

Where the Shape of the Egg Comes From?

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Abstract

The shape of the egg is proposed to be the consequence of synergistic actions from the transmission of forces derived from instinctual motions and energy matter conversions that act to obstruct the grounding and neutralization of energy emissions by limiting in size the physical domain of self witness. A philosophy and theory associating, atemporal in nature, form and emergence is evolved from logical considerations for the construction of a mathematical/geometrical model of the egg that is generated from a template construed from simple geometrical considerations. The acquisition of instinct as the setting/identity associated propagation of motion to avoid closed space is discussed in relation to cause and effect, the universal attribute of contingency and a special verses general case to describe the world. Analogy is made between the proposed natural transmission of the transparent/conceptual egg form, expressed physically at important nodes in the course of biological propagation to the philosophy of self- belonging of Bertrand Russell.

Key words: mind and matter, 'the concept, mathematical model of the egg, location place and identity; negative selection; contingency and cause and effect, language and instinct, form and space, Russell's Paradox

The origin of the shape of the egg has been an enigma, not only in modern times, but over the course of human scholastic endeavors; an egg figure was created only by overlaying many geometrical shapes (Figure 3). Schauberger (Alexandersson, 1982) in the 1900s elaborated a philosophy relating the processes of nature to an openness he proposed to be prerequisite, ubiquitous in descriptions of nature; he demonstrated a planar rendition of the egg shape from sections of the (open) hyperbolic cone (Figure 4). Accomplishment, limited to the physical approximation of the egg by planar assembly from the distant perspective of the observer (Darling, 2004, Koeller, 2000), restricted to organizations created by eye, i.e. artwork, is frustrated to envision form that arises from within natural emergences. In lines of scientific investigation the compatibility of physical observation with imagined and/or induced theory have taken form to achieve substance that rely on a forgery of nature based on a free floating mathematics and geometry that excuses the existence of gravity at its' ideal limit. Seeking to conquer or control human suffering, frustration with the elements, accomplishment of real

definition that includes the individual in a oneness with nature has been sublimated to the details of observation of the external, procrastinated simultaneously and indefinitely with hope that a unified view would evolve from contemporary efforts. An eccentric view of the world has ensued instead from endeavors that straddle a road bordered on one shoulder by general considerations for a general case and on the other by a special case that better compliments tests and observation; at the root of the path of endeavors is a non-existent null hypothesis upon which is all tested. It is the hope of this presentation to demonstrate a universal special case of form.

Discussion

Modern determinations of the workings of nature, more reflexive that reflective, based on cause and effect, motion, energy and line of sight for explanation create more mystery than understanding of its' paradoxes. If nature is viewed from a perspective in which complexity is perspective dependent within the ubiquitously existing situation of contingency, it becomes apparent that study restricted to cause and effect limits the intellect for resources to provide explanation. The complexity of systems is stringently dependent on interpretation-the

special case that involves universal factors, i.e. form or shape, that effect order to all cases produces a more simple and workable interpretation. In contrast to generalized arguments, form rather than numbers and volumetric amounts are accounted to construe elemental divisions that in general cases possess as building blocks energy potentials that are distributed across boundaries that exceed in number those possible from unaided observation with imagination that does not involve out-of-this world creations. For example, ideas of membrane potentials in the biological sciences that drive processes, or electrostatic interactions between intra-atomic elements are able to produce a general view with a generally inferred divide for explanation, but falter when temporality, beginnings, ends, and emergence by proximal inheritance is considered; inheritance as a continuity from one system state to the next, from entity to entity, the continuity of the self, suffers for explanation but to render it as a special case possessed to all elements. The existence of the normal distribution and null hypothesis, i.e. that at least two situations exist that are identical is eliminated from considerations. The state in which temperature is evenly distributed is attributed strictly to observation that actively seeks analogy from theory, the imagined normal state should

have no role in descriptive understanding from which
quantitative assessment ensues.

