

STRESS & ANTI-STRESS: HOLISTIC QUANTUM-INFORMATIONAL FRAMEWORK WITH OVERVIEW OF RECOMMENDED ANTI-STRESS APPROACHES & TECHNIQUES

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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. In the context of *quantum-informational holistic acupuncture-based & consciousness-based approaches and techniques*, their goal would be a *bioresonant stimulation* of electromagnetic (EM) psychosomatically disordered quantum state (acupuncture palpatory painful or psychologically traumatic, as one of hundreds possible disordered states) thus enabling that its initial memory attractor is bioresonantly excited (similarly to annealing procedure in artificial neural networks) becoming more shallower and wider on the account of deepening of the (energy-dominating) attractor of healthy quantum state (acupuncture palpatory painless or psychologically non-traumatic) – which is then altogether *quantum-holographically projected* on the lower quantum-holographic *cellular level*, thus changing the *expression of genes*. However, when this process is hindered by *transpersonal entangled blockages* in the energy-state space of EM quantum field of the acupuncture system / consciousness (and numerous laboratory tests are revealing the evidence of entangled minds i.e. *extrasensory experiences* in a quantum reality) – then memory attractors of quantum-holographic network of EM quantum-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, thus performing *spiritual integration of personality* which *initiate the process of permanent healing* as suggested by experiences of volunteers in *post-hypnotic regressions*). So, all these 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* as well as *limitations of their prevention and healing methods*, which might help in *developing strategies for psychosomatic complementary and integrative medicine in the 21st century*. Finally, we hereby present the *selected anti-stress holistic recommendations* for regular balancing of the acupuncture system / consciousness, alongside with *broader overview* of the recommended anti-stress holistic approaches and techniques, with features placed in the context of the quantum-holographic psychosomatic framework presented above, provided in the *Appendix*.

Keywords: *stress, anti-stress, psychosomatics, quantum-holographic informatics, integrative biophysics, integrative medicine, complementary medicine, quantum-informational medicine, acupuncture system, individual consciousness, collective consciousness, recommended anti-stress holistic approaches and techniques.*

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 stress becomes harmful and causes numerous psychosomatic diseases. This is the reason why stress has come into the focus of science and medicine since the beginning of 1960s, when Hans Seley, director of the Institute for Experimental Medicine and Surgery of the University of Montreal, introduced the notion of *general adaptation syndrome* as a group of mutually connected *non-specific stress-reactions* of the organism [1-6].

The different causes of stress (hate, anger, fear, frustration, noise, nicotine etc.) were named by 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*" as a normal reaction to stressful situations is missing, thus mobilized energetic and physiological potentials are returning against the organism, and with continuing (chronic) action can cause numerous *psychosomatic disorders*.

Although the problem of stress is now especially important in the Balkans, because of the increased interpersonal, interethnic, and interreligious conflicts the whole Balkan region has been facing on the crossroad of the two millennia, it is not less important in industrially most developed countries. At the end of 1980s the famous American magazine *Time* chose for its headline "Stress: Epidemic of Eighties", and Paul Rosch, president of the *American Institute of Stress*, pointed out that numerous studies showed that the problem was even amplified, and that 75-90% visits to physicians are related to stress. Also, the *World Health Organization* has recently described the job stress as a *world epidemic*, and in report of *United Nations* at the beginning of 1990s it was marked as a *disease of 20th century*; at the same time, it was estimated that 60-80% job accidents were caused by stress. Finally, recent investigations undoubtedly confirmed important role of the stress in development of different psychosomatic disorders: cardiovascular, gastrointestinal, dermatological, rheumatic, immunologic, neurological, and psychiatric.

Further on the quantum-informational framework of psychosomatics will be presented, which enables better understanding of the *nature of psychosomatic disorders* from the fundamental viewpoint, as well as the *limits and methods of their prevention and healing*, including *optimization of the existing transpersonal programs within the family environment*.

Quantum-Informational Framework of Psychosomatics

Contemporary medicine has put its emphasis on the *alopathic-dosed non-economic highly pharmaceutical-oriented* medicine technologies. On the contrary, in the past years more attention is paid to bioadequate *homeopathic-dosed economic bioresonant quantum-informational medicine* technologies, related to usage of such values of the field energy, appearing in normal functioning of human organism [4-26]. 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* [4-19].

In the focus of these quantum-holistic methods are body's *acupuncture system and consciousness* – which (within the Feynman propagator version of quantum mechanics) have *quantum-informational structure of quantum-holographic Hopfield-like associative neural network* [27] – with very significant quantum-holographic psychosomatic implications [4-12]. In this context, it should be noted that Resonant Recognition

Model (RRM) of biomolecular recognition implies that on the biomolecular level information processing is going on in the *inverse space* of Fourier spectra of the primary sequences of biomolecules [28-30], similarly to (quantum) holographic ideas that cognitive information processing is going on in the *inverse space* of Fourier spectra of the perceptive stimuli [31,32], thus supporting idea on *quantum-holographic fractal coupling* of various hierarchical levels in biological species [13].

In the context of *acupuncture-based and consciousness-based approaches and techniques of quantum-informational medicine* [4-26,33-74], their goal would be a bioresonant excitation of the electromagnetic (EM) microwave (MW) / ultralowfrequency (ULF)-modulated or radiofrequency (RF) / lowfrequency (LF)-modulated psychosomatically disordered state (acupuncture palpatory-painful or psychologically traumatic, as one of hundreds possible disordered states) thus enabling that its initial memory attractor is bioresonantly excited (similar to annealing procedure in artificial neural networks [75]) becoming more shallower and wider on the account of deepening of the (energy-dominating) attractor of healthy (acupuncture palpatory painless or psychologically traumatic-free) state – which is then altogether *quantum-holographically projected* on the lower quantum-holographic *cellular level*, thus changing the *expression of genes* [5-11]. Thus, all these acupuncture-based and consciousness-based holistic approaches and techniques might be considered as *quantum-informational therapies*, via imposing new boundary conditions in the energy-state space of the acupuncture system / consciousness.

However, when this process is hindered by *transpersonally entangled blockages* in the 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. [76,77]) – then memory attractors of quantum-holographic network of 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 [5-11,56-74], thus providing *spiritual integration of personality* which *initiates the process of permanent healing* as suggested by experiences of clients in *post-hypnotic regressions* [78]). These transpersonal holistic procedures, alongside with working on all levels of *EM bioresonant (MW / ULF-modulated or RF / LF-modulated) therapies* [4-26] and *non-circular (psycho / energy) therapies* [33-73], might be the holistic clue for imposing healing boundary conditions in the energy-state space of the acupuncture system / consciousness of the patients, cf. Fig. 1.

On Macroscopic Quantum Nature of Acupuncture System and Consciousness

It should be pointed out that on all quantum-holographic 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), there exist *two* (interacting) macroscopic quantum subsystems [5,8,10,11]: first with *modifying many-electron hypersurface* $E_e(\phi_e^{(k)})$ and second with *modifying EM multi-phonon hypersurface* $E_v(\phi_v^{(k)})$, as in Fig. 1.

It should be added that an energy hypersurface of multi-phonon quantum state might also include low-energy long-range coherent MW Frohlich excitations (created as a result of interaction of electronic and phonon subsystems [79,80]), of particular significance in microwave resonance therapy (MRT) of a dynamic modification of the 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 various hierarchical biophysical levels – including numerous acupuncture projection zones and corresponding organs and cells, with underlying *macroscopic quantum-informational control mechanisms of embryogenesis / ontogenesis and morphogenesis* and their backward epigenetic influence on the *expression of genes*, starting from the first

fertilized cell division which initializes differentiation of the acupuncture system of non-threshold electrical GJ-synapses ("gap-junctions") [4-13].

This underlying quantum-coherent nonlocality might be of fundamental importance in understanding epigenetic macroscopic (quantum) holistic very nature of *psychosomatic health and diseases* as well – implying also a *fuzzy borderline* between quantum coherent (nonstationary) and semi-classical decoherent (stationary) manifestations of the macroscopic quantum-informational *acupuncture system* and *consciousness* (as well as any macroscopic condensed-state physical (sub)system), and their *close relationship* with significant psychosomatic-cognitive implications [5-11].

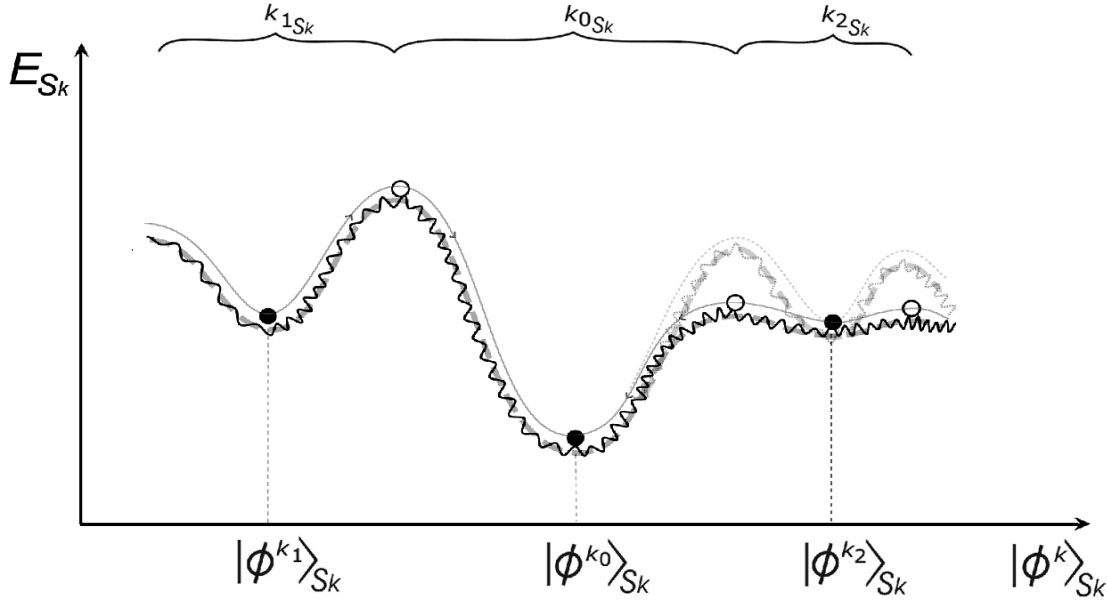


Figure 1. Schematic presentation of the adaptation of memory attractors in the energy-state ($E_{S_k}(\phi^k)$) hypersurface of the quantum-holographic memory / propagator of various hierarchical levels of biological macroscopic open quantum systems S_k (local cell's biomolecular protein / target, local 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 room-temperature solution for quantum-holographic information processing, permanently fluctuating between quantum-coherent states $|\phi^k(t)\rangle_{S_k} = \sum_i c_{k_i}(t) |\phi^{k_i}\rangle_{S_k}$ and

classically-reduced states $\hat{\rho}_{S_k}^k(t) = \sum_i |c_{k_i}(t)|^2 |\phi^{k_i}\rangle_{S_k} \langle \phi^{k_i}|$ 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 epigenetic backward dynamic influence on the expression of genes. This implies necessity of quantum-informational successive bioresonant balancing of all unwilling side memory attractors (like ϕ^{k_2} in Figure), which would cause development of psychosomatic diseases on the individual level, and interpersonal fights in this and further generations on the collective level.

