

Proc. Speech and Language: Fundamental and Applied Aspects of Speech and Language, M.Sovilj, M.Subotić (eds.), LAAC & IEPSP, Belgrade, 2017; To be reprinted in *Int. J. Prenatal & Life Sciences* (2018, Special Issue): *Prenatal & Life Sciences Centenary Anthology, 100 Years of Prenatal Psychology: Vital Keys to Understanding the Meaning in Life*, Co-Editors-in-Chief: Jon RG Turner & Troya GN Turner.

ON QUANTUM-HOLOGRAPHIC AND TRANS-GENERATIONAL IMPLICATIONS FOR CHILD DEVELOPMENT

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Abstract. Our previously developed quantum-informational framework of psychosomatics seems to provide theoretically fundamental understanding of the nature of psychosomatic diseases as well as limitations of their prevention and healing methods, by imposing new healing boundary conditions in the energy-state space of the EM quantum-field-related acupuncture system / (individual and collective) consciousness – suggesting three front lines of psychosomatic medicine: (i) collective consciousness, (ii) acupuncture system / individual consciousness, (iii) somatic level. It should be noted that the necessary activities in the second and third levels, with neglect of the first level, would result in further transfer of memory attractors on the level of individual and collective consciousness in this and future generations. This suggests necessity to focus on origins of many problems in child development on underlying prenatal trans-generational levels, and might be inspiring for wider applications of transpersonal holistic approaches and techniques in improvement of child development.

Keywords: child development, quantum-holographic and trans-generational implications, integrative medicine and transpersonal psychology, acupuncture-based and consciousness-based approaches and techniques.

1. INTRODUCTION

In conclusions of the *First International Congress on Psychological Trauma: Prenatal, Perinatal and Postnatal aspects (PTPPA 2015)* the following messages were outlined (Brekhman et al., 2015): (i) For understanding development of human consciousness, communication, behaviour and learning, we must apply a holistic approach from the prenatal period, from preconception, because a man is a unique expression of trans-generational characteristics of his ancestors and interactions with closer and wider environment; (ii) If in considering development of communication and behaviour we do not perceive this fact, we might consequently come into a situation of not being able to have substantial insight into our own situation and behaviour, and even less of the others; (iii) Experts who deal with child development, upbringing and education, should complement their knowledge with the art of composing and interpreting genealogic tree (somatic, psychological, spiritual), thus gaining holistic insight into the complete development of a person from the moment of conception, and being adequately prepared to support young generations properly.

This paper is fully in line with these conclusions. On the one hand, it provides theoretically fundamental understanding of our *quantum-holographic / quantum-gravitational theoretical framework for psychosomatics and spirituality* (cf. Section 2). On the other hand, it might have significant *quantum-holographic / quantum-gravitational implications for child development*, including *prenatal trans-generational aspects* (cf. Section 3).

2. ON QUANTUM-HOLOGRAPHIC FRAMEWORK FOR PSYCHOSOMATICS & SPIRITUALITY

Our previously developed generalized *Hopfield-like neural macroscopic quantum-holographic / quantum-gravitational (HNMQHQG) theoretical framework for psychosomatics and spirituality* provides better fundamental understanding of the *nature of psychosomatic diseases* as well as *limitations of their prevention and healing methods*, which might help in *developing strategies for psychosomatic integrative medicine in the 21st*

century, with all holistic acupuncture-based and consciousness-based approaches and techniques treated as *quantum-informational therapies*, by imposing new healing boundary conditions in the energy-state space of the electromagnetic (EM) quantum-field-related *acupuncture system / (individual and collective) consciousness* – suggesting that *three front lines of psychosomatic integrative medicine* (Group of authors, 1999; <http://www.dejanrakovicfund.org>; Raković et al, 2004, 2009; 2011; Raković, 2008a, 2009; and refs. therein): (i) *spirituality & circular (psycho / energy) therapies* from all relevant meta-positions, with the possibility of a potential permanent removal of mutual memory attractors on the *level of collective consciousness*, (ii) *(quantum) holistic medicine and non-circular (psycho / energy) therapies*, which temporarily remove the memory attractors on the *level of acupuncture system / individual consciousness* and prevent or alleviate their somatization, as a result of negligence on the first level, and (iii) *symptomatic conventional medicine*, which via immunology, pharmacology, biomedical diagnostics and surgery on the *somatic level* prevents or alleviates consequences of carelessness on the first two levels. It should be noted that the necessary activities in the second and third levels, with neglect of the first level, would result in further transfer of memory attractors on the level of individual and collective consciousness in this and future generations. This suggests necessity to focus on *origins of many problems* in child development on *underlying prenatal trans-generational levels*, as suggested by experiences of clients in *posthypnotic regressions* as well.

In this context, it should be also added that *psychosomatic healthy state* is the state of the *minimal entropy* while *psychosomatic disordered state* is the state of the *increased entropy* – and application of some *psychosomatic therapy* naturally *decreases entropy* (degradation) i.e. *increases information* (organization) of the (open) psychosomatic system (Raković, 2016a,b, 2017a).¹ Then, in the context of holistic acupuncture-based and consciousness-based approaches and techniques (see <http://www.dejanrakovicfund.org>; Raković et al., 2009, 2011; Raković, 2009, 2011a, 2013), their goal would be (external) bioresonant excitation of the target palpatory-painful / psychologically-traumatic attractors of the (open) acupuncture system / (individual) consciousness. This enables disordered initial attractors to be one-by-one bioresonantly excited (similar to annealing procedure in artificial neural networks (Hecht-Nielsen, 1990)), thus becoming shallower and wider on the account of deepening of (energy-dominating) attractor of the healthy quantum state (acupuncture palpatory painless or psychologically non-traumatic). However, when this process is hindered by transpersonal entangled blockages in the energy-state space of EM field of the (open) acupuncture system / (individual and collective) consciousness – then memory attractors of quantum-holographic network of the EM field-related collective consciousness should be removed as well, to disentangle energy-informationally all mental addresses included in the problem with final goal to achieve permanent healing i.e. spiritual integration of personality (see <http://www.atpweb.org>; Raković et al, 2009; Raković, 2009, 2013, 2014, 2015a,b,c, 2016a, 2017a,c; and refs. therein). This purified information of