1 Philosophical considerations

A graphical form intended to elucidate a connection of matter and energy based on the relation $E=mc^2$ (E =energy, m =mass, c =velocity of light), of energy to matter given in the special theory of relativity, though with c as a variable, shows a close three dimensional likeness to ordinary eggs (Figures 1, 2) (Kirsh, 2010, 2011). It is proposed that space can be rendered analytically this way to illustrate a constraint imposed by the necessity of familiarity between elements of processes for them to occur, of energy and matter to enable their mutual interaction. In a perspective that includes the imagined universe as a whole, emergence as a physical-temporal descent from container to contents, possessing the element of time, might be visualized to entail the successive confinement of witness perspective to the places of the generation of structure such that a sound description of all processes can be inferred to entail a conceptual reassignment of perspective from a view based on general natural law operating in ubiquitously open space, forces responsible for processes within a whole universe, to that of the inherited local spaces of the emerging entity: rather than forces of positive selection for survival, forces of negative selection against paths towards closed spaces are

envisioned to conduct an orchestration at the local space of the entity, internally and externally at all levels, and to possess a form/shape-of-space modulation of the characteristics of propagated spaces: in broad perspective the containment of energy to mass, the reverse of a nuclear reaction, results in a reduction of the range of self-witness of the becoming entity whose existence poses an obstruction to its' non-existence or closure of its' space, loss of energy and volume. Time redefined to possess arbitrary value having no coherent conceptual meaning, appears to possess a definable simultaneity only as a consequence of the relatively slow rates of change within an evolved common familiarity of elements.

All elements in the egg representation are derived from values of distance in which a common time is shared between system states that have gained definition strictly from the atemporal attribution of meaning as it is associated with becoming trajectory contained to associating witnesses. The familiarity of energy and matter is necessarily physical, i.e. tangible, such that the world as a whole, experienced by the senses, becomes defined by a compatibility of physical values of distance in order to form 3-D structures. A distance attributed to naturally occurring change in the velocity of light, as matter is rendered from energy, necessarily shares

parametric familiarity with distances of the material world to render form. Figure 2 demonstrates an egg shape from independent angular parameters of periods added from π attains form when it is associated with a template based on the sphere $R=(2\Delta C)^2$ in motion along line $=2\Delta c+\Delta v$ (Figure 1); $\Delta\text{Velocity}(\text{matter}) = r\sin\theta$, $\Delta\text{Velocity}(\text{light})=r\cos\theta$. The egg shape generated this way is inferred to be a special and only case of nature; the general case of the free floating, closed, sphere is inferred not to exist; mathematical elucidations relating a simultaneity of time to locations in relative motion is also inferred to be invalid by the same argument, they refer from a perspective with respect to location as a value that yet is capable of accepting value to its' meaning and is not inflexible. For instance to define the topics, identity A or identity B requires the addition of value to location A or location B to designate a history. It must be assumed that all perspectives are in relative motion and that a path of emission over time interval t , t_1-t_2 , can intersect at emerging positions t_1-t_2 only if t_2 is designated to be qualitative or value independent in nature-i.e. to refer only to identity that is fixed within emerging elements and has continued at t_1 , t_2 during the interval, though physical parameters necessarily have changed; t cannot refer to the parameters of physical location

as is implied with the designation velocity of light during its' travel within the period t_1-t_2 . Interestingly, this model also entails that light can traverse over t_1-t_2 , from identity A to identity B but not mathematical coordinate location A to B if A and B are emerging or in motion, as can be argued to be the case for all entities: corollary reflection implies, if it is naturally assumed that neither identities A or B can exist at either two places at once or entail more than one identity to either agent A or B, that the mutual existence of both A and B is required for observations; light received at identity=B is contingent on the existence of and identity=A and cannot be inferred to have been emitted sometime in the past during the existence of A, but to be concurrent and reflective of the existent identity=A whose actual coordinate location relative to B cannot have coherent meaning simultaneously with the existence of identity=A or B during the act of witness. For valid scientific perspective, the world is construed to be a place of emerging identities in lieu of a place of emerging parametric locations.

From the perspective of this description, in order to make assumption, for instance, that light received to an observer on earth from space describes events of the distant past, it would have to be assumed that the net identity of all spaces

associated with witness, i.e. vast stretches of the universe, are shifting in such a way as to be, coordinate wise, fixed in position and philosophically absent of emergence,-i.e. in a randomly distributed null state that would be equal to that of all states. If a flashlight shinning at an object at a given distance is turned off, witness communication ceases at that instant, the light from the flashlight does not continue its' journey to the illuminated object but instead does not exist at the instant energy emission stops. In viewing processes the observer must consider himself as a participant and atemporal in the sense that even though witness can be inferred to occur to events infinite in size relative to the observer, light energy received from space has plowed its way vast distances from its source and in an instantaneous manner is dependent on the existence of the source and temporally concurrent emission from it. It may be further inferred that emissions of energy can produce progeny at coordinate points intermediate between witnesses, space can be viewed to be filled with identities and communications this way, the postulate of an absolute vacuum, or an ether that fills space and is required to conduct light is unnecessary; especially if it is logically assumed that a lack of reception logically precludes testimony to the existence of the witness event. It is from the senses that the world must be