The above problem is of fundamentally-theoretical physical significance, as it tackles the question of *universality of quantum mechanics*, i.e. the question of general validity of the quantum-physical laws for *macroscopic phenomena* as well, mostly treated by the methods of classical physics. Although this question was raised in the early phase of founding of quantum-mechanical theory (and temporarily put aside for very different reasons, being considered as a difficult scientific problem), in this respect the situation is not much better today, and it can be said freely that the problem of universal validity of quantum mechanics is still open [81-93].

On this line, it should be pointed out that Sit'ko with coauthors have revealed *necessary and sufficient conditions* for existence of *macroscopic selfconsistent potentials* (of so called Landau-Haken type) alongside acupuncture meridians, with EM MW *eigenfrequencies* of healthy and disordered states of the *acupuncture system* [14,94-97], 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*.

Also, it is worth pointing out that Umezawa with coauthors and Del Giudice with coauthors, by applying fundamental 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* (nonpropagated / 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* in general [98-101,102-107], while Jibu and coauthors have pointed to them as a possible quantum basis of *consciousness* in brain [108-111].

According to such a theoretical concept, as evanescent photons in water are not related to propagating waves (in EM RF range [102-107]), they cannot be detected externally – so in the region of biological macroscopic ordered localizations of the electric dipole field of water special probes must be inserted, to enable embedded quanta of non-propagating modes of the EM RF field to be scattered in detectable propagating modes, which were detected experimentally in the EM RF region [112].

On the other hand, 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 and specific frequency and phase and amplitude modulation for all basic biological and physiological activities), so photons of such non-standard characteristics are called *biophotons* [113]. It was discovered that biophoton emission reflects the following *important characteristics*: health as a symmetry between left and right sides of body; illness via disordered symmetry between left and right sides of body; light channels within body which regulate transfer of energy and information between different parts; biological rhythms such as 14-days, 1-month, 3-months i 9-months.

Especially, Sit'ko and coauthors have conducted EM MW measurements via specially designed radiometric system (on the level of inherent noises $\sim 5 \cdot 10^{-23} \text{ W/Hz} \cdot \text{cm}^2$), which enabled obtaining of the following *important characteristics of the acupuncture channels and points* [114]: *channels* have diameter of $3 \div 5 \text{ mm}$ in their surface exits in the acupuncture points; *refraction index* within channels is $n = 1$ as in the air, while being $5 \div 6$ in the body outside channels; in case of functional disorders of channels, upon external EM MW flux of $10^{-21} \div 10^{-20} \text{ W/Hz} \cdot \text{cm}^2$ the corresponding *acupuncture points* completely absorb radiation, while upon flux greater than $10^{-19} \text{ W/Hz} \cdot \text{cm}^2$ acupuncture points completely reflect external EM MW radiation (so in natural conditions the effects of solar radiation on biological systems are neglecting in the very sensitive EM MW regulatory region, being intensely absorbed by atmosphere, which was presumably of evolutionary significance in natural selection of biological species).

Based on the principles of *photonic crystals* and *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 the surrounding higher-index (quasi)periodic medium [115]), it seems that the above mentioned

EM MW experiments suggest an interesting possibility [116,117] to consider the *low-index* $n = 1$ *acupuncture channels* as 3D *photonic crystal channel waveguides of propagated EM MW photons* (influencing backward the structure and ionic conductivity of the channels), *confined* by the surrounding higher-index (quasi) periodic cellular body medium outside channels (of $n = 5\div 6$ in the cellular cytoplasm and $n \gg 1$ in the cellular membranes of metabolic depending striking polarization of the volume ion density [118]) *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 / cia / uncreated light* (via miniature *quantum-gravitational tunnels* stabilized by exotic nature of *vital energy* as the quantum vacuum fluctuations in these tunnels [10,11, 90,116,117]), indicating that this type of exotic transpersonal communications provides *continuously-refreshing interaction* between two mentally-addressed persons and thereby *trans-personal stabilize quantum-entanglement* 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 the situation in the 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 [92]).

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* [78]), when *prayers and 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* [10,11,116,117,119-123].

Three Front Lines of Complementary and Integrative Psychosomatic Medicine

The presented integrative quantum-holographic framework for psychosomatics might have significant holistic implications, providing fundamental quantum-informational framework for better understanding of the *epigenetic nature of psychosomatic diseases* as well as *limitations and methods of their prevention and healing*, which might help in *developing strategies for complementary and integrative psychosomatic medicine in the 21st century*.

Thus, on the basis of integrative quantum-holographic framework it might be said that *three front lines of complementary and integrative psychosomatic medicine do exist* [5-7,9-11]: (1) *Spirituality and circular (psycho / energy) therapies from all relevant meta-positions*, with possibility of permanent erasing of mutual memory attractors on the *level of collective consciousness*; (2) *(Quantum) holistic medicine and 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.

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

Anti-Stress Holistic Recommendations

Finally, we present the selected review of several useful anti-stress holistic recommendations *for regular balancing of the acupuncture system / consciousness*.

(1) *Programmed Active Relief, for everyday physiological compensation of the second phase of stress* (when organism is prepared for "fight or flight", which is missing in contemporary conditions of life and work as a normal reaction to stressful situations, that causes the first phase of stress with mobilization of energetic and physiological potentials of the organism, through stress-realized hormones, sugars, and fats injected into blood)... These simple programs of kinesiologic / sport recreation *also soften undesired psychosomatic reactions* in daily stressful situations, contributing to improvement of overall health (<http://www.dejanrakovicfund.org/iasc.html>)...

(2) *Reflex-Segmental Massage, for everyday reduction of stress and fatigue* (via techniques of stimulation of the acupuncture system and projective microsystems, combined with aromatherapy, in prophylactic and therapeutic purposes for many psychosomatic disorders)... Massage acts spasmodically and analgetically, and amplifies secretory activity of the tallow and sweat glands, thus providing *general relaxing and sedative effects*... For its simplicity, the reflex-segmental massage is *prophylactically* recommended once a day as daily anti-stress self-aid, and in the case of already manifested psychosomatic diseases as a temporary self-aid on the disordered acupuncture meridian before visiting physician... In particular, *TaiChi tapping* in a given 4-minute order along the acupuncture meridians, is recommended for preventive purposes once a day for anti-stress self-help (<https://www.youtube.com/watch?v=4rkM4tYSaTE>)...

(3) *Acupuncture Technologies, for regular half-year prevention and therapy of stress and psychosomatic diseases* (via traditional and contemporary methods of stimulation of the acupuncture system, as a synthesis of the traditional knowledge in Chinese medicine and recent quantum-informational discoveries in biophysics and bioengineering)... By successive *bioresonant acting* on several anti-stress acupuncture points, remarkable clinical results of the treatment are being achieved in *therapy of stress*... They are recommended for *half-year balancing* of the acupuncture system *for prevention of psychosomatic diseases* caused by prolonged stress, and in case of manifested diseases also for *therapy of numerous psychosomatic diseases* in acute and chronic phases (<http://www.dejanrakovicfund.org/iasc.html>)...

(4) *Homeopathy, for prevention and therapy of psychosomatic diseases* (via traditional and electronic methods, in case that regulatory system (*vital force*) of the patient is not unimprovably damaged)... As a second most spreaded curing method in the world, it is based on three principles: *principle of holism* (a person is considered as a wholeness of somatic, psychic and spiritual characteristics); *principle of similarity* (homeopic remedy obtained from the original substance which causes particular symptoms in a healthy person, is applied for healing of the sick person which has the same symptoms); *principle of minimal doze* (homeopic remedy so diluted that there are no molecular traces of the original substance it was obtained from) (<http://www.abchomeopathy.com>)...

(5) *Autogenic Training, for everyday autosuggestive anti-stress relaxation* (relaxation of muscles and blood vessels, recognition of the body feeling of breath and heart, and exercise for concentration, based on the idea of the equivalence of muscular and mental strain)... This *medically widely recognized* technique of relaxation is acting primarily from the state of alertness, but with careful sinking in deeper levels of consciousness, as autosuggestive short relaxing messages are *softening person's undesired psychosomatic reactions* in daily stressful situations... A prerequisite for the success of autogenic training is a short morning and evening *regularly exercising* at home (<http://www.dejanrakovicfund.org/iasc.html>)...

(6) *Reiki Positive Affirmations, for creation of new healthy habits* (based on idea of achieving harmony within self and environment): (i) *Just for today, I will not worry!* (ii) *Just for today, I will not be angry!* (iii) *Just for today, I will be grateful for everything!* (iv) *Just for today, I will do my work honestly (and on myself)!* (v) *Just for today, I will be kind to every living creature!*... The basis of these affirmations is the fact that we only

really have "today", and if everyone lives "today" as the only possible one, harmony would be achieved... Reiki educations provide simple and efficient method of self-aid in energy-informational *revitalization of the person* on all spiritual-psycho-somatic levels (<http://www.reiki.org>)...

(7) *Yoga Rhythmical Breathing, for everyday revitalization of the organism* (in the morning and evening relaxing walks, in fresh air, with rhythmicity 6:6:12: during 6 steps deep inhale, next 6 steps keeping the breath, and following 12 steps the full exhale)... In the same context, in closed environments a *microclimate bioengineering* can be recommended by applying *aeroionizers* (generators of negative ions)... In particular, according to *Swara Yoga*, rhythmical breathing through the nose is practiced, with pause for keeping the breath between inhalation and exhalation (in order to inhale as many as possible aeroions which are then redistributed within acupuncture ionic system)... For achieving deeper levels of energy-informational relaxation, some course of yoga is recommended (<http://www.swarayoga.org>)...

(8) *Control of Nasal Rhythms, for change of stressful mood* (via intermediate change of 2-hour ultradian brain rhythms, in order to keep energy and emotional balance of the organism)... According to *Swara Yoga* there is possibility for influence of the nasal rhythm on the brain one, by activating less active nostril through special breathing procedure: the more active nostril is closed by finger pressure, this being followed by forceful and short inhaling 10-15 times through the less active nostril (thus exciting previously less active channel through ionic nostril receptors, with subsequent influence on the limbic brain center to *switch the phase of ultradian rhythm*, which might be easily monitored by exchanged activity of nostrils)... The procedure is very simple and can be efficiently used to prevent development of cold in early phase as well (<http://www.dejanrakovicfund.org/iasc.html>)...

(9) *Contemplative Sense of Awareness, for removal of the deep roots of the latter reaction, projection or estimate* (spoken in itself): (i) *I experience a pleasant feeling* (for feelings of desire)... (ii) *I experience an unpleasant feeling* (for feelings of hostility)... (iii) *I experience a neutral feeling* (for neutral feelings)... In accordance with *Theravada Buddhism*, very quiet monitoring of pleasant and unpleasant feelings (with no emotional response) also weak and breaks the trend of desire and aversion (monitoring of pleasant feelings eliminates cravings and monitoring of unpleasant feelings eliminates aversion), while calm monitoring of neutral feelings removes ignorance (with humility toward all conditionalities) (<http://www.accesstoinight.org>)...

(10) *Meditative Self-Suggestion Messages, for normalizing the body* (spoken in itself, with eyes closed, with visualization of the entire body placed in a golden-yellow light ball with inscription Norma): *Full normalization of health, here and now, for the physical, mental and spiritual level ...* It can be combined with visualization of similar small golden-yellow ball of light about 10 cm above the selected body part with its descent into the body, and with visualization of the *circulation of vital energy* in the clockwise direction in that part of the body, looking toward the body (this circulation can be occasionally applied on several energy chakras in the area of the genitals, abdomen, heart, throat, brow)... This *normalizes* the energy-information integration at all spiritual-psycho-somatic levels (<http://www.youtube.com/watch?v=DqeGYuNno6o>)...