¹ As Peruš (1996) showed that *any quantum system* has formal mathematical structure of *quantum-holographic Hopfield-like neural network* (within the Feynman propagator version of quantum mechanics; see also Raković, 2008a, 2009) – then it follows that *manifestly macroscopic quantum-like acupuncture system* (with *highly resonant microwave sensory response of the disordered organism, biologically effective non-thermal microwave radiation of extremely low intensity and energy, and neglecting microwave energy losses down acupuncture meridians*) and *consciousness* (with *in-deterministic properties of free will, non-local properties of consciousness pervading body, and altered and transitional states of consciousness*) – have fundamental (not model-dependent!) informational structure of *quantum-holographic Hopfield-like neural network* (see Raković, 2002, 2008a, 2009; Raković et al., 2004, 2009), with Hebb-like correlation matrix of memory synaptic connections corresponding to Green's function (quantum propagator) in Feynman's version of Schrodinger equation:

$$G(r_2, t_2; r_1, t_1) = \sum_{i=1}^P \phi^{k_i}(r_2, t_2) \phi^{k_i*}(r_1, t_1) = \sum_{i=1}^P A_{k_i}(r_2, t_2) A_{k_i}^*(r_1, t_1) e^{\frac{i}{\hbar}(\alpha_{k_i}(r_2, t_2) - \alpha_{k_i}(r_1, t_1))}$$

whose memory attractors ϕ^{k_i} could be treated as psychosomatic states, representing biophysical basis of acupuncture-based and consciousness-based *quantum-holistic local psychosomatics*. Further on, by considering psychosomatic state in generally mixed quantum state of density matrix:

$$\widehat{\rho}_S = \sum_i |c_{k_i}|^2 |\phi^{k_i}\rangle_S \langle\phi^{k_i}| \equiv \sum_i p_{k_i} |\phi^{k_i}\rangle_S \langle\phi^{k_i}|$$

(where p_{k_i} are probabilities of realization of the k_i -th quantum state), then von Neumann's quantum-mechanical entropy $S = -kTr(\widehat{\rho}_S \ln \widehat{\rho}_S)$ is reduced to classical Shannon's entropy $S = -k \sum_i p_{k_i} \ln p_{k_i}$ (Nielsen and Chuang, 2002; Dugić, 2004, 2009;

Raković, 2008a, 2009). So, within our HNMQHQG theoretical framework, *entropy of pure-healthy state* of the psychosomatic system (described by the single k_0 -th term in the superposition, of probability $p_{k_0} = 1$), would be $S_{k_0} = 0$ (as pure quantum state $\widehat{\rho}_{S_{k_0}}^{(k_0)}$ provides maximal possible information about the quantum psychosomatic system), while *entropy of mixed-disordered state* of the psychosomatic system (described by the full above superposition), would be $S_{\widehat{\rho}} > 0$ (as mixed stochastic state $\widehat{\rho}_{S_{kv}}^{(k)}$ provides uncomplete information about the quantum psychosomatic system).

the healthy quantum state is then altogether quantum-holographically projected on lower quantum-holographic cellular levels, thus changing expression of genes in morphogenesis (so called downward causation!).

Also, our HNMQHQG theoretical framework for psychosomatics and spirituality provides better understanding of the *two modes of knowledge*, according to the coupling strength mind-body-environment (see <http://www.dejanrakovicfund.org>; Raković and Dugić, 2005; Raković, 2007a,b, 2008a,b, 2009, 2011a,b, 2015a,b,c, 2016a, 2017a,b,c; and refs. therein): (i) *weakly-coupled quantum-entangled / quantum-coherent direct mode* (in the *out-of-body* spiritual-creative *non-stationary transitional states of consciousness / stationary altered states of consciousness*, like prayer, meditation, daydreams, lucid dreams, creative insights...) and (ii) *strongly-coupled classically-reduced indirect mode* (in *bodily* perceptively-rationally mediated *normal states of consciousness*, like sensory perception, logic and scientific reasoning...) – and *conditions of mutual transformation*, with significant spiritual-epistemological implications. This explains the *generally poor informational rationalization* of any direct quantum-holographic spiritual / religious *mystical experience* (as the problem of quantum theory of measurement, related to the reduction of the implicate order of the quantum-entangled (quantum-holographic) superposition of states into the explicate order of measuring classically-reduced states). And can help us realize that all our *partial rationalizations* (classically-reduced mappings!) are still only an approximation of *fundamental holistic reality* (quantum-holographic territory!) – and that all *divisions are tragic misunderstanding* of spiritually immature (historical) epoch of civilization (as map is not the territory!) (see Raković, 1997, 2002, 2008b, 2015a,b,c, 2016a, 2017a,c). On the other hand, *the consensuses of the mystics of the same tradition on a similar partial rationalization of mystical experiences* could be understood as *part of the same dominant-channeling trans-generational contextual heritage of members of the same tradition* (Raković, 2017a,c; because we are not born as so-called *tabula rasa*, as being indicated by contemporary experiences of hypno-regressions (Newton, 1994, 2000, 2004, 2009) and experiences of different traditions as well (Eliade et al, 1991)).

In this context, it should be also added that *necessity of direct quantum-holographic coupling of individual and cosmic collective consciousness* in an observation of the implicate order might need *weak out-of-body quantum-communication consciousness-environment coupling*, i.e. previous *reprogramming of all psychosomatic loads* (cleansing of the possessive or hedonistic emotional-mental sinful / karmic connections with world – which as loading *mental addresses* would give rise to *quantum-gravitational projections* of the mentally-channelled tunnelled consciousness upon the *out-of-body environment*, and thus to classically-reduced *out-of-body stationary extrasensory observing* of the mentally-addressed environment (Raković, 1995, 2000, 2008a,b, 2009, 2015a,b,c, 2016a, 2017a,b,c; and refs. therein)).^{2,3,4,5} Hence, the efforts of mystics of all traditions to *purify consciousness /*

² According to our previous proposals (see Raković, 1995, 2000, 2008a, 2009, and refs. therein), *transpersonal interactions* might be interpreted by *collapse-related consciousness-channeled quantum-gravitational tunneling of operator's individual consciousness* – mentally addressed on the target's content of the *collective consciousness / environment* in operator's *transitional states of consciousness* (short lasting and therefore not easily reproducible (Jahn, 1982)!) – thus *intentionally channeling state of operator's individual consciousness*, and *automatically influencing the complement collective consciousness / environment output in quantum-gravitationally-induced and consciousness-channeled decoherence (quantum collapse)*:

$$|\Phi\rangle_S |\Psi\rangle_E = \sum_i c_i |\Phi_i\rangle_S |\Psi_i\rangle_E \xrightarrow{p_j = |c_j|^2 \approx 1} |\Phi_j\rangle_S |\Psi_j\rangle_E$$

