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Can Extended Human Genome Explain Personality Structures?

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Abstract

We propose a novel paradigmatic approach to sentient reality as a whole, with specific application to Information-guided DNA dynamics, leading to a triadic genomic configuration, which accommodates besides the parental hereditary legacy, possibly externally originating highly complex guiding matrix able to control the specific way the protein-synthesis is performed. Such informational input transcending the Zero-point energy interdimensional barrier, couples to the zygote's quantum-governed energetic configuration by way of resonant bands of subtle energy superposition effects at the instance of fertilization, triggered by a Zinc-spark related bio-photon bridge. Thus, unique secondary torsion parameters in the DNA strands determine the way the basic protein-generating template is read, supplying the new entity's psycho-cognitive particularities along purposeful developmental vectors.

Keywords: subquantum, subtle energy, DNA, Zinc spark, genome

Poate genomul uman extins să explice structurile personalității?

Rezumat

Propunem o nouă abordare paradigmatică a realității simțitoare în ansamblu, cu aplicație specifică dinamicii ADN-ului ghidat de informații, care să conducă la o configurație genomică triadică, care se acomodează pe lângă moștenirea ereditară parentală, eventual provenind din exterior, matrice de ghidare extrem de complexă capabilă să controleze specificul specific. modul în care se realizează sinteza proteinelor. O astfel de intrare informațională care transcende bariera interdimensională a energiei din punctul zero, se cuplează la configurația energetică guvernată cuantică a zigotului prin intermediul benzilor rezonante de efecte subtile de suprapunere a energiei la momentul fertilizării, declanșate de o punte bio-fotonică legată de scânteii de zinc. Astfel, parametrii secundari unici de torsiune din catenele ADN determină modul în care este citit șablonul de bază generator de proteine, furnizând particularitățile psiho-cognitive ale noii entități de-a lungul vectorilor de dezvoltare intenționați.

Cuvinte cheie: subcuantic, energie subtilă, ADN, scânteie de zinc, genom

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Introduction

Lately, an increasing body of interdisciplinary data is piling up around a still controversial and poorly understood aspects of the complex human personality, rising more questions than answers. The mechanism of obvious superpositions between genetic and epigenetic modulators that results in the high-level complexity maps able to describe particular personality tendencies, often difficult to be coherently linked to the parental genetic heritage and even to later epigenetic modelling factors found in the subject's environmental and social conditioning factors are still elusive for science. Moreover, modern genetics have no satisfactory explanatory suggestions (Chalmers, 2006) regarding quite contradicting behavioral variables met in almost same age brothers and sister, even in twins. There is an overwhelming database attesting such observations.

Starting our theoretical exploration to find an acceptable hypothesis that might cast more light on this highly challenging evidence, we screened a wide amount of interdisciplinary advancement in sciences, and we believe to have identified a credible correlation also to be traced between some appearingly uncorrelated findings. Let's first address these starting domains of our research, strongly anchored in scientific reports from the domain of published biochemistry, tissue biology and genetics, and show the possible link we think to have found between them by applying a novel hyperdimensional, sub-quantum inspired time-symmetric concept (Donald & Martin, 1976; Biermann, 2008) that we defended in many past publications and international lectures (Boyd & Klein, 2007; Boyd, n.d.; Klein, 2018).

Recent experimentally proved premises

Mainstream genetics addressed hitherto the well-known internal structure of the DNA double helix, based on its parental genomic heritage. The topography and biochemical properties of the base pairs binding the strands of the DNA macromolecule seemed to supply all the required information about its genomes' parametric protein-building potential, according to the specificity of the zygote's early chromatin setup, totally dependent on the random sperm cell's genetical constitution and its acrosomal impact on the female oocyte.