(11) *Meridian Therapies, for fast removing of psychological traumas, phobias, allergies, post-traumatic stress* (via simultaneous effects of *emotionally-involved visualization of the psychosomatic problems and tapping/ touching of some acupuncture points*; in associative array they also enable reaching to the deepest root of some permanent problem, i.e. finding and integration of clients's *primeval polarities*)... These psycho / energy therapies also demonstrate close *relationship between consciousness and acupuncture system*, and having in mind that for permanent removal of traumas it is necessary to apply *transpersonal circular (psycho / energy) therapeutic processes from all relevant meta-positions of the trauma-involved persons*, they confirm that interactions between trauma-involved persons are deepening at the level of *collective consciousness* (<http://www.spiritual-technology.com>)...

(12) *Family Constellations, for transpersonal optimizing existing family relationships...* This group psychotherapy method, known also as *Order of Love*, includes an internal spiritual realm of the individual and

transpersonal relationships within the family and social environment (transcending the boundaries of private and enabling insight into the trans-generational dynamics and their effect on the individual)... Group work in the field of transpersonal Family Constellations and comprehension of *trans-generational dynamics* at the level of collective consciousness provide insight into the relationship and a sense of family relationships, leading to very rapid progress and final resolution and *healing of family relationships* (<http://curezone.com/Hellinger>)...

(13) *Ho'oponopono, for transpersonal mental cleansing* (in case of some disease or conflict, spoken in itself to his soul and God): (i) *I am sorry*, (ii) *Forgive me*, (iii) *I love you*, (iv) *Thank you*... This ancient Hawaiian practice helps to balance the individual first and then the conflicting parties, removing the problem at a spiritual level with final manifestation at the somatic level... The effectiveness of this practice is to assume full responsibility *for any circumstance* in which we find ourselves, because all what occurs in our lives is *just a projection* of the existing transpersonally-entangled spiritual-psycho-somatic programs that cause disorders, diseases and afflictions ([http:// www.thereisaway.org/Ho%27oponopono_cleaning_meditation.htm](http://www.thereisaway.org/Ho%27oponopono_cleaning_meditation.htm))...

(14) *Bruno Gröning teaching, for transpersonal optimizing existing living programs* (with mental appeal to Bruno, as an open spiritual channel, to take all our loads, in the morning and in the evening up to half an hour by sitting with palms facing up, without crossing arms and legs in order that received healing stream flow (heilstrom) remained unbroken): *Dear Bruno, please take all my loads and loads of my environment... Please take them for our most good, in accordance with God's will and God's grace... Thank you dear Bruno, thank you my God*... In this mental appeal the first sentence is important for *optimizing* all existing spiritual and psycho-somatic (energy-informational) programs in ourselves and in our environment, the second sentence is important for *insurance* of spiritual optimization of them, while the third sentence is important because of *gratitude* for all optimizations of previous and future life programs... This appeal is *advisable* to all the family members, because of *optimization* of the existing *transpersonal programs in family* (<https://www.bruno-groening.org>)...

(15) *Prayer, for transpersonal optimizing existing living programs* (lying in bed before going to sleep, eyes closed, spoken in itself): *My God, help me to accept myself (my personality, my body, my disease, my therapists, my therapies) and my environment (my loved ones, my friends, my enemies) ... Help me to forgive myself and all others... Thank you for your support so far and I pray to spare us of oversized further temptations*... In this prayer the first two sentences are important for *optimizing* all existing spiritual and psycho-somatic (energy-informational) programs in ourselves and in our environment, while the third sentence is important in *gratitude* for all current and future optimization of these programs... Prayer is *advisable* to all the family members, because of *optimization* of existing spiritual-psycho-somatic *transpersonal programs in family*... I also warmly recommend Jesus' prayer: *Lord Jesus Christ, Son of God, have mercy on me, a sinner*, for the transpersonal removal of trans-generational sins, i.e. taken portions of the burden of collective consciousness... (<http://www.allaboutprayer.org/family-prayer.htm>)...

The order of the recommendations is given by the usual bottom-up hierarchy [2-6]: physical, mental and spiritual (*In a healthy body is a healthy mind*)... but their order can be applied in the spiritually predestined top-down hierarchy [60-71]: spiritual, mental and physical (*In a healthy spiritual environment is a healthy life*)... but also combined, according to personal preferences...

For *anti-stress self-help* the following selection and order of the above approaches and techniques in *preventive-optimized* holistic top-down hierarchy is recommended: *prayer; Bruno Gröning teaching; ho'oponopono; meditative self-suggestion messages; contemplative sense of awareness; control of nasal rhythms; yoga rhythmical breathing; reiki positive affirmations; autogenic training; reflex-segmental massage; programmed active relief*.

Mentioned choice is neither unique nor comprehensive, and therefore selected anti-stress approaches and techniques with recommendations and alternatives are given in Table 1 below.

Broader overview of the recommended anti-stress holistic approaches and techniques, with features placed in the context of the quantum-holographic psychosomatic framework presented above, is provided in Appendix later on.

Table 1. Overview of selected anti-stress approaches & techniques with recommendations & alternatives, in the usual holistic bottom-up hierarchy: physical, mental & spiritual

<i>Approaches and Techniques</i>	<i>Recommendations</i>	<i>Alternatives</i>
Programmed active relief	Prevention, everyday	Recreation, Long walks
Reflex-segmental massage	Prevention, everyday	TaiChi tapping, Anti-stress massage
Acupuncture technologies	Prevention, half-yearly Healing, as needed	Homeopathy, Reiki, Qigong, TaiChi tapping, Reconnection
Homeopathy	Prevention, half-yearly Healing, as needed	Acupuncture technologies, Reiki, Qigong, Reconnection
Autogenic training	Prevention, everyday	Reiki affirmations, Meditative self-suggestion messages, Yoga, Qigong
Reiki affirmations Reiki	Prevention, everyday Healing, as needed	Autogenic training Qigong, Reconnection
Yoga rhythmical breathing	Prevention, everyday	Reiki, Qigong, Reconnection
Control of nasal rhythms	Prevention, as needed	Yoga
Contemplative sense of awareness	Prevention, everyday	Meditation, Meridian therapies
Meditative self-suggestion messages	Prevention, everyday	Reiki, Qigong
Meridian therapies	Prevention, as needed Healing, as needed	Reiki, TaiChi tapping, Reconnection [48], Quantum transformation [52]
Family constellations	Prevention, as needed Healing, as needed	Prayer, Meridian therapies, Theta [49], Shamanic techniques [58,59]
Ho'oponopono	Prevention, everyday Healing, as needed	Prayer, Bruno Groening teaching [71], Theta, Shamanic techniques
Bruno Groening teaching	Prevention, everyday Healing, as needed	Prayer, Ho'oponopono, Theta, Shamanic techniques
Prayer	Prevention, everyday Healing, as needed	Ho'oponopono, Bruno Groening teaching, Theta, Shamanic techniques

Conclusion

The presented *integrative quantum-holographic framework for psychosomatics* might have significant holistic implications, providing fundamental quantum-informational framework for better understanding of the *nature of stress-induced psychosomatic diseases* as well as *limitations of methods of anti-stress prevention and healing*, which might help in *developing strategies for integrative psychosomatic medicine in the 21st century*.

Within this framework, it appears that 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*.

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

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APPENDIX. RECOMMENDED ANTI-STRESS HOLISTIC APPROACHES & TECHNIQUES

In this appendix we will give a brief overview of the above-recommended anti-stress techniques and holistic approaches: *programmed active relief; reflex-segmental massage and sonotherapy; acupuncture technologies; homeopathy; autogenic training; bioenergocorrection techniques; yoga and meditation; meridian therapies; family constellations; prayer.*

Programmed Active Relief

General stress mechanism prepares the organism for intense physical activity. Namely, the *two-phase stress mechanism* has been developed during the evolution [1,2]: (1) mobilization of the energetic and physiological potentials of the organism – preparation for defense, attack, or escape; and (2) intense physical activity – muscular strain which is spending the hormones, sugars and fats injected into the blood during the first phase.

However, daily stressful situations mostly do not request strong physical activity of contemporary person as a reaction to stress. On the contrary, it is the calmness, repression and control of emotions, and reduction of physical activity, which is demanded. In contemporary people the social behavior dominates the biological one, so that socially useful unnatural behavior disturbs biological harmony of psychoemotional and physical reactions, giving rise to neuroses and other psychosomatic disorders. Such omission of the second phase of stress has negative consequences on many organs and organic systems.

The most natural and useful *compensation of the second phase of stress* is corresponding *programmed active relief* i.e. program of kinesiologic / sports recreation.

Kinesiologic anti-stress programs are based on contemporary scientific results on significant *effects of the programs of kinesiologic recreation* [3,4]: they are excellent prophylaxis against negative effects of stress, through improvement of muscular, cardiovascular, nervous and especially endocrine system, thus softening reaction on the stress; they improve general self-confidence, provide the sense of coolness, and lower anxiety, irritability, and depressive states; they enhance life tonus and working ability; they represent the most efficient compensation of the second phase of stress - physical activity ("fight or flight"), which is missing in contemporary conditions of life and work as a normal reaction to stress; they neutralize an excess of hormones, glucoses, and cholesterol, injected into the blood in stressful situations; they enlarge endorphin within the organism with positive influence on intellectual activity, alleviate or remove depressive states and nervous overreactions, soften stress and reaction to it; and they develop abilities for relaxation and self-control.

Besides, the necessity of programs of kinesiologic recreation is supported by the facts [3,4] that absence of general motor activity or hypokinesia causes drowsiness, laziness, irritability, insomnia, loss of appetite, bad mood, weakening of emotional stability, deterioration of physical and mental abilities. Hypokinesia is one of the basic causes of numerous difficult chronic diseases of internal organs, and of metabolic deterioration. Hypokinesia is most frequently combined with other pathogenic factors of civilization – neuropsychological strain, overdosed and non-adequate nutrition, inconvenient life and work conditions, and harmful factors and habits.

Therefore, persons with optimal physical readiness have greater activity of nervous centers, differentiate complex signals faster and more precisely, have greater speed of information reception and processing, and higher stability of neural processes. Systematic exercises induce significant morphological and functional changes in all parts of the locomotion system: increase in mass and volume of the skeletal muscles, improvement in muscular blood supply and in neuromuscular regulation, enhancement in bone strength and their cross-section, growth of muscular energetic potentials which accelerate aerobic and anaerobic reactions, increase of sensitivity and mobility of neuromuscular apparatus and ability for more complete and faster muscular relaxation and concentration of muscular strains. Sports recreative activities also contribute to

reduction of fat layers and growth of sugar reserves; they increase abilities of breathing system in more intense oxygen and nutrition supplies of all tissues and cells in human organism, improve activity of heart and heart-vessel systems, and provide more rational and efficient work of all organs.

