



THE UNIVERSALITY OF THE SPHERE-VORTEX PRINCIPLE

Gabriel Kelemen

Faculty of Arts and Design, Timisoara, Romania, kelemengabi@yahoo.com

Abstract: The visualization of sound is one of the ancestral human dreams. Surprising the image of the aural ephemeral has been interesting scientific environments to this day. Almost everything in the universe is in a vibration state. Clarifying the hierarchy, the origin and co-substantiality of form with the natural language algorithm, grafted on phenomenal synergies, inextricably situates form as a result of stationary wave interference in conjunction with symbolic language-induced inferences.

Keywords: sphere, vortex, standing wave, morphodynamic, computational

1. INTRODUCTION

Following the dynamics of sphere-spiral principle and observing the relationships from macro to microcosm, the biosphere represents the cradle of human civilization, in which the human being, as part of the living world, is interlocked up to unification with the terrestrial biosphere.

The living world abounds in patterns of chiral symmetry. Although living organisms are seen as biological self-replicate automatics, and all life phenomena tend to be explained in terms of biophysics and biochemistry, although life is based on many factors related to phenomena such as electrochemical energy, gravity, magnetism, etc., still something is omitted.

2. MORPHODYNAMIC NONLINEAR PHENOMENA IN FLUIDS. COMPUTATIONAL CHARTS

As the French biochemist Jacques Monod (1910-1976) noted, "*living beings are objects endowed with a project.*" One might assume that the phenomenon of life is based on a different type of causal factor, unknown to physical sciences, interacting and animating metabolic processes inside living organisms. So far no variation of these assumptions could be tested experimentally.

The universality of the Sphere-Vortex principle starts from observing the abundance of spherical units in nature, at both macrocosmic and microcosmic level, i.e. the galaxies, stars, planetary systems, planets, satellites, the arrangement in concentric spherical manner, at planetary level the atmosphere, hydrosphere, lithosphere, and finally the diversity of species present in the Atomic periodic table from whose combination follows the entire molecular diversity that represents the basis of inorganic and organic world.

In fact, the area of morphological coverage from macro at micro cosmos, quantifies in a complex mode the interval of *shape octave* by following the sequence of transformations starting from the morphodynamics of large spheres consisting of spherical atoms, having as a result of their interference the variety of crystalline and amorphous systems and finally the surprising diversity of living forms in a permanent change from small to large at the level of the biosphere. Thus, each egg cell is actually the start of the transformations of metamorphosis of the primordial sphere which determines by synchronic division the entire typology of terrestrial living world.

The biosphere is situated at the conjunction between the lithosphere, hydrosphere and atmosphere, folded on the convective dynamics of specific to terrestrial climate, influenced by the tidal currents, diurnal cycle, the Coriolis atmospheric currents, more intense at the equator, thus modulating the atmosphere in a toroidal-vortex manner, generating cyclones, in interdependence with the movement of marine currents with trajectories of a great complexity that constitutes without doubt a veritable maze of hydrodynamic natural vortexes whose nonlinear dynamics hosts the miracle – life.

The natural stationary electromagnetic waves induced by the solar wind fills the complexity of the periodic interdependence blending into a perfect symphony of subtle interference between field, substance, form and information.

Moreover, every lightning that occurs in terrestrial atmosphere gives rise to a quasi-stationary wave which manifests itself as a kind of electromagnetic echo ... the electromagnetic field of the Earth vibrates on several frequencies that are just about the harmonic of the fundamental frequency of 83 Hz, calculated for the first time by Dr. Winfried Otto Schumann in 1952. The values of these harmonics are located between 6 and 50 Hz. [2]

Therefore, the stages of the transformations from sphere through spiral and the resumption of the cycle reveals the importance of a deepening of complex relations from vibration-matter-information, stationary waves having a major contribution in the morphodynamicsimulation of the of living. The chirality problem at the molecular level involves a particular tropism, a certain affinity for one or the other of the optically active antipodes oflevodextrogyre type of high specificity in molecular architecture of living at the cellular level. Thus, as in the two-dimensional plane we encounter spirals rotated to the left or right, with one arm, with 2, 3, ... n arms, so in three dimensions we deal with vortexes (tornadoes, waterspouts) rotated to the left or to the right. The concept of chirality in the inorganic matter and organisms, with all his peculiarities, implies unsuspected connections which find an answer in the complex dynamics of nonlinear phenomena in fluids subject to acoustic influences.