Secondary layer of information – DNA torsion pattern

However, recent research in genetics succeeded to put in evidence a second layer of genetic information on the top of the classical genetic code (Ramos & Laederach, 2014). Scientists from the Leiden University proved that the genetic information in the DNA is able to modulate the DNA mechanics, too (<https://www.universiteitleiden.nl/en/news/2016/06/second-layer-of-information-in-dna-confirmed>). The way the classical genetic code is performed by specific reading of the coupled base pairs in the helix, and consequently which proteins are made, proved to be determined by the second layer of information, namely the topographic parameters of the folding process observed in the DNA strands themselves into nucleosomes (Eslami-Mossallam, 2016). It has been suggested, that this fundamental second DNA structural parameter is originating at the ZPE (Zero-point energy) level as primary guiding structures for the early embryologic development and its consequences, strongly suggestive of an unexpected modulator that impacts the parental heritage from outside. This is performed by a different packing and accessibility of the DNA, and leads to a different frequency of protein production. Could it be hypothesized that such genetic modulators could be also introducing into the process some new personality traits different from the ones originating in the parental genetic supply? The “letters” constituent of the parental codes are used

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by this folding process to complete and determinate the final characteristic pattern of the whole genome. This hidden informatic layer is real and physicists are finding more and more proof for its existence.

Researchers of the Leiden University (Netherlands) confirmed the presence of this second guiding system of genetic instructions by computer simulations (Schiessel, 2017). They attributed these new mechanical cues to random biochemical alignments, a rather weak explanatory option if seen from the perspective of general genomic determinacy.

Conformist approach to genetic dynamics, models the electron clouds of nucleic acids in DNA as a chain of coupled quantum harmonic oscillators with dipole-dipole interaction between nearest neighbors resulting in a Wan der Waals type of bonding. By now, the second hidden code within the DNA recently discovered is supposed to instruct cells on how genes are controlled.

Jeremy England (2014), from Massachusetts Institute of Technology, who derived a mathematical formulation based on established physics, indicating that when a group of atoms is driven by an external source of energy, it will gradually restructure itself in order to dissipate increasingly more energy, suggesting that under certain conditions, matter inexorably acquires the key physical attribute associated with life. Or, true life in the case of zygote maturation phases leading to a new biologically active entity, might be related to self-assembled supramolecular photoactive centers working as a photoactive prebiotic kernel system. Quantum biology and biophysics showed a tremendous degree of coherence within all living systems. A specific quantum state is established for the system as a whole by quantum entanglement events. Such quantum phase transitions involving quantum entanglement components are most probably informatically controlled and guided by subquantum Information carriers (Boyd & Klein, 2007; Boyd, n.d.; Klein, 2018). Such subtle determinants are responsible for specific mechanical cues

within the DNA, which determine how preferentially DNA folds, resulting in the second layer of information charge present in the DNA. It is a highly credible assumption that beside the protein formation attributed to the classical description of the DNA, this additional guiding system related to the folding pattern of the DNA strands in the double helix is the determinant factor of psychologic make-up during the embryogenetic process, which is not protein-dependent. How someone will capitalize his/her genetically acquired morphologic traits may be determined by this superimposed set of personality-related information, most probably encoded in the folding pattern of the DNA strands.

If quantum entanglement is causally implied in the early embryonal development, it may be quantified in terms of negativity and single base von Neumann entropy, allowing to reach analytical expressions for the binding energy of the coupled chaining terms of entanglement, shading more light on the correlation energy present in the system. According to Stamatoyannopoulos from Washington University (<https://www.washington.edu/news/2013/12/12/scientists-discover-double-meaning-in-genetic-code/>), the genomes use a genetic code to write two separate languages. He concludes that our basic assumption about reading the human genome missed half of the picture (Stergachis et al., 2013). Some of the codons used by the genetic code can have two meanings - one related to proteins, the other to gene control. The term assigned to codons from this perspective is "duons", which make the DNA an incredibly powerful information storage system, which nature has fully exploited in unexpected ways.

At the ZPE point, reverse entropy is induced in the primary chaotic quantum state dominating the initiation moment of fertilization. According to England's experimental findings, under aphotonic input more bonds are forming among elementary particles, inverting the entropic

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vector of the system in linear time. In an open system (as the ZPE-determined interdimensional reference frame), entropy can be kept in low value domains by dividing energy unevenly among its atoms and thus increasing the entropy of its surroundings. Reproduction is one such mechanism by which a system may dissipate an increasing amount of energy over time. And as England puts it, “*a great way of dissipating more energy is to make more copies of yourself.*” (*Quanta Magazine*, January 22, 2014). This is exactly what happens in cellular division initiated by the fertilization act.