Alternatively, this might be interpreted as *quantum entanglement between memory attractors of individual consciousness* $|\Phi_i\rangle_S$ and *collective consciousness* $|\Psi_i\rangle_E$ (*correlated via consciousness-based resonant recognition / interaction* (see Raković, 2014, 2017a,b,c, and refs. therein) of *associatively-related attractors of individual and collective consciousness*) – followed by *body-induced collapse-related stochastic process* (with previously mentally enhanced $|c_j| \approx 1$ contribution, by focusing on corresponding *j-th memory attractor* $|\Phi_j\rangle_S$ in *normal state of individual consciousness*). On this line, the *gauge quantum field theory and quantum gravity correspondence* (within string theory) of any quantum entangled system (i.e. Einstein-Podolsky-Rosen correlated quantum pair) and corresponding connected miniature (non-traversable) wormhole (i.e. quantum-gravitational Einstein-Rosen bridge) should be pointed out (Maldacena and Susskind, 2013). On its possible traversability in cosmological conditions see Thorne (1994), and in transpersonal conditions see (Raković, 1995, 2008a, 2009, 2017a,b,c; Raković and Dugić, 1998; Raković et al., 2004, 2009, 2011; and refs. therein). In the context of *Tesla-inspired holistic questions of creativity and education* (Raković, 2017b), the above formula might represent *mentally controlled-directed increasing of macro-quantum correlations of individual and collective consciousness in transpersonally-entangling creative phases* (with previous mental increase of the focused weight contribution c_j and subsequent (practically non-stochastic) classically-reduced selection of this dominant weight contribution c_j) – while in the context of *Tesla-inspired holistic questions of psychosomatics and spirituality* (Raković, 2017c) the above formula might represent *mentally controlled-systemic decreasing of macro-quantum correlations of individual and collective consciousness in transpersonally-disentangling spiritual phases* (with previously systemic mental decreasing of all weight contributions c_i and subsequent (stochastic) classically-reduced selection of the weight contribution c_j)! [Note that the above formula also describes a much more frequent, *constantly fluctuating*, spontaneous interaction of *individual consciousness with a closer environment*, making that with sensory-focused contents we have the experience of reality as in *normal states of consciousness* (Raković, 2017a)! This continuous fluctuation has its analogy

in the *quantum biomolecular world*, between *continuously fluctuating non-complementary /states of biomolecular energy* \rangle_S and */states of biomolecular conformation* \rangle_S (and entangling */ (complement) states of biomolecular environment* \rangle_E) (Raković et al., 2014)!]

³ It should be pointed out, that in the context of *necessary conditions for decoherence* described by the formula in the footnote above, defining of open quantum system and its environment is – *simultaneous process* – so that in the context of universal validity of quantum mechanics *consciousness is relative concept*, non-locally also influenced by farther parts of existing observing universe (and *vice versa!*), simultaneously creating conditions for the process of decoherence in the context of *existing relative borderline* (Dugić et al., 2002; Raković et al., 2004; and refs. therein):

$$|\Phi\rangle_S |\Psi\rangle_E \equiv |(\text{partial}) \text{ individual / collective consciousness} \rangle_S |(\text{complement}) \text{ environment} \rangle_E .$$

This is fully in accordance with the idea of *collective consciousness* as a possible *ontological property of the physical field itself* (see Raković, 1995, 2000, 2002, 2007b, 2008a,b, 2009, 2014, 2015a,b,c; 2016a, 2017a,b,c; Raković et al., 2004, 2009; and refs. therein), with different micro-quantum and macro-quantum (both non-biological and biological, real and virtual) excitations. Then, as *cosmic collective consciousness* (coincident with the *field of Universe*) has its *complement particle cosmic environment*, their strong-interaction-coupling affects *decoherence of the field of cosmic collective consciousness* into stationary *classically-reduced (observing) stochastic state*, with probabilities of realizations of corresponding classically-reduced states of cosmic collective consciousness. [However, note that the *cosmic composite quantum state*:

$$|\Phi\rangle_S |\Psi\rangle_E \equiv |(\text{cosmic field collective consciousness}) \rangle_S |(\text{complement}) \text{ cosmic particle environment} \rangle_E$$

evolves without collapse (due to absence of the complement outside-cosmic environment!), which implies that *Universe as a whole is presumably quantum hologram* subject to deterministic Schrödinger evolution (in the context of universal validity of quantum mechanics) (Raković, 2007b, 2017a)! This indicates that the *quantum information* (embedded by quantum-holographic boundary conditions in the very beginning of the Universe) is *fundamental physical property of the Universe* (and perhaps even more fundamental than particles, fields, and even the space-time, as briefly formulated by Wheeler's famous motto *'It from bit'*, motivated by *quantum-theoretical viewpoint* that we live in a *participatory Universe* (Wheeler, 1990; Vedral, 2010). In this context, the intriguing field-mediated experiments (Gariaev, 2009; Gariaev et al., 2011; Montagnier et al., 2010; Milovanovic et al., 2014) indicate that the *(quantum-holographic) field-encoded information* is presumably critically important even on the evolutionary scale to transfer appropriate boundary quantum-information conditions necessary for an explanation of the current *dynamics of biological evolution*, that cannot be explained on the basis of classical random laws described by the probability theory, as simply argued by Lennox (2007). On possibility of spiritual imposing new boundary conditions at the level of cosmic field / collective consciousness see the next footnote!]

⁴ It should be noted that *spontaneous transpersonal communications*, with exchange of information in transitional states of consciousness, have *negative psychosomatic-spiritual effects*, as they necessary give rise to *global trans-generational increase of psychosomatic loads* on the level of macroscopic quantum space-time network of *collective consciousness* – which might represent the *karmic / sin engine of history*. *The only phenomenon which decreases these loads is all-forgiving prayer to ourselves and others* (relatives, enemies, decided) – *probably via simultaneously purifying spiritually-excited vacuum-exotic new macro-quantum portions of vital energy* (similarly to spiritually-excited and mentally-channeled Ayurvedic, Qigong, Reiki and modern experiences of local and transpersonal healing (Swami Sada Shiva Tirtha, 2007; Cohen, 1999; Lee Rand, 1998; Brennan, 1987; Pearl, 2001; Stibal, 2006; Kinslow, 2008; Bartlett, 2009; Grabovoi et al., 2012)) *in prayer-related persons* – as *(decoherence-like) quantum-gravitational in-deterministic purifying interventions in (intrinsically-unitary) quantum-holographic evolution of collective consciousness!* This leaves most room for *free will and influence on future preferences* – making the *role of every person indispensable* due to influence and concern for *collective mental environment!* *As there is no out-of-cosmic environment that triggers the non-unitary entanglement of the quantum-entangled state of the field-related cosmic collective consciousness and complementary particle cosmic environment* – *the above proposed mechanism of prayer imposes (intrinsically, non-unitary!) necessary boundary conditions without mutually mentally-loaded addresses*. Hence it can be really said that *all-forgiving prayer* represents biophysical basis for optimization of *(quantum) holistic global psychosomatics of collective consciousness* (and complementary incoming individual and collective events) (Raković, 1995, 2000, 2002, 2008a,b, 2009, 2014, 2015a,b,c, 2016a, 2017a,c; Raković et al., 2004, 2009)! It should be added that aforementioned Ayurvedic, Qigong, Reiki, and modern experiences of local and transpersonal healings imply that *meditative visualization (intrinsically, non-unitary!) also imposes new (decoherence-like) quantum-gravitational boundary conditions*, by mentally-channeled transfer of purifying spiritually-excited vacuum-exotic new macro-quantum portions of vital energy. But contrary to prayer, *meditation balances only practitioner himself* while not removing simultaneously other mentally-loaded addresses (thus in these situations it is necessary to practice *circular meditatively-healing visualization from meta-position(s) of the other(s)* included in the existing conflict, in order to *remove simulataneously mentally-loaded addresses*). So, in the context of our quantum-holographic / quantum-gravitational theoretical framework, *spiritual prayer / meditation practices are non-unitary source of free will* at the level of *collective consciousness*, while *non-spiritual behaviour maintains the trans-generationally-programed unitary evolution of collective consciousness* – which evolutionary greatly increases *spiritual responsibility of each person and the entire human race!* [It should also be noted that *transpersonal vacuum-exotic aspect of energy-informational channels of vital energy* (i.e. their connection with exotic vacuum quantum fluctuations, necessary for anti-gravitational stabilization of these spatial-temporal miniature wormhole channels (see Footnote 2 and Raković, 1995, 2000, 2002, 2008a,b, 2009, 2015a,b,c; 2016a, 2017a; Raković and Dugić, 1998; Raković et al., 2004, 2009; and refs. therein)) might be *extended to energy-informational acupuncture channels* (Raković, 2014), of peculiar vacuum-like $n = 1$ refraction index (Sit'ko, 2012; Complete issue, 1998), *with vacuum-like outside inflow of vital energy / prana / qi* (Swami Sada Shiva Tirtha, 2007; Cohen, 1999; Lee Rand, 1998) – implying that such type of deeper exotic spatial-temporal communication enables *continuously-refreshing interaction* between the two mentally-addressed persons and *transpersonally stabilizes quantum-entanglement* of their acupuncture systems / consciousnesses i.e. *prevents dis-entanglement* of their macroscopic quantum-entangled non-stationary states by *decoherence-like* interaction with their local somatic environments!]

