well documented technique of dowsing abstract geometrical shapes, this paper details the findings for 2-body interaction starting with 2 abstract circles and then extending the observations to 2 physical objects. Interesting comparisons are made between identical abstract and solid geometries. As any two bodies separate, observations made by several independent experienced dowsers have confirmed the creation of subtle energy beams, vortices, Cornu spirals, null points, resonance effects, and bifurcation. This complex pattern is affected dynamically during the separation process. The conclusions provide further evidence for consciousness beings linked into the structure of universal space-time, and is augmented by local space-time variables such as the earth's spin, magnetism, gravity, and orientation also affecting the mind's perception.


## Introduction

This paper is a significant update and development of References 1,2 which were published in 2002 and Reference 3 published in 2009. The findings in Reference 9, the 1 -body problem, are also utilised and developed.

There are numerous examples in the bibliography at the end of this paper as to the link between consciousness and the structure of the universe, with dowsing being a powerful technique to research this connection. Although dowsing is usually associated with physical objects, references 3 to 9 demonstrate the methodology and benefits for dowsing pure abstract geometry when investigating possible interactions between the mind and the structure of the universe. Eliminating the variable of mass is one great advantage, and enables fundamental comparisons to be made between solid and abstract sources possessing identical geometry. This paper analyses the simple case of two abstract circles such as drawn on paper, and then generalises the findings to any two physical bodies.

## Findings

An interaction between any two objects occurs if they are in close proximity, and this is determined in this paper. The observed dowsable pattern is a function of the size of the source objects and their separation distance. The dowsed pattern for 2 equal circles is shown in Figure 1. It comprises a complex arrangement of straight lines, subtle energy beams, vortices, Cornu Spirals, and curlicues, which have dynamics as described below.

## Straight Lines

2 circle interaction produces six straight dowsable subtle energy lines:
Two lines, or more accurately 2 subtle energy beams, $\mathbf{a} \& \mathbf{b}$ are on the axis through the centres of the 2 circles, as shown in Figure 1. They have a perceived outward flow.

The length of these lines is variable and is a function of the separation distance between the 2 -circles. In general, for any separation, the lengths of lines $\mathbf{a} \& \mathbf{b}$ are equal.

The two lines $\mathbf{c} \& \mathbf{d}$ are at right angles to the lines a \& b , and are equidistant between the centres of the 2 circles if the circles are of equal size. If not, the point where $\mathbf{a} \& \mathbf{b}$ crosses $\mathbf{c} \& \mathbf{d}$ is closer to the larger circle. Lines $\mathbf{c} \& \mathbf{d}$ also have a perceived outward flow, but unlike lines $\mathbf{a} \& \mathbf{b}$ are almost fixed in length as the circles separate. In general, the lengths of lines $\mathbf{c} \& \mathbf{d}$ are equal.

The two lines $\mathbf{e} \& \mathbf{f}$ have a flow toward the geometrical centre point between the 2 circles.

## The Dowsable Pattern Produced by 2-Body Interaction



Figure 1

## Curved Lines

Also depicted in Figure 1, are 3 types of curved lines.
12 of these curved lines marked $\mathbf{g}, \mathbf{h}, \mathbf{i} \& \mathbf{j}$ comprise 4 sets of curlicues emanating outwards from the 2 circles. Each set comprises 3 curved lines flowing away from the 2 circles, on either side of the straight central axis. As shown in Table 1, (which relates to 2 crystals, but equally applies to any 2 objects), the lengths of these curved lines are less than the straight lines $\mathbf{a b}$ and $\mathbf{c d}$. (However, due to lack of space, the diagram is incorrect here as it shows only 4 of the 12 lines emanating from the 2 circles).

Between the 2 circles, 6 curved lines, marked $\mathbf{o} \& \mathbf{p}$, emanate inwards and join the 2 circles. These look similar to a magnetic lines of force pattern. They consist of 2 pairs each comprising 3 curved lines either side of the central axis.

These curlicues are analogous to Cornu Spirals which are well known in optics and occur when studying interference patterns and diffraction. Lines ab and cd seem to act as mirrors so the observed patterns are symmetrical about these lines.