Figure 1. Secondary coiling of DNA. *Source: <https://bigthink.com/surprising-science/2-new-ways-to-find-aliens-according-to-a-nobel-prize-winner>*

A self-replicated microstructure has been supported by the Harvard University team's simulation experiments, too ([https://molbio.mgh.harvard.edu/szostakweb/publications/Szostak_pdfs/Schrum et al IACS 2009.pdf](https://molbio.mgh.harvard.edu/szostakweb/publications/Szostak_pdfs/Schrum_et_al_IACS_2009.pdf)). Other research protocols led to relating self-assembling photoactive systems to quantum entanglement phenomena, which are, as we suggest, subquantum guided information bearing effects, originating in higher control systems - implicated orders – (Bohm, 1993) from nonlocal domains behind the ZPE transductor instance. Tamulis and Grigalavicus (2010) confirm this assumption, by their statement that self-assembly of molecules toward supramolecular bioorganic systems depends on the quantum mechanics laws. Zygote evolution is logically enhanced also by quantum superposition of information layers inside the DNA structure, provided external Information input is supplied from probably trans-space-time domains, by subtle energy

configurations (Srinivasan, 2007; Kronn, 2009). Of course, the warm quantum coherence is basic for DNA stability.

Further on, the photo excited (Zinc spark discussed here) electron charge transfer from one protocell to other leads to self-assembly associated with exchange of energy and information. Such assumptions led Fritz-Albert Popp (2003) to put forward the hypothesis that biophotons are emitted from a coherent electrodynamic field within the living system. This may confidently be expressed the other way around, too (Mei, 1994; Niggli, 2003; Bischof, 2005; Srinivasan, 2017). Each living cell is resonating in a coherent bio photonic energy field (a ubiquitous nonlocal field, corresponding to a nonlocal domain).

After all, the medium of our bodies is a form of liquid crystal, an ideal transmitter of communication, resonance and coherence. And DNA is itself a liquid crystal, lattice-type structure. All living structures (embryonal ones included) continuously emit a radiation of light forming a field of coherence and a holographic instantaneous communication (Gariaev, 1994; Gariaev et al., 1999).

Perturbation calculations allow gain of information in systems where the number of particles are small for statistical entropy to describe the system. Here comes into play the neguentropic input from previously organized information complexes, whatever their origination would be.

The fluctuation theorem allows for a probability that entropy may flow in a direction opposite to that dictated by the second law of thermodynamics. This is an important assessment for our hypothesis, as it confirms that living systems have an entropy lowering and information gaining vector, leading to entangled molecules governed by quantum mechanics and the general weak interaction. The entropy grows by changing the temperature-dependent diffraction patterns

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of the electromagnetic oscillators. A time reversal (retro causation) is involved in this process. Anti-neutrinos are supposed to go back in time relative to the neutron created electron and proton, with a superluminal velocity related to the weak interaction.

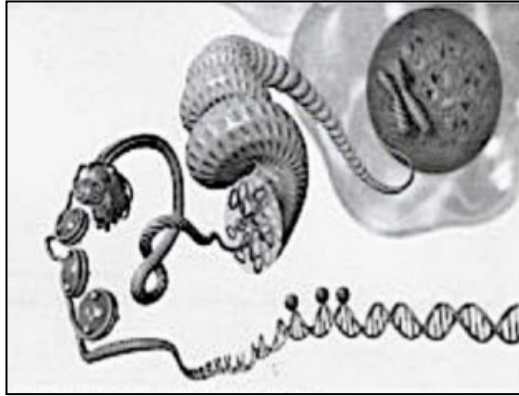


Figure 2. A second layer of genetic Information. *Source: B. Tingley, <https://mysteriousuniverse.org/author/bbtingley>*

In order to complete our reference to the DNA second layer of information hitherto unknown, which strongly suggests a corresponding second source able to determine how the parental genome will be read, and which source most probably is external to the system, we have to add that this new discovery applies also to the RNA.

The secondary structure of RNA has concrete consequences for the cell, as RNA is the genetic messenger of the DNA information charge. The analogy between the chemical structures both of the DNA strand and the RNA is reflected also in the analogy of their information storage system. Complementary bases from two RNA molecules do not couple to form a DNA-like double helix which prevent DNA from forming secondary structures. The nucleotides of RNA are free to interact within each molecule, interactions that result in folding of the RNA chain into secondary structures, able to copy their equivalents described for the DNA. These folding-based secondary structures of RNA will preserve information of second order transcribed from the DNA and transfer it as efficient modulators not only for protein synthesis. This coherent information transfer is also related to the rotational timing of fluctuations within the quadrature phase. These two-

photon coherent states enable preferential addition of the quantum noise to the quadrature not carrying information, thus improving the informational transfer.

