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Hyperbolic Medicine. A Space-Time Synchronization External to the Human

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Abstract: ***Background**: we call "Hyperbolic Medicine" ("Mediperbolic") the study of hyperbolic curves that occur in the physiology of a living being, especially in humans, in relation to other hyperbolic curves that may be in nature. The aim of this work is to determine which hyperbolic patterns occur in nature and their relationship with human physiology, in order to establish the bases of hyperbolic medicine. **Methods**: a bibliographic review of scientific works was made about hyperbolic curves in medicine, electro-magnetic fields, circadian rhythms, teleportation, precognition, fractals and space-time perpendicular to the movement of an organ. The articles considered of greatest interest for this work have been selected. **Results**: examples and tables with data of hyperbolic curves in nature and their relationship with the Earth's magnetic field, human physiology, circadian rhythms, biological effects of electro-magnetic fields, space-time relativity perpendicular to movement, teleportation, precognition and fractals are exposed. **Conclusions**: the reality we see is hyperbolic because the lines of the Earth's magnetic field deform our environment until it becomes hyperbolic. This influences human physiology and its circadian rhythms, giving patterns of hyperbolic adaptation. The space-time relativity perpendicular to the movement of each organ, teleportation, precognition and fractal structure are present in this hyperbolic adaptation.*

Keywords: hyperbolic, medicine, synchronization, magnetic, fields

1. Introduction

A hyperbolic curve is an open geometric figure with two branches, obtained by cutting a right cone through a plane oblique to the axis of symmetry, with an angle less than that of the generatrix with respect to the axis of revolution. Other conic sections are the parabola and the ellipse. A circle is a special case of an ellipse [1].

We call "Hyperbolic Medicine" (abbreviated "Mediperbolic") to the study of hyperbolic curves that occur in the physiology of a living being, especially in humans, in relation to other hyperbolic curves that may be in nature, such as electromagnetic fields, systems of expansion-contraction in motion, space-time relativity, circadian rhythms, visual perception of reality, teleportation, precognition, fractal structures, or other analogues.

We know from previous works that:

1) The images in nature are hyperbolas, because the deformed space in which we live is hyperbolic. When we look at houses of the same size, the closest ones are perceived as larger than the ones further away. The image of each house is transferred to the human eye at the speed of light and it follows a curve that is similar to the lines of force of a magnetic field. [2-5](figure 1).
2) It has been described that the lines of force of a magnet and of the Earth's magnetic field are hyperbolic images [6-8] (figure 2).
3) In human physiology, hyperbolic curves are very frequent and they are also similar to the hyperbolic curves described by the lines of force of the Earth's magnetic field [5].

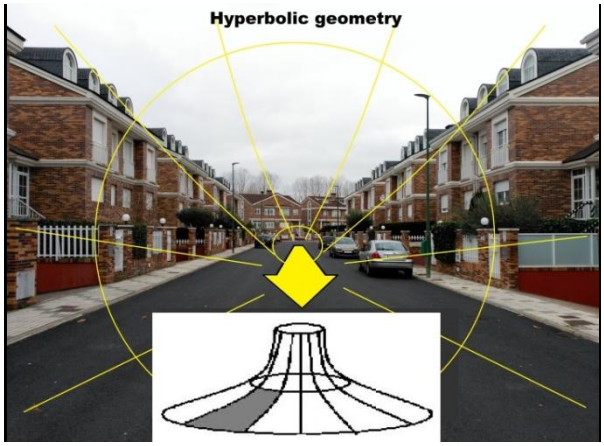

Figure 1: Houses of the same size at different distances from the observer. The images that approach the observer increase in the direction perpendicular to its line of sight following hyperbolic curves.

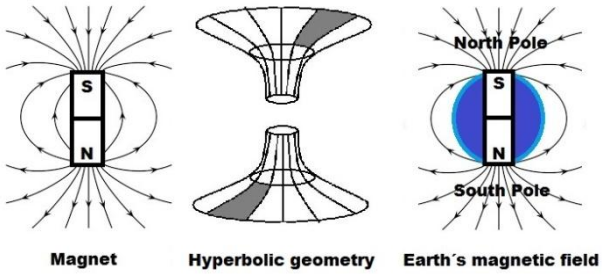

Figure 2: Hyperbolic images of the lines of force of a magnet and of the Earth's magnetic field.

