12. Consciousness, Vorticity, and Dipoles

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Abstract

As spin is a fundamental feature of the universe, preliminary evidence suggests that its study could help in understanding consciousness. Research detailed in this paper further develops the author's work in Reference 1. The findings demonstrate that rotating objects generate fields that are also associated with mind-generated fields. Numerous quantitative properties of these fields generated by rotation are shown to be very different to fields associated with static objects. Dipole antenna radiation patterns are also discovered. The conclusions suggest that vorticity is not only involved in consciousness, but also has wider implications in understanding our universe, and therefore the subject warrants further research.

Objectives

Spin is a fundamental property of the universe at whatever scale one chooses – be it rotating galaxies, planets revolving in solar systems, planets spinning on their own axes, electrons spinning around nuclei of atoms, or the spin associated with fundamental particles. The latter particles that carry the fundamental forces of nature, such as the photon and the gluon are bosons, which have integer spin, whilst the quarks and leptons that make up matter are fermions, which have half-integer spin (1/2, 3/2 …). The objectives of the research described in this article are to further the author's quest in the study of consciousness, its connection with vorticity, and the mind's interaction with the structure of the universe.

Scope

For thousands of years, numerous civilisations around the world have been aware of "spiritual aspects", "earth energies", "auras", and other sensations that are not yet detectable by instrumentation. As will become apparent, this approach may at first seem unusual, but is proving to be very productive in the study of consciousness. In this context, it will be demonstrated that dowsing is a useful, relevant, and powerful tool in this research.

The findings, as detailed in this paper, are compared for four different situations. These are:-

    A. Static Solids
    B. Rotating Solids - special

C. Rotating Water - special
D. Rotating Objects - general

Each is examined in turn.

Static Solids

Starting with static objects such as crystals, enables a benchmark to be set against which observations of rotational experiments can be compared. A brief recap of an aura associated with tangible matter is a useful starting point. (Reference 1, chapter 10)
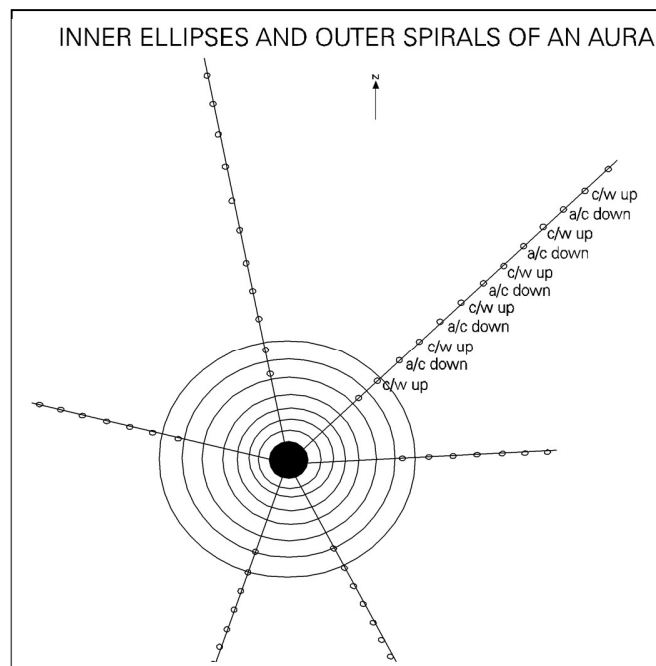

Figure 1

Figure 1 is a horizontal cross-sectional plane through any object, and illustrates auras associated with solids, the properties of which may be briefly summarised and quantified as follows.

1. Auras comprise a series of ellipsoidal shaped inner fields.
2. These ellipsoids are concentric with the centre of the source object.
3. These ellipsoid fields have 7 boundaries. i.e. there are seven different fields.
4. The separation distances between these boundaries form an Arithmetic Series.
5. These ellipsoids comprise Type 1 Fields. (Reference 1, chapter 13).
6. These auras are present in all 3 dimensions.
7. The size of the core aura (the inner most field) is a function of **Mass** (Reference 1, page 69). The formula for the Range (the distance of the core aura boundary to the centre of the source object) is given by:-

$$R = a \log M + b$$

Where R = Range; M = Mass; a & b are constants.

In other words, a megalith has a larger aura than a grain of sand.

