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Stress & Anti-stress: Holistic Quantum-informational Framework

Dejan Raković[1,2,3]

[1] Faculty of Electrical Engineering, University of Belgrade (Serbia), retired
[2] Life activities advancement Institute (LAAI), Belgrade (Serbia)
[3] Whole-Self Discovery & Development Institute, Inc. International, Co–Director for Serbia

rakovicd@etf.bg.ac.rs
www.dejanrakovic.com

Abstract. In the report of United Nations at the beginning of 1990s *stress* was marked as a disease of 20th century, as its role in the development of numerous psychosomatic disorders was undoubtedly confirmed. On these lines, contemporary investigations of *psychosomatic diseases* imply the necessity of application of *holistic methods*, oriented to *healing the person as a whole* and not disease as a symptom of disorder of the whole, suggesting their *macroscopic quantum origin*. In the focus of these quantum-holistic methods are body's *acupuncture system & consciousness* – which (within the Feynman propagator version of quantum mechanics) have *informational structure of quantum-holographic* Hopfield-like associative neural network – with very significant quantum-holographic psychosomatic implications. So, all holistic acupuncture-based & consciousness-based approaches and techniques can be treated as *quantum-informational therapies*, by *imposing new healing boundary conditions in the energy-state space* of EM quantum-field-related *acupuncture system / (individual and collective) consciousness*. The above mentioned quantum-holographic psychosomatic framework provides better understanding of the *nature of psychosomatic diseases*, which might help in *developing strategies for psychosomatic complementary & integrative medicine in the 21st century.*

Keywords: *stress, anti-stress, psychosomatics, integrative medicine, acupuncture system, consciousness, quantum-holographic informatics.*

INTRODUCTION

Stress is inevitable consequence of life. To some extent, which is individual, stress contributes to a better adaptation to daily life and work: *stress itself is the life salt* [1]. However, when this boundary is crossed, *prolonged (chronic) stress becomes harmful and causes psychosomatic diseases* [1-6].

At the beginning of 1960s the different causes of stress (hate, anger, fear, frustration, noise, nicotine etc.) were named by Hans Seley as ***stressors***, to which an ***organism reacts always equally***: injecting sugars, fats, and adrenaline (stress-realized hormone) into the blood, followed by growth of blood pressure, narrowing of blood vessels and increasing secretion of gastric acid – as a *preparatory physiological reaction* of the organism for the *second phase of stress*, of intense muscular strain for ***"fight or flight"***.

As in contemporary life and work conditions the *"fight or flight"* ***is missing as a reaction*** to stressful situations, thus mobilized energetic and physiological potentials are returning against the organism, and with chronic action can cause *psychosomatic disorders.* So in report of United Nations at the beginning of 1990s the ***stress was marked as a disease of 20th century***.

Further on, the ***quantum-informational framework of psychosomatics*** will be presented, enabling fundamental understanding of the *nature, limits and methods of prevention & healing of psychosomatic disorders*, including *optimization of the transpersonal programs within the family environment.*

QUANTUM-INFORMATIONAL FRAMEWORK OF PSYCHOSOMATICS

Contemporary medicine has put its emphasis on the *alopatic-dosed non-economic* ***highly-pharmaceutic*** medicine technologies. On the contrary, in the past years more attention is payed to bioadequate *homeopatic-dosed economic* ***bioresonant quantum-informational*** medicine technologies, related to usage of such values of the field energy, appearing in normal functioning of human organism [4-25].

So, contemporary investigations of psychosomatic diseases imply the necessity of application of ***holistic methods***, oriented to ***healing the person as a whole*** and not disease as a symptom of disorder of the whole, suggesting their ***macroscopic quantum origin*** [4-19].

In the focus of these quantum-holistic methods are body's ***acupuncture system & consciousness*** – which (within Feynman propagator version of quantum mechanics) have ***quantum-informational structure*** *of* ***quantum-holographic Hopfield-like associative neural network*** [26] – with very significant quantum-holographic psychosomatic implications [4-12].

It should be added that RRM-model implies that ***biomolecular recognition*** functions in ***inverse space of Fourier spectra of biomolecular primary sequences*** [27-29], similarly to (quantum) holographic ideas that ***cognitive processing*** functions in ***inverse space of Fourier spectra of perceptive stimuli*** [30,31], thus supporting idea on *quantum-holographic fractal coupling* of hierarchical levels in biological species [13].

In the context of *acupuncture-based & consciousness-based approaches and techniques of quantum-informational medicine* [4-25,32-73], their goal would be ***bioresonant excitation*** of disordered EM quantum state (***acupuncture palpatory-painful / psychologically traumatic***) thus enabling that its initial memory attractor is bioresonantly excited (similar to *annealing procedure* in neural networks [74]) becoming more shallower and wider on the account of deepening of the (energy-dominating) attractor of healthy (***acupuncture palpatory painless / psychologically traumatic-free***) state – which is then altogether *quantum-holographically projected* on the lower quantum-holographic *cellular level*, thus changing *expression of genes* [5-11].

However, when this process is hindered by ***transpersonally entangled blockages*** in EM field-related energy-state space of the acupuncture system / consciousness (on numerous laboratory tests revealing the evidence of entangled minds i.e. *extrasensory experiences* in a quantum reality, see refs. [75,76]) – then memory attractors of quantum-holographic network of EM field-related ***collective consciousness*** should be removed as well (via *prayer* or *circular (psycho / energy) therapies* from all relevant meta-positions included in the problem [5-11,55-73], thus providing ***spiritual integration of personality*** which *initiates the process of permanent healing* as suggested by experiences of clients in *post-hypnotic regressions* [77]).

Hence, *all acupuncture-based & consciousness-based holistic procedures* might be treated as ***quantum-informational therapies***, by imposing ***new healing boundary conditions in the EM quantum energy-state space of acupuncture system / (individual & collective) consciousness*** (cf. Fig. 1).