4) Several authors point out that electromagnetic fields have effects on human physiology [9-12].
5) Biological rhythms have been described as phenomena of adaptation to periodic variations in the environment. This are repeated over time and are related to the rotation of the Earth on its axis and around the Sun [13].

It has been said that time and those rhythms are in DNA and RNA molecules, in the genetic code, but they are controlled by a biological clock, which is regulated by environmental signals, such as light, rest and sound [13,14]. We know that some stimuli such as variations in light, temperature and humidity can make biological rhythms synchronize, because it makes them change to get closer to the frequency of the stimulus [13,14]. These human circadian rhythms can follow hyperbolic curves [15,16].

6) A space-time relativity perpendicular to the axis of motion of an organ has also been described. According to the Theory of Relativity an object that moves on an X axis perpendicular to the line of sight of an observer contracts its length X by a factor K= $\sqrt{1-v^2/c^2}$ and its time is dilated by a factor K = $\frac{1}{\sqrt{1-v^2/c^2}}$, while its dimensions Y and Z perpendicular to that direction of movement do not change (v: speed of a moving organ; c: speed of light in the vacuum) [17-19]. According to current works, it is different if that object moves perpendicular to the line of sight of an observer or if it approaches-moves away in the same line of sight [2-5]. These works indicate that when the object approaches an observer in his same line of sight, he perceives its height (Y) and width (Z) increasing in size. For this reason he interprets that these dimensions Y and Z perpendicular to the axis of movement of the object have been dilated. If the object moves away from the observer along that same line of sight, he perceives those dimensions Y and Z each time smaller, for which he interprets that there is a contraction [2-5]. This has two consequences: 1º) any object that moves along an X axis perpendicular to the line of sight of an observer will have a contracted length X, and 2º) if the object moves in the same line of sight of the observer the lengths Y and Z perpendicular to that axis expand if the object approaches the observer, or contract if it moves away from him (figure 3).

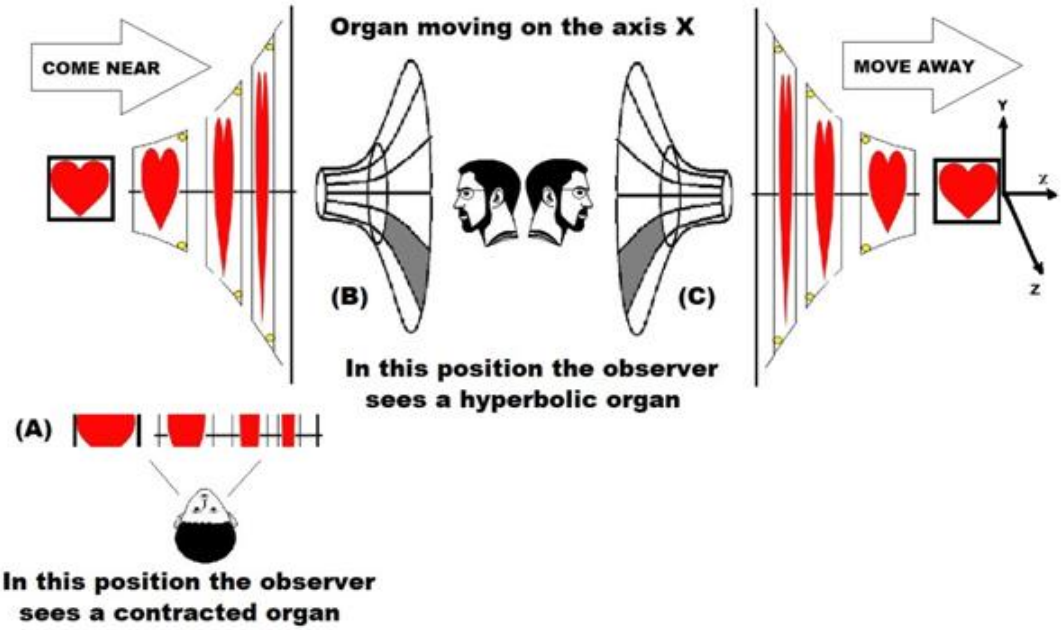

Figure 3: THIS IS VERY IMPORTANT. When an organ moves perpendicular to the line of sight of the observer, he sees it contracted (A). If the organ moves in his same line of sight, he sees a hyperbola that is approaching (B) or moving away (C).