constructed if constructs are to be effected that are relevant to witnesses. The existence of the described paradox and its' proposed solution entail a universality that penetrates not only to the witness of the external, but to the internal means of functioning within entities, to be homogeneous throughout. The brain, then has to be a space that, as all processes endures time, but has the same atemporal and special spatial design described here to all of space; thus it is a place or space of identities that bear contiguous associations by proximal inheritance, each of which cannot be described philosophically with either fixed or dynamic coordinate locations. In the construction of models that give light a time traveling ability, the mind falsely instinctively attaches an element of time to distance because it studies the physical dimensions of shape upon the expenditure of energy involved with applications relevant to life processes and activities, actual events are postulated to involve only atemporal form, are qualitative in nature, and can be described strictly conceptually visually with respect to the penetration or invasion of spaces by one another. With the imagination, light can be viewed as a material agent that invades spaces upon witness, perception of it entails physiological processes, though at a miniature level, of intercourses of spaces within a context of energy-matter

conversion that is entailed to effect physiological processes associated with the sensual, perceptual and cognitive. The perception of distant light from stars can be viewed as the invasion of the very small spaces of the perceiving entity by vast volumes of light traversing and filling space that is effected by the vast amounts of energy entailed to stellar transmissions.

2 The Physical Egg

The actual shape of eggs laid by birds is postulated to occur from a synergy of forces of gravity, muscular expulsion, and like motion initiated forces associated with changing conformations of egg constituents, upon malleable, until laid, eggs. A precursor to the full egg is viewed to acquire a new physically heterogeneous organization from the motions accrued during the laying process. The blunt end of the egg is postulated, as in the description of the graphical egg above, to be the result of fast (biochemical) energies whose magnitudes are at times oriented in an opposite vector direction to the directions of physical motions. Thus while the egg is both being pushed muscularly and pulled down by gravity, motion imparted causes a rearrangement to a preexisting inherited arrangement of internal elements; the yolk etc. that are is postulated to undergo a push, turn and/or twist to effects a rearrangement of

internal mass that arises from fast, in comparison to the velocities of muscular transmission, metabolic energies and molecular rearrangements, to effect from the assortment of temporally concurrent forces an array of distances in which the blunt end arises from forces that leans against movements to gravity and muscular contraction, to arrive with blunt and pointed ends.

A net linear path of motion of the entire egg is described in which the vector sign of different components may change during the laying process: offspring, previously contained and moving together with the parent suffer a seeding motion imparted by instinct that renders parametric and descriptive features of offspring to be different from that of parent. The cryptically acquired shape of the egg is mostly likely the consequence of concurrently occurring physical action and reaction within a heterogeneous assortment of egg shaped spaces and the consequences of those actions upon more complex, less prominent, macromolecular but likewise ordered inherited structure. Consider the case of the spinning hard boiled egg with a metabolically inactive yolk verses that of a non-hard boiled egg (Darling, 2004).

As well as an amazing strength of eggs to support large weights regardless of the fragile property of their shells, a

paradox of raw verses hard boiled egg (Darling, 2004) can be observed upon motion introduced. Induced spinning by hand of a hardboiled egg resting on a flat surface causes the egg to raise its' center of gravity to lift in a spiral like manner resembling the fast pirouette achieved in figure skating by raising the arms above the head. In converse a raw egg when spun does not demonstrate this behavior. On investigation it was conjectured that friction between the egg and table surface produces a gyroscopic effect which causes some of the kinetic energy of the spin to be translated into potential energy that is demonstrated as the lifting of the egg in a spiraling motion. Different interpretation here attaches an anti-lifting property to the fluidity of the yolk of the raw egg within the priorly assembled shell that has already undergone an expenditure of energy and a physical rearrangement to produce the egg shape; it maybe that only the spinning un-boiled yolk and shell combined are stable with the property not to lift to oppose gravity as evidence that the pre-delivered egg, upon delivery, acquires potential forces that act against gravity and together produce concurrently the shape of the shell along with rearrangements required for subsequent organismal development. After laying energies opposite to gravity and initiated by motion (i.e. induced spinning) responsible for the formation of the egg

shaped shell, though with the mass laden blunt end relatively fixed in position favoring gravity, possessing a transparent energy acquired during ovulation and laying, able to do work, may still be witnessed if both the yolk and shell are present.