8. An aura's outer arms comprise a series of conical shaped spirals.
9. These arms seem to extend to infinity.
10. The separation distances between adjacent spirals also form an Arithmetic Series.
11. The spirals are Type 3 Fields. (Reference 1, chapter 13).
12. Finally, natural every-day objects, untouched by humans, do not posses Type 4 fields. (Reference 1, chapter 13).

The following sections compare the above static aura and field properties with those observed and measured in rotational experiments.

Rotating Solids

If any solid, such as a crystal or stone is spun, even at high speeds, there is no change in its aura's dimensions, location, or structure.

- The Aura as described above is not affected by either spinning the object on its axis or by its rotation in a circle.
- Type 1 boundaries stay the same.
- Type 3 spirals stay the same.

This is counter intuitive, and on the surface seems very strange. The obvious question is "Why does the aura and its fields appear static when the source is rotating?" This observation could be most profound, and is discussed further in the Conclusions of this paper.

Rotating Water

This section moves on from spinning solids to rotating liquids. Unlike solids, liquids can form vortices. What happens with the simplest and commonest liquid – water? When a bottle of water is moved vigorously in a circular motion to form a vortex, the range of its aura is increased. This is illustrated in Figure 2. (Reference 1, page 78)

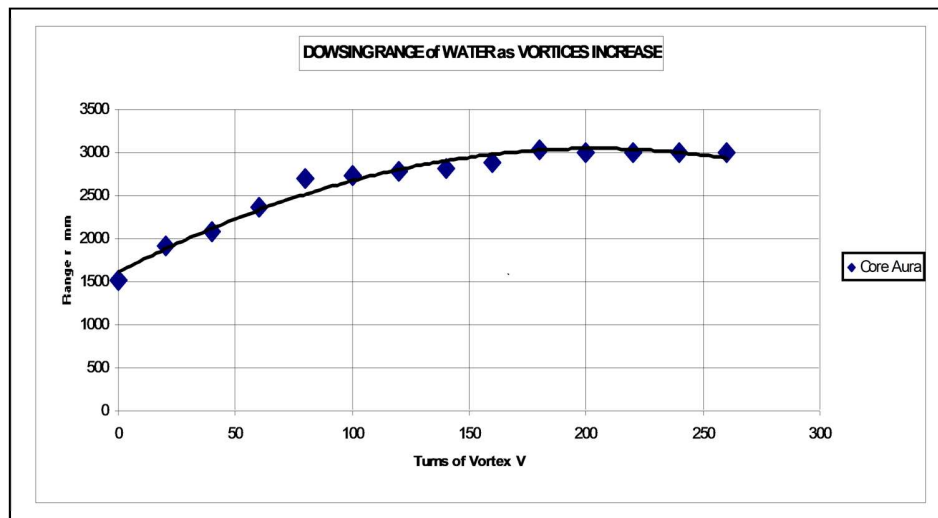**The Aura of Water in a Vortex**

Figure 2

The aura's size is an asymptotic relationship to the number of turns of the vortex. In one experiment the size of the water's core aura eventually doubled. After 200 turns of a vortex the core aura increased from 1.5m to 3.0m. It is not just the core aura that increases. All 7 ellipsoidal fields expand in unison, together with the associated Type 3 spirals. The other interesting finding is that the expanded aura retains its increased size after spinning stops. These observations only occur for rotating liquids and are discussed further in the conclusions of this paper.

Rotating Objects and their Fields - general

This section discusses in depth the third category of rotation, where the observer's intent is different to the previous experiments. As will become apparent, in general (as opposed to the special cases discussed above) every property observed and measured relating to rotational generated fields and auras is different to all the previous results. The following experiments and findings are numbered to facilitate referencing and comparisons.

1. Spin generates Type 4 fields. An easy experiment to detect Type 4 rotational fields is to switch on an electric fan. Type 4 fields are not there before the fan is rotating.
2. This Type 4 field can then be compared experimentally to, say, a mind created floating dowsable line, or mind created energised water. (Reference 1, chapter 12). This comparison shows that the rotational generated fields are the same as mind created fields.
3. Type 4 fields are also associated with spiritual concepts such as prayers. They can, for example, be detected in religious scrolls, altars in active cathedrals, or worshipped Buddahs.
4. The next simple experiment can be to detect that rotational fields comprise nine Type 4 field boundaries, and not seven as with static objects.

5. This experiment can be followed by measuring the separation distances between the nine boundaries to demonstrate that they form an approximate Geometric series. An example is given in Figure 3.