7) Teleportation has been demonstrated in different physical systems, such as photons, atoms, ions, electrons [20-25] and also between two microorganisms that are distant from each other [26]. The quantum state of an object is its defining characteristic, so that teleporting its quantum state is equivalent to teleporting the object [27]. An approach to the teleportation of a human organ can be made taking into account space-time relativity. If we change the time and space of a biological process we could act on its development. It has been described that to teleport human organs, they would have to travel perpendicular to the line of displacement to a certain point of approach, so time is contracted, while the lengths are dilated [2,3].

8) Precognition is a phenomenon by which individuals have access to information on future events before this happens and that cannot be deduced from the information acquired in the present through the senses [28-32]. It is related to "presentiment", "intuition", "anticipatory predictive activity", "premonition", "Psi", "telepathy", "clairvoyance" [33,34].

9) We also know that fractals are very frequent in nature [35-37]. The aim of this work is to determine what hyperbolic patterns occur in nature and their relationship with human physiology, in order to establish the bases of hyperbolic medicine.

2. Material and methods

In various databases (Medline, Scielo), own archives and in Internet search engines, a bibliographic review of scientific works has been made about hyperbolic curves in medicine, electro-magnetic fields, circadian rhythms, teleportation, precognition, fractals and space-time perpendicular to the movement of an organ. The articles considered of greatest interest for this work have been selected and their relationship with hyperbolic medicine has been established.

3. Results

The results of the study indicate that:

1) Images of nature are hyperbolas [2-5] (figure 1).
2) The lines of force of a magnet and the Earth's magnetic field are hyperbolic images [6-8] (figure 2).
3) In human physiology, hyperbolic curves are very frequent, as shown in table 1 [5].
4) Electromagnetic fields have effects on human physiology, according to table 2 [9-12].
5) Human circadian rhythms (table 3) can be synchronized with the hyperbolic curves that occur in nature [15,16].
6) There is a space-time relativity perpendicular to the axis of movement of an organ (figure 3), as shown in table 4.
7) Teleportation has been demonstrated in different physical systems [20-26] and has been related to hyperbolic medicine [2-5].
8) Some proposed explanations for precognition are in table 5. Points "d" and "e" are related to hyperbolic medicine [4].

Table 1: Hyperbolic curves in physiology

• Oxygen saturation for hemoglobin and myoglobin in relation to partial oxygen pressure [38].
• Sometimes dose-effect relationship curves [39].
• Glucokinase and fructokinase saturation curves [40].
• Aspartate saturation curves [41].
• Insulin sensitivity in oral glucose tolerance test [42].
• Heart rate responses during exercise [43].
• Strength-speed ratio of myocardial myosin isoenzymes [44].
• Force-speed ratio of shortening of skeletal muscle fibers [45].
• In aviation, periods of incapacitation in extreme gravitational stress [46].
• Descriptions of the perception of odors, in an olfactory space [47].
• The human eye perceives a hyperbolic image of reality [2-5,48].

9) In medicine, the existence of fractals is very frequent [53,54] and their relationship with hyperbolic medicine has also been described [3,5].