⁵ It should also be added that *transpersonally-extended esoteric concepts* of various spiritual traditions of East and West (Wilber, 1980; Vujčić, 1995; Vlahos, 1998; <http://en.wikipedia.org/wiki/Soul>; <https://en.wikipedia.org/wiki/Spirit>; <https://en.wikipedia.org/wiki/Qi>) could be biophysically accounted within our plausibly generalized HNMQHQC *theoretical framework* (<http://www.dejanrakovicfund.org>; Raković et al., 2004, 2009; Raković, 1995, 2000, 2007a,b, 2008a,b, 2009, 2011a, 2015a,b,c, 2016a, 2017a): (i) *astral body (manomaya,*

soul via spiritual practice (prayer, meditation...) and thus to reach their *final eschatological goal* (Kingdom of God, nirvana...), i.e. *post-mortem salvation of soul* (non-bounded sin-free / karmic-free) by *re-union (re-ligare / yoga)* with the *supreme God* (Eliade et al, 1991; Wilber, 1980; Vlahos, 1998; Vujićin, 1995) might appear reasonable! [But it still would leave room for *personal love*, whose highest manifestation is ability and readiness for *permanent and unconditioned forgiving* (to loving person, and because of him / her to everybody else, including enemies!), in spiritual prayer and (subtly related quantum-holographic) living practice; the same refers to love for relatives and friends.]

The mentioned research is on the line of renewed interest in *consciousness studies*, with the indication of the *great synthesis of two modes of knowledge* – where the *role of each person becomes indispensable* due to the influence and concern of the *collective mental environment*, which is a *fundamental issue* of both spiritual and civic morality. Thus civilization, via *synthesis* of scientific knowledge in the field of *consciousness* and millennia experiences of the *spiritual traditions*, could contribute that new millennium would be characterized by *wisdom*. All this indicates the *full significance of holistic education and behavior*, suggesting necessity of *redefining* the global educational / informational / policy goals, with the shift towards *holistic gentle actions for solutions of the global risk society*. Decisive role in this process could play all *religious communities*, cultivating a true *spiritual moral* and absolute (not declarative, as so far in history!) inter-personal, inter-ethnic and inter-religious *tolerance*, as a measure of individual behavior from the *perspective of death*, i.e. amount of generated and non-reprogrammed psychosomatic conflicts until death, which determines the *spiritual evolution* of the soul of the deceased as well as the *preferences* of the individual and / or collective future of the descendants – that can be *significantly altered* only via *collective prayer* for our neighbors and enemies, and consequently *global reprogramming of collective consciousness*.

3. ON TRANS-GENERATIONAL IMPLICATIONS FOR CHILD DEVELOPMENT

Michael Newton, a famous American transpersonal hypno-regression-therapist, in his books talks about a number of psychotherapeutic experiences of post-hypnotic regressions, with systematized messages of his clients that our major life lessons and opportunities to optimize the otherwise predestined life-programs are lying in spiritual sphere of purification (Newton, 1994, 2000, 2004, 2009). Reading of Newton's books brought me a special pleasure, because of the many important *associations and implications* on correspondence of the *described experiences and theoretical predictions* of our HNMQHQG framework (cf. Raković, 2016a): (i) *transpersonal-spiritual tunneling as exclusive communications, without space-time barriers* (in accordance with our theoretical predictions); (ii) *soul transpersonally chooses a pair of prospective parents, among several offered alternatives previously carefully observed with all the details of a future life* (indicating that life is predestined on the physical level by existing boundary conditions at the level of cosmic field / collective consciousness); (iii) *by made choice of the parents, life is not completely fixed, but can be optimized by spiritual means, repenting and forgiving to*

lingasarira, manovijnana, ka, psyche, nephesh, nafs, subtle body, psychic body, soul...) vs. ionic component of the out-of-body displaceable EM-ionic-exotic macro-quantum acupuncture system (connected with the body by miniature wormhole space-time tunnel, generated and stabilized in highly-noninertial transitional states of consciousness, as frequently observed in extrasensory near-death experiences); (ii) *mental body (vijñanamaya, sukmasarira, manas, ba, thymos, ruach, ruh, noetic body, spiritual body, mind...)* vs. EM component of the out-of-body displaceable EM-ionic-exotic macro-quantum acupuncture system (embedded within ionic component of the out-of-body displaceable EM-ionic-exotic macro-quantum acupuncture system); (iii) *distributed centers of consciousness (chakras, acupuncture points, sephiroths, holy discs...)* vs. EM-ionic condensations in the structured out-of-body displaceable EM-ionic-exotic macro-quantum acupuncture system; (iv) *vital energy (chi / qi / ki, prana / akasha, mana, ka, pneuma / ether / natura medica / anima mundi, yesod, baraka, the Holy Spirit / Uncreated Light, bioenergy / biofield...)* vs. EM-ionic-exotic macro-quantum condensates (unstructured / structured, virtual / real) within acupuncture channels (with possible generalization from the EM field to the unified field, in line with the broader traditional meaning of vital energy, as all-pervasive cosmic quintessence). Additionally, if put in the *theoretical context of the holographic principle* (Susskind and Lindesay, 2005), according to which any 3D physical system is *isomorphic* to the holographic information embedded on its 2D surface, then *quantum-holographic informational content of a body* could also be contained in *corresponding surface layer of vital energy (aura)*, as has been stated in various traditions of East and West. [On the other hand, bearing in mind the *generally poor informational rationalization* of any direct quantum-holographic spiritual / religious mystical experience, it can help us understand that all our *partial rationalizations* (with different personalized pantheons) are only approximations of *fundamentally-holistic reality* (Prabhavananda and Isherwood, 1969; Castaneda, 1971; Talbot, 1991; Vujićin, 1995). In this context, *several-millennia controversy about post mortem evolution of the soul*, might be probably related to an *interpretative epistemological level* of rationalization of transpersonal transfer of mentally-addressed loads within the existing generation and further generations via network of collective consciousness, with possibility that particular strong conflicts transferred as *ego-states* leave a strong impression of previously lived lives (Raković, 2008a,b, 2009). But what is the *ontological spiritual reality* (implicate order of the very quantum-holographic territory!) – could remain *permanent controversy* of all these principally limited attempts (explicate orders of classically-reduced mappings of the quantum-holographic territory!) of *human rationalization* (Vujićin, 1995)!]