9 Field Boundaries

Fan			13th April 2005	
Horizontal Axis			10:00am	

Radius of Rotating Object		**25 mm**
Rate of Spin		**400 rpm??**
Axis of Spin to Measurements		**0°**

Boundary Number n	Range of Aura metres	Arithmetic ? (n+1)-n	Geometric ? (n+1)/n	Vorticity m^2.rpm
1	0.330			125
2	1.008	0.678	3.055	
3	1.672	0.664	1.659	
4	2.425	0.753	1.450	
5	3.172	0.747	1.308	
6	4.581	1.409	1.444	
7	6.193	1.612	1.352	
8	7.597	1.404	1.227	
9	9.123	1.526	1.201	
Average		1.099	1.587	
Standard Deviation		0.422	0.611	

Figure 3

As is common when measuring the separation of aura field boundaries, or the turns of a dowsable spiral, the series are neither a precise Geometric nor Arithmetic progression. However, it is reassuring that there is usually a clear and consistent indication as to which of the two series is applicable. As is often the case in science, perturbations appear to spoil simple relationships. This should be treated in a positive attitude, as it usually leads to further, deeper understandings.

In the above chart, the expected "constants" have increasing values if the boundaries are deemed to form an Arithmetic series, but reducing ratios if they are considered to form a Geometric series. In Figure 3, boundary 1, the core aura, presents the biggest problem. However, let us see what happens if we attempt to "normalise" or inject a "vorticity constant".

Adding a Constant

Boundary Number n	2 metres added	Arithmetic ? (n+1)-n	Geometric (n+1)/n
1	2.330		
2	3.008	0.678	1.291
3	3.672	0.664	1.221
4	4.425	0.753	1.205
5	5.172	0.747	1.169
6	6.581	1.409	1.272
7	8.193	1.612	1.245
8	9.597	1.404	1.171
9	11.123	1.526	1.159
Average		1.099	1.217
Standard Deviation		0.422	0.050

Figure 4

Figure 4 illustrates what happens to the measurements in Figure 3 if we move the origin of the tape measure further back an arbitrary 2 metres from the centre of rotation. The Arithmetic progression remains the same, but we obtain a good approximation to a geometric series with a constant of 1.2. A question for future research work is to enquire "why?"

6. A simple observation establishes that there are no Type 3 fields being generated from a rotating fan.

7. When the rotation stops, the Type 4 Aura disappears.

8. A very heavy spinning object generates exactly the same Type 4 aura as does the same sized light object. A rotating object's Mass is irrelevant to the size of the created Aura.

9. Simple experiments prove that faster and larger spinning objects produce bigger auras. Range (**R**) is a function of revolutions per minute (**ω**) and radius (**r**). The concept of Vorticity is relevant here, where

$$\text{Vorticity, } \mathbf{V} = \tfrac{1}{2} \cdot \mathbf{r}^2 \cdot \mathbf{\omega} \qquad (i)$$

Figure 5 plots graphically the results of several experiments involving different sized spinning objects rotating at different speeds. It is apparent from the graph that increased Vorticity increases the aura's Range, (i.e. the size of the Type 4 aura), with a linear relationship of the form:

Range, **R = cV + d**   (ii)
(where **c** and **d** are constants, which in this case are 0.056 and 717 respectively).