Table 2. Biological effects of electromagnetic fields

• Electromagnetic fields occur in nerves, heart tissue, skeletal muscle and other body tissues.
• There are cells that move towards the cathode (fibroblasts, keratinocytes, chondrocytes, epithelial cells) and others towards the anode (corneal endothelial cells, granulocytes, vascular endothelial cells), but this depends on the animal species.
• The cell membrane acts as a "Faraday cage" that serves as a shield against irrelevant electric fields.
• Some molecules produce permanent dipoles that align with the applied electric field.
• Channels and ion receptors in the cell membrane can be altered by modifying the activation kinetics. Calcium channels and Ca^{2+} ions are the target of electrical and electromagnetic changes.
• Animal cells are oriented perpendicular to the electric field lines. This occurs with actin fibers and microtubules in fibroblasts.
• Round cells are elongated and stretched to experience minimum electric field gradients.
• Bacteria with magnetite particles can detect the Earth's magnetic field.
• Electromagnetic fields can regulate the speed and quantity of products of biochemical reactions.
• The Earth's magnetic field influences the geomagnetic orientation and navigation of some fish (salmon, sharks, rays), migratory birds, butterflies and bees.

Table 3: Some human circadian rhythms

• Testosterone and cortisol: maximum at 8:00 hours and minimum at 22:00 hours.
• Melatonin: light decreases production, darkness increases it.
• Salivary flow: maximum between 6-14 years and decreases after 20 years. It is more in men, more by day and less by night.
• Respiratory rhythm: every 6 seconds.
• Heart rate: every 1 second.
• - Menstruation: 28 days

Table 4: Classical theory of relativity and results of a previous study by the autor [2-5]

Classical theory of Relativity. Object moves perpendicular to the observer's line of sight.
-Length X parallel to the axis of movement contracts by a factor K= $\sqrt{1 - v^2/c^2}$
-Time t_x parallel to the axis of movement dilates by a factorK = $\frac{1}{\sqrt{1-v^2/c^2}}$
Results of a previous study by the author. Object approaches or moves away from the observer in his same line of sight
A)Lengths Y and Z perpendicular to the axis of movement:
-When the organ approaches the observer these lengths dilate by a factor K = $\frac{1}{\sqrt{1-v^2/c^2}}$
-When the organ moves away from the observer these lengths contract by a factor K= $\sqrt{1 - v^2/c^2}$
B)Times t_y y t_z perpendicular to the axis of movement:
- When the organ approaches the observer these times contract by a factor K= $\sqrt{1 - v^2/c^2}$
- When the organ moves away from the observer these times dilate by a factorK = $\frac{1}{\sqrt{1-v^2/c^2}}$

Table 5: Different explanations of premonition

a) It is a function of the unconscious mind that is accessing a forgotten information, which have been stored in the brain [49].
b) Delayed conscious experience hypothesis. Our conscious mind is always receving delayed information. Our conscious experience of events is delayed by 1-10 seconds relative to the external time [32], or according to others about 18 seconds [49].
c) It is a "déjà vu", appearing facts that are already known previously [50,51]. They can be false memories of the past that give false impressions of the future [52].
d) Hypothesis called "quantum biology": there would be quantum processing in biological systems, which would give interactions between future and past events [32].
e) It has an extracerebral origin: geomagnetic field, geophysical disturbances [29].

4. Discussion

A good example to understand why images in nature are hyperbolas is when an observer looks at houses of equal size, distant from each other, (figure 1). We can now look at a human organ instead of a house. If a moving organ approaches an observer, he perceives that its perpendicular dimensions to the movement (height Y, width Z) are greater when the organ is closer to him. On the contrary, if organ moves away from the observer, he perceives that those

perpendicular dimensions Y and Z are getting smaller and smaller. In any case, the images of the organ that the observer perceives are hyperbolic, when it approaches or when it moves away (figure 3). According to previous descriptions [2-5], this is because the magnetic field that surrounds us deforms the space in which we live until it is curved. In fact, the lines of force of a magnet and the Earth's magnetic field are hyperbolic images [6-8].

We know from previous works that hyperbolic curves are very frequent in human physiology [2-5,38-48]. It has been pointed out that when an organ approaches an observer it does so according to the hyperbolic lines of force that emerge from the north pole of a magnet. When the organ moves away from the observer, it does so according to the hyperbolic lines of force that enter through the south pole of a magnet. The expansion factor perpendicular to the movement $K = \frac{1}{\sqrt{1-v^2/c^2}}$ calculated in previous works [2], we can transform it into $1/K^2=1-v^2/c^2$and it gives us the hyperbola approaching. The contraction factor perpendicular to the movement calculated as $K= \sqrt{1 - v^2/c^2}$ can be transformed into $1/k^2=1- c^2/v^2$, which is the hyperbola that moves away [5]. Some hyperbolic curves that occur in human physiology may be conditioned by the hyperbolic curves of the Earth's magnetic field. There is an adaptation of human physiology to the hyperbolic deformation of the space in which we live.