Despite postulated motions internal to the egg, twisting in orientation, forces opposite to gravity, the resulting shape is the product of a net displacement, linear in nature, it can be postulated to render the greatest possible lifetime with respect to volume: the straight line possess the greatest amount of open and hence can be speculated to be the choice of nature to effect the greatest lifetime to individuals occurred during the maintenance and propagation of identity assumed to species. The human ovum, or that of other species might be inferred to also possess the same mathematically renderable egg shape in the absence of the shell. It might be supposed that during delivery of the egg a transparent line with a torque, rather than a gravitational center, accompanies processes. A similar example of internally originating change opposing the application of impulse has been observed upon the contraction of chromatin in response to an externally applied pulling or stretching force (Fulcronis, 2006). If evolution is considered to involve the restriction of witness capability to create coordinate-less entity identity, true perspective established

from a natural limiting occurred to the range of creation energies, instinct might be described to arise from the invasion of physical spaces with disparate tempos of distance modulated functioning that is entailed to emerged spaces; as described above is entangled with the quality of unique identity that is acquired from a temporal and physical contiguity that is inherit to the universal, contiguity, and parameter possessing quality of 'path'; rather than coordinate parameters, path entails inherited structure as identity; DNA might be described as an energetic piece of physical path, the product of the conversion of a path of energy to matter during its' emergence, is a special case for memory in which a general case, entailing the absence of motion, can be inferred not to exist if, as discussed, location in the absence of motion entailing identity is argued not to exist.

It is thus speculated that instinct serving the purpose of survival, inclination to reject the closed path ensuing from closing path, is but a passenger along with form that is transmitted along with the products of motion, path as cause and effect, from motions inherited in a process of death to birth. The mysteries of observed instinctual behavior, seemingly attributable specifically, in an unexplainable manner to the natures of specific species, might be better understood

as an appearing acquired knowing that is associated with whole structure and form, internal structure and form, has no establishable direct correspondence with genetic traits for definition, and is acquired and accumulated generation to generation from the mating of disparate tempo's of the operation of the spaces of structures. Cognition, a growing catalogue of learned and transmitted concepts, contained to a single human mind might be viewed alternately to be possessed in less temporal diversity throughout other parts of nature. The possibilities for the continued path of emergence of a rock, a conceptual constitution that is birthed from difference states, e.g. of temperature, of pressure, entail the changes it undergoes from the space it occupies from its past situation towards its' future situation and might be very simple to have escaped reflection (excuse the pun); it bears an almost imperceptibly slow moving tempo in relation to the path originating and ensuing memory capabilities, potential conceptual interactions, concentrated densely, infinitely in comparison, within the confines of the physical and mental spaces of human beings. The simple instinct of a rock to fall in gravity, or to shatter with pressure, passenger the path of its emergence; it behaves certain ways in response to the invasion of its spaces, The product of simultaneous motion and

separation from the parent might be seen to give rise to instinct, despite its' complex appearance; potentially both cause and effect of the acquisition of identity, place and need (to avoid the closed) instinct might be described as motion seeded, identity specific, continuous reordering work applied to a necessarily familiarity bearing environment that proceeds from a reordering occurred during birth, to effect birth, (of the egg as described); a special case constructed of contingency, instinct is propagated and functions at all levels from the cell nucleus to the whole organism. Greater dissection to understand instinct from observed components of structure and function, to make a universal catalogue appear meaninglessly based upon an apparition that the components of behavior are universally divisible and orderable to a state of description in the absence of the behaving element; eggs cannot be discussed without chickens, it is likewise meaningless to order distinct genetic elements assigned function in the absence of identity/place, e.g. in the absence of their containing elements and their associated environments. Instinct involves the reimpacting of energy of motion acquired from metabolic energy, energy from food ingestion, in a mating

to familiarity possessing acquired structure and identity as it proceeds from the same; in the absence of a place it has no more meaning than might a set of static coordinates that, as discussed cannot be realized to evolve universal concepts, include instantaneous meaning in witness associations and preclude a knowing of absolute location: contingency is the universal cause that effects the world; a cause and effect condition for life itself is resolvable only with a granted existence of energy, hence study of the potential across a divide cannot provide a conceptual understanding of the world, the seeking of an impossible null condition that is associated with the redirection towards construction via energy conversion to matter. It might be surmised that the contingency responsible for life is not upon life but upon a condition or situation of renewed motion and separation; processes are contingent upon a reiterated place of relatively slow change and familiarity between elements from which the locks and key of the world, of biological structure, of all action and communication are effected.