This relationship has a 0.85 correlation coefficient. This is fairly good, but is not exceptional.
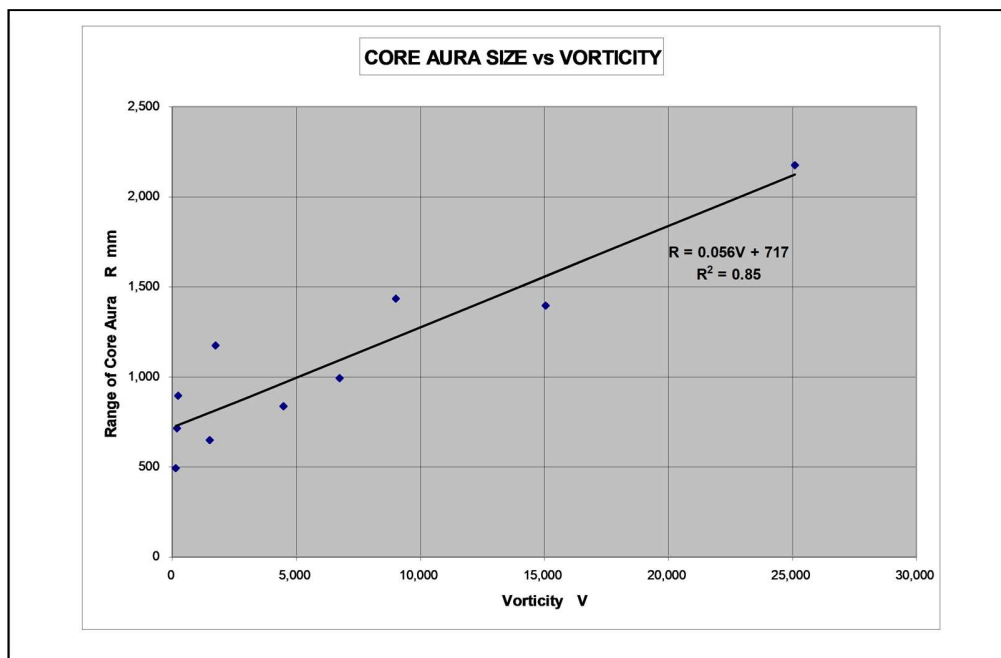
Figure 5

As always in science, results differ from expectations. Treated positively, this is usually useful as it demonstrates there are no pre-conceptions affecting the results. It also leads to discoveries that are more fundamental.

The graph in Figure 5 also highlights some of the challenging idiosyncrasies. For example, as the spin/vorticity tends to zero the Range of the Type 4 aura should also tend to zero, as per experimental observations when objects are stopped spinning. However, it does not. When there is no spin, there is a 0.5 – 0.9m core aura. i.e. in equation (ii) **d** should equal zero. There is therefore a Zero anomaly.

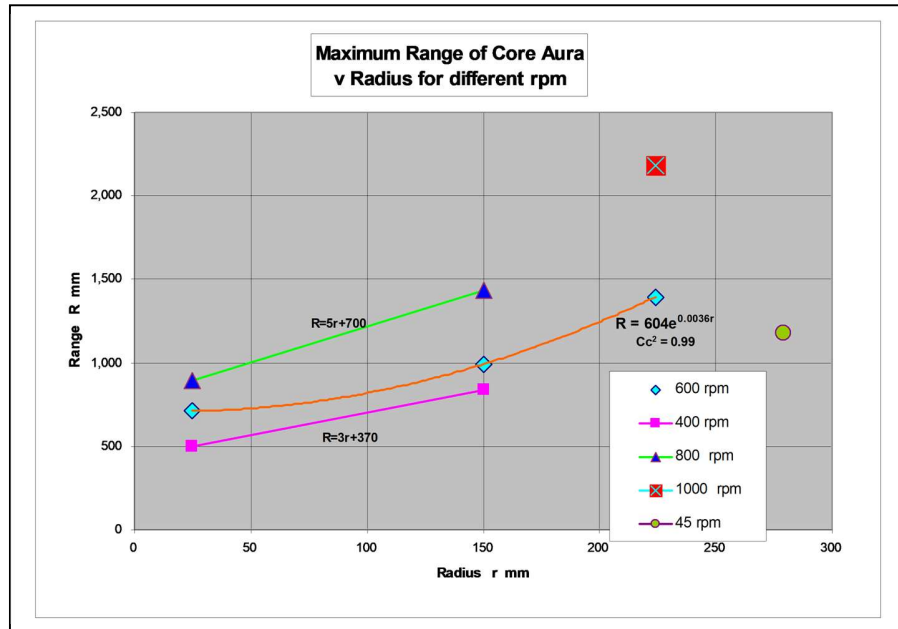It may be useful to examine the components of this graph in an attempt to analyse this discrepancy.

Figure 6

Figure 6 is a simplified graph of Figure 5 that separates the components of vorticity by
      (a) Increasing the radius but keeping the rpm constant
      (b) Increasing the speed of rotation, but keeping the radius constant.

In other words, these graphs illustrate how the Range increases as the radius of the spinning object is increased, and how the Range increases as the revolutions per minute are increased.

However, there is still a Zero anomaly. It would be expected that all the curves should go through the origin. No radius should produce no Type 4 Fields. However, once again in science, common sense does not prevail! We will return to this later.