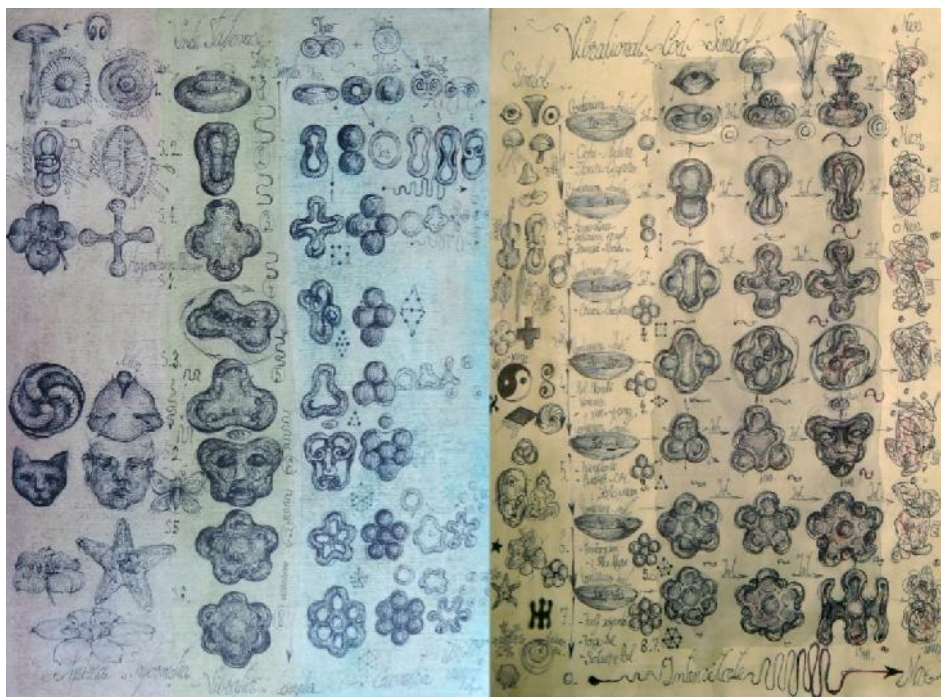


Figure1:Standing Wavehierarchy.Source: Gabriel Kelemen 2012

Stationary waves in fluids become therefore a vast experimental territory which unifies the phenomenology of shape dynamics from the macro-microscopic size to the mezzo-cosmos specific to human dimensional.