## Outer Cornu Spirals Produced by 2 Physical Bodies

2 Olive sized crystals in an east-west orientation

| Separation distance |  |  |
| :--- | :---: | :---: |
| Centre to centre | 3.00 | cms |
| Circumference to Circumference | 6.00 | mms |


|  | metres |  | Type 4 terminated with Type 3 <br> Length of line a |
| :--- | :---: | :---: | :---: |
| Leral |  |  |  |


|  | metres |  | Type 4 terminated with Type 3 <br> Length of line c |
| :--- | :---: | :---: | :---: |
|  | 2.00 |  | c x |

Table 1
Outside the ends of lines a \& b and $\mathbf{c} \& \mathbf{d}$ are a further set of Cornu spirals marked as $\mathbf{k} \& \mathbf{l}$ and $\mathbf{m} \& \mathbf{n}$, as illustrated in Figure 1. As is apparent from Table 1, these Cornu spirals start at about 1.2 times the length of lines ab and $\mathbf{c d}$, and extend to about 2.5 times the length of lines $\mathbf{a b}$ and $\mathbf{c d}$. They therefore extend about 1.3 times the length of lines $\mathbf{a b}$ and $\mathbf{c d}$.

## Cornu Spirals



Figure 2

## Spirals

There are 17 spirals, or more accurately, conical helices. When looking downwards, 4 clockwise spirals, indicated in Figure 1 with green and red circles, terminate the straight lines. The 12 spirals which terminate the curlicues positioned above the central axis of the

2 circles (illustrated in Figure 1) are also clockwise, but anticlockwise below the central axis.

Between the 2 circles, where lines $\mathbf{e f}$ and $\mathbf{c} \mathbf{d}$ meet, a clockwise spiral is formed (looking down). If the 2 circles have equal sized auras this spiral, also marked with green and red circles, is midway, but if they are unequal it is closer to the largest circle. When the source paper is horizontal, this spiral has a perpendicular vertical vortex.

## Physical or Abstract

Usually, the observed dowsed pattern is the same for abstract source geometry, such as drawn on paper, as it is for any identical solid source geometry. If the 2 circles drawn on paper are replaced by any 2 solid objects, the observed patterns and effects are identical save for an interesting difference which manifests itself in different null points.

## Null Points

Whilst separating 2 circles or any 2 objects, a series of null points are created. As the null points are approached the curved lines become flatter, as illustrated in Figure 2. Eventually, at these null points all 16 terminating spirals, the central spiral, the Cornu spirals as well as all 18 curlicues disappear. The straight line ab through the central axis and the perpendicular lines $\mathbf{c d}$ are not affected. The dowsed pattern at these null points is depicted in Figure 3.


Figure 3
However, there are also quantitative differences between abstract and physical source geometry as the two objects are separated.

- Paper drawn circles

As is apparent from Table 2, $\mathbf{6}$ null points are produced, which are spaced in a near geometric series. As an illustration, for circles with a 2.3 mm diameter, the average geometric constant is 1.46 , but with a $12 \%$ deviation.

Also for paper circles the 4 sets of Cornu spirals marked as $\mathbf{k} \& \mathbf{l}$ and $\mathbf{m} \& \mathbf{n}$ each comprise 9 separate Cornu spirals (i.e. 36 in total), which are spaced nearly equally in an arithmetic series.

- Solid discs or physical objects

As shown in Table 3, whilst separating 2 solid discs or cut-out paper circles having the same diameters as the above circles, $\mathbf{4}$ null points are produced, the distances between which are nearly in a geometric series. The average geometric constant is 1.89 , but with a $6.5 \%$ deviation.

However, for solid objects the 4 sets of Cornu spirals marked as $\mathbf{k} \& \mathbf{I}$ and $\mathbf{m} \& \mathbf{n}$ each comprise 7 separate Cornu spirals (i.e. 28 in total), which are spaced nearly equally in an arithmetic series.

As discussed for the 1 -circle experiments, abstract circles produce 9 aura rings extending outwards from the core aura, but solid discs (both 3-dimensional and 2dimensional) only produce 7 rings. (See Reference 4). Could the null points be caused by the interacting outer auras of each of the 2-circles with associated information being cancelled out?