10. Unlike the aura of static solids, rotational auras are not present in all 3 dimensions. This is easily shown by means of a simple experiment to measure the Range of, say, the 9th (outer most) field boundary along a horizontal axis of rotation. The maximum Range is found to be along the axis of rotation ($\theta = 0°$). If the fan is turned around a vertical axis through 90°, or by laying the fan on its back, (so that the axis of rotation is vertical, not horizontal), there are no observable Type 4 fields. In other words there is a zero field at 90° to the axis of rotation ($\theta = 90°$). It would therefore be expected that a normal cosine relationship exists.

$$R = Fn(V) = \frac{1}{2} \cdot r^2 \cdot \omega \cdot \cos\theta \qquad\qquad (iii)$$

To prove if this is true, a series of readings were taken for different angles of spin (θ), but keeping r and ω constant in equation (iii). The results appear in Figure 7. Between 0° and 90° the findings adhere closely to a fourth power relationship between R and θ with a correlation coefficient of better than 0.99.

Angles to Direction of Spin

R = -2E-07θ^4 + 6E-05θ^3 - 0.0044θ^2 - 0.0233θ + 9.0581
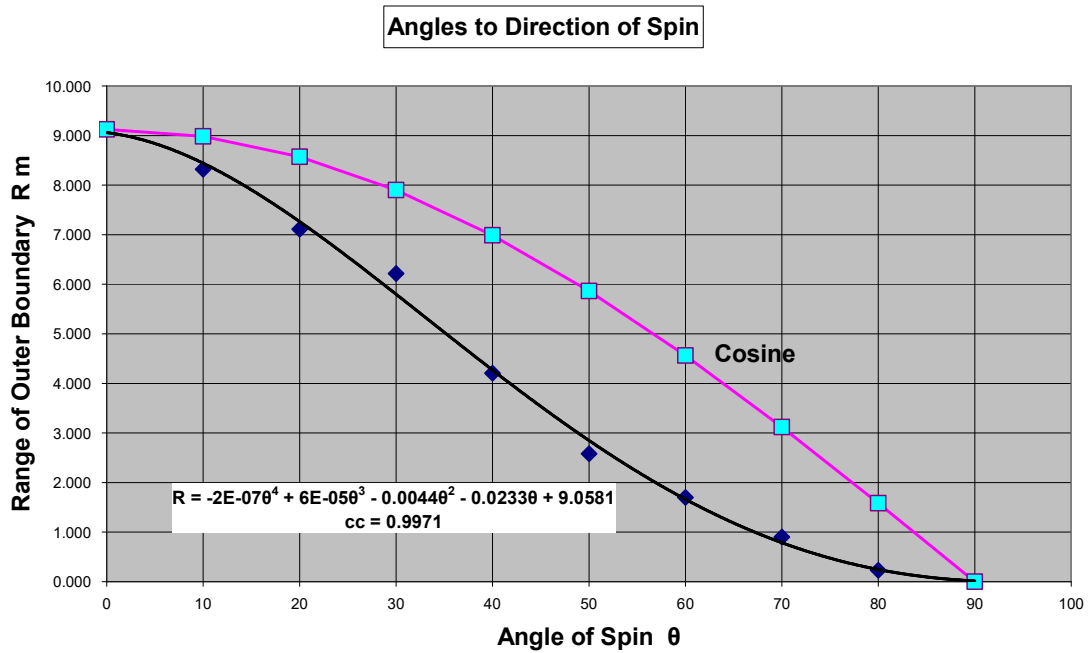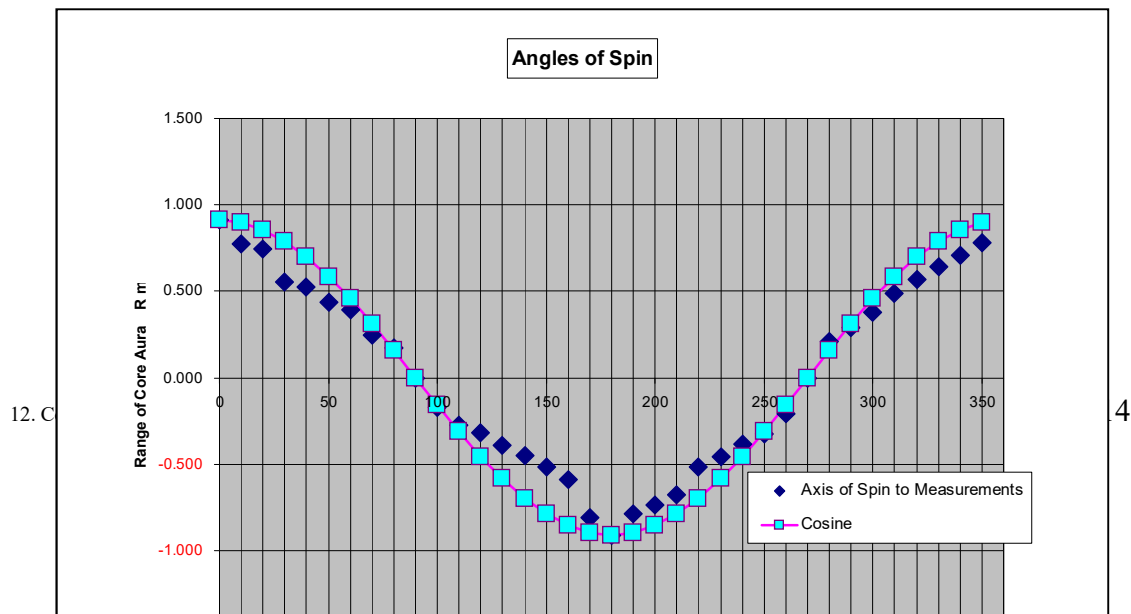cc = 0.9971