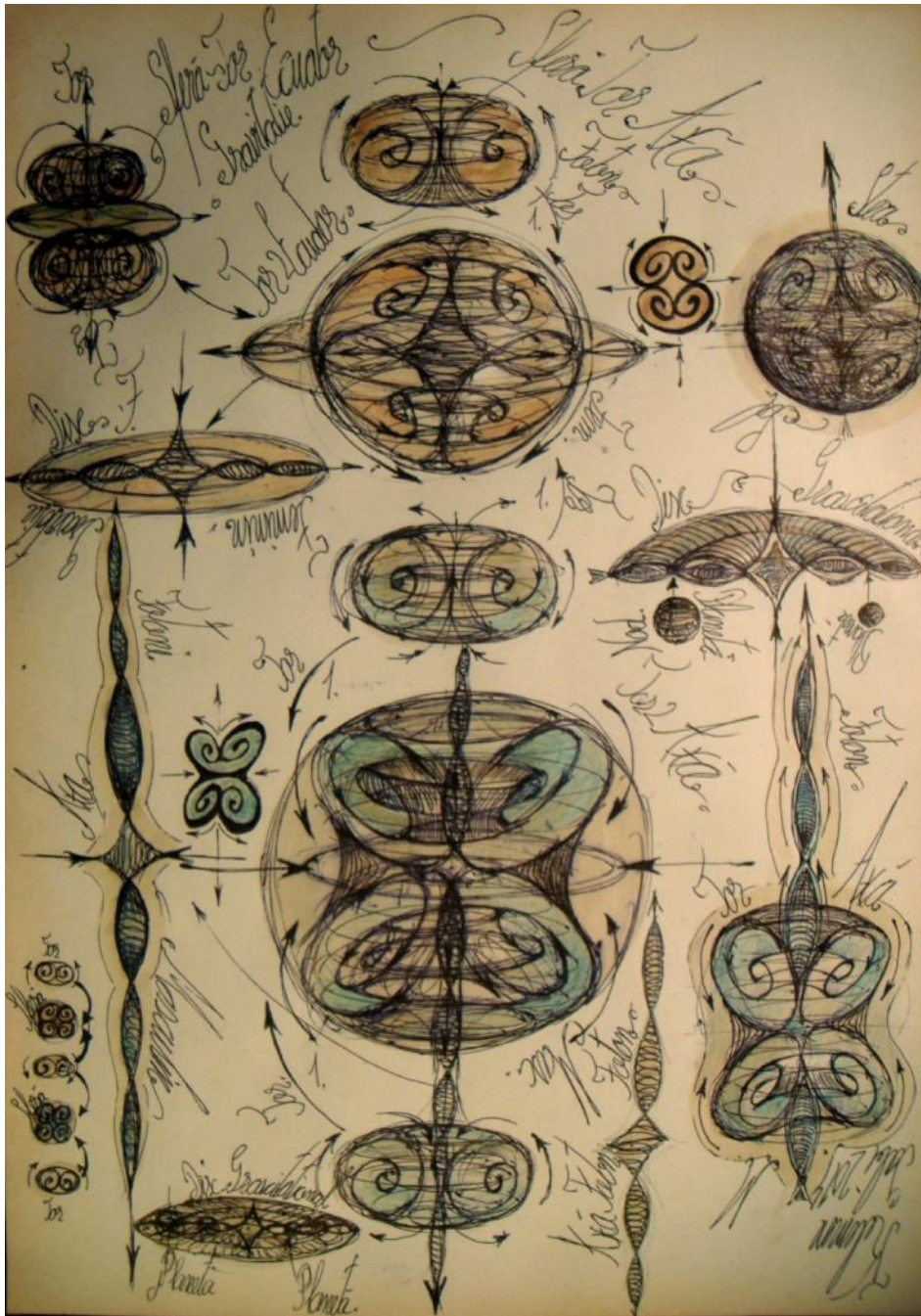


Figure 2: Considering each rotating globular plasma formation called star or planetoid, it consists, as we have seen, of two deformed toroids with a calotte aspect.

In orange, up top, the two toroids appear, connected equatorially, developing the gravitational lens, with plasma currents movement from the equator towards the poles. At the bottom, the situation is reversed: the direction of plasma currents in the two calottes (marked in green) is from the poles towards the equator, creating an implosive type, reverse gravity. Thus we have:

1. Gravity disc
2. Anti-gravity axis.[3] Source: Gabriel Kelemen 2014

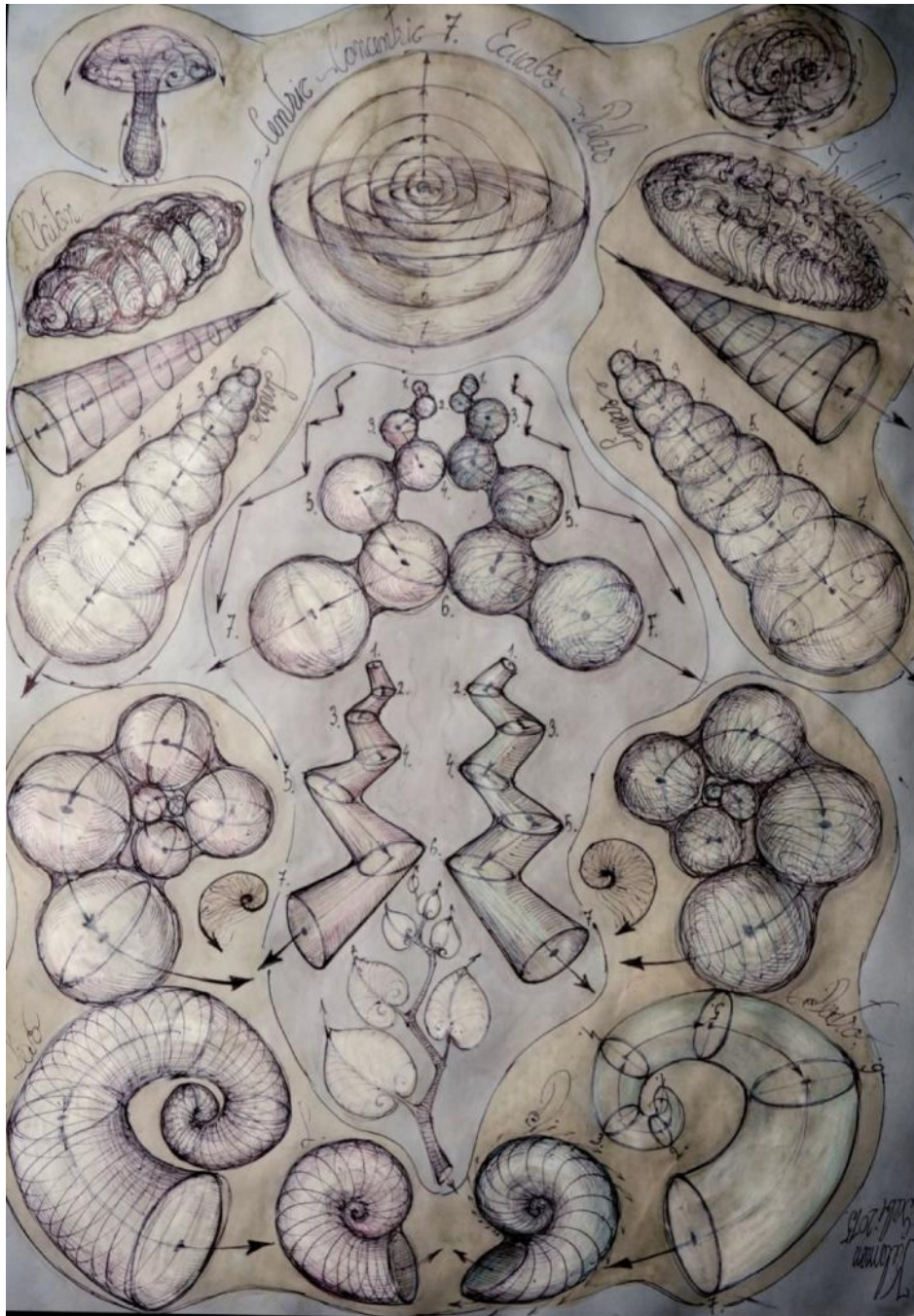


Figure 3: Picture in which manifestations of the sphere-spiral principle are exemplified. From the top we have concentric spheres, in the left and right they are unfolded eccentrically from big to small, forming increasing rows of cone appearance. In the central part the alternating ascending principle appears, of meander type, while at the bottom, left and right, levo and dextrorotatory spiral manifestation.

At each of these ways, similar biological elements are associated:

- One of centric type
- The second of eccentric linear type
- The third of alternate eccentric type (meander)
- The fourth of spiral type with the two antipodes (LD).Source: Gabriel Kelemen 2015