ourselves and others (bringing new boundary conditions at the level of cosmic field / collective consciousness, which points to the fundamental importance of spirituality as a source of the greatest freedom for optimizing otherwise predestined life-programs, and necessity of careful control of the reactions on current life-temptations in order to avoid further deepening of the existing conflicts); (iv) *although the aforementioned experiences evoke strong associations on reincarnation, some of the reported insights suggest the possibility of transmission of information of the same content into several persons during their overlapping lifetime periods* (implying a trans-generational transfer of accumulated information, with experiences that transferred contents leave a strong impression of the previously lived lives).

So, in the context of the aforementioned *trans-generationally-predestined quantum-holographic structure of collective consciousness* (as suggested by the experiences of tribal traditions, and traditions of the East and the West), *it seems irrational not only to be angry at life program* (previously freely chosen prenatally, *but it is also irrational not to optimize it* (spiritually-accepting and forgiving ourselves and our environment) – *contributing to both our own spiritual growth and catharsis of our trans-generational mental environment* (which is fundamental question of both mental hygiene and civil decency i.e. both spiritual and civil morality)!

Also, it is hereby instructive to mention Buddhist interpretation of *karma*, which occurs not as a *result of our spontaneous reaction* to the current situation in life, but as a *result of the latter justification of our conscious reactions against the others* in this situation (Panajotović, 2011)! In the context of the above mentioned *quantum-holographic predestined life programs*, this is fully justified because we all (*non-consciously*) *react to current conflicting-encoded life-situations* (several hundred milliseconds before we become aware (Dennett, 1991; Wegner, 2002; Hameroff and Penrose, 2014)!), but immediately afterwards we have a chance to (*consciously*) *permanently untangle the existing trans-generational conflict by penitent-all-forgiving prayer*. This is *quite fair spiritual opportunity* – *and up to each person is either to use it or not* – with accompanied *either unloading or overloading* trans-generational conflicts!

That might be possibly the reason for *Christianity* to insist on *repenting and forgiving* ('And forgive us our debts, as we forgive our debtors', Mt.6,12), which represents a level of *spiritual maturity of a person*. This implies an obligation of spiritually mature persons to help in reprogramming mental / emotional conflicts by praying, even when themselves being victims of the conflicts ('But I say unto you, love your enemies, bless them that curse you, do good to them that hate you, and pray for them which despitefully use you, and persecute you', Mt.5,44). *It is not even allowed to see evil in fellow-men and condemn them* (an old biblical commandment given to the man in paradise, forbidding to take food 'of the tree of the knowledge of good and evil' – in fellow-men – 'for in the day that you eat there-of you shall die' (Gen.2,17), whose violation has caused the *Adam's fall*, and sowed the seed of the growing '*terror of history*'), insisting only on *personal repenting and forgiving*, as the only way in *permanent reprogramming of psychic conflicts*. Anything else would enhance the existing mental / emotional personal loads and enlarge evil in the world, dismissing an individual and humankind from the final spiritual ideal of sinless state of consciousness!

Bearing in mind the role of a mentally burdensome contents in the *post-mortem spiritual evolution of the soul* of the dying (let us mention transpersonal collective levels of consciousness of *Bardo levels* in Tibetan tradition (Evans Wentz, 1968) or *aerial toll house* in Christian tradition (Father Seraphim Rose, 1988)) – this implies the importance of prayers for the soul of the deceased with ability not only to *influence its spiritual evolution*, but *also trans-generational preferences for individual and / or collective future offspring* (with possibility of even *retroactive-nonlocal trans-generational dis-entangling / un-binding of mental / emotional conflicts*, as suggested by *experiments with prayer* (McTaggart, 2007) – bearing resemblance to quantum delayed choice experiments (Wheeler, 1984; Jasquez et al., 2007; Kaiser et al., 2012) and pointing additionally to quantum roots of consciousness)!

We also mention some tribal traditions where initiated shamans ritually enter the altered states of consciousness and receive answers to the health problems of members of their tribe, and apply their healing methods based on reprogramming the loads on the level of tribe's collective consciousness (like in South America *Ayahuaska tradition* (Hadži-Nikolić, 2011), or Nigerian *Abiku tradition* (Tomšić Akengen, 2011), with fascinating spiritual diagnosis and subsequent extension of the predestined-short-life programs; or like in Hawaiian *Ho'oponopono tradition* (Vitale and Hew Len, 2007), based on the *participatory* concept of taking full *responsibility for any circumstance* in which we find ourselves and *repenting and forgiving ourselves* in the context of disturbing life situations, with fascinating successes in reprogramming *ourselves and our environment*). [In this context, I have to mention an incredible experience of my cousin Milica, with (epi)genetically conditioned high-risk pregnancy of very low level of amniotic fluid, normalized in just a few days of ho'oponopono prayer practices, with subsequent normal delivery!]

On the same line, it is worth mentioning the *fascinating world bestseller confession of Anita Moorjani* (2012) *on spiritual changing her life program*, in which she decided to change her previous life program (and thus forgive herself and her grieving husband) and to continue to live – with return from clinical death and after a few weeks even *spontaneous healing of terminal phase of cancer*; this greatly contributes to our understanding that even *most difficult psychosomatic illness, like cancer, have their roots in the energy-information blockages* and that *healing begins by removing them* – first lovingly to ourselves, accepting ourselves and forgiving ourselves, which is then manifested by love to others and acceptance of others (e.g. by spiritually dis-entangling / un-binding repentant-forgiving prayer (Hay, 1984; Raković, 2008a,b, 2009))! [See link http://www.dejanrakovicfund.org/2012_DRF_Stress_&_Anti_Stress.pdf with more details on recommended holistic anti-stress approaches and techniques!]