Reflex-Segmental Massage and Sonotherapy

Massage has been used by early tribes and peoples, in south Africa, Egypt, Babylon, Assyria, in ancient East, India, Greece and Rome. Since 19th century massage has been applied in numerous centers worldwide (clinics, hospitals, spas, physiotherapeutic cabinets, and cosmetic saloons), and a lot of investigations imply the massage influence on metabolic processes within the organism [2,5,6]. Massage can be categorized into contemporary and traditional eastern massage [2,7].

Reflex-segmental massage originates from the Far Eastern tradition, and appears in wider Western application only at the beginning of 20th century, when Shcherbak investigated the influence of mechanical vibrations on human organism during the vibrational massage. Shcherbak's methodology treats the zones reflexly connected with nervous centers, as spinal cord is functionally divided into segments wherefrom originates the innervation of internal organs and corresponding skin zones (Head's reflexogenic zones). In some disorders of internal organs, the changes in skin, underskin tissue, muscles, and periost appear in the innervations zones reflexly corresponding to these organs. As a consequence of pathophysiologic and pathologic disorders in these tissues painful manifestations appear, being designated as *painful points* or *trigger points*, with the following characteristics: sensitivity to palpation (under finger pressure the pain appears not only in the treated zone but also in displaced regions); radius of 1-2 cm; localizations in different tissues (muscles, vesicles, periost); the patient is most frequently not aware of their existence; they are not directly connected to the painful region, but they are on the same segmental level of the parasimpatical nervous system. The painful points are very successfully treated by various types of reflexogenic massage, thus restoring the equilibrium of vegetative nervous system, and removing or alleviating the pain. Although the part of the classical massage, the reflex-segmental massage is specific in its individual approach and individual choice of the zones (depending on the disorder). In particular, *TaiChi tapping* in a given 4-minute order along the acupuncture meridians, is recommended for preventive purposes once a day for anti-stress self-help (<https://www.youtube.com/watch?v=4rkM4tYSaTE>).

Aromatherapy massage combines massage with etheric oils, and is a basis of aromatherapy [8], whose roots date back to the time of Indian ayurvedic medicine [9] as well as the ancient Chinese, Tibetan, Egyptian and Greco-Roman [10], medieval Arab and European folk medicine, with a resurgence of interest in it only in the mid 20th century. It *harmonizes* the vital energy flows, strongly relaxes and relieves the effects of stress, stimulates body functions and improves health. However, *aromatherapy* is used more widely, through *scented bath and sauna* (for a complete psycho-physical relaxation), *ethereal lining* (for pain in bones and muscles), *rinsing the mouth and throat* (to relieve inflammation of the mucous membrane) and *refreshing the air* (for combat various mass infections).

Sonotherapy is the use of acoustic energy for therapeutic purposes [6,7]. Ultrasonic waves due to their double action (mechanical and thermal) represent a very effective means in the therapy of numerous pathologies of the bone-muscular and nervous systems. Both effects cause a local increase in temperature, leading to better circulation through the treated area, which speeds up and facilitates treatment, including *sonophoresis* (the introduction of drugs through ultrasound, where, unlike electrophoresis, the drug penetrates substantially deeper into the tissue, up to 50 mm). Indications for the application of sonotherapy are wide: degenerative joints and spinal columns, extrajoint rheumatism, isialgia, neuralgia, posttraumatic conditions of the bones, soft tissues, muscles and ligaments.

Acupuncture Technologies

Acupuncture. It is one of the most significant fields of the 5,000 years old *Chinese traditional medicine* [2,11-22], related to the insertion of needles in *acupuncture points* on the skin, which regulates the flow of the *vital energy (qi)* within 12 paired *meridians*, having correspondence to 12 visceral organs: six *yang*-organs (large intestine, triple warmer, small intestine, stomach, gall bladder, urinary bladder) and six *yin*-organs (lung, pericardium, heart, spleen, liver, kidney). The time of maximal *qi* activity of each meridian is 2 hours, giving rise to a complete 24-hour circulation of *qi* through all 12 meridians; there is successive regularity of alternative sequence of the paired organs: -yin-yin-yang-yang-... Beside 12 paired meridians, which are great double circulation of *qi*, Chinese tradition has also depicted 2 middle meridians, the back one and the front one, independent of the great double *qi* circulation.

Acupuncture treatments are recommended for *prophylactic half-year balancing* of the acupuncture system for the *prevention of stress and psychosomatic disorders*, and in the case of already existing diseases are recommended for the *treatment of numerous psychosomatic diseases* in the acute and chronic phase, according to the *methodology of modern acupuncture* [11-18]. Recommended *treatment* at one acupuncture point is up to 10 minutes, while the entire duration of the *acupuncture session* is up to 30 minutes every day or every other day. Number of *acupuncture sessions* in one cycle is 7-10 (possibly ≤ 14), with a minimum break of 21 days and an optimum of 28 days, in case you need to repeat the treatment cycle.

Swara yoga [2,18-23] as a part of 5,000 years old *Indian traditional medicine*, is also acquainted with an energy system analogous to the Chinese acupuncture system. In Indian terminology *qi* is known as *prana*, and *meridians* as *nadis*. There are 14 important *nadis*, although three of them have special medical and spiritual significance: *ida* activates *anabolic processes* (being active for one hour, when *left nostril* is open); *pingala* activates *catabolic processes* (being active for next one hour, when *right nostril* is open); *shushumna* is the only meridian which passes through all seven *chakras* (*centers of consciousness*, with ascribed spiritual meaning [24,25]) and is usually active only several minutes (in-between the time intervals of alternating 1-hour dominating activities of *ida* and *pingala*). Through their interrelation with *endocrine glands*, these three *nadis* influence *biochemistry* of the whole organism [23].

Ionic nature of the acupuncture system is suggested by recent research of *non-threshold GJ-electrical synapses*, which showed an order of magnitude increase in their concentration at acupuncture points [16-22], which is consistent with a *much lower electrical resistance* of acupuncture points in relation to the surrounding tissue, and with a much higher absorption of aeroions in these points [2,14- 22]. Ionic nature of the acupuncture system is also supported by biophysical model of the acupuncture system and states of consciousness [18-22]: according to this model, *qi* (*prana*, *ki*, *pneuma*, *vital energy*, *bioenergy*...) would have its theoretical interpretation in *ions*, out of which "+" *ions* have *catabolic* (*yang*) influence and flow dominantly through the *right* part of the circulatory acupuncture system, while "-" *ions* have *anabolic* (*yin*) influence and flow dominantly through the *left* part of the circulatory acupuncture system.

The biophysical ionic interpretation of the acupuncture system can also account for the origin of *Chinese therapeutic rules* yin-yang / tonification-sedation through the type / rotation of the needles [17-22,26,27]. Yin syndrome (excess of "-" ions in some left acupuncture channel) is tonified by taking in "+" ions from air or taking off "-" ions from the channel (through Ag needles working as anode) i.e. by rotating needles in counterclockwise direction on the left channel (thus closing its GJs for flow of "-" ions) or clockwise direction on the corresponding right channel (thus opening its GJs for flow of "+" ions). Yang syndrome (excess of "+" ions in some right acupuncture channel) is sedated by taking in "-" ions from air or taking off "+" ions from the channel (through Au needles working as cathode) i.e. by rotating needles in counterclockwise direction on the right channel (thus closing its GJs for flow of "+" ions) or clockwise direction on the corresponding left channel

(thus opening its GJs for flow of "-" ions). On the other hand, some other Chinese therapeutic rules need taking into account functional physiological interactions between acupuncture system and nervous and humoral systems.

Besides, the biophysical ionic interpretation of the acupuncture system can also explain interrelation of 2-hour *ultradian rhythms* in Indian and Chinese traditional medicines. So, *nasal rhythm* has ultradian periodicity ~ 2 hours (i.e. ~ 1 hour of alternative dominance of the left and right phases: -ida-pingala-...). Although this rhythm is apparently not in phase with ~ 24-hour *acupuncture rhythm* of the successive dominance of 12 paired meridians (i.e. ~ 2-hour successive dominance of every organ-related meridian with corresponding yin or yang functions in the mentioned order: -yin-yin-yang-yang-...), it seems that every ~ 2-hour organ-related acupuncture phase (either yin or yang) requires complete ~ 2-hour nasal phase (ida-pingala) in order to balance activities of corresponding organ-related pair of symmetrical left and right meridians, to enable both regenerative (anabolic, ida-like left-meridian) and degradative (catabolic, pingala-like right-meridian) organ functions [17-22,26,27], contributing finally to either yin or yang overall corresponding organ-effect from the viewpoint of the traditional Chinese medicine. This implies that both "-" and "+" ions are metabolically significant (which is confirmed by experiments with experimental animals which die after couple of weeks in the atmosphere without ions!), although small excess (ratio 5:4) of "-" ions is relaxing-well-being for the body!

Acupressure. It is traditional *Chinese and Tibetan massage*, conducted by stimulation of acupuncture points by pressure of fingers or handle of needles [2,5,6,15-18,28]. The choice of acupressure points depends on the purpose: in prophylaxis the points with general regenerative effects are recommended, and in therapeutics the points on the disordered meridian or organ should be used. Acupressure is applied in the direction of the meridian energy flow, by respecting other rules of Chinese traditional medicine in choosing overall procedure too; it is widespread because of its therapeutic effects, as well as of its simplicity in application. Reflex effect of acupressure massage on the entire nervous system plays a major role in regulating the function of certain organs and systems, as well as establishing a functional balance in general, to the cellular level. *Shiatsu massage* is also applied in prophylactic and therapeutic purposes, and is conducted by the pressure of fingers, elbows, and knees upon selected acupuncture ones.

Moxibustion. It is traditional *Chinese and Tibetan* healing method, placing the *heated* plant packages (moksha, usually black diaper - *Artemisia vulgaris*) or *burning* them on acupuncture points [11-18,28]. This is used for disorders of the flow of vital energy, if previous massage therapy has not been successful. The moxibustion counterpart in modern medicine could be electrophoresis of drugs on Head's reflexogenic zones. Due to the simplicity and low cost, the moxibustion is sometimes populistically referred as a tool that can be applied by laymen, although experienced doctors of Tibetan traditional medicine consider moxibustion (moksha) is a very effective means of treatment, but also very dangerous if not applied in the right time and in the right way, respecting the rules of the calendar and rhythms [28].

Microwave Resonance Therapy. It is modern Russian-Ukrainian technology of acupuncture stimulation [2,16,18], representing a synthesis of knowledge of ancient Chinese medicine and new biophysical quantum-informational discoveries [29-37]. It appears under various synonyms: microwave resonance therapy (MRT), information wave therapy (IWT), short wave therapy (SWT), millimetre wave therapy (MWT). MRT therapy can be applied in the *prevention and treatment of stress*, as well as in many *psychosomatic diseases*, with methodology, indications and contraindications adapted from the *methodology of modern acupuncture*. The method originates from the former Soviet Union, and the first investigations in 1960s that resulted in the construction of the first generation of MRT-generators, were not related to their medical but for military satellite communications. Later came the research activities of these waves on biological systems (Zalyubovskaya in Kharkov, and Devyatkov et al in Moscow [29-31], with substantial discovery of Sit'ko et al in Kiev in the early 1980s about the necessity and reproducibility of MRT applied to acupuncture points [32-36]), which successfully led to the development of the second generation of narrow-band (52 to 78 GHz) and third-generation broadband (30-300 GHz) MRT-generators, and finally the fourth-generation broadband CEM

MRT-generators with variable therapeutic oscillators in the mid-2000s (Tkachenko et al in Nizhny Novgorod [37]).