Similarly, it seems counterintuitive that abstract circles have 9 Cornu spirals, but solid circles (be they 2 -dimensional paper cut-outs, or 3-dimensional discs) only have 7 Cornu spirals. The theory of dowsing involves information. Instinct suggests that a solid disc contains more information than an abstract circle drawn on paper, and, for example, a 3-dimensional metal disc has even more information than a 2-dimensional paper cut-out. However, having more information does not produce more rings! Physical discs only have 7 rings, but drawn abstract circles produce 9 rings. Intent and the act of observation of the source geometry determine the number of layers of an aura. Does abstract thought require more information than physical objects?

## $2 x$ Circles drawn on Paper

| Basic Data |  | cms |
| :--- | :---: | :---: |
| Diameter of circle drawn round $£ 1$ coin | $\mathbf{D}$ | 2.3 |
| Radius of circle drawn round $£ 1$ coin | $\mathbf{R}$ | 1.15 |
| Distance of core aura from circumference | $\mathbf{r a}_{\mathbf{a}}$ | 1.50 |
| Distance of core aura from centre of circle | $\mathbf{r a}_{\mathbf{a}}+\mathbf{R}$ | 2.65 |
| Distance of outer aura from circumference | $\mathbf{r o}_{\mathbf{o}}$ | 6.5 |
| Distance of outer aura from centre of circle | $\mathbf{r o}_{\mathbf{\circ}}+\mathbf{R}$ | 7.65 |


| Maximum Separation Distance between 2 objects |  | cms |
| :--- | :---: | :---: |
| Circumference to Circumference between 2 objects | $\mathbf{S}_{\max }$ | 19.5 |
| Centre to centre between 2 objects | $\mathbf{S}_{\max }+\mathbf{D}$ | 21.80 |


| Centre of Circle to the 4 Null Points |  | cms | $\mathrm{d}_{2} / \mathrm{d}_{1}$ |
| :---: | :---: | :---: | :---: |
| First Null Point | $\mathrm{d}_{1}$ | 3.0 |  |
| Second Null Point | $\mathrm{d}_{2}$ | 5.1 | 1.68 |
| Third Null Point | $d_{3}$ | 8.4 | 1.66 |
| Fourth Null Point | $\mathrm{d}_{4}$ | 12.2 | 1.45 |
| Fifth Null Point | $\mathrm{d}_{5}$ | 15.6 | 1.28 |
| Sixth Null Point | $\mathrm{d}_{6}$ | 18.8 | 1.21 |
| Average Geometric Constant |  |  | 1.46 |
| Deviation <br> \% Deviation |  |  | $\begin{gathered} \hline \mathbf{0 . 1 7} \\ 11.91 \% \end{gathered}$ |

Table 2

## Measurement Definitions

For quantitative work it is beneficial to define the separation distances between the 2objects and the dowsable pattern. There are practical benefits for measuring the separation distance between the 2 objects from circumference to circumference. When the objects touch there is no interaction and no lines or curves are generated, so conceptually, the graph of the length of lines a \& b passes through the origin. A more symmetrical curve can also be plotted. For irregular objects, surface to surface is not only easier to measure, but reflects the importance of the interaction between irregular geometry, and that points produce larger auras than flat surfaces. However, for the curved lines, measuring from the centres of the circles can be more practical.

## $2 x £ 1$ coins

| Basic Data |  | cms |
| :--- | :---: | :---: |
| Diameter of $£ 1$ coin | $\mathbf{D}$ | 2.3 |
| Radius of $£ 1$ coin | $\mathbf{R}$ | 1.15 |
| Distance of core aura from circumference | $\mathbf{r a}_{\mathbf{a}}$ | 1.556 |
| Distance of core aura from centre | $\mathbf{r a}_{\mathbf{a}} \mathbf{R}$ | 2.706 |
| Distance of outer aura from circumference | $\mathbf{r o}_{\mathbf{o}}$ | 4.5 |
| Distance of outer aura from centre of circle | $\mathbf{r o}_{\mathbf{0}}+\mathbf{R}$ | 5.65 |


| Maximum Separation Distance between 2 objects |  | cms |
| :--- | :---: | :---: |
| Circumference to Circumference between 2 objects | $\mathbf{S}_{\max }$ | 19.7 |
| Centre to centre between 2 objects | $\mathbf{S}_{\max }+\mathbf{D}$ | 22.00 |