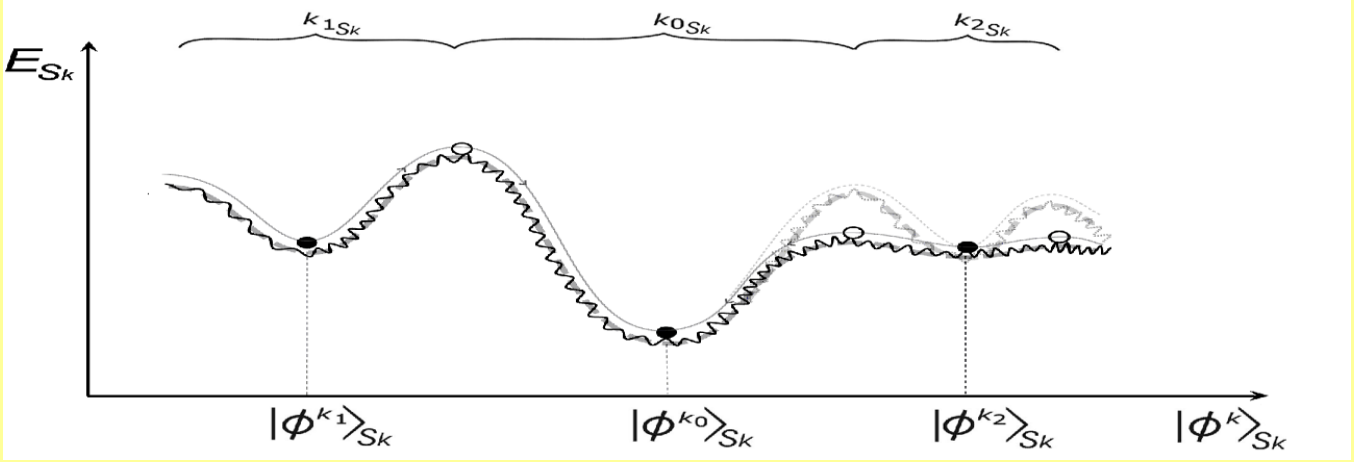


Figure 1. Schematic presentation of the adaptation of memory attractors in the energy-state ($E_{S_k}(\phi^k)$) hypersurface of the ***quantum-holographic memory*** of various hierarchical levels of biological ***macroscopic open quantum systems*** S_k (***local cell's biomolecular protein / target, local acupuncture system / consciousness, or nonlocal out-of-body consciousness / collective consciousness***) [5-11]:

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

It should be pointed out that Nature presumably has chosen elegant ***biological room-temperature solution for quantum-holographic information processing***, permanently fluctuating between quantum-coherent $\left|\phi^k(t)\right\rangle_{S_k}=\sum_i c_{k_i}(t)\left|\phi^{k_i}\right\rangle_{S_k}$ and classically-reduced $\widehat{\rho}^{\,k}_{S_k}(t)=\sum_i\left|c_{k_i}(t)\right|^2\left|\phi^{k_i}\right\rangle_{S_kS_k}\left\langle\phi^{k_i}\right|$ states of the biological macroscopic open quantum system S_k, via non-stationary bioresonance interactions with out-of-body farther environment and through decoherence by bodily closer environment. Thus ***quantum neural holography*** combined with ***quantum decoherence*** might be very significant element of the ***feedback bioinformatics***, from the level of cell – to the level of organism – and further to the level of collective consciousness, with ***backward dynamic influence on the expression of genes***. This implies ***necessity*** of quantum-informational successive ***bioresonant balansing*** of all unwilling side memory attractors (like ϕ^{k_2} in the Figure), which would cause development of ***psychosomatic diseases*** on the individual level, and ***interpersonal fights*** in this and further generations on the collective level.

It should be added that an ***multi-phonon energy hypersuface*** might also include *low-energy long-range coherent* ***microwave Fröhlich excitations*** (created as a result of interaction of electronic & phonon (sub)systems [78,79]), of particular significance in ***microwave resonance therapy (MRT)*** of *dynamic modification of EM multi-phonon (and related many-electron) acupuncture macroscopic quantum subsystem* [4-12,14-16].

The mentioned quantum-holographic picture implies that quantum-holographic hierarchical parts carry information on wholeness, enabling subtle ***quantum-holographic fractal coupling*** between different hierarchical biophysical levels – including various acupuncture projection zones & corresponding organs and cells, with underlying ***macroscopic quantum-informational control mechanisms of embryogenesis / ontogenesis & morphogenesis*** and their backward influence on the *expression of genes*, starting from the first fertilized cell division which initializes differentiation of the acupuncture system of (electrical synaptic) "gap-junctions" [4-13].

This underlying quantum-coherent non-locality might be also of fundamental importance in understanding macroscopic (quantum) holistic very nature of ***psychosomatic health & diseases*** – implying also a *fuzzy borderline between quantum coherent (non-stationary) & semi-classical decoherent (stationary) manifestations* of macroscopic quantum-informational ***acupuncture system & consciousness***, and their ***close relationship***, with *significant psychosomatic-cognitive implic*ations [5-11].

The above problem is of fundamentally-theoretical physical significance, as it tackles the open question of ***universality of quantum mechanics*** [82-92], i.e. question of general validity of quantum-physical laws for ***macroscopic phenomena*** as well, mostly treated by methods of classical physics.

Sit'ko with coauthors have revealed on this line ***necessary & sufficient conditions*** for existence of ***macroscopic self-consistent potentials*** (of so called Landau-Haken type) alongside acupuncture meridians, with EM MW *eigenfrequencies* of healthy and disordered states of *acupuncture system* [14,93-96], pointing out that living systems are the *fourth level of quantum ladder of Nature* (nuclear-atomic-molecular-biological), governed by specific macroscopic quantum laws of the ***Physics of the Alive***.