CEM (Controlled Energy Materials) MRT-generators with variable therapeutic CEM oscillators provide a unique opportunity for the initial recording of MT-spectrum (biologically resonant in both frequency and intensity) in acupuncture (reflexogenic) zone (being part of the resonance cavity for measuring CEM-oscillator) and subsequent re-emitting of the same spectrum by the CEM-oscillator within the same zone – thus allowing the initial memory attractor of the disordered state to be *bioresonantly* excited and subsequently depleted in favor of deepened attracting acupuncture healthy state, eventually leading to the complete erasure of psychosomatic disorders (see Fig. 1). This suggests that healthy state can be considered as an absolute minimum (ground state) in the *energy-state hypersurface of the acupuncture system*, while some disorders of the acupuncture system would correspond to newly created lateral minima of the (time varying) *energy-state hypersurface of the acupuncture system* [2-18,22] – which is probably the explanation for the stronger MW-sensory responses of the more deepened (disordered) lateral minima of the acupuncture system [26,38,39]. On the other hand, in the early 1980s acupuncture system was indicated as a macroscopic quantum dynamical structure [33-34], which might simply be considered as a result of differentiation of the peak areas of three-dimensional standing waves, formed by the reflection of coherent MW Fröhlich excitations [40-41] of molecular subunits of the cell membranes and proteins, microtubules, etc.

Bioresonance Therapy. It is modern German technology of acupuncture stimulation, representing a synthesis of knowledge of ancient Chinese medicine and new biophysical quantum-informational discoveries [42]. Most often it appears under the synonym *electropuncture* (and in conjunction with *homeopathy*). It may be used in the *prevention and treatment of stress*, as well as many *psychosomatic diseases*, with methodology, indications and contraindications, adapted from the *methodology of modern acupuncture*. The method originates from Germany, and the first studies began in the mid 1950s by Voll [43], whose name still carries one diagnostic and therapeutic quantum-informational method, which has gained wider popularity worldwide. The research of Voll et al established a precise clinical correlation between the relative changes in skin electroresistance of corresponding measuring points and functional disorders of corresponding organs, for 1.5 to 2 years before clinical manifestations of disorders, suggesting which body's meridians should be balanced by the (ULF) electropuncture, but also providing opportunity to test the optimal choice of homeopathic remedies (see the section on homeopathy). The latter studies have revealed UNF *bioresonance stimulation* of the acupuncture analgesic endorphin (~ 4 Hz) and serotonin and / or nor-epinephrine (~ 200 Hz) mechanisms [44]. Today, the ULF resonance therapy is used either alone or in combination with MRT therapy, when the MW-signal is UNF-modulated; and moreover it is also used as an endogenous adaptive bioresonance therapy, by recorded, processed and re-emitted own EM spectrum of the patients in the corresponding acupuncture (reflexogenic) zone [45-47].

Laseropuncture. Specific characteristics of the laser radiation made lasers widely used in many medical fields [48-49]. *Laseropuncture* can be used in the *prevention and treatment of stress*, as well as in numerous *psychosomatic diseases*, with methodology, indications and contraindications, adapted from the *methodology of modern acupuncture*. For this purpose the low-power lasers of 50 - 100 mW are used, with the *primary biological effects* (activation of enzyme systems, increased release of neurotransmitters, stimulation of energy processes) and *biological secondary effects* (stimulation of microcirculation and cell metabolism), which results in a number of *therapeutic effects* (analgesic, anti-inflammatory, antiedemous, regenerative). To achieve all these desired effects, it is necessary to take into account the principles of dosing and training of doctors involved in this method.

Magnetoacupuncture. *Effects of magnetic fields* on any organism can be *biophysical, biochemical, physiological* or *pathophysiological*, while the results can be *subjective and objective* [50]. *Magnetoacupuncture* can be used in the *prevention and treatment of stress*, as well as in numerous *psychosomatic*

diseases, with methodology, indications and contraindications, adapted from the *methodology of modern acupuncture*. The results of experimental studies and therapeutic effects of *permanent magnetic fields* applied in the form of *MADU strips* [51], unipolarly oriented by north side to the skin, in the long run allow the *regenerative processes* of the bones, joints and other tissues, by their influence on enzymatic, metabolic, vascular, and other physiologic processes, which results in a number of *therapeutic effects* (vasodilation, angiogenesis, antiedema, regenerative).

In addition to medical feasibility of therapeutic magnets, it should be noted that it is *inadvisable* to indefinitely use even weak magnets (in the form of the popular "magnetic" jewelry), because it *disrupts energy-configuration structure of the acupuncture system* and indirectly quantum-holographically *alters cell genome expression*. This can lead to adverse *psychosomatic disorders*, which is supported by the *pathogenic effects* of weak *geomagnetic anomalies* (where may be of importance the effects of *EM induction* in the conductive ionic GJs-contours of the *non-threshold acupuncture system*, originating from the slowly varying flux of geomagnetic fields in them [17-22,52]).

Homeopathy

Homeopathic idea is more than 2,000 years old and belongs to the European tradition (Hippocrates, Paracelsus, Hahnemann). Homeopathy as modern holistic and scientific medical discipline was founded in the late 18th and early 19th century by German doctor and pharmacist Samuel Hahnemann [53]. According to the World Health Organization, homeopathy as a treatment is the second most abundant in the world. Homeopathy can help in the *prevention and treatment* of numerous *psychosomatic diseases*, if regulation system (*vital force*) of the patient is not irreparably damaged.

Duration of homeopathic treatment depends on the type and duration of symptoms from which the patient suffers (approximately for each year of illness, one month of treatment), as well as of the individual properties of the patient. The homeopathy healing shows regularity: first symptoms disappear from inside the body and then outward symptoms; from head to feet; from functionally important organs to less important; and from the symptoms that were last reported to those who were first reported (Herring's rule).

Homeopathy is based on three fundamental principles [54-56]: (1) *principle of holism* (the man is viewed as a whole physical, emotional and spiritual characteristics and treated as a universal individual), (2) *principle of similarity* ("like cures like", which means that the homeopathic remedy derived from substances that in a healthy person causes certain symptoms can be successfully applied to treat a sick person with those same symptoms), (3) *principle of minimum dose* (homeopathic remedy may be so diluted that there are no molecular traces of the substance from which it is derived).

The *main obstacle* to the acceptance of homeopathy by medical and pharmaceutical community at large were highly diluted potentiated drugs used in homeopathy, with not accepting possibility that the *internal energy of the water molecule* can be therapeutically active drug ingredient, i.e. carrier of information, although still accumulating amount of scientific data goes in favor of it [54-57]. In this context, the *quantum-holographic informational framework* indicates that any quantum subsystem (including *homeopathic starting substance with water as solvent*) has the structure of quantum-holographic Hopfield-like neural network with *characteristic EM memory-attractor states*, which can *interact* with the macroscopic quantum-sensory EM level of the *acupuncture system / consciousness* and rewrite there his own informational program of homeopathic correction, which is then *quantum-holographically projected* onto a lower EM quantum-holographic *cellular enzyme-genomic level*, with impact on the healing-changed *expression of genes* [18,21,22].

In support of this explanation testifies *Voll's electropuncture diagnostics* [43,45-47], which is used to *test the optimal choice* of homeopathic remedies, which from a distance about 50 cm (without an oral administration of homeopathic remedy!) change electroresistance of acupuncture meridians of the patient, so that particular homeopathic remedy is chosen which *mostly reduces* the relative deviation of the previously

measured values compared to the nominal value of a healthy state. On the same line, let us mention the *harmonizing effect* on the acupuncture system of the necklace with pendants of *homeopathic remedies*, as indicated by the pilot study with bioelectrographic GDV-camera of the control and experimental groups exposed to EM fields of mobile phones without and with the beads of homeopathic remedies [58]). A step further is made in the direction of *electronic homeopathy*, with direct transmission of properties of homeopathic drugs on carriers (water, alcohol, saline solutions, sugar...) with the possibility of changing their potency, without the use of homeopathic substances [45-47]. All this suggests that *homeopathy* with full justification can be classified in the field of *bioresonance quantum-information therapy*.

Autogenic Training

Autogenic training (AT) is a medically widely applied *autosuggestive technique of relaxation* of muscles and blood vessels, recognition of the body feeling of breath and heart, and exercise for concentration, based on Schultz's idea of the *equivalence of muscular and mental strain*. By auto-suggestive short relaxing messages one's undesired psychosomatic reactions in daily stressful situations are softened: it can help in all functional psychosomatic disorders, where mistakes produced by habits should be corrected, or where severe emotional reactions should be smothered [59,60]. Technique of autogenic training is not only recommended for everyday anti-stress self-aid, but its short morning and evening exercising at home is essential prerequisite for its success.

First experiences in AT originate from early Schultz's works in his ambulance for hypnosis since early 1910s, followed by his neurological practices and finally published in his big monograph in early 1930s, being until 1970s reprinted almost without changes in Germany and worldwide; in the further affirmation of AT a significant role was played by Lindemann, who has pointed to its great importance in anti-stress prophylaxis [59,60]. The related techniques have been also developed in USA (*progressive relaxation*, Jacobson) and France (*relaxation*, Ajuriaguerra, Lemair, et al) [2,61,62].

So, AT has passed through the whole 20th century, and "in the following one it will enter as a method which outlived many psychotherapeutic trends, which have appeared and disappeared with the waves of fashion" [63]. Although AT, in the context of psychotherapy, might be classified into relatively nonpretensional "shallow or pragmatic methods, which are not concerned with the background of mental, neurotic, and psychosomatic disorders, but directly attack and remove the symptoms of these disorders" [64] – nevertheless Porot in his renowned Encyclopedia of Psychiatry points out its great practical significance: *Autogenic Training is the most contemporary method of medical relaxation* [65].

In the near future it might be expected that AT will emerge outside the medical framework, with a wider spectrum of applications, as excesses of psychophysiological and social tensions are becoming more and more a problem of civilization, which will be less and less resistible by unconscious self-defending automatism [66]. One of the ways of self-defense is AT and related methods, based on the millennial tradition of Eastern meditative techniques.

Classical AT is acting primarily from the state of alertness, but with careful sinking to deeper levels of consciousness, as autosuggestive short relaxing messages are *softening* one's undesired psychosomatic reactions in daily stressful situations. Experience has shown that this is more efficient if emotional flows are more freely engaged, this being the reason that autosuggestive messages include the words: perfect, relaxing, calm, pleasant, easy, good, free, happy, friendly, bravely, strong, far, quickly, highly [59,60].

Although classical AT might be classified into relatively shallow psychotherapeutic techniques, in order to strengthen integration and communication between different levels of consciousness higher courses of AT have been developing, like *Autogenic Training - New Generation* (AT-NG) [63]. In developing AT-NG especially inspiring was Jung's warning, that rationalism of the modern age is

keeping back to unconscious everything considered irrational, religious [67], this being the reason that AT-NG is directly oriented towards these speculative Jung's focuses of archetype tensions, with intention to weaken and cleanse them, and to recover old, forgotten, principles of morality [63].

Bioenergycorrection Techniques

Bioenergycorrection as an ancient way of correction of flow of *vital energy* is known in many traditions for millennia, enduring the test of time to the present day, with some modern modifications. On the wave of expansion of *integrative medicine* since the mid-1990s in China, the United States, and Europe, some *bioenergycorrection techniques* were subjected to *scientific research* and were included in the *curricula* of local medical universities.