Zinc spark at fertilization

It is known that gamete cells are electrogenetic thus able to respond to electrical signals (Tosti & Boni, 2004). During fertilization, we assist to a reciprocal activation of the two gametes. Signals from the oocyte induce dramatic changes, both morphological and functional, in the spermatozoon, while the last triggers the female gamete into metabolic activation, by a sperm-induced Ca^{+2} release. The activation signal is quickly perceived by the entire oocyte by a short increase in intra cellular Ca^{+2} . In some species, this Ca^{+2} increase is followed by a long oscillation pattern of the ion, entertained by specific receptors. The ionic event is associated with electrical changes in the oocyte plasma membrane. It is important to stress, that Ca^{+2} gradients are linked to calcium-activated K^{+} channels. A voltage modification in the oocyte is described as the “fertilization potential”, which results from an ion flux across the plasma membrane, marked by an inward ionic current. Most interesting to emphasize, that as observed in sea urchin eggs at the moment of fertilization, the first electrical response of the oocyte to the spermatozoon interaction, precedes the fertilization potential by $>10\text{s}$! (a hint to a retro causation effect?).

Anyway, most important for our study is the fact that the fertilization potential is related to the inward ionic current that results in a net increase in Ca^{2+} concentration at the fertilization. Moreover, membrane potential fluctuations are intimately linked to $\text{Cl}^{+/-}$ ions responsible for the first depolarization phase evoked by the sperm, whereas K^{+} contributes to the repolarizing phase.

Whatever the ionic trigger considered (species-dependent differing mechanisms), there is no doubt by now that a series of hyperpolarization events occur at the moment of fertilization. The

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authors (Tosti & Boni, 2004: 55) quoted above write: “*The significance of the change in resting potential at fertilization is still unclear [...]*”.

Maybe we could add something to clarify this topic.

Quoting a break through research dated back 2012 done by a team in the Northwestern University, B. Fogel (2015) publishes its finding in a paper bearing the sensation-charged title: “When Egg Meets Sperm, Sparks Fly”. The researchers using fluorescent labels for ZINC, discovered thousands of Zn-rich packages inside an egg cell. Their release at the instant of fertilization results in a phenomenon known as “ZINC SPARK”. The mammalian egg cell accumulates an unprecedented amount of 20 billion atoms of Zn during the 12 hours before ovulation (Que et al., 2015). When sperm meets the egg, much of that Zn is released in a series of bursts. Using a “molecular probe” to visualize and measure Zn sparks, Woodruff et al. (2015) published their findings in *Nature Chemistry* - showing that hot spots of fluorescence at the cell surface demonstrate how groups of Zn-rich packages are released upon fertilization resulting in the Zn Spark. The team has been able to show by fluorescence techniques some 8000 vesicles at the inner surface of the egg membrane, each one containing about one million Zn atoms. During a time-span of an hour and a half, three to five sparks of this kind have been witnessed, releasing each of them 3-5 billion Zn atoms in discrete “hot spots”. It is supposed that the Zn content in the egg has an inhibition role of its maturation until the event of fertilization. When a threshold level of Zn is reached, the egg is ready for fertilization - when the stored Zn radiates out from the cell in a breathtaking burst of light. The Zn spark is an inorganic signature of human egg activation (polyspermy block, completion of meiosis, entry into mitosis, selective recruitment and degradation of maternal mRNA, pronuclear development).

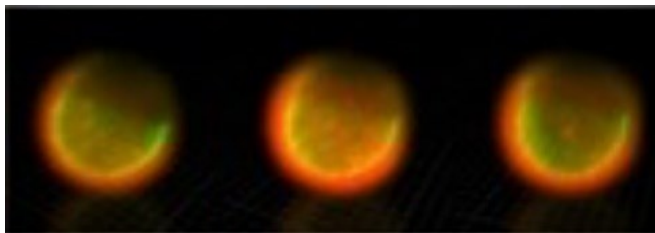


Figure 3. Zinc spark under fluorescent microscopy. *Source: <https://www.sciencefriday.com/articles/picture-of-the-week-zinc-spark/>*