They also conducted EM MW measurements via specially designed radiometric system (on the level of inherent noises ~ $5 \cdot 10^{-23}$ W/Hz·cm^2), which enabled obtaining of ***important characteristics of acupuncture channels & points*** [113]: *channels* have diameter of 3÷5 mm in their surface exits in the acupuncture points; *refraction index* within channels is $n = 1$ as in the air, while being 5÷6 in the body outside channels; in case of functional disorders of channels, upon external EM MW flux of $10^{-21} \div 10^{-20}$ W/Hz·cm^2 the corresponding *acupuncture points* completely absorb radiation, while upon flux greater than 10^{-19} W/Hz·cm^2 acupuncture points completely reflect external EM MW radiation.

Umezawa with coauthors & ***Del Giudice with coauthors***, by applying quantum-field theoretical formalism of *spontaneous symmetry breaking*, have pointed to biological room-temperature macroscopic condensates of virtual quasiparticles of the effective mass and charge, so called ***evanescent photons in water*** (non-propagated/tunneling longitudinal modes of quantum EM field embedded by biological macroscopic ordered localizations of the electric dipole field of water), as a possible quantum basis of functioning of *cells* [97-100,101-106], while ***Jibu and coauthors*** have pointed to them as a quantum basis of *consciousness* [107-110]. By inserting special probes, to enable embedded quanta of non-propagating modes to be scattered in detectable propagating modes, they were detected experimentally [111].

Popp and coauthors have conducted EM optical measurements in darkness by specially designed detector and discovered that *biological systems*, from bacteria to biological tissues, *continuously emit ultra-weak photon emission* (mainly in the *visual range of* EM spectrum, of non-exponential attenuation & specific frequency, and phase & amplitude modulation for all basic biological & physiological activities), so photons of such non-standard characteristics are called ***biophotons*** [112]. It was discovered that biophoton emission reflects the following ***important characteristics***: *health* as a symmetry between left & right sides of body; *illness* via disordered symmetry between left & right sides of body; *light channels* within body which regulate transfer of energy & information between different parts; various *biological rhythms*.

Based on principles of photonic crystals & photonic bandgap guiding (where the confinement of photons in some low-index hollow-core 3D defect might be achieved by exploiting photonic bandgap reflectivity of surrounding higher-index (quasi) periodic medium [114]), it seems that the above mentioned EM MW experiments suggest an interesting possibility [115,116] to consider the *low-index* ***n = 1 acupuncture channels as 3D photonic crystal channel waveguides of propagated EM MW photons*** (influencing backward structure & ionic conductivity of the channels), *confined by the surrounding higher-index (quasi) periodic cellular body medium outside channels* (of $n = 5 \div 6$ in cellular cytoplasm and $n \gg 1$ in cellular membranes of metabolic depending striking polarization of the volume ion density [117]) *with non-propagated EM MW evanescent photons.*

Exotic aspect of acupuncture channels (*of strange vacuum-like refractive index*) *may be a relic of the external inflow of vital energy / prana / chi / uncreated light* (via miniature *quantum-gravitational tunnels* stabilized by exotic nature of *vital energy* as quantum vacuum fluctuations in these tunnels [10,11, 89,115,116]), indicating that this type of transpersonal communications ***provides continuously-refreshing interaction*** between two mentally-addressed persons & ***stabilize entanglement transpersonally*** of their acupuncture systems / consciousnesses, i.e. *prevents decoherence* of their macroscopic quantum-entangled states by interaction with their local bodily environments (*in contrast to situation in microworld* where there are no such stabilizing mental-transpersonal addressing exotic effects, and hence laboratory formed quantum-entangled particle-pairs must be *well isolated from the environment* in order to prevent their quantum-decoherence [91]).

CONCLUSION

The presented ***quantum-informational framework for psychosomatics*** provides fundamentals for better understanding of the ***nature of stress-induced psychosomatic diseases*** **as well as** ***limitations and methods of their anti-stress prevention & healing***, which might help in *developing strategies for integrative psychosomatic medicine in the 21st century.*

Thus, it might be said that ***three front lines of integrative psychosomatic medicine do exist*** [5-7,9-11]: **(1)** ***Spirituality & circular (psycho / energy) therapies from all relevant meta-positions***, with possibility of permanent erasing of memory attractors on the *level of collective consciousness*; **(2)** ***(Quantum) holistic medicine & non-circular (psycho / energy) therapies***, whose efforts temporary erase memory attractors on the *level of acupuncture system / individual consciousness*, and prevent or alleviate their somatization, as a consequence of the indolence on the first level; and **(3)** ***Conventional symptomatic medicine***, whose activities on the *somatic level* via immunology, pharmacology, biomedical diagnostics and surgery hinder or soothe somatized consequences of the carelessness on the first two levels.

It should be stressed that *necessary activities* on the second & third front lines, with ***neglect of the first front line***, might have a consequence of ***further transfer of memory attractors*** on the level of individual & collective consciousness in this and further generations, thus ***accumulating quantum-holographic loads*** which might cause not only illnesses, but also inter-personal fights, wars, and other troubles.

On this line, ***extended overview*** [6] of holistic recommendations for ***regular balancing*** of the *acupuncture system / (individual & collective) consciousness* might be of significance for ***improvement*** of *psychosomatic status of wider population*.

In this context, it should be pointed out that the ***healing effects*** upon acupuncture system / consciousness of the patient are ***often blocked*** by quantum-holographic ***spiritual coded self-acceptance*** of the disease as a form of ***(self) punishment*** (as suggested by the respondents in the ***post-hypnotic regressions*** [77]), when ***prayers & love*** for yourself and others with the aim of ceasing (self) punishment are necessary – thus ***effecting a spiritual integration of personality***, i.e. *unfolding transpersonal energy blockages*, which *triggers a process of ongoing healing* [10,11, 115,116,118-126].