In this section it will first be considered *holistic psychosomatic nature of bioenergycorrection* in the context of quantum-holographic psychosomatic framework [2,18-22], and then some of the *traditional techniques of bioenergycorrection* (Reiki [68-71], Qigong [72-75], Chromotherapy [9]); for *other methods of bioenergycorrection* interested readers are referred to the corresponding literature [76-97].

On Psychosomatic Nature of Traditional Bioenergycorrection. The biophysical mechanism of action of the *vital energy* should be sought in the *EM-ionic macro-quantum nature of acupuncture system* [2,18-22], i.e. *qi* which according to Chinese traditional medicine flows through acupuncture channels, although other traditions were also acquainted with significance of vital energy (in its wider meaning, all-pervading cosmic quintessence as well) [24,25,69,98]: Indian (*prana, akasha*), Tibetan (*lung*), Japanese (*ki*), Polynesian (*mana*), Egyptian (*ka*), Hebrew (*yesod*), Greek (*pneuma, ether, natura medica, anima mundi*), Christian (*Holy spirit, Light*), Islamic (*baraka*), and contemporary energy medicine (*bioenergy, biofield*). Besides, according to theoretically elaborated relationship *individual consciousness / acupuncture system* i.e. *EM MW / ULF-modulated ionic quantum-holographic Hopfield-like associative neural network* [2,18-22], esoteric notions like *astral body* (*manomaya, lingasarira, manovijnana, ka, psyche, nephesh, nafs, subtle body, psychic body, soul...*) and *mental body* (*vijnanamaya, suksmasarira, manas, ba, thymos, ruach, ruh, noetic body, spiritual body, spirit...*) [24,25,99] might be biophysically related to *out-of-body displaced part (connected with the body by miniature “wormhole” space-time tunnel / “silver chord” of vital energy of the astral-mental body* [24,25,99], *supported by near-death extrasensory experiences as well* [100-103]) *of the ionic acupuncture system*, and with the embedded *quantum EM component* of ionic MW / ULF-modulated currents, respectively. On the same line, the *ionic condensations* in the structured acupuncture system, with the *embedded quantum EM component* of ionic currents, behave like *distributed centers of consciousness* [2,18-22] – this presumably being biophysical basis of yogic *chakras* [24,25,98] (in which *vital energy* (*prana / qi / ki*) in normal state *circulates* clockwise, whose rhythm slows down in the case of psychosomatic diseases, with possibility of counterclockwise reversed circulation in case of most difficult diseases [80,84]). In wider context of *collective consciousness and vital energy* (and in accordance with their wider traditional relations with all-pervading cosmic quintessence [24,25,69,98,99]), the above relationships with *EM field* might be generalized to relationships with the *unified field* [18-22,104], with various micro-quantum and macro-quantum (non-biological and biological, non-structured and structured, virtual and real) excitations [24,25,105-108]. If put in the context of the *holographic principle* [109,110] according to which any (three-dimensional) physical system is *isomorphic* to the holographic information embedded on its (two-dimensional) surface, then the *quantum-holographic informational content of a body* could be also contained in the *corresponding surface layer of vital energy of the astral-mental body (aura)*, as has been stated in various traditions [24,25,98,99]).

It should be mentioned that in the past decades a notion of *bioenergy* was adopted in the practice of *bioenergycorrection*, but it seems that there is no any specific type of energy in biological systems. Essentially, there is *ionic diffusion*, from the *ionic abundant acupuncture system of healer* onto the *ionic depleted acupuncture system of healee*. The confusion in interpretation of biotherapeutic healings originates from

combination of the ionic diffusion mechanism with *two accompanied biophysical mechanisms* [18-22]: (1) *short-range MW / ULF-modulated EM-induced interactions (in possible combination with RF / LF-modulated and UV / visible / IR bioresonant interactions)* between the acupuncture systems of healer and healee (presumably significant for diagnostics, but also for therapeutic-suggestive non-verbal messages); and (2) *transpersonal mentally-addressed spatio-temporal tunneling* of the displaced part of EM-ionic acupuncture system of the healer onto acupuncture system of the healee in *transitional states of consciousness* (with the subsequent combination of ionic diffusion and short-range MW / ULF-modulated EM-induced interactions). [It should be stressed that many transpersonal phenomena associated with *consciousness* and *psychosomatic bioenergy correction* are phenomenologically well documented [18-25,68-90,93-97,100-103,106-108,111-122], and their physical explanation should be sought on the border of the current *scientific paradigm* [18-22,107,108,114-126]. Within our *quantum-holographic / quantum-gravitational theoretical framework of consciousness and psychosomatics* [18-22,123] they are of *quantum-gravitational* nature (in space-time transcending *highly-noninertial* strong-gravity-equivalent (according to *Einstein's equivalence principle*!) *transitional states of consciousness*, based on locally generated "wormhole" space-time tunnels stabilized by so called *exotic matter* (vacuum fluctuations in strongly curved space-time of "wormhole" tunnels [124]) with *anti-gravity* effects – really observed in the *transpersonal psychokinetic manifestations* of vital energy [25,77,78,106-108,119-121]). The same theoretical framework also suggests a physical basis for ad hoc *von Neumann's projection postulate* (at the micro-quantum scale [125,126]), to explain the quantum-mechanical *wave function collapse* (through local quantum-gravity-induced "wormhole" tunnels in strong-gravity-equivalent (according to *Einstein's equivalence principle*) *highly-noninertial* quantum-measurement-like situations [123]); the question of how it is possible that these highly-noninertial microparticle processes with inevitable opening of miniature "wormhole" tunnels were not taken into account within quantum mechanics that is yet extremely accurate theory (?) – can be answered as they were (!) but implicitly within von Neumann's projection postulate (which is on the deeper quantum-gravitational-level!)]

It should be noted that the *healing effects* upon acupuncture system / consciousness of the patient are *often blocked* by quantum-holographically encoded *spiritual personal acceptance* of the disease as a form of (self)punishment (as indicated by respondents on the *post-hypnotic regressions* [111]), when *prayers and love* for oneself and the others are needed for termination of (self)punishment – which performs *spiritual integration of personality* i.e. disappearance of the corresponding attractor energy blockages within the acupuncture system / consciousness of the patient, which *triggers a process of permanent healing* [18-22,77-79,112-114].

Reiki. It is about 2,500 years old method of improving health, based on pervasive use of the *Universal vital energy* in order to significantly increase the capacity of their own *vital energy*, strengthening the body's defense capabilities, improving health, and also improving the quality of life [68-71]. Reiki is mentioned in the Sanskrit sutras, the writings of monks from Tibet, India, and China and in the works of prominent spiritual teachers around the world; Reiki was also used in Egypt, Greece, Rome, and in the countries of South America. Knowledge about the art of receiving vital energy was subsequently lost for an extended period of time.

In the early 20th century, a Japanese doctor Mikao Usui, spent almost 10 years of research and travel around the world to come up with all sorts of sources that indicated the man's mastery of this amazing art, compiling the simple technique of transferring and applying the skills of channeling Universal vital energy called *Reiki* (in Japanese: *Rei* - Universal, Divine, Vital, *ki* - energy). Usui experienced *Reiki initiation* (opening the energy channels) after 21 days spent in solitude and meditation, without food, living only on water; for him Reiki primarily represents the art of spiritual development and, as a natural and inevitable result, healing on all levels.

Followers of Usui (Chujiro Hayashi, Takata of Hawaii, Phyllis Lei Furumoto, Barbara Rey, William Lee Rand...) then spread Reiki around the world, making properties of Reiki methods applied and tested in many clinics, institutes and laboratories around the world. Although Reiki differs from school to school, from teacher

to teacher, and from practitioners to practitioners – for anyone who comes into contact with the vital energy differences in historical versions and differences in schools and styles become unimportant, and remains the only realistic health improvement at all levels.

In most developed countries the Reiki method is integrated with the methods of modern medicine. Reiki skills are used by many for stress relief and relaxation, as well as for improvement of the quality of life in different areas: interpersonal relationships, work, education, love, finances, etc. Regular practice of Reiki creates all necessary conditions for the establishment of harmony of the body, psyche and spirit, and therefore life itself.

The essence of Reiki method lies primarily in the opening of person's energy channels and their connection with the Universal vital energy in order to facilitate its free flow through all levels of the organism. The process of opening (initiation) is achieved by Master-teacher with a special technique of channeling of vital energy [68-71]. Although practitioners may acquire any Reiki knowledge by themselves through education and training, the very process of *opening* cannot be performed independently. Reiki allows the person to trigger an intense flow of vital energy through its body within 20 seconds to 5 minutes (depending on the level of education).

Studies have found that Universal vital energy comes into the practitioner's body, first of all, through the crown of head and descends in a spiral down the spinal column, via the so-called energy channel, which consists of 7 interconnected energy centers, known as chakras. Flowing through the spinal cord, the vital energy is distributed in the body, filling every cell and emerges through the minor chakras in the palms of the hands and feet. By laying practitioner's hands on the body, vital energy is further directed and focused in a particular area. Reiki practitioner can *guide* Universal vital energy *toward the body*, but also *transpersonally in any direction outside the body* (regardless of distance!): to other people, objects, animals, plants, the situations, the fields of life...

During therapy, Reiki therapist receives Universal vital energy as well as the client, except that after treatment the vital energy retains for hours and continues its positive effects in the body of the recipient. Reiki therapist does not lose and spend his vital energy during the treatment, but rather improves own psychophysical condition. While receiving Universal vital energy, each person takes the amount of vital energy that is necessary to eliminate energy blockages in all spiritual and psycho-somatic levels, allowing for the establishment of their overall harmony.

Practicing Reiki *promotes spiritual growth*, developing such properties such as [68-71]: compassion, tolerance, healthy self-love, love for our neighbors, all living beings, environment, earth... Reiki skills are not based on a belief system, and therefore do not require mental preparation and suggestive guidance leading to the improvement of health: *It is only needed to wish to receive the Universal vital energy*.

Qigong. It is about 5,000 years old traditional Chinese method of improving health through preventive health practices expressed through physical exercises, martial arts, meditation techniques, and the use of the Universal flow of vital energy in the body [72-75]. *Breathing technique to improve vital energy* Chinese called *Qigong* (Qi – universal vital energy, breath or breathe; gong – work or technique). Throughout history, Qigong (or Chigong) was transferred by different schools: the traditional, Taoist, Buddhist, Confucian, Neo-Confucian, School of Chinese Medicine, and School of traditional Chinese martial arts.

Traditional Chinese medicine has been prescribing Qigong exercises for preventive reduction of stress, health maintenance and strengthening of the body, but if necessary they can be practiced as a *therapeutic intervention*. Today millions of people in China and around the world are regularly practicing Qigong, through simple breathing exercises, stretching and strengthening tendons, ligaments and muscular-skeletal systems of the body, but also more complex exercises of visualization, monitoring and control of flow of vital energy through the body.

Research on the effectiveness of medical Qigong began during the 1950s in China, and the mid-1980s in the United States. Medical Qigong has been officially recognized as a standard medical technique in Chinese hospitals in the late 1980s. On the wave of expansion of integrative medicine, in the mid-1990s Qigong was included in the curricula of medical universities in China, and during the 2000s in the United States.