4. CONCLUSION

The outlined quantum-informational theoretical framework for psychosomatics and spirituality might have significant holistic implications, based on three front lines: (i) collective consciousness, (ii) acupuncture system / individual consciousness, and (iii) somatic level. This implies necessity to focus on *origins and treatments* of many problems in child development on *underlying prenatal trans-generational levels of collective consciousness*, as confirmed by experiences of clients in post-hypnotic regressions too.

Everything considered might be of *fundamental importance* in understanding underlying quantum-informational acupuncture system / (individual and collective) consciousness *EM field-related biofeedback control mechanisms* of embryogenesis / ontogenesis and morphogenesis *via downward influence on the expression of genes* – shedding new light on the *long standing open problems of the nature and role of acupuncture system and (individual and collective) consciousness* as well.

All this might provide better understanding of the *nature of stress-induced psychosomatic diseases* as well as *limitations and methods of their prevention and healing*, which might help in *developing strategies for integrative psychosomatic medicine in the 21st century*. And might be inspiring for *wider applications of transpersonal holistic approaches and techniques in improvement of development of children and their psycholinguistic functions, and of psychosomatic-cognitive status of adults* as well.

Acknowledgements – This paper was partly financed by the Serbian Ministry of Education, Science, and Technological Development, Project No. 178027.

REFERENCES

- Bartlett, R., 2009. *Matrix Energetics: The Science and Art of Transformation*. Hillsboro: Beyond Words Publ.
- Brekhman, G., Sovilj, M., Raković, D., eds., 2015. *Proc. 1st Int. Congress on Psychological Trauma: Prenatal, Perinatal & Postnatal Aspects (PTPPA 2015)*. Belgrade: LAAC & IEPSP.
- Brennan, B. A., 1987. *Hands of Light: A Guide to Healing Through the Human Energy Field*. New York: Bantam.
- Castaneda, C., 1971. *A Separate Reality: Further Conversations with Don Juan*. New York: Simon & Schuster.
- Cohen, K. S., 1999. *The Way of Qigong: The Art & Science of Chinese Energy Healing*. Random House of Canada.
- Complete issue, 1998. *Physics of the Alive (Физика живого)* 6(1).
- Dennett, D. C., 1991. *Consciousness Explained*. Boston, MA: Little Brown.
- Dugić, M., 2004. *Decoherence in Classical Limit of Quantum Mechanics*. SFIN XVII(2). Belgrade: Institute of Physics. (In Serbian).
- Dugić, M., 2009. *Fundamentals of Quantum Informatics and Quantum Computing*. Kragujevac: Faculty of Science. (In Serbian).
- Dugić, M., Ćirković, M. M., Raković, D., 2002. On a possible physical metatheory of consciousness. *Open Systems & Information Dynamics* 9(2), 153-166.
- Eliade, M., Wiesner, H. S., Couliano, I. P., 1991. *The Eliade Guide to World Religions*. San Francisco: Harper.
- Evans Wentz, W., 1968. *The Tibetan Book of the Dead*. London: Oxford Univ.
- Father Seraphim Rose, 1988. *The Soul After Death*. Platina: St. Herman of Alaska Brotherhood.
- Gariaev, P. P., 2009. *Linguistic-Wave Genome: Theory and Practice*. Kiev: Institute of Quantum Genetics. (In Russian).
- Gariaev, P. P., Friedman, M. J., Leonova-Gariaeva, E. A., 2011. Principles of linguistic-wave genetics. *DNA Decipher J* 1(1), 11-24.
- Grabovoi, G., Smirnova, G. S., Jelezky, S., 2012. *Methods of Healing through the Application of Consciousness*. Hamburg: Rare Ware Medienverlag.
- Group of authors, 1999. *Anti-Stress Holistic Handbook, with Fundamentals of Acupuncture, Microwave Resonance Therapy, Relaxation Massage, Airoionotherapy, Autogenic Training, and Consciousness*. Belgrade: IASC (In Serbian).