Structure and function of the genetic material and associated processes, describable here as basically egg shaped are accountable as processes of egg shaped spaces that attain real physical existence within the interval of transmission

between parent and offspring where nature demands the greatest efficiency and conservation within less materially realized, transparent **form** possessed to spaces. Process dynamics, in order to employ a special case to describe the universe are restricted to spaces defined to possess a shared and atemporal familiarity of agents, to shared form.

3 The Space Filling Concept

In the language of Bertrand Russell, the shape of the egg might be called both universal and not universal as it is not physically universal, but conceptually universal as a form, as distance can be both witnessible and not witnessible, but universally present. Russells' Paradox (Irvine, 2010) refers to paradox arising from self referral, the set of all things that do not belong to themselves, both belongs and does not belong to itself. Physical things belong to the set of physical things that is and is not a physical thing. Russell conjectured that form existed that was both physical and conceptual as the egg form discussed. Russell also introduced the law of the excluded middle-for instance the statement that all round eggs are brown is true is ambiguous if there are no round eggs. In the theory of definite description, Russell denoted that some symbols are incomplete and take on meaning only within appropriate context, have no meaning alone. As in the above

discussion, processes of inheritance by proximity define emergence that can be divided either finitely or infinitely, structure wise or energy-differential wise-respectively depending on context related to prior existence of structure- in infinite division space produce still the infinite/open, and on finite division produce the closed. If a universal instinct exists to avoid the closed, then the conceptual life of individuals is trapped in a narrow between a(n) (a)countable finite and un(a)countable infinite-a situation that non-the-less must exist to all spaces whether inside the cell, in outer space or within the atom. Correspondences referring to the infinite or finite, referring to size, cannot have meaning if the element of contiguity responsible for identity has no attributable aspect of physical dimension. The expression infinite time, or finite time, if referred to depend on the attribute of identity, as argued, has no dimension; hence time cannot be given the quality of dimension. It is then value applied to dimensionless form that produces dimension, the dimensions of an egg, the parameters of motion in acts of instinct, the meaning of words in a sentence. The dimensions of space cannot bear components that propagate both in three dimensions, as light, and two dimensions as matter, the only conceivable bridge between

energy/light and matter is distance that might be entailed only
with the application of value to form.

Conclusion

In biological concept identity is commonly perceived to come from the egg though it cannot be excluded, in converse, that identity is not also universally the birthing entity of the possession of either distance, middle meaning or the egg shape.

References

Alexandersson, Olof, Living water: Viktor Schauberger and the secrets of natural energy, ISBN0855001127, Turnstone Press (Wellingborough, Northamptonshire), 1982.

Darling, David, J., The universal book of mathematics: from Abracadabra to Zeno's paradoxes, John Wiley and Sons, pps.102-103, 2004.

Fulconis, R. Mechanism of Rec-A Mediated Homologous Recombination Revisited By Single Molecule Nanomanipulation The EMBO Journal 25:4293-4304 September 2006.

Irvine, A. D., Bertrand Russell in The Stanford Encyclopedia of Philosophy, substantive revision March 2010 available online <http://plato.stanford.edu/entries/russell/>

Kirsh, Marvin, E. Uniqueness, Self Belonging and Intercourse in Nature, ISBN 9783838367378 Lambert Academic Publishing, Germany, 2010.

Kirsh, Marvin, E., Evolution at the Surface of Euclid: Elements of a Long Infinity in Motion Along Space, International Journal of Arts and Science 4(2):71-96 2011.

Koeller, Jurgen, Mathematische Basteleien 2000. <http://www.mathematische-basteleien.de/eggcurves.htm#References>.

Figure 1 An oval template for the generation of the egg from a simple geometry of motion of fast and slow radiation The egg (Figure 2) is evolved from a linear motion (v) from which light (c) is projected simultaneously in the x-y and x-z planes.