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REFERENCES

1. H. Selye, *Stress without Distress,* Hodder, Stouphton, 1974.
2. H. Lindemann, *Anti-Stress Program – How to Overcome Stress*, Prosvjeta, Zagreb, 1982, Serbocroat translation from German.
3. M. Blagajac, *Programmed Active Relief*, Belgrade, 1992, in Serbian.
4. Group of authors, *Anti-Stress Holistic Handbook, with Fundamentals of Acupuncture, Microwave Resonance Therapy, Relaxation Massage, Airoionotherapy, Autogenic Training, and Consciousness,* IASC, Belgrade, 1999, in Serbian
5. D. Raković, A. Škokljev, D. Djordjević, *Introduction to Quantum-Informational Medicine, with Basics of Quantum-Holographic Psychosomatics, Acupuncturology and Reflextherapy*, ECPD, Belgrade, 2009, in Serbian.
6. http://dejanrakovicfund.org; 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.
7. D. Raković, Quantum-holographic framework for consciousness and acupuncture: Psychosomatic-cognitive implications, *Medical Data Rev.* 3(3) (2011) 303-313, Invited paper; Reprinted in: D. Karabeg, D. Raković, S. Arandjelović, M. Mićović, eds., *Proc. QIM 2011 Round Table Knowledge Federation*, QUANTTES & HF & DRF, Belgrade, 2011; http://www.qim2011.org.
8. D. Raković, M. Dugić, M. Plavšić, G. Keković, I. Cosic, D. Davidović, Quantum decoherence and quantum-holographic information processes: From biomolecules to biosystems, *Mater. Sci. Forum* 518 (2006) 485-490.
9. D. Raković, S. Arandjelović, M. Mićović (eds.), *Proc. Symp. Quantum-Informational Medicine QIM 2011: Acupuncture-Based and Consciousness-Based Holistic Approaches & Techniques*, QUANTTES & HF & DRF, Belgrade, 2011; http://www.qim2011.org.
10. D. Raković, *Fundamentals of Biophysics*, 3rd ed., IASC & IEFPG, Belgrade, 2008, in Serbian.
11. D. Raković, *Integrative Biophysics, Quantum Medicine, and Quantum-Holographic Informatics: Psychosomatic-Cognitive Implications,* IASC & IEPSP, Belgrade, 2009.
12. Z. Jovanović-Ignjatić, *Quantum-Holographic Medicine: Via Acupuncture and Microwave-resonance (Self) Regulatory Mechanisms,* Quanttes, Belgrade, 2010, in Serbian.
13. Y. Zhang, *ECIWO Biology and Medicine: A New Theory of Conquering Cancer and Completely New Acupuncture Therapy*, Neimenggu People Press, Beijing, 1987.
14. S. P. Sit'ko, L. N. Mkrtchian, *Introduction to Quantum Medicine*, Pattern, Kiev, 1994.
15. N. D. Devyatkov, O. Betskii (eds.), *Biological Aspects of Low Intensity Millimetre Waves*, Seven Plus, Moscow, 1994.
16. Yu. P. Potehina, Y. A. Tkachenko, A. M. Kozhemyakin, *Report on Clinical Evaluation for Apparatus EHF-IR Therapies Portable with Changeable Oscillators CEM TECH,* CEM Corp, Nizhniy Novgorod, 2008.
17. M. Yu. Gotovskiy, Yu. F. Perov, L. V. Chernecova, *Bioresonance Therapy*, IMEDIS, Moscow, 2010.
18. A. V. Samohin, Y. V. Gotovski, *Electroacupuncture Diagnosis and Treatment by the Method of R. Voll*, 5th ed., IMEDIS, Moskva, 2007, in Russian.
19. R. Voll, Twenty years of electroacupuncture diagnosis in Germany. A progress report, *Am. J Acup*. 3(1) (1975) 7-17.
20. D. Djordjević, *Influence of Magnetic Fields on Mechanisms of Neurohumoral Regulation*, PhD Thesis, Faculty of Medicine, Belgrade, 2008, in Serbian.
21. B. Bellavite, A. Signorini, *The Emerging Science of Homeopathy: Complexity, Biodynamics and Nanopharmacology,* North Atlantic Books, Berkeley, 2002.
22. B. Todorović, *Scientific Bases of Homeopathy: Bioinformatics and Nanopharmacology*, Prometej, Novi Sad, 2005, in Serbian.
23. V. Stambolović (ed.), *Alternative Approaches to Health Improvement*, ALCD, Belgrade, 2003, in Serbian.
24. http://www.imconsortium.org/prod/groups/ahc/@pub/@ahc/@cahcim/documents/asset/ahc_asset_391689.pdf; official website of the Consortium of Academic Medical Centers for Integrative Medicine, founded by the end of 1990s, which includes over 50 highly esteemed US academic health centers and affiliate institutions, in order to transform medicine and healthcare through rigorous scientific studies, new models of clinical care, and innovative educational programs that integrate biomedicine, the complexity of human beings, the intrinsic nature of healing, and the rich diversity of therapeutic systems.