The experimental confirmation of this highly significant event has been performed by F. E. Duncan et al. (2015) using selective fluorophores following artificial activation of the egg with ionomycin and its variants introduced in the egg by microinjections. Inducing thus high intracellular Ca levels, they observed a related triggering of Zn release into the extracellular space in a “prominent Zn spark”. In biological sense, the Zn spark is associated with parthenogenetic activation, being considered an extracellular marker of the fertilization event. A positive correlation has been found between the Zn spark and the Ca transients with a larger intracellular Ca wave associated with a larger amplitude of Zn exocytosis. There is a meiotic maturation dependence of the gamete’s ability to elicit a Zn spark following parthenogenetic activation. As a very early hallmark of egg activation at the fertilization event, during meiotic maturation the gamete is able to achieve a maximal Zn spark response.

Moreover, it has been demonstrated that parameters of the Zn spark are highly associated with blastocysts of increased quality. Other studies (Zhang et al., 2016) showed that the Zn spark has been mounted 2 minutes and 8 seconds after the sperm penetrated the Zona Pellucida. This finding is consistent with the first intracellular Ca transient initiated at the site of the sperm entry around 12 sec after the sperm’s interaction with the ooplasmic membrane. The Zn spark occurred as a bright fluorescent signal at the hemisphere opposite to the sperm entry site. The intracellular Ca transients triggering the Zn spark gradually decline to zero after its initiation. The Zn exocytosis contributes to zona hardening thus blocking polyspermy.

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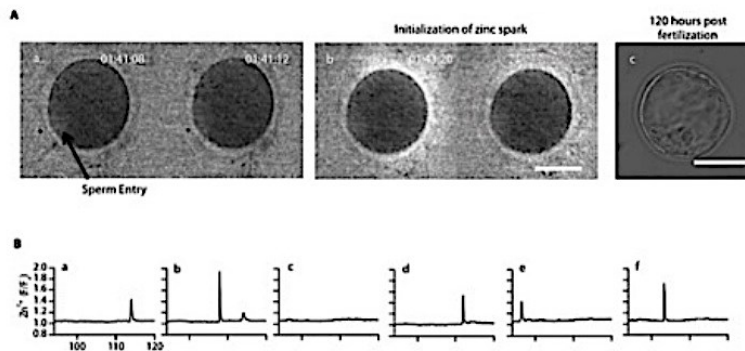


Figure 4. Zinc spark release amplitude correlations. Source: https://www.researchgate.net/figure/Larger-zinc-spark-release-during-IVF-is-associated-with-embryos-that-develop-to-the_fig1_298914031

But the Zn spark has for us another most critic significance, too. In order to understand this aspect, we must mention another research done by P. Ruegg (2018) from ETH Zurich - regarding the gene regulation using light. He quotes a new experimental protocol introduced by Romano et al. (2020) using blue light to control the transcription of DNA into RNA in single cells. Using fluorescence microscopy linked to computer screening, the researchers succeeded to count how many RNA molecules are transcribed at a given time and to decide the amount of light that each cell should receive next in order to regulate their transcription as desired. Such studies clearly point to an effective interference between photons and the genome expression. This hint is to be seen from the perspective of general signal transduction pathways, which interact with one another forming networks that allow cellular responses, transcription and translation of genes included. Molecular events of this kind control cell growth, proliferation, metabolism and differentiation.

B. E. Mossalam et al. discuss in a paper of June 2016 a computational approach to multiplexing genetic and nucleosome positioning codes. Besides mechanical properties that determine nucleosome structures, a genome-wide multiplexing of Informational pathways is proposed. The exact positions of nucleosomes play a crucial role in chromatin function. The nucleosome positioning rules can't be fully explained only by mechanical properties of the base-pair sequencing. Undeformed B-DNA can be described in two non-vanishing degrees of freedom (0.34 nm rise along and a ~36-degree twist around the axis perpendicular to the bp plates). But, to

produce a bent DNA molecule in the nucleosome, and especially to produce the secondary twisting of the DNA/RNA, that obviously conveys the superposed Informational structure, other degrees of non-zero freedom are also required. In order to accommodate the double Information storage (the parental and the superimposed one), an interdimensional non-zero degree of freedom is a prerequisite. This means that the genetic stuff has to tap into Informational domains beyond the ZPE barrier.