Figure 7

The observations do not adhere to the expected Cosine relationship, which is superimposed in Figure 7. Once again, there is a perturbation effect. This creates a challenge to determine the cause of the perturbations.

11. To see if this anomaly is a result of a directional background effect, the horizontal Range was measured through 360°, by keeping both the vertical axis, and the horizontal axis of rotation constant. Once again, the Range does not adhere to the expected Cosine relationship, as illustrated in Figure 8.

Angles of Spin

Axis of Spin to Measurements
Cosine

12. C

4

Angles to Direction of Spin

Cosine

$R = -2E-07x^4 + 6E-05x^3 - 0.0044x^2 - 0.0233x + 9.0581$
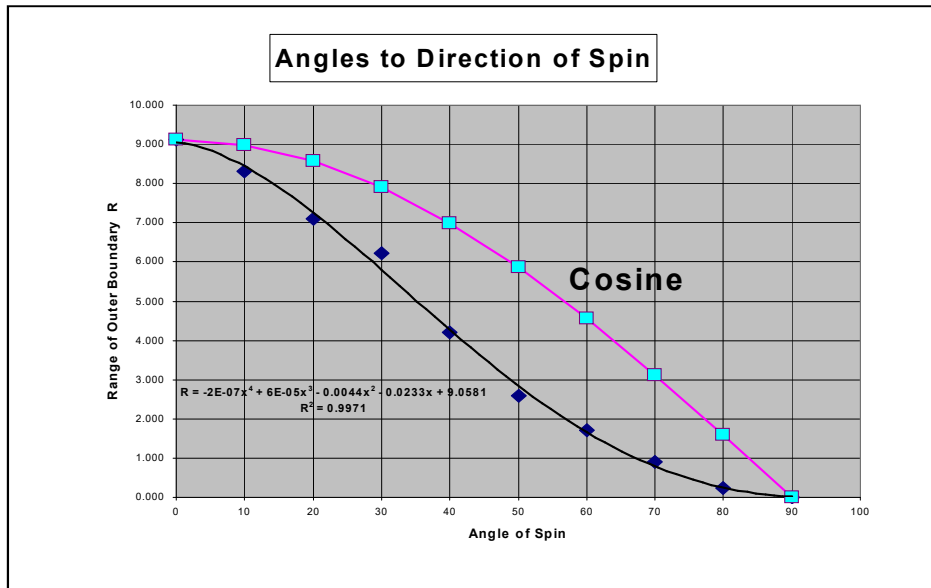$R^2 = 0.9971$