25. http://www.issseem.org; official website of The International Society for the Study of Subtle Energies and Energy Medicine (ISSSEEM), founded by the end of 1980s.
26. M. Peruš, Neuro-quantum parallelism in mind-brain and computers, *Informatica* 20 (1996) 173-183.
27. I. Cosic, Macromolecular bioactivity: Is it resonant interaction between macro-molecules? – Theory and applications, *IEEE Trans. Biomed. Eng.* 41(12) (1994) 1101-1114.
28. I. Cosic, *The Resonant Recognition Model of Macromolecular Bioactivity: Theory and Applications*, Birkhauser Verlag, Basel, 1997.
29. G. Keković, D. Raković, B. Tošić, D. Davidović, I. Cosic, Quantum-mechanical foundations of Resonance Recognition Model, *Acta Phys. Polon. A* 17(5) (2010) 756-759.
30. K. Pribram, *Languages of the Brain: Experimental Paradoxes & Principles in Neuro-Psychology*, Brandon, New York, 1971.
31. K. Pribram, *Brain & Perception: Holonomy & Structure in Figural Processing*, Lawrence Erlbaum, Hillsdale, 1991.
32. H. Lindemann, *Relieve Tension the Autogenic Way*, Wyden, New York, 1973.
33. J. Murphy, *The Power of Your Subconscious Mind*, Wilder, Radford, 2007.
34. L. L. Hay, *You Can Heal Your Life,* Hay House, Carlsbad, 1984.
35. D. Chopra, *Quantum Healing: Exploring the Frontiers of Mind/Body Medicine*, Bantam, New York, 1989.
36. Paramhansa Yogananda, *Autobiography of a Yogi*, The Philosophical Library, New York, 1946.
37. B. A. Brennan, *Hands of Light: A Guide to Healing Through the Human Energy Field*, Bantam, New York, 1987.
38. K. S. Cohen, *The Way of Qigong: The Art & Science of Chinese Energy Healing*, Random House of Canada, 1999.
39. Mantak Chia, *Awaken Healing Energy through the Tao*, Aurora Press, Santa Fe, 1983.
40. Swami Sada Shiva Tirtha, *The Ayurveda Encyclopedia. Natural Secrets of Healing, Prevention and Longevity*, 2nd ed., Sat Yuga Press, New York, 2007.
41. Master Choa Kok Sui, *The Origin of Modern Pranic Healing and Arhatic Yoga*, Institute for Inner Studies Publishing Foundation Inc, 2006.
42. H. Johari, *Breath, Mind, and Consciousness*, Destiny Books, Rochester, 1989.
43. Swami Satyananda Saraswati, *Yoga Nidra,* 4th ed., Bihar School of Yoga, Monghur, Bihar, India, 1982.
44. D. W. Orme-Johnson, J. T. Farrow (eds.), *Scientific Research on the Transcendental Meditation Program*, Collected papers Vol. 1, MERU Press, Rheinweiler, W. Germany, 1977.
45. D. Panajotović, *Buddhism: Guide to Theravada Buddhism*, Udruženje srpskih izdavača, Belgrade, 2011, in Serbian; see also http://www.accesstoinsight.org.
46. M. Milenković, *Reiki – The Road to Self*, 2nd ed., Booking, Belgrade, 2010, in Serbian; see also http://www.reiki.org.
47. E. Pearl, *The Reconnection: Heal Others, Heal Yourself*, Hay House, Carlsbad, 2001; see also http://www.thereconnection.com.
48. V. Stibal, *Theta Healing: Go Up and Seek God, Go Up and Work with God*, THInK, Idaho Falls, 2006; see also http://www.thetahealingserbia.com.
49. G. Grabovoi, S. Smirnova, S. Jelezky, Methods of Healing through the Application of Consciousness, Rare Ware Medienverlag, Hamburg, 2012.
50. R. Bartlett, *Matrix Energetics: The Science and Art of Transformation*, Beyond Words Publ., Hillsboro, 2009.
51. F. J. Kinslow, *The Secret of Instant Healing*, Hay House, Carlsbad, 2008.
52. S. Simonovska, Quantum transformation, In: D. Raković, S. Arandjelović, M. Mićović (eds.), *Proc. Symp. Quantum-Informational Medicine QIM 2011: Acupuncture-Based & Consciousness-Based Holistic Approaches & Techniques*, QUANTTES & HF & DRF, Belgrade, 2011; http://www.qim2011.org.
53. W. Fishman, M. Grinims, *Muscle Response Test*, Richard Marek, New York, 1979.
54. R. J. Callahan, J. Callahan, *Thought Field Therapy and Trauma: Treatment and Theory*, Indian Wells, 1996.
55. Ž. Mihajlović Slavinski, *PEAT and Neutralization of Primeval Polarities*, Belgrade, 2000; http://www.spiritual-technology.com.
56. B. Hellinger, G. ten Hevel, *Acknowledging what is: Conversations with Bert Hellinger,* Zeig, Tucker & Theisen, Phoenix, AZ, 1999; see also http://www.curezone.com/Hellinger.
57. M. Tomšić Akengen, Abiku phenomenon: Spiritual origin and treatment of self-destructiveness, In: D. Raković, S. Arandjelović, M. Mićović (eds.), *Proc. Symp. Quantum-Informational Medicine QIM 2011: Acupuncture-Based and Consciousness-Based Holistic Approaches & Techniques*, QUANTTES & HF & DRF, Belgrade, 2011; http://www.qim2011.org.