Knowledge of Qigong exercises used to be much closed, while in modern times it has become easily accessible throughout China and the rest of the world, and currently there are over 3,000 different styles and schools of Qigong. Following these trends, many people began to learn Qigong independently without supervision of the initiated teacher, whose *indispensable function* is to prevent unbalanced approach to student exercises, as unbalanced flow of vital energy can lead to mental and physical dysfunction of the inexperienced practitioner.

Qigong and its connection with the Chinese martial arts are often associated with spirituality, without which it is considered that it is not possible to achieve a relaxed and calm state of mind and body. Experienced teachers of Qigong martial arts claim that the access to the higher states of Universal vital energy and the subsequent health benefits that these higher states offer, are possible only through the principle of cultivating virtues, when the practitioner realizes that he never divorced from nature.

Qigong exercises can be roughly divided into two main groups: *external Qigong* (movement exercises, now popular in the West) and *internal Qigong* (meditation exercises, traditionally popular in China), although they are often combined. The terms that are used for external Qigong exercises are colorful and reflect the desire to accurately convey the feeling that one has during exercises. On the other hand, one of the main representatives of internal qigong is a *Taoist Qigong* (*Taoist Yoga*, promoted for decades by Mantak Chia all over the world [75]), involving technique of deep breathing in conjunction with meditative visualization of the circulation of vital energy along so-called *microcosmic orbit* (by completing the energy circuit between the front and back acupuncture meridians).

Practicing Qigong improve all aspects of health [72,73]: disappearing stress and psychosomatic illness, and increases vitality and general mood. On the other hand, Qigong can be practiced as energy therapy (such as Reiki treatment), by guiding received Universal vital energy from the therapist to the client [75].

Chromotherapy. According to about 5,000 years old tradition of *Ayurvedic medicine* [9], in one of the *chakras* the circulation of vital energy may be *disturbed* and can be *balanced* by corresponding *colors*, which is the basis of today's *chromotherapy* (correspondence of colors, chakras and related organs / organ systems): (1) *Red*: Muladhara chakra (located in the base of the spine) is used to stimulate the body and mind and improve blood circulation and respiration; (2) *Orange*: Swadhisthana chakra (located at the bottom of the genital organs) is used for healing lungs, speeding digestion and raising the level of emotion and energy; (3) *Yellow*: Manipura chakra (located in the solar plexus) is used to clean the body, stimulate the nervous system and mental activities; (4) *Green*: Anahata chakra (located in the region of the heart) is used to reduce blood pressure, relieve neuralgia and migraine, as well as for the treatment of mental illness, nervous tension, hysterical attacks, insomnia; (5) *Blue*: Vishuddha chakra (located in the area of the throat) is used to reduce blood pressure, pulse and respiration rate, alleviating illness and pain, calming and increasing introspection, (6) *Indigo Blue*: Ajna chakra (located in the area of the "third eye") is used to relieve skin problems, (7) *Purple*: Sahasrara chakra (located at the top of the head) is used for the uplifting of the heart and lungs and increase organic resistance).

Yoga and Meditation

Yoga. The Yoga Sutras of Patanjali [127], written 2,300 years ago, are considered the best and most authoritative compilation and reformulation of spiritual disciplines and *meditation* techniques that are found in the Upanishads several centuries before that. *Yoga means union*, it is a method by which an individual can become one (or more precisely, re-united) with the highest God (Brahman) underlying this apparent, ephemeral universe (even the word religion in its Latin root means the same: *re + ligare* (re + union)). In its essential

meaning yoga is defined as *control of thought waves of the mind*; describing actions of thought waves, yogis use a simple picture – the picture of the lake, where the lake represents the mind and the bottom of the lake represents the Atman or the true Reality: If the surface of the lake is disturbed, the water becomes muddy and the bottom cannot be seen. The goals of yoga vary from achieving reunification of Atman with Brahman, to improving health [23,128-130].

Swara yoga for good health recommends half-hour *rhythmic breathing* through the nose (in the traditional lotus position, but may be also practiced in the morning and evening relaxing walks), with rhythmicity 6:6:12 (in walks, during 6 steps deep inhalation, next 6 steps holding the breath, and the next 12 steps slow and complete exhalation), 5:5:10 or 4:4:8, depending on individual lung capacity [2,18-23]. These breathing exercises should be carried out in the fresh air (preferably near rivers), where there is an excess of negative ions, which have a beneficial effect on the relaxation of the body and hence the overall health. Then it is practiced exclusively *rhythmic breathing through the nose*, with an interruption to keep breath between inhalation and exhalation (in order to inhale as much as amount of ions (prana) through one of two (out of three) most important nadis (left *ida* and right *pingala*), with their entrances in corresponding nostrils, to be then redistributed within the acupuncture ionic system).

Decades of research have shown that ions in the air (concentration of $\sim 10^3$ - 10^4 cm^{-3}) substantially affect the behavioral effects (freshness / fatigue, relaxation / irritability), and in the long run the human health: it is shown that the effect of *negative* aeroions is *anabolic* (leading to relaxation, and consequently improving health condition), while the effect of *positive* aeroions is *catabolic* (eventually leading to fatigue, and in the long run to occurrence of disease) [2,18-22,131-133]. In addition to *artificial sources* of poorly influencing *positive ions* (in household appliances, personal computers, air conditioners and industrial machinery), there are also *natural sources*, usually in the form of hot winds (as, for example, fen – the wind blowing in southern Germany and Switzerland). To improve microclimate, *aeroionizers* are made (generators of negative aeroions), which in its vicinity raise the concentration of *negative ions* in the air up to 10^5 cm^{-3} , establishing a microclimate which is seen in the countryside near rivers and waterfalls, forests and mountains, after heavy thunderstorms and heavy downpours.

Swara yoga also recommends simple *control of nasal rhythms* (2-hour ultradian rhythms) in the process of recovering or keeping energy and emotional balance of the organism [18-23]. Namely, there is possibility for *reverse influence* of the nasal rhythm on the brain one, by activating less active nostril through special breathing procedure: the more active nostril is closed by finger pressure, this being followed by forceful and short inhaling 10-15 times through the less active nostril. In this way the previously less active channel (*ida* or *pingala*) is excited through ionic nostril receptors, then subsequently influencing the limbic brain center to switch the phase of ultradian rhythm. The effect is achieved after only several minutes, which might be monitored by exchanged activity of nostrils. The procedure is very simple, and can be efficiently used to prevent development of stressful mood, cold in early phase (through switching the ultradian rhythm of developing disorder) etc.

Meditation. According to ancient Indian spiritual introspective techniques of *meditation*, by successive activation of *centers of consciousness (chakras)*, starting from the base of the spine to the scalp, there appears a growing *consciousness expansion*, acquisition of *mystical powers (siddhis)*, with final reaching a direct and permanent state of *mystical spiritual unity (nirvana)* of aspirant's individual consciousness (Atman) with the divine consciousness (Brahman) [24,25]. In the context of the collective consciousness as a possible *ontological property of the very physical field* [103], it seems that the *whole psychosomatics is quantum hologram*, and this applies to both collective and individual consciousness [18-22] – which resembles the Hindu relationship *Brahman / Atman*, as a whole and the part which contains information on the whole (*Brahman is Atman*); that fits in the Hindu concept of Atman in the broad sense, as a divine manifestation in the form of the world soul or universal self, that exists in everything: objects, trees, animals, and people, although it

is not always realized to the same extent [24,25] (and in the context of the *holographic principle* [109,110] and the *all-pervading field of collective consciousness and vital energy* [24,25,106-108], *quantum-holographic information* could be embedded in the *surface layer* of each physical system (and the Universe as a whole) including its field of collective consciousness and vital energy [24,25,98,99]).

In addition to the aforementioned eschatological context of meditation, It should be noted that in the *Indian tradition*, meditation is often *intertwined* with prayer, witnessing the incredible prayer-mediated *transpersonal healing* [77,78]. Chopra also pointed to the *healing effects of meditation* [76], as confirmed by *anti-stress TM-research* too [129,134]; a similar applies to the technique of *contemplation* in the Buddhist tradition [135] (close to techniques of *meditation* in the Hindu tradition [128]). Within the quantum-holographic framework of psychosomatics [18-22] this would suggest that the *positive-visualizing-information* from the level of *consciousness / acupuncture system* might be *quantum-holographically projected* to the level of the genome, thus initiating its *healing expression and somatization*. This is in line with the recently demonstrated Russian findings of Gariaev et al of the (quantum-holographic) impact of information-modulated laser signal on the *expression of genes* [136].

Hereby we also point out the experience of Jon RG (John-Richard - 50 years ago) Turner [137]. Some 50 years ago, he was living in Los Angeles, and he closed his eyes and asked his Whole-Self what he could possibly do to assist these patients who had failed to find homeostasis after 5, 10, some even 20 years of various therapies. What entered his mind were the words "If you will take each person back to the period before they were born each will experience rapid healing!" So, *not only we are the synthesis of our parent's genetic DNA coding which gave us our physical characteristics, we are also the synthesis of our energetically charged thoughts and emotions during our pregnancy which gave us our mental and emotional characteristics: our Whole-Self emotional DNA© (W-S eDNA ©)*. The healing came from the recognition that the trauma feelings were the result of our mother's event not something we had done. In next several decades this evolved in the *Whole-Self Prebirth Psychology, Philosophy & Education* [138] prefaced by *The Whole-Self Radiance Relaxation Exercise ©*. There is also balancing of consciousness / bio-energy achievable through the *Whole-Self Radiance Relaxation Exercise* discovered and developed by Jon RG & Troya GN Turner.

On *transpersonal importance of visualization* and mentally-channeled transpersonal interactions at the level of collective consciousness, testify also various *tribal traditions*. Thus, the African-Haitian *voodoo magic* visualization *intentionally creates transpersonal astral-mental "silver cord"* between the operator and the victim, while the Hawaiian *hooponopono-tradition* visualization *intentionally breaks the "silver cord"* and thus *removes the transpersonal traumatic emotional connection* – which *naturally exists* between mother and child, and *spontaneously appears* by intense exchange of vital energy between relatives, close associates, current and former lovers, friends and enemies, and might survive *post-mortem* between the living and the dead person [97].

However, it should be noted that the aforementioned and similar mental-channeled transpersonal *magic-ritual practices* of tribal traditions, with the intention of achieving energy-informational influence on the others, are associated with the great *spiritual loads* of the practitioners as well. These practices are probably magic-invocation *mediated* by hypothetical macroscopic powerful and spiritually-loaded EM / ionic vacuum excitations (from "demonic" archetypal levels of the collective consciousness, as indicated by *experiences* of various esoteric-religious traditions [24,25,79,81,93-97,106-108,139-142]).

Let us mention the millennia controversy of *post-mortem* evolution of the soul, which probably refers to *interpretive epistemological level* of classically-reduced rationalization of *transpersonal transfer* of mentally-addressed loads within the existing generation and further *via quantum-holographic network of collective consciousness*, with the possible *impressions* that particularly strong conflicts are transferred as "ego-states" with strong *feelings* of previously experienced lives [18-22].