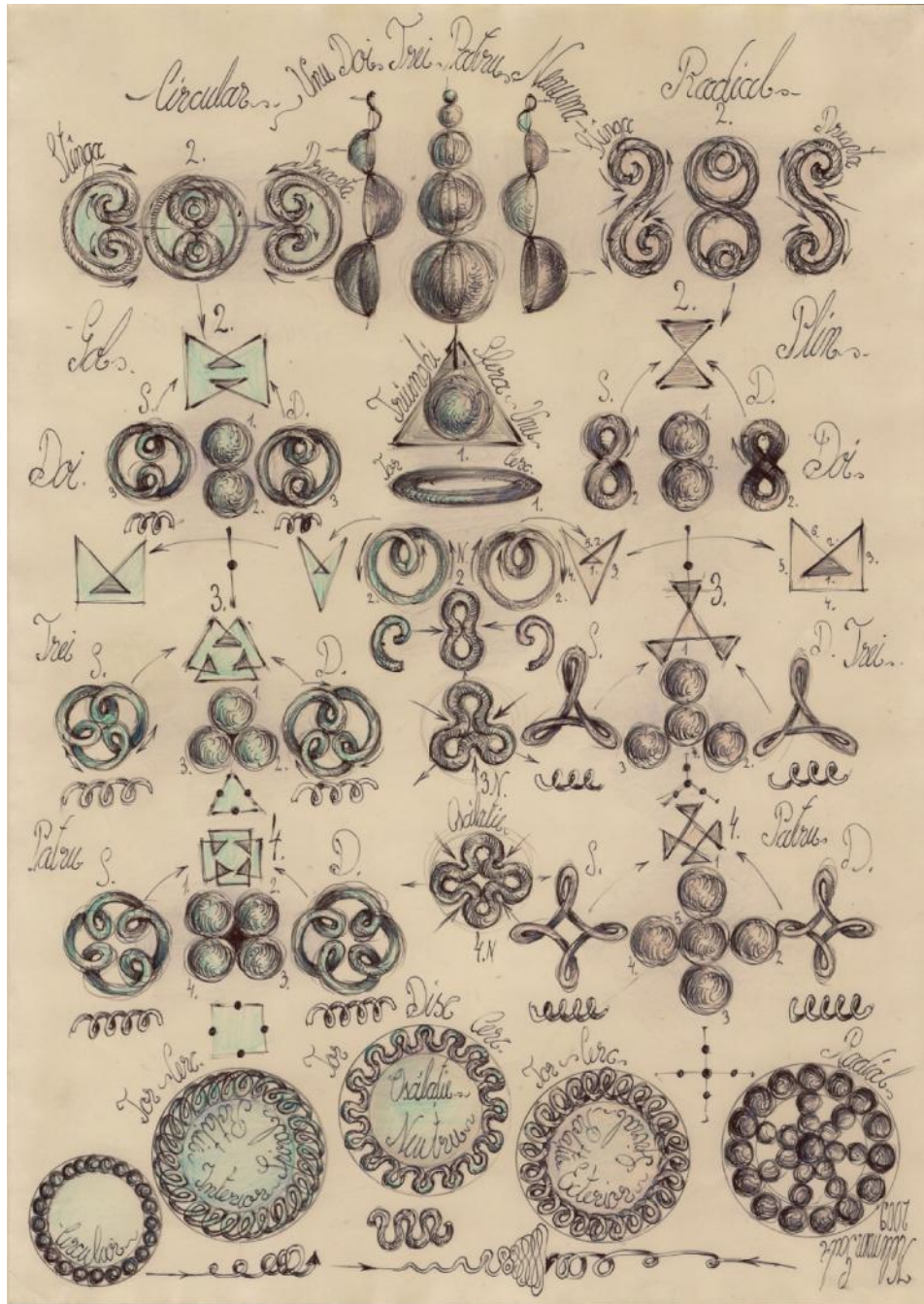


Figure 4. The relationship between the sphere and the torus sets the development of an alphabet operating with consecutive algorithms from 1 to n, which are illustrated hierarchically until the 5th degree. In the center of the image, denoted by 1, there is a sphere which, on the left and right side, respectively, develops through growths, illustrating the successive elements from 1 to 5. The sphere grows with the same diameter on the left are convex, while those on the right are concave. The metamorphoses of the primordial torus from the centrally located 1 develop to the left forming levo- and dextrorotary inward loops from 1 to 5, while on the right they develop similarly, except that the loops are outward. Above them, the points of contact of two tangent spheres are shown in a schematic geometrical manner with black dots to help identify similarities. Source: Gabriel Kelemen 2009



Figure 5: Axial diagram made by successive compact growths, which treats from simple to complex the levo- and dextrorotatory chirality, each string being marked in a distinct colour. Thus, the first string is formed by a chain of tangent spheres, the second by two, etc. The following geometric sequence is obtained: point, segment, triangle, square, pentagon, hexagon. On the left and right columns growth modes are exemplified by simultaneous additions of spheres which continue the string development
 Source: Gabriel Kelemen 2014

REFERENCES

- [1] Jacques Monod, *Lehasard et la nécessité*, Editions du Seuil, (1970).
- [2] Flavius Dan Surianu, *DespreForteleNaturii siRadiatiaElectromagnetica*, Editura de Vest Timisoara 2014.
- [3] Gabriel Kelemen, *The Universality of the Sphere-Vortex Archetype*, Edit. ArtPress Timisoara 2015.