Opinion

On the Emergence of Crop Circle

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Abstract

In this paper, we describe the emergence of field crop circle. We propose that the pattern which we can observe in field crop circle are the results of interaction of Schumann waves with crops. The crops are the photographic plate (detectors) of the Schuman photons.

Keyword: Emergence, field crop circle, Schumann wave, photon.

Introduction

Crop Circles - the strange patterns that appear mysteriously overnight in farmers' fields - provoke puzzlement, delight and intrigue among the press and public alike (See, e.g., Fig.1).



Fig.1. Crop Circle "Julia set"

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Fig.2. Mathematical presentation of fractal Julia set

In Fig.1, we present the beautiful example of Field crops (observed) And in Fig.2 The fractal model of crop circles (Fatou and Julia calculations)

The crop circles are mostly found in the United Kingdom, but have spread to dozens of countries around the world in past decades. The mystery has inspired countless books, blogs, fan groups, researchers (dubbed "cereologists") and even Hollywood films. Despite having been studied for decades, the question remains: Who - or what - is making them?

Many people believe that crop circles have been reported for centuries, a claim repeated in many books and websites devoted to the mystery. Their primary piece of evidence is a woodcut from 1678 that appears to show a field of oat stalks laid out in a circle. Some take this to be a first-hand eyewitness account of a crop circle, but a little historical investigation shows otherwise.

The woodcut actually illustrates what in folklore is called a "mowing devil" legend, in which an English farmer told a worker with whom he was feuding that he "would rather pay the Devil himself" to cut his oat field than pay the fee demanded. The source of the harvesting is not unknown or mysterious; it is indeed Satan himself, who - complete with signature horns and a tail - can be seen in the woodcut holding a scythe.

Some claim that the first crop circles (though they were not called that at the time) appeared near the small town of Tully, Australia. In 1966, a farmer said he saw a flying saucer rise up from a swampy area and fly away; when he went to investigate he saw a roughly circular area of debris and apparently flattened reeds and grass, which he assumed had been made by the alien spacecraft (but which police investigators said was likely caused by a natural phenomenon such as a dust devil or waterspout). Referred in the press as "flying saucer nests," this story is more a UFO report than a crop circle report.

As in the 1678 mowing devil legend, the case for it being linked to crop circles is especially weak when we consider that the impression or formation was not made in a crop of any kind but instead in ordinary grass. A round impression in a lawn or grassy area is not necessarily mysterious (as anyone with a kiddie pool in the back yard knows). Indeed, mysterious circles

have appeared in grass throughout the world that are sometimes attributed to fairies but instead caused by disease.

In fact, the first real crop circles didn't appear until the 1970s, when simple circles began appearing in the English countryside. The number and complexity of the circles increased dramatically, reaching a peak in the 1980s and 1990s when increasingly elaborate circles were produced, including those illustrating complex mathematical equations.

In July 1996, one of the world's most complex and spectacular crop circles appeared in England, across a highway from the mysterious and world-famous Stonehenge monument in the Wiltshire countryside. It was astonishing fractal pattern called a Julia Set, and while some simple or rough circles might be explained away as the result of a strange weather phenomenon, this one unmistakably demonstrated intelligence. The only question was whether that intelligence was terrestrial or extra-terrestrial.

Making the design all the more mysterious, it was claimed that the circle appeared in less than an hour and during the daytime — which, if true, would be virtually impossible for hoaxers to accomplish. The circle became one of the most famous and important crop circles in history.

It was later revealed that the circle had in fact been made in about three hours (by three hoaxers) very early that morning. It simply hadn't been noticed until the following afternoon when spotted from an airplane overhead.

Unlike other mysterious phenomenon such as psychic powers, ghosts, or Bigfoot, there is no doubt that crop circles are "real." The evidence that they exist is clear and overwhelming. The real question is instead what creates them — and there are ways to investigate that question.

We can look at both internal and external evidence to evaluate crop circles. Internal information includes the content and meaning of the designs (is there anything that indicates that any information contained in the "messages" is of extraterrestrial origin?), and external information, including the physical construction of the crop designs themselves (is there anything that indicates that the designs were created by anything other than humans?)