Meridian Therapies

Meridian (Psycho / Energy) Therapies (MPET), created during 1990s [143,144], represent application of energy paradigm for removing psychological disorders, which enables their much faster resolving if we approach them as if they were disturbances in energy fields (or aura), than if we start searching for their historical causes as was characteristically done in psychotherapies. In the context of MPET methods, let us mention the *muscle test* from the *Applied kinesiology* [144,145], which can easily detect the polarities associated with the rotation of the vital energy in the chakras in the clockwise-counterclockwise direction, the orientation back-front or up-down in the aura, of state of good-bad, pleasant-unpleasant, or beneficial-harmful. MPET methods open new great perspectives, demonstrating close relationship between *consciousness and acupuncture system* [18-22], with fast removing of *traumas, phobias, allergies, post-traumatic stress and other psychosomatic disorders*, via simultaneous effects of *emotional visualization of the psychosomatic problems and tapping / touching of some acupuncture points*. This might be *quantum-informationally* interpreted as *smearing and associative integration of the disorder-related memory attractors* through successive imposing of new boundary conditions in the energy-state space of acupuncture system / consciousness, so that initial memory attractor of the psychosomatic disorder becomes shallower and wider, with greater overlap and accompanied associative integration into memory attractor of deeper normal ego-state. In addition, having in mind the frequent necessity and effectiveness of *transpersonal circular (psycho) therapeutic processes*, i.e. from all relevant mentally-addressed *meta-positions of other participants* in the treated trauma, MPET methods confirm that the interaction of trauma-related persons take place at the level of *collective consciousness*.

There are several major systems of MPET [144]: TFT, EFT, TAT, EMDR, and PEAT... *Thought Field Therapy* (TFT) was invented by clinical psychologist Roger Callahan, who started this energetic revolution in psychology and psychotherapy. TFT entails diagnostic procedures to determine meridians misbalance, combined with tapping at specific acupuncture points in a prescribed sequence (algorithm) in order to treat various psychological problems. *Emotional Freedom Technique* (EFT) was developed by Gary Craig, one of the first disciples of Roger Callahan. He developed EFT on the basis of TFT, but according to the statements of many practitioners, it is simpler and more efficient than TFT, because it uses just one algorithm for all disturbances. *Tapas Acupressure Technique* (TAT) was created by Tapasvini Fleming, who fruitfully connected her knowledge of acupressure with meridian systems. Briefly, TAT is a 'do-it-yourself' therapeutic technique based on *Traditional Chinese Medicine*, which is extremely efficient with all kinds of allergies, sensitivities with different kinds of food and negative environmental influences. *Eye Movement Desensitization and Reprocessing* (EMDR) was developed by Francine Shapiro with colleagues. EMDR works by diminishing sensitivity through eye movements and reprocessing traumatic incidents. It is very simple and efficient method for healing traumas and disorders connected with anxiety. *Primal Energy Activation and Transcendence* (PEAT) and its several modifications (Deep PEAT, Basic PEAT, DP4 Method...) were developed by Živorad Mihajlović Slavinski. Application of PEAT, by simultaneous visualization and tapping selected acupuncture points, quickly removes traumas in the "frozen" image in Basic PEAT, in the alternate visualizations of herself / problematic situation in DP4 Method, or in associative series in Deep PEAT which goes to the very root of the problem, i.e. to finding and integrating customer *primeval polarities*.

The existence of *primeval polarities* is in accordance with the ancient Chinese concept, according to which everything in nature functions as a dynamic harmony of *yin-yang polarities* (female-male, hedonism-spirituality, creation-destruction, passive-active ...). In occultism is regarded as the greatest secret neutralization of primary *primeval polarities* (specific for each individual), making aware fundamental life game between them, which are then considered without (often traumatic) emotional empathy, because man is further considering them as one primeval polarity in the second one, and vice versa, i.e. they become "undivided one", as part of the (quantum-holographic) implicate order [144].

Family Constellations

Family Constellations or Order of Love was methodologically developed and framed in the early 1980s by German psychotherapist, philosopher, theologian and educator Bert Hellinger, under the influence of group dynamics, primal therapy, transactional analysis and different forms of hypnotherapy, adapting it to modern therapeutic approach [146,147].

This method confirms the *transpersonal nature* of traumatic memory attractors of quantum-holographic network related to "field of knowledge" of the *family relationships* [18-22], the possibility of *transpersonal relief* of their energy through representative feelings in a group work (of previously completely non-involved group), which is directly manifested through *changing family relationships* due to a changed "field of knowledge" of the treated family.

By its effective healing effect Family Constellations goes beyond traditional therapeutic work. It is a way of healing that involves the *transpersonal relationships* within the family and social environment. This process also goes beyond the personal and gives insight into the *trans-generation dynamics* and its effect on the individual. Awareness of these dynamics through the so-called collective memory connects us to the transpersonal, allowing us insight into the connection and meaning of the relationships, leading to very rapid progress and final solution and healing [146,147].

Representative sense is central to the work of Family Constellations. It is one of the basic human capabilities that the physical and emotional levels can experience feelings of others and have the "knowledge" about them, even though before they had no any cognitive information about. Being a "medium" for experiences of other people is human capability which has its roots in the very beginning of human existence, and is one of the oldest "knowledge" of the human race. In addition, it is used in many other modern forms of psychotherapy, such as the concept of mutual transmission of psychoanalysis, but in the Order of Love the largest degree of differentiation of these abilities is attained. Family constellations represent so-called "field of knowledge" which practically reflects the energy state within a family environment, with great potential to effective healing [146,147].

Family Constellations procedure is solution-oriented and is subject to natural orders and laws working within family environment i.e. factual category regardless of the moral codes. Violation of these laws can result in serious illness and suffering, and restoring them to healing. These laws include the right of belonging of all family members regardless of the moral codes, and undisputed right to their own fate, to their own suffering and guilt. So children cannot bear the loads of their parents, who must cope with their loads, and so contribute to the prosperity of their own lives. Including the ancestors and the dead family members, as well as those who were energy tied to the family in some sufferings, leads to reconciliation on a deeper level and the living family members renew their strength [146,147].

Working in the field of Family Constellations requires post-graduate upgrading and qualification and implies a good knowledge of the recognized psychotherapeutic methods, but also the ability of practitioners of Order of Love to give up notions of control over the situation and to "work without intent and fear", says Hellinger [146,147].

Prayer

Previously discussed methods of meridian (psycho / energy) therapy and Family Constellations confirm that the *interactions* of trauma-related persons take place at the level of *collective consciousness* [18-22]. In particular, bearing in mind that the *transpersonal circular meridian (psycho / energy) therapeutic processes from the meta-position of all trauma-related persons* are necessary for the permanent removal of the trauma, it sheds new light on the possibility that the memory attractors of psychosomatic disorders on the level of collective consciousness might be *permanently reprogrammable by merciful prayer for others* [18-22].

This could be probably achieved through prayer-induced hypothetical macroscopic powerful and spiritually-clean EM / ionic vacuum excitations (from "divine" archetypal levels of the collective consciousness, as indicated by *experiences* of various esoteric-religious traditions [24,25,79,81,93-97,106-108,139-142]). These *indeterministic interventions* (with non-Schrödinger imposing essentially new boundary conditions!) in an otherwise causal quantum-holographic evolution of collective consciousness, might permanently remove the *interpersonal conflict* of the two persons as a net effect. At the same time other non-reprogrammed interpersonal conflicts in other related persons might cause their (unconscious mental-addressed) transpersonal re-induction in the two previously prayer-involved persons. This leaves the most room for *free will and influence on future preferences*, because *non-reprogramming by prayer* might result in *further unconscious transfer* of memory attractors on the level of *collective consciousness* in this and future generations, just *accumulating* quantum-holographic loads which *might cause later* not only diseases, but also interpersonal conflicts, wars and other sufferings [18-22].

In this context, the above *analogy between mathematical formalisms of Hopfield-like quantum-holographic associative neural network and Feynman's propagator version of quantum mechanics* indicates *collective consciousness (and vital energy, in accordance with its wider traditional meaning of all-pervading cosmic quintessence [24,25,69,98])* as a possible *ontological property of the unified field* [18-22,104] with various micro-quantum and macro-quantum (non-biological and biological, non-structured and structured, virtual and real [105])) excitations, which is widely spread thesis of *Eastern esoteric / religious traditions* [24,25,107,108]. Then *memory attractors of quantum-holographic space-time network of collective consciousness* might be treated as *psychosomatic collective disorders* representing generalized *quantum-holistic field-related records* (including *inter-personal prayer-finally-reprogrammable nonlocal loads* [77-80]) – which might be the basis of *quantum-informational global psychosomatics* [18-22].

Also, in the context of direct quantum-holographic coupling of individual and collective cosmic consciousness in *observing implicate order* [18-22,113,148-155], it would require weak out-of-body quantum-communicational consciousness-environment coupling. That is, it is necessary previously to *remove all psychosomatic loads* (cleansing of the possessive or hedonistic emotional-mental sin / karmic connections with the world – which as a burdensome "mental addresses" would lead to quantum projections of the mentally-channeled transpersonal-tunneled consciousness on the appropriate out-of-body environment, and thus to classically-reduced out-of-body extrasensory observing of the mentally-addressed environment!). Hence, *effort of mystics of all traditions* to previously *clean consciousness / soul* through spiritual practice (prayer, meditation ...) and thus to reach their ultimate *eschatological goal* (the Kingdom of God, Nirvana ...) i.e. *post-mortem* salvation (of sinless, unbound) soul [24,25,77-79] is understandable.

That still leaves room for personal love, whose highest manifestation is precisely the ability and willingness of permanent and unconditional forgiveness to the loving person (and for her to everyone else, including enemies), in spiritual prayer and (quantum-holographically subtly mutually related) life practice. Something similar applies to the love of family and friends [18-22,114].

In addition to *prayer-mediated healing effects* that have a special place in the *Christian (hesychastic) tradition* [79,80,156], their important role in different practices should also be mentioned: *Shamanic rituals* [93-95], *Hindu meditation* [77,78], as well as *some modern methods of healing* [81,87,88].

In the context of *trans-generational* cosmic quantum hologram, although on the level of collective consciousness everything is *quantum-holographically predestined* – as suggested by experiences of different spiritual traditions [157] and post-hypnotic regressions [111] as well – they also suggest the possibility of *optimizing life-programs by spiritual purification*. In particular, let us mention Hawaiian *ho'oponopono* tradition with *remarkable reprogramming of the life situations by contextual repenting and forgiving ourselves* [93]; or South American *ayahuaska* tradition [94] and Nigerian *Abiku* tradition [95] with *fascinating spiritual diagnoses and extensions of the predestined-short-life programs*; or *fascinating world bestseller of Anita*

Moorjani [112] on spiritual changing her life program with return from clinical death and after a few weeks spontaneous healing of terminal phase of cancer; or contemporary spiritual teaching of Bruno Groening with incredible healing channel remained open after his death [142], in optimizing both individual and collective life programs! This greatly contributes to our understanding that even most difficult psychosomatic disorders 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 [19,22])!

Appendix References

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122. The issue of space-time tunneling of vital energy through the transpersonally opened energy channels at first glance contradicts the so-called *no-cloning theorem* of Quantum informatics, which allows only a distant teleportation of quantum states but not the quantum particles, which is equivalent to saying that quantum particles cannot move faster than the speed of light in vacuum [125]; however, such restrictions apply only to (Schrodinger-governed) unitary transformation of quantum states, but not to (non-Schrodinger-governed) non-unitary transformation of quantum states associated with the collapse of the wave function (via probabilistically generated local quantum-gravitationally-induced "wormhole" tunnels, according to the proposed quantum-holographic / quantum-gravitational theoretical framework).
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