|  |  |  | GeometricSeries?$d_{2} / d_{1}$ |
| :---: | :---: | :---: | :---: |
| Centre of Circle to the 4 Null Points |  | cms |  |
| First Null Point | $\mathrm{d}_{1}$ | 18.90 |  |
| Second Null Point | $\mathrm{d}_{2}$ | 10.40 | 1.82 |
| Third Null Point | $\mathrm{d}_{3}$ | 5.00 | 2.08 |
| Fourth Null Point | $\mathrm{d}_{4}$ | 2.80 | 1.79 |
| Average Geometric Constant |  |  | 1.89 |
| Deviation \% Deviation |  |  | $\begin{gathered} 0.12 \\ 6.53 \% \\ \hline \end{gathered}$ |

Table 3
These conventions are incorporated in Tables 1, 2, and 3, where the following definitions are used.

Diameter of circle
D
Radius of circle
Distance of core aura from circumference
Distance of core aura from centre of circle
Distance of outer aura from circumference
Distance of outer aura from centre of circle
Separation Distance
Optimum Separation Distance
Maximum Separation Distance
Length of lines $\mathbf{a}$ or $\mathbf{b}$
R
ra $\mathbf{r a}_{\mathrm{a}}+\mathbf{R}$
r
$r_{0}+R$
S
So
$S_{\text {max }}$
L

As apparent from Tables 2 and 3, (i.e. physical compared to abstract sources), the core auras have similar dimensions as have the maximum separation distances between the 2 circles. This again demonstrates the similarity between abstract and physical sources, provided the latter are inert and not excited or charged up.

## Resonance

As the circles are separated, a resonance effect changes the length of the central axis lines $\mathbf{a b}$. This is shown graphically in Figure 4 where the maximum length, $\mathbf{L}_{\text {max }}$ of each line $\mathbf{a} \& \mathbf{b}$ was 2.068 metres, when the 2 circles (of radii 3.85 mms ) were at an optimum critical separation distance, $\mathbf{S}_{\mathbf{o}}$, of 3 cms apart. The lines $\mathbf{a} \& \mathbf{b}$ disappeared when the separation of the 2 circles, $\mathbf{S}_{\text {max }}$, was equal to or greater than 6 cms . This is another example of a $2: 1$ ratio.

As a comparison to the above inert examples in Tables 2 and 3, 2 grains of quartz which had been charged up with photons, had an optimum separation So of 31 cms apart ( 10 times greater than above), and the length of the line ab was significantly increased to 8 m (4 times the above). Photons significantly alter perception and increase perceived dimensions.

The Changing Subtle Energy Beam Length when Separating 2 Circles


Figure 4

## Bifurcation

All 16 termination spirals bifurcate, but not the centre spiral. The spirals or more accurately conical helices at the ends of the lines, bifurcate into a symmetrical pair of "parabola like" shaped lines which end in another helix which also bifurcates. This is shown in Figure 5, and the process continues with ever decreasing parabola lengths. About 6 bifurcations is the practical end of this "infinite" harmonic series. As usual in quantitative dowsing, individual observers obtain different bifurcation lengths, but
the same ratios. (See Reference 6). The bifurcation factor seems 2:1, but not the Feigenbaum's constant of 4.669 that is usually associated with bifurcation in chaos theory. Figure 5 represents the latter.

## An Illustration of Bifurcation



Figure 5
The angle between adjacent helices is about $30^{\circ}$ which possibly decreases as the bifurcation evolves. All the above measurements were made on the ground - none involving height.

## Mager Colours

Using a Mager disk, the 2 straight lines $\mathbf{a} \& \mathbf{b}$ are usually mauve/violet, but sometimes, for unknown reasons, the lines change to white (but only if they also change to Type 1 subtle energy). The Cornu spirals, the 6 curved "lines of force" and the 12 curlicues and their terminating spirals are green. Unexpectedly, the curved bifurcating lines are white, but their terminating spirals are green, and where they bifurcate there seems to be a small mauve portal. It is not known what these colours mean in this context, but they could relate to frequencies of the subtle energies.