- Hadži-Nikolić, Č., 2011. Entheogenic shamanism: Anthropological category, transpersonal dimension or psychotherapeutic model. In: *Proc. Symp. Quantum-Informational Medicine QIM 2011: Acupuncture-Based & Consciousness-Based Holistic Approaches & Techniques*, D. Raković, S. Arandjelović, M. Mićović, eds.). Belgrade: QUANTTES & HF & DRF.
- Hameroff, S., Penrose, R., 2014. Consciousness in the universe, A review of the 'Orch OR' theory. *Physics of Life Reviews* 11, 39–78.
- Hay, L. L., 1984. *You Can Heal Your Life*. Carlsbad: Hay House.
- Hecht-Nielsen, R., 1990. *Neurocomputing*. New York: Addison-Wesley.
- <http://www.atpweb.org>; Official website of The Association for Transpersonal Psychology (ATP), founded by the beginning of 1970s, and considered by A. Maslow as the fourth force in psychology, alongside with psychoanalysis, behaviorism, and humanistic psychology.
- <http://www.dejanrakovicfund.org>; Official website of Dejan Raković Fund (DRF) for Promoting Holistic Research and Ecology of Consciousness, with available relevant author's books, proceedings, papers, communications, and links to recommended websites.
- http://www.dejanrakovicfund.org/2012_DRF_Stress_&_Anti_Stress.pdf.
- <https://en.wikipedia.org/wiki/Qi>.
- <http://en.wikipedia.org/wiki/Soul>.
- <https://en.wikipedia.org/wiki/Spirit>.
- Jacques, V., Wu, E., Grosshans, F., Treussart, F., Grangier, P., Aspect, A., Roch, J.-F., 2007. Experimental realization of Wheeler's delayed-choice Gedanken experiment. *Science* 315, 966-968.
- Jahn, R. G., 1982. The persistent paradox of psychic phenomena: An engineering perspective. *Proc. IEEE* 70, 136-170.
- Kaiser, F., Coudreau, T., Milman, P., Ostrowsky, D. B., Tanzilli, S., 2012. Entanglement-enabled delayed choice experiment. *Science* 338, 637-640.
- Kinslow, F. J., 2008. *The Secret of Instant Healing*. Carlsbad: Hay House.
- Lee Rand, W., 1998. *Reiki The Healing Touch*. Southfield: Vision.
- Lennox, J., 2007. *God's Undertaker: Has Science Buried God?* Oxford: Lion Hudson.
- Maldacena, J., Susskind, L., 2013. Cool horizons for entangled black holes. *Fortschr. Phys.* 61(9), 781-811.
- McTaggart, L., 2007. *The Intention Experiment: Using Your Thoughts to Change Your Life and the World*. New York: Free Press.
- Milovanovic, B., Hadzic, B., Joordanov, D., Matovic, B., Romcevic, N., Matija, L., Jetic, B., Dragicevic, A., Koruga, Dj., Mutavdzin, S., Paunovic, J., Gligorijevic, T., 2014. The high dilution of drugs and placebo effect: New nanotechnological approach. Plenary lecture presented at *7th European Congress for Integrative Medicine (ECIM 2014)*, Belgrade, Serbia, 10-11 October 2014. Abstracts published in *Acupuncture & Electro-Therapeutics Res., Int. J.* 39(2).
- Montagnier, L., Aissa, J., Del Giudice, E., Lavallee, C., Tedeschi, A., Vitiello, G., 2010. DNA waves and water. arXiv:1012.5166v1 [q-bio.OT].
- Moorjani, A., 2012. *Dying To Be Me: My Journey from Cancer, to Near Death, to True Healing*. Carlsbad: Hay House.
- Newton, M., 1994. *Journey of Souls*. Woodbury: Llewellyn.
- Newton, M., 2000. *Destiny of Souls*. Woodbury: Llewellyn.
- Newton, M., 2004. *Life Between Lives Hypnotherapy*. Woodbury: Llewellyn.
- Newton, M., 2009. *Memories of the Afterlife*. Woodbury: Llewellyn.
- Nielsen, M. A., Chuang, I. L., 2002. *Quantum Computation and Quantum Information*. Cambridge: Cambridge Univ. Press.
- Panajotović, D., 2011. *Buddhism: Guide to Theravada Buddhism*. Belgrade: Udruženje srpskih izdavača. (In Serbian).
- Pearl, E., 2001. *The Reconnection: Heal Others, Heal Yourself*. Carlsbad: Hay House.
- Peruš, M., 1996. Neuro-quantum parallelism in mind-brain and computers. *Informatica* 20, 173-183.
- Raković, D., 1995. Brainwaves, neural networks, and ionic structures: Biophysical model for altered states in consciousness. In: *Consciousness: Scientific Challenge of the 21st Century* (D. Raković, Dj. Koruga, eds.). Belgrade: ECPD.
- Raković, D., 1997. Towards a new/old humanism: Transitional states of consciousness as a clue? In: *Proc. Symp. Brain and Consciousness* (Lj. Rakić, G. Kostopoulos, D. Raković, Dj. Koruga, eds.). Belgrade: ECPD.
- Raković, D., 2000. Transitional states of consciousness as a biophysical basis of transpersonal transcendental phenomena. *Int. J. Appl. Sci. & Computat.* 7(3), 174-187.
- Raković, D., 2002. Biophysical bases and frontiers of (quantum) holistic psychosomatics. In: *Science - Religion - Society* (V. Jerotić, Dj. Koruga, D. Raković, eds.). Belgrade: Orthodox Theological Faculty SPC & Ministry of Religions of Republic of Serbia. (In Serbian).
- Raković, D., 2007a. Quantum-coherent and classically-reduced modes of consciousness: Religious and epistemological implications. In: *Religion and Epistemology* (V. Jerotić, M. Arsenijević, P. Grujić, D. Raković, eds.). Belgrade: Dereta. (In Serbian).
- Raković, D., 2007b. Scientific bases of quantum-holographic paradigm. In: *Proc. Int. Conf. Measuring Energy Fields* (I. Kononenko, ed.). Kammik: Zdravilni gaj, Invited lecture.
- Raković, D., 2008a. *Fundamentals of Biophysics*. 3rd ed. Belgrade: IASC & IEFPG. (In Serbian).
- Raković, D., 2008b. *Recollections, Dreams, Thoughts: About Past and Future 1984-2008. On Crossway of Quantum-Holographic and Classically-Reduced Reality*. Belgrade: IASC & IEFPG. (In Serbian).

