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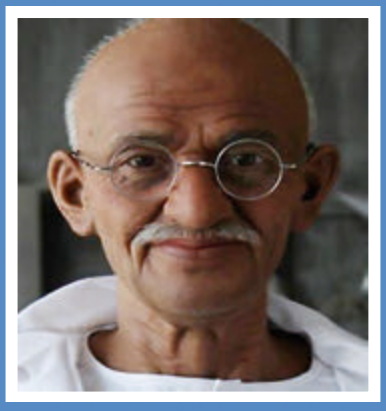
HARMONIOUS CIVILIZATION SPIRITUAL CULTURE

Mahatma Gandhi:

Nonviolence [harmony, peace] is the greatest force at the disposal of mankind. It is mightier than the mightiest weapon of destruction. Nonviolence is not the inheritance of cowardice, it is always heroism. ***Nonviolence is the law of our life.***



Mahatma Gandhi:
Nonviolence Starting Point.
Spherons' Genetics and Statistics.
GANDHICA

Research. Primer. Poetics. Design.

Dedicated
To Gandhi 150th Birth Anniversary, October 2, 2019 and
the GHA 15th anniversary on February 15, 2020

By
The GHA 82 coauthors of the 25 countries

New Delhi
2019

GHA Great Coauthors and Contributors into 'Gandhi book'

Presented on the GHA website personally: https://peacefromharmony.org

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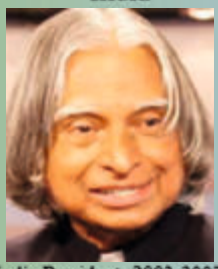

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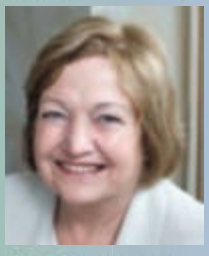

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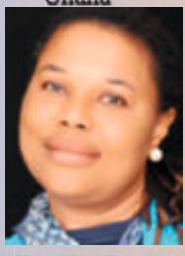

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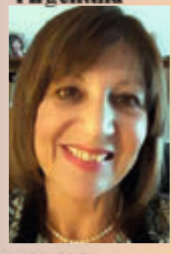

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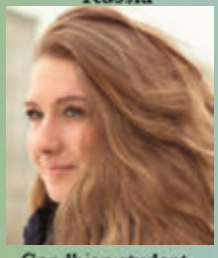

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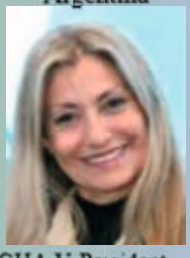

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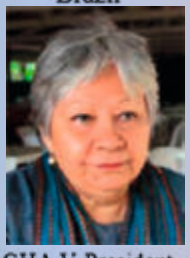

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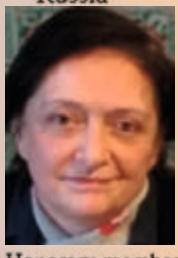

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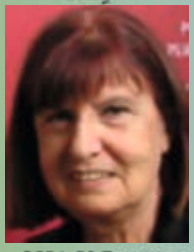

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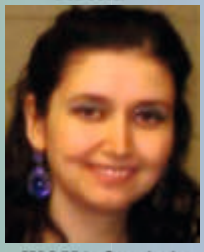

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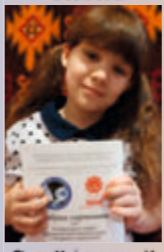

Gandhian pupil

Polina Semashko
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Gandhian pupil

Mahatma Gandhi. Nonviolence Starting Point. Spherons' Genome and Statistics. GANDHICA

Research. Primer. Poetics. Design.
The GHA 67th Project. Approved: November 6, 2018

The *Gandhica* Recognitions

"The world needs a great vision of peace and prosperity of all the nations. *Global Peace Science* from harmony and its continuation in *Gandhica* are the dawn of a shining, harmonious vision of peace and prosperity for all nations! Together with it, the enlightened citizens will emerge, able of building a harmonious civilization of peace and prosperity on the planet Earth." - **Abdul Kalam**, President of India

"The Leo Semashko's first fundamental system discovery was made more than 40 years ago – it is structurally equal and constant but historically transient universal clusters of the population differing on employment in one of the four spheres of social production. Therefore, they were called by '*spherons*'. In the GHA's ninth book *Gandhica*, the concept of spherons received full empirical evidence by the world statistics of the 76 countries that turned it from a hypothesis into the first fundamental peace science." - **Mairead Maguire**, Nobel Peace Laureate, North Ireland. From her nomination of Leo Semashko for the 2020 Nobel Peace Prize based on *Gandhica*.