## Subtle Energy Types

The author has categorised 7 types of subtle energies as explained in References 11, and 12. The straight lines can be categorised as Type 4 subtle energy which is usually associated with multi-body interactions, psi-lines, or one of the 3 different "earth energy" lines between banks and ditches. However, sometimes, as mentioned above, these straight lines are Type 1 subtle energy which is very common in "earth energies". Examples of Type 1 are the auras of most objects, or most dowsable ley lines, or the 14 lines either side of banks and ditches. Interestingly, the lines after bifurcation can be classified as Type 1 lines.

The curved lines, Cornu spirals, terminating spirals, and single spirals can all be categorised as Type 3 subtle energy. Type 3 is also very common in "earth energies" and is always involved in spirals. For example, it is found as one of the lines comprising a series of spirals between banks and ditches. Type 3 has different properties to Types 1 and 4.

Type 5 is a rare form of subtle energy which is detected at the small portal at points of bifurcation by spirals. Intriguingly, there is a 5 -dimension dowsing response at the 2 points in each vortex where it bifurcates. This is the same response as dowsing a half sine wave, (see Reference 3), or the spirals at the end of radials in a peace grid. It is not known how to interpret this 5-dimensional response.

## Perturbations

Orientation of the 2 circles to true or magnetic north does not seem to make a significant difference, but a strong artificial E-W magnetic field produces the same results as detailed above, but with increased separation distances by about $10 \%$.

## Analysis and Theory

The above findings of the 2-body experiment suggest that there are 2 different phenomena; one for straight lines and another for the curved lines.

## Straight Lines

The variable length straight line through the axis of the 2 -bodies can be explained by pure resonance of 2 sine waves each with a half wavelength, $\lambda$, equal to the maximum separation distance.

$$
\begin{equation*}
\lambda=2 \cdot S_{\max } \tag{i}
\end{equation*}
$$

This is illustrated in Figure 6 where the maximum separation distance is measured as $360^{\circ}$ and the 2 circles are $150^{\circ}$ apart. At a separation of $180^{\circ}$ the maximum beam length is obtained and coincides with maximum resonance.

An Illustration of Simple Resonance


Figure 6
The separation distance is illustrated as degrees on the $x$-axis. The line length is represented as amplitude on the $y$-axis. the maximum separation distance is measured
as $360^{\circ}$. Each circle emits a wave $\boldsymbol{\lambda}=\mathbf{2} . \mathbf{S}_{\text {max. }}$. The green wave is emitted by the right hand object, whilst the red wave is from the left hand object. The blue curve is the combined resonance wave. In this example, The 2 circles are $150^{\circ}$ apart.

The implication of this model is that both circles act as nodes and the structure of space time, together with consciousness, enables the 2 circles to "know" where the other is together with details of its radius. Provided the 2 circles are closer than the maximum separation distance they each emit a subtle energy standing wave whose wavelength equals their maximum separation distance.

A Theoretical Equation Superimposed on Actual Experimental Results


Figure 7
This theory is supported by Figure 7 where the theoretical equation (ii) is superimposed on the actual experimental results depicted in Figure 4. The heuristic formula based on this theory is:

$$
\begin{align*}
& L=L_{\max } * \sin \left(S / S_{\max } * \pi\right)  \tag{ii}\\
& L=2.068 * \sin (S / 6.00 * \pi) \tag{iii}
\end{align*}
$$

Where $\mathbf{L}=$ the length in metres of the generated dowsable subtle energy beam. $\mathbf{S}=$ the separation distance between the two circles.

Equation (iii) is a very good fit to the observations, especially as the apparent perturbations are at the same separation distances as the null points. The aura radius is a function of the radii of the circles as in equation (iiii), (see Reference 9), and determines the maximum separation distance and maximum line length.
From the conclusions of the 1 -circle experiments

$$
\begin{equation*}
\mathbf{r}_{\mathrm{a}}=1.7568 * \mathbf{R} \tag{iiii}
\end{equation*}
$$

Where $\mathbf{R}=$ the radius of the source circle $\mathbf{r a}_{\mathbf{a}}=$ the aura of the circle.