- Raković, D., 2009. *Integrative Biophysics, Quantum Medicine, and Quantum-Holographic Informatics: Psychosomatic-Cognitive Implications*. Belgrade: IASC & IEPSP; there is also Serbian edition (2008).
- Raković, D., 2011a. Quantum-holographic framework for consciousness and acupuncture: Psychosomatic-cognitive implications. *Medical Data Rev.* 3(3), 303-313, Invited paper; Reprinted in: *Proc. QIM 2011 Round Table Knowledge Federation* (D. Karabeg, D. Raković, S. Arandjelović, M. Mićović, eds.). Belgrade: QUANTTES & HF & DRF.
- Raković, D., 2011b. On nature and control of creativity – Tesla as a case study. In: *Proc. 2nd Int. Workshop on Knowledge Federation* (D. Karabeg, J. Park, eds.). Dubrovnik, Croatia, 2010, CEUR-WS.org/Vol-822.
- Raković, D., 2013. Stress and anti-stress: Holistic quantum-informational framework, with anti-stress recommendations. In: *Verbal Communication Quality Inter-disciplinary Research II*, (S. Jovicic, M. Subotic, M. Sovilj, eds.). Belgrade: LAAC / IEPSP.
- Raković, D., 2014. Quantum-informational bases and frontiers of psychosomatic integrative medicine. In: *Proc. NEUREL-2014* (B. Reljin, S. Stanković, eds.). Belgrade: IEEE Serbia & Montenegro Section. Similar invited lecture was given by the author at *7th European Congress for Integrative Medicine (ECIM 2014)*, Belgrade, Serbia, 10-11 October 2014, Abstracts published in *Acupuncture & Electro-Therapeutics Res., Int. J.* 2014, 39(2), 351-352.
- Raković, D., 2015a. On biophysical energy-informational nature of acupuncture system, consciousness and vital energy. In: *Proc. Speech & Language 2015, 5th Int. Conf. Fundamental and Applied Aspects of Speech and Language* (M. Sovilj, M. Subotić, eds.). Belgrade: LAAC / IEPSP. Also presented at *Joint Workshop on Quantum-Informational Medicine & 1st Serbian Congress for Integrative Medicine, 7th European Congress for Integrative Medicine (ECIM 2014)*, Belgrade, Serbia, 10-11 October 2014. Similar invited lecture was given by the author at *1st Rubicon Group Conference*, London, UK, 11-13 March 2016.
- Raković, D., 2015b. On quantum-holographic bases and frontiers of integrative medicine and transpersonal psychology: Psychosomatic, epistemological, and spiritual implications. In: *Proc. 1st Int. Congress on Psychological Trauma: Prenatal, Perinatal & Postnatal Aspects (PTPPA 2015)* (G. Brekhman, M. Sovilj, D. Raković, eds.). Belgrade: LAAC / IEPSP.
- Raković, D., 2015c. Quantum-holographic bases of psychosomatics and spirituality: Contribution to comparative research in science and religion. Reported at Summer School 'Meeting of Science and Religion'. Faculty of Law of the University of Bgrade, Institute for Newer History of Serbia, The Ombudsman of the University of Bgrade, Belgrade, 14-18 September 2015. Reported previously at Inter-religious Round Table 'Religion, Science, Culture: Contribution of World Religions to Science and Culture – Religious Heritage as a Research Subject at the University of Bgrade'. The Office of the Ombudsman of the University of Bgrade, Belgrade, 10 June 2013.
- Raković, D., 2016a. On quantum-holographic bases of psychophysiological development of a child. In: *Psychophysiological Development of a Child: Prenatal, Perinatal and Postnatal Aspects* (M. Sovilj, Lj. Jeličić, T. Adamović, eds.). Belgrade: LAAC & IEPSP. To be reprinted in: *Int. J. Prenatal & Life Sciences (Special Issue, 2018): Prenatal & Life Sciences Centenary Anthology, 100 Years of Prenatal Psychology: Vital Keys to Understanding the Meaning in Life*, J. R. G. Turner, T. G. N. Turner, eds-in-chief. There is also Serbian edition, 2017, preprint.
- Raković, D., 2016b. On bioresonant pattern-qua-attractors and healing boundary conditions within quantum-holographic psychosomatics. In: *Proc. NEUREL-2016* (B. Reljin, S. Stanković, eds.). Belgrade: IEEE Serbia & Montenegro Section.
- Raković, D., 2017a. Tesla's legacy for new millennium: Path to quantum-holographic primal source. Invited lecture at: *Int. Congress Nikola Tesla 2017: Disruptive Innovation*, Belgrade, 2 June 2017, preprint.
- Raković, D., 2017b. Tesla's inspired holistic questions of creativity and education & Tesla's inspired holistic clue for future global education practices. Invited participations at: *Workshop 1 – Tesla's Inspired Holistic Questions of Creativity and Education & Workshop 3 – ReMaking Tesla - Practices that Make a Genius*, within *Int. Congress Nikola Tesla 2017: Disruptive Innovation*, Belgrade, 3 June 2017, preprint.
- Raković, D., 2017c. Tesla's inspired holistic questions of psychosomatics and spirituality. Invited participation at: *Workshop 2 – Tesla's Inspired Holistic Questions of Psychosomatics and Spirituality*, within *Int. Congress Nikola Tesla 2017: Disruptive Innovation*, Belgrade, 3 June 2017, preprint.
- Raković, D., Dugić, M., 1998. Consciousness mediated quantum gravitational collapse via generated wormholes: From macroscopic biophysical to microscopic quantum arguments. In: *Proc. 3rd Int. Conf. Computational Intelligence & Neuroscience / Proc. Joint Conf. Information Sciences, Vol. 2*. Durham, NC.: Research Triangle Park.
- Raković, D., Dugić, M., Ćirković, M. M., 2004. Macroscopic quantum effects in biophysics and consciousness. *NeuroQuantology* 2(4), 237-262.
- Raković, D., Dugić, M., 2005. Quantum-holographic and classical Hopfield-like associative nnets: Implications for modeling two cognitive modes of consciousness. *Optičeskii J.* 72(5), 13-18 (*Special Issue on Topical Meeting on Opto-informatics 'Optics Meets Optika'*, Saint-Petersburg, 2004).
- Raković, D., Škokljević, A., Djordjević, D., 2009. *Introduction to Quantum-Informational Medicine, with Basics of Quantum-Holographic Psychosomatics, Acupunctureology and Reflexotherapy*. Belgrade: ECPD. (In Serbian).
- Raković, D., Arandjelović, S., Mićović, M., eds., 2011. *Proc. Symp. Quantum-Informational Medicine QIM 2011: Acupuncture-Based & Consciousness-Based Holistic Approaches & Techniques*. Belgrade: QUANTTES & HF & DRF.
- Raković, D., Dugić, M., Jeknić-Dugić, J., Plavšić, M., Jaćimovski, S., Šetrajić, J., 2014. On macroscopic quantum phenomena in biomolecules and cells: From Levinthal to Hopfield. *BioMed Res. Int.* 2014, Article ID 580491, 9 pages.

- Sit'ko, S. P., 2012. The realization of genome in the notions of Physics of the Alive. *Medical Data Rev.* 4(2), 207-215, Invited paper; Reprinted from: *Proc. Symp. Quantum-Informational Medicine QIM 2011: Acupuncture-Based & Consciousness-Based Holistic Approaches & Techniques* (D. Raković, S. Arandjelović, M. Mićović, eds.). Belgrade: QUANTTES & HF & DRF.
- Stibal, V., 2006. *Theta Healing: Go Up and Seek God, Go Up and Work with God*. Idaho Falls: THInK, see also <http://www.thetahealingserbia.com>.
- Susskind, L., Lindesay, J., 2005. *An Introduction to Black Holes, Information and the String Theory Revolution: The Holographic Universe*. Singapore: World Scientific.
- Swami Prabhavananda, Isherwood, Ch., tr., 1969. *The Yoga Sutras of Patanjali. How to Know God*. New York: New American Library.
- Swami Sada Shiva Tirtha, 2007. *The Ayurveda Encyclopedia. Natural Secrets of Healing, Prevention and Longevity*. 2nd ed. New York: Sat Yuga Press.
- Talbot, M., 1991. *The Holographic Universe*. York: HarperCollins.
- Thorne, S., 1994. *Black Holes and Time Warps: Einstein's Outrageous Legacy*. London: Picador.
- Tomšić Akengen, M., 2011. Abiku phenomenon: Spiritual origin and treatment of self-destructiveness. In: *Proc. Symp. Quantum-Informational Medicine QIM 2011: Acupuncture-Based & Consciousness-Based Holistic Approaches & Techniques* (D. Raković, S. Arandjelović, M. Mićović, eds.). Belgrade: QUANTTES & HF & DRF.
- Vedral, V., 2010. *Decoding Reality: The Universe as Quantum Information*. Oxford: Oxford Univ. Press.
- Vitale, J., Hew Len, I., 2007. *Zero Limits: The Secret Hawaiian System for Wealth, Health, Peace, and More*. Hoboken: Wiley.
- Vlahos, J., 1998. *Orthodox Psychotherapy: The Holy Fathers Science*. Belgrade: Missionary School of St. Alexander Nevskiy Church. (Serbian transl from Greek).
- Vujićin, P., 1995. States of consciousness in esoteric practice. In: *Consciousness: Scientific Challenge of the 21st Century* (D. Raković, Dj. Koruga, eds.). Belgrade: ECPD, and refs therein.
- Wegner, D. M., 2002. *The Illusion of Conscious Will*. Cambridge, MA: MIT Press.
- Wheeler, J. A., 1984. Law without law. In: *Quantum Theory and Measurement* (J. A. Wheeler, W. H. Zurek, eds.). Princeton, NJ: Princeton Univ Press, pp. 182–213.
- Wheeler, J. A., 1990. Information, physics, quantum: The search for links. In: *Complexity, Entropy, and the Physics of Information* (W. H. Zurek, ed.). Boulder, CO: Westview Press.
- Wilber, K., 1980. *The Atman Project*. Wheaton, IL: Quest.