Figure 7

Figure 8

Figure 9, represents a Polar diagram of the Type 4 Fields perceived to be emanating from a rotating object, where the horizontal axis of rotation is pointing north i.e. the north-south 0° to 180° line. The 3-dimensional representation of the aura can be obtained by visualising this diagram being spun around this axis of revolution. It is similar to two back-to-back pears. The aura is not very symmetrical. Is this due to experimental error, background effects, or are more perturbations present?
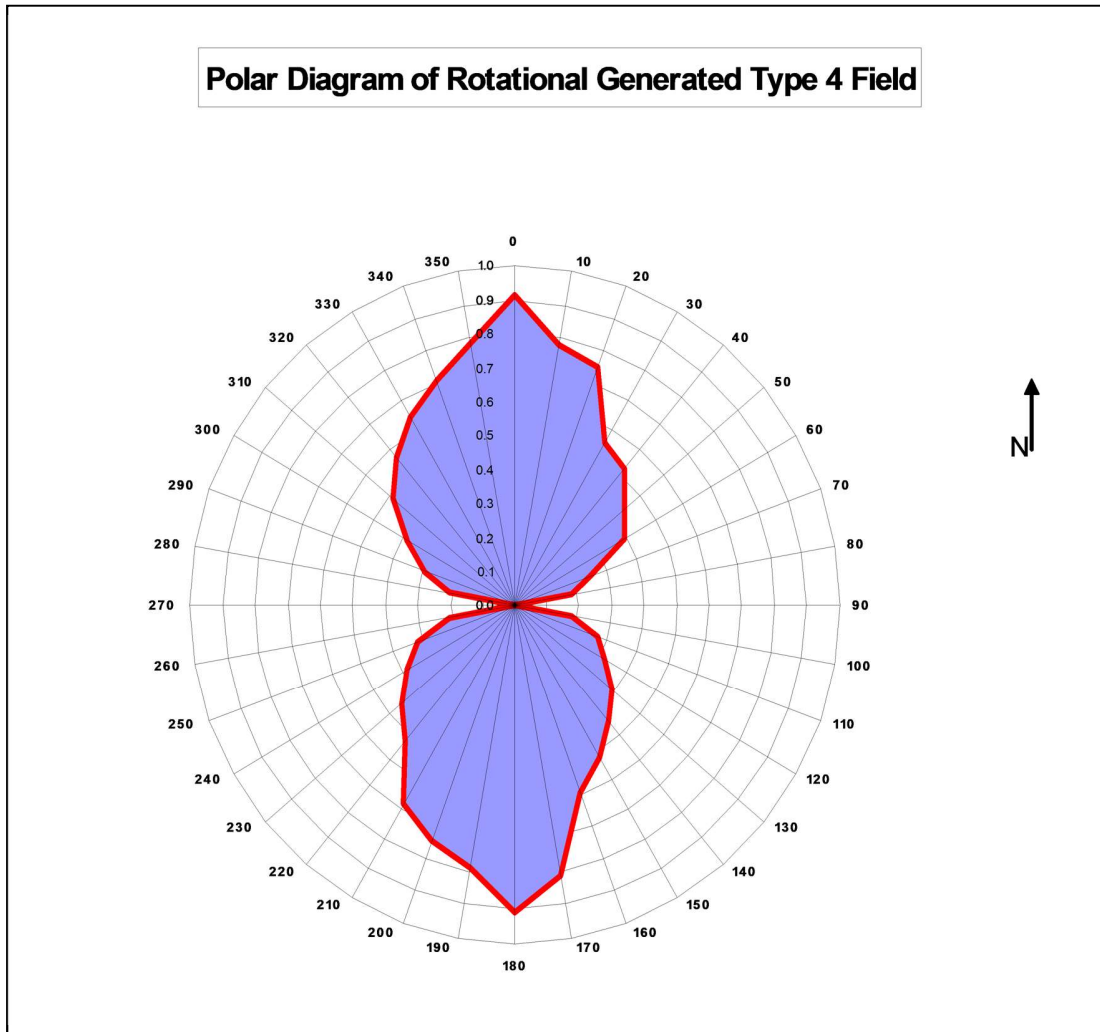
Polar Diagram of Rotational Generated Type 4 Field

Figure 9

Summary

Figure 10 summarises the findings in this paper and in particular the differences between static and rotating objects.

Comparison of Aura Characteristics

Property	Static Object	Rotating Object
Field Types	1 and 3	4
Number of Field Boundaries	7	9
Boundary Separation Distances	Arithmetic	Geometric
Permanence	Always present	Only whilst spinning
Range Dependence	R = Fn (M)	R = Fn (r,ω)
3-D Aura shape	Uniform	Directional
Source of aura	Matter	Rotation

Figure 10

Conclusions

Once again, there is confirmation of the power of using the technique of dowsing in the scientific study of consciousness. As is apparent, the properties of auras generated by spinning objects, or rotating liquids, are totally different to auras associated with static objects. This statement seems to apply to all of the characteristics as elaborated above.