58. Č. Hadži-Nikolić, Entheogenic shamanism: Anthropological category, transpersonal dimension or psychotherapeutic model, In: D. Raković, S. Arandjelović, M. Mićović (eds.), *Proc. Symp. Quantum-Informational Medicine QIM 2011: Acupuncture-Based and Consciousness-Based Holistic Approaches & Techniques*, QUANTTES & HF & DRF, Belgrade, 2011; http://www.qim2011.org.
59. B. J. Øverbye, The divided self as understood by shaman natural healers! An effort of transcultural research to understand altered states of mind, *Med. Data Rev.* 1(3) (2009) 69-76.
60. P. Vujičin, States of consciousness in esoteric practice, in: D. Raković, Dj. Koruga, eds., *Consciousness: Scientific Challenge of the 21st Century*, ECPD, Belgrade, 1995, and refs therein.
61. S. Petrović, *Tibetan Medicine*, Narodna knjiga – Alfa, Belgrade, 2000, in Serbian; see also http://en.wikipedia.org/wiki/Traditional_Tibetan_medicine.
62. C. Tart (ed.), *Transpersonal Psychologies*, 2nd ed., Harper, San Francisco, 1992.
63. http://www.atpweb.org; official website of The Association for Transpersonal Psychology (ATP), concerned from early 1970ies with the study of humanity's highest potential, and with the recognition, understanding, and realization of unitive, spiritual, and transcendent states of consciousness (making transpersonal psychology the fourth force in psychology, alongside with psychoanalysis, behaviorism, and humanistic psychology, after one of its founders, A. Maslow).
64. S. Grof, C. Grof, *Holotropic Breathwork*: *A New Approach to Self-Exploration and Therapy,* Series in Transpersonal and Humanistic Psychology, Sunny Press, Albany, 2010.
65. S. Milenković, *Values of Contemporary Psychotherapy*, Narodna knjiga – Alfa, Belgrade, 1997, in Serbian.
66. V. Jerotić, *Individuation and (or) Deification*, Ars Libri, Belgrade & National and University Library, Priština, 1998, in Serbian.
67. J. Vlahos, *Orthodox Psychotherapy: The Holy Fathers Science*, Missionary School of St. Alexander Nevskiy Church, Belgrade, 1998, Serbian transl from Greek.
68. L. Dossey, *Healing Words: The Power of Prayer and the Practice of Medicine*, Harper, San Francisco, 1993.
69. K. C. Markides, *Fire in the Heart. Healers, Sages and Mystics*, Paragon, New York, 1990.
70. M. Kamp, *Healing the Spiritual Way Through the Teachings of Bruno Gröning*, Monchengladbach, 1999.
71. I. Hew Len, J. Vitale, *Zero Limits: The Secret Hawaiian System for Wealth, Health, Peace, and More*, Wiley, Hoboken, 2007.
72. W. S. Harris, M. Gowda, J. W. Kolb, C. P. Strychacz, J. L. Vacek, P. G. Jones, A. Forker, J. H. O'Keefe, B. D. McCallister, A randomized, controlled trial of the effects of remote, intercessory prayer on outcomes in patients admitted to the coronary care unit, *Arch. Intern. Med*.159 (1999) 2273-2278.
73. B. Bedričić, M. Stokić, Z. Milosavljević, D. Milovanović, M. Ostojić, D. Raković, M. Sovilj, S. Maksimović, Psycho-physiological correlates of non-verbal transpersonal holistic psychosomatic communication, In: S. Jovičić, M. Subotić, eds., *Verbal Communication Quality Interdisciplinary Research I*, LAAC & IEPSP, Belgrade, 2011.
74. R. Hecht-Nielsen, *Neurocomputing*, Addison-Wesley, New York, 1990.
75. R. G. Jahn, B. J. Dunne, *Consciousness and the Source of Reality: The PEAR Odyssey*, ICRL, Princeton, 2011.
76. D. Radin, *Entangled Minds: Extrasensory Experiences in a Quantum Reality*, Paraview, New York, 2006.
77. M. Newton, *Journey of Souls*, Llewellyn, Woodbury, 1994.
78. H. Fröhlich, Long-range coherence and energy storage in biological systems, *Int. J. Quantum Chem.* 2 (1968) 641-649.
79. G. Keković, D. Raković, M. Satarić, Dj. Koruga, Model of soliton transport through microtubular cytoskeleton in acupuncture system, *Mater. Sci. Forum* 494 (2005) 507-512.
80. A. J. Leggett, Macroscopic quantum systems and the quantum theory of measurement, *Prog. Theor. Phys. Suppl.* No. 69 (1980) 80-100.
81. A. J. Leggett, A. Garg, Quantum mechanics versus macroscopic realism: Is the flux there when nobody looks?, *Phys. Rev. Lett.* 54 (1985) 857-860.
82. W. H. Zurek, Decoherence and the transition from quantum to classical, *Phys. Today* 44(10) (1991) 36-44.
83. W. H. Zurek, Decoherence, einselection, and the quantum origins of the classical, *Rev. Mod. Phys.* 75 (2003) 715-765.
84. G. C. Ghirardi, A. Rimini, T. Weber, Unified dynamics for microscopic and macroscopic systems, *Phys. Rev. D* 34 (1986) 470-491.
85. R. Penrose, On gravity's role in quantum state reduction, *Gen. Rel. Grav.* 28 (1996) 581-600.
86. J. Kofler, Č. Brukner, Classical world arising out of quantum physics under the restriction of coarse-grained measurements, *Phys. Rev. Lett.* 99 (2007) 180403.
87. J. Kofler, Č. Brukner, Conditions for quantum violation of macroscopic realism, *Phys. Rev. Lett.* 101 (2008) 090403.