Table 2 shows some effects of electromagnetic fields on human physiology. The relationship between the two is obvious. Geomagnetic rhythms can serve as time signals to organize physiological rhythms. The consequences of this is that human biorhythms follow hyperbolic curves, synchronized with the hyperbolic lines of the Earth's magnetic field. When humans are protected from environmental magnetic fields, circadian rhythms come to desynchronize and they can gradually resynchronize by reapplying the magnetic fields. There is a close interaction between geomagnetic and biomagnetic fields throughout evolution [9-16]. In this way, the cells of the human body synchronize their physiological processes to create similar hyperbolic curves [5]. There may be a "long life biorhythm", ranging from birth to death. At birth, this "long life biorhythm" appears in cell physiology and it becomes hyperbolic by synchronizing with the hyperbolic lines of force in the Earth's magnetic field. If external stimuli are applied to modify the hyperbolic physiological curves, these tend to synchronize to become hyperbolas again. Cellular physiological processes are subject to permanent synchronization.

The magnetic field modifies the path of light to give a hyperbolic curve. This has been studied in relation to a space-time relativity perpendicular to the axis of movement of an object [2-5]. According to classical physics, the lines of an electric field diverge from the charge "q" with spherical symmetry in a system at rest. If that system moves at high speed on the X axis, the lines of that electric field are contracted on the surface parallel to that X axis [17] (figure 4). According to current studies [2,3,5] the perpendicular surfaces Y and Z should expand if the charge "q" approaches the observer and contract if it moves away from him. Something similar happens with the perpendicular Doppler effect, which does not exist in classical physics [17]. However, according to current studies [2,3,5], the contraction perpendicular of time should be taken into account when the light source moves towards the observer and also the dilation perpendicular of time should be taken into account when the light source moves away from him.

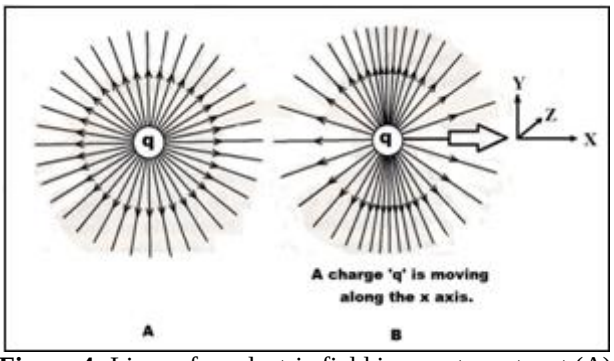

Figure 4: Lines of an electric field in a system at rest (A) and in a system in motion (B), according to classical physics.

In relation to all the above we have the teleportation of a human organ, which is of interest because it allows changing the time and space of a biological process and thus act on its development. Human organs should move perpendicular to the line of displacement to a certain point of approximation, so time is contracted, while lengths are dilated. Related to space time relativity is also the precognition. This phenomenon goes against the principle of causality of classical physics, since it would imply the propagation of physical signals from the future to the past [30], however quantum mechanical experiments can show a retrocausal influence. That information could travel through those hyperbolic curves of the Earth's magnetic field.We know that those hyperbolic curves are found in humans in different biochemical processes. In this way, their organs could act as sensors for this phenomenon.

Hyperbolic human physiology can fragment like a magnet does it into smaller ones and this is repeated at smaller scales as happens in a fractal [5,16]. It is actually a geometric object whose structure is repeated at different scales [35-37].

5. Conclusions

We can conclude that the reality we see is hyperbolic because the lines of the Earth's magnetic field deform our environment until it becomes hyperbolic. This influences human physiology and its circadian rhythms, giving patterns of hyperbolic adaptation. The space-time relativity perpendicular to the movement of each organ, teleportation, precognition and fractal structure are present in this hyperbolic adaptation.

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