The previous section implied a linear relationship between the maximum separation distance $\mathbf{S}_{\text {max }}$ and the radius of the 2 circles $\mathbf{R}$. Although Figure 8 contains only a few data points, it demonstrates a quadratic relationship with an excellent correlation coefficient of 0.9887 . However, the graph does not go through the origin which is illogical, and therefore requires further measurements. The equation from Figure 8 is:-

$$
\begin{equation*}
S_{\max }=-5.0541 R^{2}+141.41 R-98.655 \tag{v}
\end{equation*}
$$

Combining equations (i) and (v) gives the half wave-length of the subtle energy waves causing the 2-body resonance effect.

$$
\begin{equation*}
\lambda / 2=-5.0541 R^{2}+141.41 R-98.655 \tag{vi}
\end{equation*}
$$

Subsequent research detailed in Reference 13 shows that the arbitrary constants in equations (iii) - (vi) are due to local and astronomical forces, including gravity, spin, electromagnetic forces changing in time. Reference 13 gives more precise and universal versions for equations (iii) - (vi) based on phi ( $\varphi$ ) and no arbitrary constants. It is surprising that only the dimension of length appears in these equations; the radii of the source circles and their separation. No other forces, factors, or dimensions are implied. Does this suggest that only the geometric structure of space-time is involved in producing the findings in this paper?

The Relationship between Maximum Separation and Circle Radius


Figure 8

## Curved Lines

All the vortices and Cornu spirals are produced by a different effect. A similar resonance model based on 2 shorter sine waves with a half wavelength equal to $1 / 6$ or
$1 / 4$ of the maximum separation distance would produce 4 or 6 negative areas, but these would equal the positive areas. This is illustrated in Figure 9. The findings show that this model is incorrect, as the null points are sharp troughs only extending over a few mms of separation, and comparable to the fine tuning of radio stations. Future work is required to find an equation to fit the findings.

However a clue as to what is creating the spirals is obtained from measuring where the perturbations occur between the theoretical and actual graphs in Figure 7. The perturbations seem to occur at the null points, and their separation distances form a series with a similar geometric constant as the null points in Table 2.

Illustrating that the above Model does not Apply to the Null Points


Figure 9

## Conclusions

An interaction between any two objects occurs if they are in close proximity. An explanation for this interaction is that the two bodies must be separated by a distance less than half the wavelength of the waves responsible for the communication between the 2 bodies. This half wavelength is a function only of the radius of the interacting objects. The observed dowsable pattern is a function of the size of the source objects and their separation distance. For example, the length of one of the lines is simply a function of the sine of the separation distance.

As any two bodies separate, observations have confirmed the creation of a consistent, repeatable pattern comprising subtle energy beams, vortices, Cornu spirals, null points, resonance effects, and bifurcation. Four different types of subtle energy are involved, with three different perceived colours, but the nature of these is currently unknown. This complex pattern is affected dynamically during the separation process.

The findings for 2-body interaction demonstrate that, in general, 2 abstract circles produce very similar dowsed patterns as do any 2 physical objects. However, esoteric differences have been quantified and interesting comparisons are made between identical abstract and solid geometries. For example, pure abstract geometry produces 6 null points and a total of 36 Cornu spirals, whilst physical solid bodies of the same size only produce 4 null points and 28 Cornu spirals.

## Postulations

The findings detailed above strongly support the following postulations about the structure of space-time and the communication of information between any two bodies;

- The derived equations suggest that the linear parts of the dowsable pattern are due to the geometric structure of space-time.
- The subtle energy beam is only observed when the observer's intent is looking at the 2 -circles. This demonstrates that consciousness is partly involved in abstract 2body interaction.
- The findings demonstrate the equivalence of pure geometry, and matter without the effects of mass, provided the solid objects are not charged-up or excited, such as by photons.
- The geometric structure of the universe at the Planck level incorporates the reasons for the difference between abstract and solid objects.
- Geometry is an integral part of the structure of space-time.
- In conjunction with Reference 8 , any 2 objects, be they abstract geometry or solid bodies, not only "know" where the other is but also its radius/size so the 2 objects can interact if their auras are sufficiently close.
- As published in Reference 13, an object with a radius $\mathbf{r}$ communicates across spacetime with a half wavelength which equals $2 . \mathrm{r}^{\wedge} \varphi$. What are these waves? The formula strongly suggests they are part of the structure of space-time.
- The 2 objects interact if their separation distance is less than the half-wavelength.
- This could explain the old conundrum of action at a distance.
- This model could also explain entanglement via a similar "entanglement" subtle energy that enables 2-bodies to interact.
- The mechanism of communication is via nodes and standing waves.
- These subtle energy waves can cause resonance, with the maximum effect such as maximum line length being at resonance.
- The presence of bifurcation suggests that chaos and flow theory are involved.
- Vortices are integral to the structure of the universe.