88. D. Raković, M. Dugić, A critical note on the role of the quantum mechanical 'collapse' in quantum modeling of consciousness, *Informatica* 26(1) (2002) 85-90.
89. D. Raković, M. Dugić, M. M. Ćirković, Macroscopic quantum effects in biophysics and consciousness, *NeuroQuantology* 2(4) (2004) 237-262.
90. D. Raković, M. Dugić, J. Jeknić-Dugić, M. Plavšić, S. Jaćimovski, J. Šetrajčić, On macroscopic quantum phenomena in biomolecules and cells: From Levinthal to Hopfield, *BioMed Research International* Vol. 2014, Article ID 580491, 9 pages, 2014.
91. M. Dugić, *Decoherence in Classical Limit of Quantum Mechanics*, *SFIN* XVII(2), Institute of Physics, Belgrade, 2004, in Serbian; see also D. Giulini, E. Joos, C. Kiefer, J. Kupsch, I.-O. Stamatescu, H. D. Zeh, *Decoherence and the Appearance of a Classical World in Quantum Theory*, Springer, Berlin, 1996.
92. V. Vedral, *Decoding Reality: The Universe as Quantum Information*, Oxford Univ. Press, Oxford, 2010.
93. Ye. A. Andreyev, M. U. Bely, S. P. Sit'ko, *Manifestation of characteristic eigenfrequencies of human organism, Application for the Discovery to the Committee of Inventions and Discovery at the Council of Ministers of the USSR, No. 32-OT-10609*, 22 May 1982, in Russian.
94. S. P. Sit'ko, Ye. A. Andreyev, I. S. Dobronravova, The whole as a result of self-organization, *J. Biol. Phys*. 16 (1988) 71-73.
95. S. P. Sit'ko, V. V.Gizhko, Towards a quantum physics of the living state, *J. Biol. Phys*. 18 (1991) 1-10.
96. S. P. Sit'ko, The realization of genome in the notions of Physics of the Alive, *Medical Data Rev.* 4(2) (2012) 207-215, Invited paper; Reprinted from: D. Raković, S. Arandjelović, M. Mićović (eds.), *Proc. Symp. Quantum-Informational Medicine QIM 2011: Acupuncture-Based and Consciousness-Based Holistic Approaches & Techniques*, QUANTTES & HF & DRF, Belgrade, 2011.
97. L. M. Ricciardi, H. Umezawa, Brain and physics of many-body problems, *Kybernetic* 4 (1967) 44-48.
98. C. I. J. M. Stuart, Y. Takahashi, H. Umezawa, On the stability and non-local properties of memory, *J. Theor. Biol.* 71 (1978) 605-618.
99. C. I. J. M. Stuart, Y. Takahashi, H. Umezawa, Mixed-system brain dynamics: Neural memory as a macroscopic ordered state, *Found. Phys.* 9 (1979) 301-327.
100. H. Umezawa, *Advanced Field Theory: Micro, Macro, and Thermal Physics*, American Institute of Physics, New York, 1993.
101. E. Del Giudice, S. Doglia, M. Milani, A collective dynamics in metabolically active cells, *Phys. Lett.* 90A (1982) 104-106.
102. E. Del Giudice, S. Doglia, M. Milani, G. Preparata, G. Vitiello, Electromagnetic field and spontaneous symmetry breaking in biological matter, *Nucl. Phys. B* 275 (1986) 185–199.
103. E. Del Giudice, G. Preparata, G. Vitiello, Water as a free electric dipole laser, *Phys. Rev. Lett.* 90A (1988) 104-106.
104. E. Del Giudice, S. Doglia, M. Milani, C. W. Smith, G. Vitiello, Magnetic flux quantization and Josephson behaviour in living systems, *Phys. Scripta B* 40 (1989) 786–791.
105. G. Preparata, *QED Coherence in Matter*, World Scientific, Singapore, 1995.
106. L. Montagnier, J. Aissa, E. Del Giudice, C. Lavallee, A. Tedeschi, G. Vitiello, DNA waves and water, arXiv:1012.5166v1 [q-bio.OT].
107. M. Jibu, S. Hagan, S. R. Hameroff, K. H. Pribram, K. Yasue, Quantum optical coherence in cytosceletal microtubules: Implications for brain function, *BioSystems* 32 (1994) 195-209.
108. M. Jibu, K. Yasue, *Quantum Brain Dynamics: An Introduction*, John Benjamins, 1995.
109. M. Jibu, K. H. Pribram, K. Yasue, From conscious experience to memory storage and retrieval: The role of quantum brain dynamics and boson condensation of evanescent photons, *Intern. J. Mod. Phys.* 10 (1996) 1735-1754.
110. M. Jibu, K. Yasue, What is mind? Quantum field theory of evanescent photons in brain as quantum theory of consciousness, *Informatica* 21 (1997) 471-490.
111. M.-W. Ho, F.-A. Popp, U. Warnke, *Bioelectrodynamics and Biocommunication*, World Scientific, Singapore, 1994.
112. Complete issue: *Indian J. Exp. Biol.* 41(5) (2003), *Proc. Symp. Biophoton*.
113. Complete issue: *Physics of the Alive* (*Фізика живого*) 6(1) (1998).
114. J.-M. Lourtioz, H. Benisty, V. Berger, J.-M. Gerard, D. Maystre, A. Tchelnokov, *Photonic Crystals*, 2nd ed., Springer, Berlin, 2008.
115. D. Raković, Quantum-informational bases and frontiers of psychosomatic integrative medicine, in: B. Reljin, S. Stanković, eds., *Proc. 12th NEUREL*, IEEE Serbia & Montenegro Section, Belgrade, 2014.
116. D. Raković, On biophysical energy-informational nature of acupuncture system, consciousness and vital energy, in: M. Sovilj, M. Subotić, eds., *Proc. Speech & Language 2015*, LAAC & IEPSP, Belgrade, 2015.

117. W. R. Adey, Tissue interactions with nonionizing electromagnetic fields, *Physiol. Rev.* 61 (1981) 435-514.
118. D. Raković, On bioresonant pattern-qua-attractors and healing boundary conditions within quantum-holographic psychosomatics, in: B. Reljin, S. Stanković, eds, *Proc. 13th NEUREL*, IEEE Serbia & Montenegro Section, Belgrade, 2016.
119. D. Raković, On quantum-holographic bases of psychophysiological development of a child, in: M. Sovilj, Lj. Jeličić, T. Adamović, eds., *Psychophysiological Development of a Child: Prenatal, Perinatal and Postnatal Aspects*, LAAC / IEPSP, Belgrade, 2016.
120. D. Raković, On quantum-holographic and trans-generational implications for child developement, in: J. R. G. Turner, T. G. N. Turner, O. Gouni, eds, *Prenatal Psychology 100 Years: A Jorney in Decoding How Our Prenatal Experience Shapes Who We Become!*, A publication of The International Journal of Prenatal & Life Sciences, Cosmoanelixis, Prenatal & Life Sciences, Athens, 2018, Invited Ch. 7, pp. 283-310 [Reprinted from M. Sovilj, M. Subotić, eds., *Proc. Speech & Language 2017*, LAAC & IEPSP, Belgrade, 2017, Plenary lecture].
121. D. Raković, On extended quantum-holographic framework for control of macro-quantum correlations of individual and collective consciousness, in: B. Reljin, S. Stanković, eds, *Proc. 14th NEUREL*, IEEE Serbia & Montenegro Section, Belgrade, 2018.
122. D. Raković, On extended quantum-holographic framework for consciousness and free will: Round trip from science to spirituality, *Int. J. Prenatal & Life Sciences* 3(3) (2019) 27-, DOI: 10.24946 / IJPLS; Reprinted in: J. R. G. Turner, T. G. N. Turner, O. Gouni, eds., *Whole-Self Approaches in Psychology & Medicine,* Cosmoanelixis, Athens, 2020, *Proc. 1st Int. Meeting-Conference for Whole-Self Prebirth Psychology*, Philosophy & Education, 13-15 Sept. 2019, Grootebroek, NL, Invited tutorial, preprint.
123. D. Raković, Quantum-informational macrophenomena in biomedicine and holistic psychosomatics: Quantum-holographic framework, *Psychology and Behavioral Science Int. J.* 19(3) (2022) 556015, Mini Review.
124. D. Raković, Quantum-holographic bases of psychosomatics and spirituality: Contribution to comparative exploration of science and religion, *SCIREA Journal of Sociology* 7(4) (2023) 235-256.
125. D. Raković, Tesla inspired quantum-holographic non-local epigenetic clue for improving integrative medicine & transpersonal psychology. *Psychology and Behavioral Science Int. J.* 21(4) (2024) 556070.
126. D. Raković, On Tesla-inspired extended quantum-holographic framework for reprogramming macro-quantum correlations of individual and collective consciousness, *J. Human Psychology* 2(1) (2024) 14-19.