This requirement is up to this point missing from the classical concept, but is a sine-qua-non for a realistic and accurate description of the process under exploration. It should be mentioned here that some objections to the Zn spark as described by the aforementioned research teams have been suggested (Trasancos, 2016), claiming that the spark effect is an artefact related to the fluorescence microscopy used. We strongly doubt that such attempts to invalidate well-established reports by serious academic teams is water-proof. As we have seen, photonic irradiation of molecular structures results in a gain of magnitude in the biophotonic emission, but do not explain it.

The same argument holds true for the case of fluorescence microscopy addressing photonic discharge of Zn-containing molecules, possibly amplified but not produced by the examination procedure applied. Moreover, for setting up the interdimensional photonic bridge required for the attraction, superposition and Quantum/Subquantum phase-alignment, a minimal photonic emission at this side of the ZPE would certainly suffice. And this level of photonic discharge at the moment of the egg's fertilization is granted.

The impacting informational pattern, using its subtle energy envelopes, is triggered to pass the ZPE barrier by the photonic signal emitted by the egg's Zn spark. The real biophotonic attractor thus supplied as an interdimensional link gets entangled with the impacting subtle energy structure

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bearing an immense Informational complexity, a structure which, is charged with virtual photons able to rich and entangle (by Quantum tunneling effect) with its reception pole and thus start a morphogenetic modulation task upon the fertilized zygote from the very moment of conception. This modulation controls the setup of the second Informational layer described in the DNA torsion parameters, aligning the parental genetic heritage with the new born's development needs.

It would be reasonable to assume that the first (and most intense) Zn spark - frequently followed by secondary, less dramatic ones - has the task to accomplish the coupling of the incoming subtle-energy body to the egg's own aetheric counterpart, in order to take immediate control upon the starting early morphogenetic process, comprising first cell divisions and further cell differentiation.

Once this anchor cast, increasingly subtle Information structures will enter the embryonal structure using the already established aethereal bridge (secondary Zn spark events might relate to this process), until the personality's whole immense complexity is in place.

Theoretical consequences

The experimental evidence hereby mentioned seems to suggest a compelling need to rethink our hitherto dogmatically transferred convictions about the human genome as bearing only the parental informational heritage. In order to explore on this line, we went back to the biochemistry of the fertilization act, and found a credible link between some subtle-energy mediated Informational and externally originating informational supply that impact the fertilization process and guides early DNA patterning in the ontological process.

Potential role of subtle energies in mediating informational superpositions

Subtle energy systems (S.E.) inside and between organized Information fields and only partly subject to space/time constraints, operate as specialized mediating networks coordinating

biologically relevant vital functions. When coupled to conventional matter/energy events, behavioral patterns with semi-stable features may result.

S.E. variants have a hyperdimensional vortical nature. A basic similarity has been suggested between S.E. forms and the superstring theory (Phillips, 1999). Important to keep in mind, that electromagnetic vibrations may stimulate resonant vibration patterns in S.E. fields.

S.E. fields emerge out of the ZPE (Zero-point Energy) in order to enter transduction processes into quasi-physical variants, able to interact with classical field phenomena by energy interactions. According to W. Tiller (1993, 1999), magnetic vector potentials may bridge between the non-physical and physical domains. Very important to mention here, that photonic outbursts may couple to subtle energy spectra in selective resonant ways. This may apply to the Zn spark effect. An available etheric template, carrying implicate orders of informational essence, may couple to the zygote's EM (electromagnetic) polarization fluctuations, by a cascade-like resonant chain of harmonics, by way of S.Q. (subquantum) flux propagations. This process stands at the background of S.Q. genetic patternings, as a result of superluminal nonlinear photonic oscillation (Firstenberg et al., 2013). The embryologic transcription process runs under coherent biphotonic regulation, in time-symmetric and time conversion conditions.

C. Trajna (1991) in his “psycho-temporal wave” concept defines subjective time flow as a differential perception of the propagation velocity of psychic information signals vs. biological (neuro-transmitted) ones. Brain's Quantum activity provides the time conversion of informational stuff operating beyond time, thus extending into extrasensory information dynamics. The event-modulating properties of information presets may have at their background S.E. (subtle energy) bands and vectors, responsible for non-neural information transfers.