The conclusions provide further evidence for consciousness being linked into the structure of universal space-time, and is augmented by local space-time variables such as the earth's spin, magnetism, gravity, and orientation also affecting the mind's perception.

Combining all the above with other general findings on dowsing geometry suggests that the total pattern produced by 2 objects (as illustrated in Figure 1) is a combination involving:

1. The geometric structure of space-time.
2. Consciousness and observation.
3. An interaction or entanglement subtle energy.
4. Nodes and standing waves.
5. Resonance.
6. Local Gravity.
7. The earth's local vorticity.
8. The earth's local magnetic field.

At the null points the latter 3 factors seem to cancel out the effects of the first 5 factors.

## Discussion Points

What does all of this information tell us about dowsing and consciousness? What questions require answering?

1. What is the mathematical transformation that enables 2 circles (whose equations are in the form $x^{2}+y^{2}=r^{2}$ ) when in close proximity, to produce a complex mathematically described pattern such as in Figure 1?
2. What causes geometrical patterns such as a circle to have an aura? Is this a manifestation of consciousness? What is the theoretical link between a geometrical shape and the size of its aura?
3. Why are abstract auras similar to those observed for solids?
4. It would seem that the observer needs to look at the source geometry to be able to dowse the intricate patterns. Does consciousness create the dowsable pattern, or is it there all the time, but intent is required to perceive it? However, if intent is present, but the dowser is not looking at the source objects the dowsable pattern is not always detected.
5. Standing waves would seem to be connecting all 2 bodies within interaction range. How do they "know" where each other is, and their radii?
6. What is it about abstract geometry that produces standing waves and becoming a node in the process?
7. Why do 2 abstract circles produce 9 Cornu spirals whilst solids produce 7 ?
8. What is the mechanism that produces 6 null points for abstract geometry, but 4 for solids?
9. What do the null points tell us about the creation and destruction of Cornu spirals?
10. Why do the null points destroy all spirals, Cornu spirals, and curlicues?
11. Why do null points only extend over a few mms of separation of the two objects?
12. An extension to the resonances and nodes theory is required to explain the findings of null points.
13. There is only 1 optimum separation distance $S_{0}$ between 2 objects, and it produces a resonance peak. If this is 30 mm as in the example in Figure 4, the half-wavelength that causes the resonance is also 30 mms , but for 2 grains of quartz, the halfwavelength is 310 mms . These are relatively large wavelengths and imply a macro cause, not a mechanism at the quantum level.
14. What is the connection between the source and $\mathbf{S}_{\mathbf{o}}$ ?

15 . What are the observed 3 colours and 4 energy types?
The Way Forward, and Suggestions for Future Research
As always, discoveries in research generate more questions than answers. Suggested topics for future research include the following.

1. More measurements are required for different sizes and sources.
2. In order to establish if either $\boldsymbol{\varphi}$ or $\boldsymbol{\delta}$ is involved, more accurate ratios are required of aura sizes, separation distances, and the dimensions of patterns.
3. $\lambda=\mathbf{F n}(\mathbf{R})$ but a more accurate Figure 8 and equation (v) is required for different sized circles - both physical and abstract.
4. Future work is required to find an equation to fit the findings for the 4 or 6 null points.
5. The findings suggest that the series of measurements are not exact geometric or arithmetic series, and it is necessary to determine the exact mathematical series.
6. As a result of further measurements, the mathematical relationship may be established between the relative sizes of the 2 source objects and the location of the central spiral.
7. At bifurcation, we need to measure vertical vortex angles to see if the angles of the associated conical helices decrease in the series such as sine $1 / 3,1 / 5,1 / 7$
8. Further research is required into the event(s) that trigger the conversion from Type 4 subtle energy into Type 1.

This article is only a summary. Further details can be obtained on the author's website http://www.jeffreykeen.co.uk/

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