Prof. Dr. Dejan Raković CV

www.dejanrakovic.com

Professor Dejan Raković *graduated Engineering Physics* at the ***Faculty of Electrical Engineering*** in Belgrade as in 1974, and completed his *M.Sc. thesis* in 1977 in the field of *quantum theory of atomic many-electron correlations* (under supervision of *Prof. Djordje Živanović* and *Prof. Vojislav Radojević*), and his *Ph.D. thesis* in 1982 in the field of *theoretical vibrational spectroscopy of conducting polymers* (under supervision of *Prof. Ivan Božović*), at the *Physics Division* of the ***Faculty of Science in Belgrade***. During 1980/81 he completed *postgraduate specialization* in the group of *Academician L.A. Gribov* in Moscow, renown authority in *theoretical spectroscopy & quantum chemistry of molecules, polymers & crystals*.

Professor Raković has a *wide scientific interest*, broadly related to *materials science & biophysics*, covering the fields of *nanomaterials & biomaterials*, *nanotechnology & spectroscopy*, *bioinformatics of biomolecular, epigenetic, psychosomatic, cognitive & electrophysiological functions*. During his career he has been ***superviser*** in 15 Ph.D. theses and has ***published*** nearly 300 papers & communications and over 40 books & proceedings, ***cited*** nearly 2000 times in scientific periodicals & monographs in Google Scholar. He has been also ***referee*** in over 20 scientific journals.

He got his first position at the ***Faculty of Electrical Engineering*** in Belgrade in 1977 and became full professor in 1997, where he has taught *numerous courses* until his *retirement* in 2016 (in *Materials Science, Biophysics, Biomaterials, Quantum Information*, and doctoral group of courses in *Nanomedicine*). He was *heading Department of Materials Science* in several election periods, undergraduate *Module of Physical Electronics* from 2012 to 2015, postgraduate *Materials Science Curriculum* from 1987 to 2005, and undergraduate *Biomedical & Ecological Engineering Curriculum* from 1996 to 2016.

Since 1995 professor Rakovic is being ***co-founder*** & ***vice-president elect*** of ***Yugoslav Materials Research Society*** (which has organized numerous annual international *YUCOMAT conferences* and *published 10 Proceedings*, and handbook *Biomaterials* (2010, in Serbian)). During the period 1995-1998 he ***headed Brain & Consciousness,*** regional project of ***European Center for Peace and Development (ECPD)*** of the United Nations University for Peace in Belgrade (and co-edited several books: *Consciousness: Scientific Challenge of the 21st Century* (1995); *Proc. ECPD Symposium & Workshop Brain & Consciousness* (1997); *Proc. Consciousness - Religion – Society* (1997, in Serbian)), while from 2009 he ***headed ECPD International School of Quantum-Informational Medicine*** (with (co-)authored textbook *Introduction to Quantum-Informational Medicine, With Basics of Quantum-Holographic Psychosomatics, Acupuncturology and Reflexotherapy* (2009, in Serbian)). In 1999 he ***co-founded*** ***International Anti-Stress Center (IASC)*** in Belgrade, becoming ***president elect*** of the *IASC Governing Board*, with *wide educational holistic anti-stress activities* (with (co-)authored *Anti-Stress Holistic Handbook, with Fundamentals of Acupuncture, Microwave Resonance Therapy, Relaxation Massage, Airoionotherapy, Autogenic Training, & Consciousness* (1999, in Serbian); *Proc. Science-Religion-Society* (2002, in Serbian); *Proc. Religion & Epistemology* (2005, in Serbian); textbook *Fundamentals of Biophysics* (3rd ed. 2008, in Serbian); scientific-popular book *Recollections, Dreams, Thoughts: About Past and Future 1984-2007. On Crossway of Quantum-Holographic & Classically-Reduced Reality* (2008, in Serbian)*;* and monograph *Integrative Biophysics, Quantum Medicine & Quantum-Holographic Informatics: Psychosomatic-Cognitive Implications* (2009)*.* In 2009 he also ***founded*** *his* ***Fund (DRF) for Holistic Research & Ecology of Consciousness***, with *wider promotive holistic activities* (including *Proc. Symp. & Round Table Quantum-Informational Medicine: Acupuncture-Based & Consciousness-Based Holistic Approaches & Techniques* (2011); *Proc. 1st Int. Congress on Psychological Trauma: Prenatal, Perinatal & Postnatal Aspects* (2015); and book *Prenatal Psychology 100 Years: A Jorney in Decoding How Our Prenatal Experience Shapes Who We Become!* (2018), becoming ***Whole-Self co-director*** for Serbia).

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