Crop circle enthusiasts have come up with many theories about what create the patterns, ranging from the plausible to the absurd. One explanation in vogue in the early 1980s was that the mysterious circle patterns were accidentally produced by the especially vigorous sexual activity of horny hedgehogs. Some people have suggested that the circles are somehow created by localized and precise wind patterns, or by scientifically undetectable Earth energy fields and meridians called ley lines.

Others, such as molecular biologist Horace Drew, suggest that the answer lies instead in time travel or alien life. He theorizes that the patterns could be made by human time travelers from the distant future to help them navigate our planet. Drew, working on the assumption that the designs are intended as messages, believes he has decoded crop circle symbols and that they contain messages such as "Believe," "There is good out there," "Beware the bearers of false gifts and their broken promises," and "We oppose deception" (all, presumably, in English).

However, these odd, pseudo-biblical messages undermine the credibility of the crop circles, or at least the meaning read into them. Of all the information that an extraterrestrial intelligence might choose to convey to humanity — ranging from how to contact them to engineering secrets of faster-than-light travel — these aliens chose to impart intentionally cryptic messages about false gifts, broken promises. The crops circles or rather Field crops are in our opinion the result of Schumann field interaction with crops. In this paper we search the equation which can describe that interaction.

2. The model

In paper (Kozlowski, 2917), we showed that for particles with $m \le M$ (Planck Mass) equation

$$\nabla^2 \Psi - \frac{1}{c^2} \frac{\partial^2 \Psi}{\partial t^2} = 0 \tag{1}$$

describes the pilot wave equation. It is interesting to observe that the pilot wave equation is independent of mass of the particles

Let us look for the solution of the Eq. (1) in the form (for 1D)

$$\Psi = \Psi(x - ct) \tag{2}$$

where Ψ is for example Julia set encoded in Schumann wave.

For finite Planck mass, we obtain (Kozlowski, 2017):

$$\Psi(x-ct) = \exp\left(\frac{2\mu ic}{\hbar}(x-ct)\right)$$
(3)

where the reduced μ mass equals

$$\mu = \frac{m_i M_p}{m + M_p} \tag{4}$$

For $m \ll M_p$, i.e. for all elementary particles one obtains

$$\mu = m_i \tag{5}$$

and formula (2) describes the wave function for free Schrödinger particles.

$$\Psi(x-ct) = \exp\left(\frac{2mic}{\hbar}(x-ct)\right)$$
(6)

For $m >> M_p$, $\mu = M_p$

$$\Psi(x-ct) = \exp\left(\frac{2M_{p}ic}{\hbar}(x-ct)\right)$$
(7)

From formula (6) we conclude that $\Psi(x-ct)$ is independent of *m* of particle, *m*.

In the case $m < M_p$ from formulae (6) and (7) one obtains

$$\mu = m \left(1 - \frac{m}{M_p} \right)$$

$$\Psi(x - ct) = \exp \left(\frac{2imc}{\hbar} (x - ct) \right) \exp \left(-i \frac{m}{M_p} \left(\frac{2mc}{\hbar} x - \frac{2mc^2}{\hbar} t \right) \right)$$
(8)

In formula (8) we put

$$k = \frac{2m_i c}{\hbar}$$

$$\omega = \frac{2m_i c^2}{\hbar}$$
(9)

and obtain

$$\Psi(x-ct) = e^{i(kx-\omega t)} e^{-i\frac{m}{M_p}(kx-\omega t)}$$
(10)

As can concluded from formula (10) the second term depends on the gravity

$$\exp\left[-i\frac{m_i}{M_p}(kx-\omega t)\right] = \exp\left[-i\left(\frac{m_i^2 G}{\hbar c}\right)^{\frac{1}{2}}(kx-\omega t)\right]$$
(11)

where G is the Newton gravity constant.

It is interesting to observe that the new constant, α_G ,

$$\alpha_G = \frac{m_i^2 G}{\hbar c} \tag{12}$$

is the gravitational constant. For $m_i = m_N$ nucleon mass

$$\alpha_G = 5.9042 \cdot 10^{-39}$$

The equation (11) describes the resulting "picture" of initial Schumann wave (Julia set).

3. Conclusions

In paper we argue that the crop circles are the results of interactions of Schumann waves with crops. Assuming the linearity of the wave equation formulated in our earlier papers, we argue that the crop circles are the patterns encoded in Schumann waves. Due to the weakness of Schumann field the picture of patterns can be obtained only in crop as photographic plate for Schumann photons,

References

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