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In Cramer's (1986) transactional interpretation of Quantum Mechanics, besides the Quantum potential expressed in physical space/time, there is also a hidden time domain. In this domain, synchronous superposed causal vectors run in opposite directions. In other words, a physical entropic causal vector is paralleled by a coaxial Information one, which is a signal emitted by future deterministic presets of actualization, able to trigger a “probing act” that has to be issued by previous causal constellations. Between the couple of opposed informational vectors, a causal loop is formed in hidden time. The whole causal loop projects into our linear entropic timeline in null time (the “present” instant), implementing the quantum choice by the collapse of the Schrodinger function.

Most remarkably, we may conclude that reality is not epiphenomenal to a random collapse of probability waves, but the other way around: the Schrodinger collapse instance occurs at specific points according to the reality to be implemented. Hidden time dynamics occurring in information fields implement informational enfolded control upon energetic phenomena at all levels (Kurakin, 2005). A time-reversed effect of retro causation gets also conceivable. It allows a guiding of the embryogenetic process by purposeful development vectors, which operate upon the etheric templates of morphogenetic fields. Such templates will grant the specific patterning of neural networks in the brain, the only organ able to work in a hyperdimensional frame of reference - being an entropy stabilizing system. This function ability of neural systems in the 5th dimension has been explained in mathematic terms by Togbey (2006), and experimentally proved by Walling & Hicks (2009).

Following the sequential increase of the dimensional correlates corresponding to specific attractors associated with progressive emergence from deep anesthesia, the authors where able to put in evidence some very interesting and highly meaningful correlations between brain function

levels and their EEG-derived electromagnetic representations. The gamma ascent event at the EEG plot marks the instance of conscient activity, associated with specific neocortical dynamics especially in the frontal areas of the brain. This effect is associated to a chaotic attractor of high complexity derived from EEG analysis. This understanding clearly suggests that consciousness is no way a collective effect of conformational dynamics evolving at some lower hierarchic implication level. Of course, chemical energy patterns also have Information propagating efficiency, and unimpaired conformal functions of collective neural assemblies are required for up-scaled integrations of Qualia and provide meanings into the Self (Marshall & Zohar, 1990).

Brain's efficiency manifests as an ideal anchorage system for connecting biological events to proactive conformally organized information fields, by way of holographic interactions.

A mediating principle between basic chemistry and purposeful developing vectors toward biologically efficient blueprints is not content in the molecular map, it must be externally supplied by quasi-material etheric templates - which build the grid structure of energy fields upon which the physical body growth.

At the instance of fertilization, a polar axis is created in the cell by its membrane's polarization. The electrical polarity and energy field of the polar axis are related to the process of first cell division. At the same instance, a third genetic input is injected into the system from outside the parental genetic legacy, in fact from outside our physical world. The couple of 23 chromosomal sets of classical genetics becomes not more than an efficient attractor for the incoming S.E. - mediated informational essence. The process clearly involves H. Stapp's "Quantum phase states" (2004; 2017). Order is injected from nonlocal Information fields into the physical domains, resulting in guiding morphogenetic modulators at early embryogenetic stages.

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We assist to a transgression of the ZPE between the nonlocal, semi material subtle energy domains contending Informational structures, into the quantum-based material world. This process is made possible by a phase superposition between resonant bands of subtle energy originating at both sides of the ZPE. Such event is accomplished by way of a coupling between biophoton-rich S.E. supplied by the female gamete and resonant similar structures associated to virtual photons transcending the ZPE barrier. Biophotons, just as any photon variants, have - according to recent studies (Firstenber et al., 2013; Georgakopoulos et al., 2018) - an aggregating capacity when certain complex physical conditions are provided.

Toward future exploration

In order to experimentally document the working hypothesis presented in this paper, current instrumentation might be quite limited to some early exploration in the field of subtle energies, the storage and transference media of experiential Information. Meaningful subtle energy variance in cell biology detected at the moment of fertilization might suggest an energetic superposition originating outside to the system, thus a new, additive Information being injected into it.

The source of this personality modulating input into the parental genomic legacy has to be established by future research projects.

Conclusions

We are at a very early stage in exploring the multiple aspects of the human personality, which due to its highest possible complexity and elusiveness for current instrumental investigation, invites for both a paradigmatic revolution and an expensive development of an adequate technology. The currently available instrumentation and the exploration methodologies they support might be but a starting point for such an adventure requiring heavy funds and most competent experts in the

various multidisciplinary domains involved. But the results would be certainly worth of all these joint efforts of open-minded scholars.

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