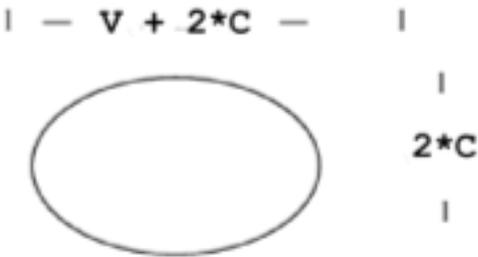


Figure 2 Three Dimensional Plot of the Shape of Space is Egg Shaped.

$$E/m = \Delta V \text{ Slow Velocity}^2/2 + \Delta C \text{ Light Velocity}^2$$

V=velocity of motion, C =Velocity of light (is applied as a variable)

$$R(a) \sin \theta = \Delta \text{ Slow Velocity}$$

$$R(a) \cos \theta = \Delta \text{ Velocity of light}$$

$$\text{Radius/Radius}(a) = \left[\left[(\sin \theta)^2 + (2 \cos \theta)^2 \right] + (2 \cos \phi)^2 \right]^{1/2}$$

$$\pi < \theta, \phi < \pi + 10^{17}$$

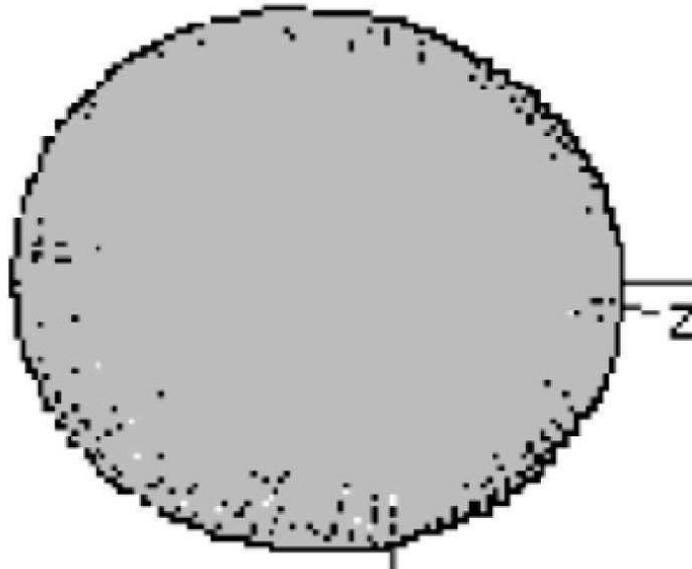


Figure 3 Egg shape created from polygons. From (<http://www.energeticforum.com/renewable-energy/5259-egg-shape-natural.html>).

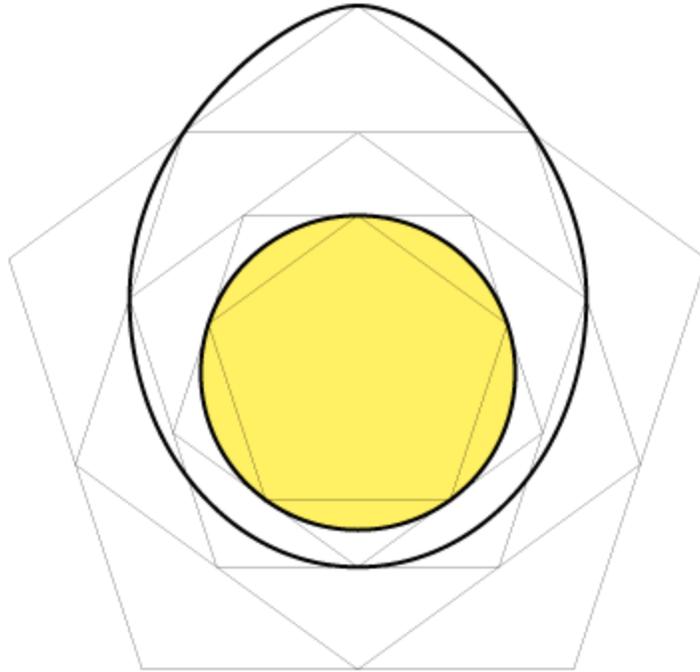


Figure 4 Schauberger's philosophy of open nature. An egg shape is demonstrated from a cross section of the hyperbolic cone (Weisstein, Eric W. "Gabriel's Horn." From *MathWorld*--A Wolfram Web Resource. <http://mathworld.wolfram.com/GabrielsHorn.html>)

$$\begin{aligned} X(u, v) &= u & u >= 1 \\ Y(u, v) &= \cos(v) / u & u = 1-10, v = 1-10 \\ Z(u, v) &= \sin(v) / u & u = 1-10, v = 1-10 \end{aligned}$$