From experiments involving spinning solid objects, the auras produced do not spin with the associated source object. Conceptually, if a sphere or an ellipsoid is spun, its shape could appear the same as when static. There may be an element of doubt. However, in auras the arms of the Type 3 spirals are not spinning with their source object, and remain static. There can be no confusion about this observation. These arms, therefore, cannot be **physically** connected to the source object, even though the latter is creating the observed aura. And, by inference, the Type 1 ellipsoids are also not physically connected to the source object producing them. The implied conclusion is that the auras we perceive are not physically there – "they are all in the mind".

This is further evidence that supports the theory that auras of physical objects seem to be a result of matter interacting with a universal field. The latter concept has numerous names ranging from the Akashic Record from thousands of years ago, to the Zero Point Field, the Information Field, or more recently, the Cosmic Internet. Whether physical matter is spinning or not, does not seem to change the quantum phase interference patterns that matter would appear to generate in the Information Field. Are we looking for the mechanism that produces auras, which also has the property of being invariant to rotation? i.e. a mathematical transformation of axes that is invariant to rotation.

Experimental results suggest that rotation affects liquids differently to solids. For example, unlike solids, liquids retain their enlarged auras resulting from spinning. Why? The most tempting reason is because of the vortices created. After the macro and visible effect of these vortices has subsided due to friction and viscosity, these vortices seem to leave a permanent effect at the micro level. It would appear that a permanent impression is left on the molecular vibrational or spin states of the water molecules, that in turn enlarges auras.

Once again, there is a strong hint that vorticity has its own special relationship with the Information Field.

The preference for arithmetic series in Type 1 fields (associated with physical bodies), and for geometric series in Type 4 fields (associated with mind and vortex generated activities) is consistent with other reported general observations and laboratory experiments.

Non-adherence to a simple cosine relationship for the angular pattern of a rotationally generated field is possibly because the perceived radiated field pattern is not emanating from a single source, even though physically the source is a single rotating object. Allowing for experimental error, the 3-dimensional polar diagram of rotational generated Type 4 fields is very similar to the radiation pattern associated with a dipole antenna, which possibly has a separation distance of a half wavelength. Further theoretical research is justified as this connection could lead to a fundamental discovery.

Mind generated fields (which would include prayers) have similar properties to rotationally generated fields. Experiments with Tibetan Spinning Prayer Wheels reinforce this view. These prayer wheels comprise a cylinder holding an inserted written prayer. The cylinder can be made to rotate on a spindle attached to a handle, assisted by a swinging chain and weight attached to the cylinder. Typically, the Type 4 field emanating from the prayer when static extends for about 0.5 metres. When spun the field extends to several metres.

The implication of this research is that consciousness, intent, the mechanism of dowsing, and the associated phenomena of remote viewing, healing etc are all linked to vorticity and the structure of the universe. This paper therefore adds yet more evidence of the commonality between the structure of the universe, geometry in general and polyhedral and vortex structures in particular, and how all of these link in with connectivity and consciousness. We are indeed living in exciting times. This conclusion suggests that further research is warranted.

Further Research

The following are suggested areas of future research.

1) **Perturbations**
   i) Why should a 2m vorticity constant give a perceived improved geometric constant?
   ii) Why is there a zero-calibration error when measuring vorticity and the size of the associated aura?
   iii) Why is there a zero error when measuring vorticity and radius?
   iv) Why is there a discrepancy in the cosine relationship and angle of spin? Is the fourth power relationship in Figure 7 the same as would be expected from a field radiated by a dipole antenna?

2) **Rotation of Earth**

i) What effect, if any, does the Earth's rotation have on the above experimental results?

3) Tibetan Spinning Prayer Wheels
i) What is the connection between Tibetan Spinning Prayer Wheels, Type 4 fields, vorticity, and the Information Field theory? Is there any measurable difference between spinning the wheel clockwise, as opposed to the preferred traditional anti-clockwise motion?

4) Dipoles
Whether an analogy of fields associated with antenna and dipoles is useful in finding a theoretical explanation for the perceived rotational generated fields observed in this paper.

As always in research, there are more queries than answers!

Acknowledgements

Bibliography

1   Jeffrey Keen; *Consciousness, Intent, and the Structure of the Universe*; Trafford; 2005; 1-4120-4512-6

2   Lawrence Edwards; *The Vortex of Life*; Floris; 1993; 0-86315-148-5