The *Gandhica* 20 additional recognitions are here:
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New Delhi
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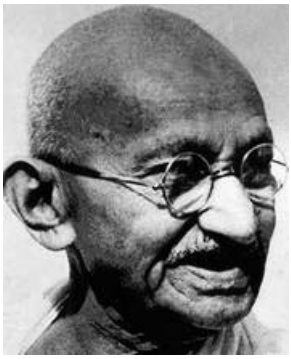

TO MAHATMA GANDHI
The 150th birth anniversary, October 2, 2019
DEDICATED

The book is dedicated to the anniversary of Gandhi and the memory of 138 million victims of 62 countries (71 million killed, 38 million injured, 29 million captured) of the WWII (1939–1945) – unprecedented violence in the history of humanity, to eradication of which Gandhi dedicated his life. Gandhi's non-violence is an unprecedented and salvatory achievement of humankind.

The authors propose a fundamentally new scientific rationale for Gandhi's nonviolence that is acceptable to all nations and excludes the very possibility of violence, war, and militarism. It allows humanity "to end the war before the war ends humanity" (John Kennedy) and prevent any possibility of repetition in the history of monstrous bloodshed like the WWII and even more terrible prepared by nuclear weapons.

The threat of biosphere self-destruction, total genocide and ecocide on the planet, coming from it, is overcome only by Gandhi's non-violence, elevated to the level of generally acceptable science and global scientific non-violent thinking. It opens a new era of non-violence in the history of humanity and will save Gandhi's non-violence from oblivion and extinction of future generations.

In order for "nonviolence to become the law of our life" according to Gandhi, humanity should seek and "require a substantially new manner of thinking if it wants to survive" (Albert Einstein). One of the versions of the "substantially new" thinking, developed over 40 years, is proposed by the GHA authors in this book, which gives Gandhi's non-violence a second, eternal life in the future. This is the best preservation of its unprecedented heritage of non-violence for humanity, opening for it a new historical era.

Leo Semashko, Subhash Chandra, Pravat Dhal, Lukas Pawlik, editors and 78 coauthors.

Mahatma Gandhi. Nonviolence Starting Point. Spherons' Genome and Statistics. Research. Primer. Poetics. Design. The GHA 67th project. Approved on November 6, 2018.
- New Delhi. Published by R.B.H. Media Designers, 2019. – 240 p. ISBN978-81-93244-9-2
The first publication in India.

Abstract

The book proposes a principal new scientific interpretation and the fundamental social rationale for Gandhi's non-violence. They are built on the discovery of a new social reality – "spherons" – societal classes of the population, employed in four spheres of social production (therefore they were called "spherons") and covering the entire population from birth to death. This discovery is based on the discovery of the early Karl Marx of four spheres of social production, on the discovery of "autopoiesis" by Humberto Maturana and on the discovery of "societal communities" by Talcott Parsons, which are integrated and developed by the discovery of spherons based on them.

Spherons received empirical evidence of population statistics of almost all countries, which is given in the book. Spherons, as the key cognitive category of integral Sociocybernetics of the third order, constitute the "substance" of that "substantially new manner of thinking necessary for the survival of humanity", the urgent need for which for this purpose was emphasized by Albert Einstein more than 70 years ago. This "substantially new thinking" based on spherons is called "tetranet thinking". Its fundamental parts: ontology, epistemology, sociology/sociocybernetics and spheral statistics are described in detail in the book on an experimental basis of its development for more than four decades, especially intensively during the last 14 years in the GHA.

Tetranet thinking allows us to understand and uncover the deep structural harmony of spherons, which defines the Gandhian law of non-violence and serves as its eternal, universal and permanent social source. This paradigm of thinking allows you to consciously regulate and use the "greatest force of non-violence of mankind", intuitively open and used by Gandhi.

The book is intended not only for social scientists to create new digital and humanitarian technologies, but also for politicians, public figures and peacemakers, arming them with a universal tool for non-violent resolution of all conflicts and prevention of all kinds of violent clashes and wars.

The book is also intended for all students of educational institutions – schools, colleges and universities as a primer (textbook for beginners, alphabet) of non-violent, Gandhian peacemaking knowledge, thinking and education, opening the corresponding peaceful and harmonious Enlightenment in the XXI century.

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Leo Semashko, Svetlana Vetrova, Natalia Chigrina, Olga Kashina, Roksana Sadykova, Vera Popovich, Yulia Budnikova, Irina Medvedeva, Elena Novoselova, Irina Kuris, Vera Afanasyeva, Alexander Semashko, Stephan Semashko, Peter Semashko, Andrei Semashko, Polina Semashko, Katerina Semashko, Andrey Smirnov, Svetlana Kuskovskaya, Uraz Baimuratov, Edward Soroko, Darina Voronina, Victor Danilov, Ivan Ivanov, Alexander Trubachev, (25)

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Authors by countries (on 11.06.19)

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Austria – 1	Denmark – 1	Puerto Rico – 1
Algeria – 1	Israel – 1	Russia – 25
Argentina – 3	India – 17	Rwanda – 1
Belarus – 1	Italy – 2	SAR – 1
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GHA heartily thanks all sponsors of the jubilee "Gandhi book" giving Gandhi's nonviolence a new life in the 21st century and Opening a new era of non-violence for humanity.

Preface

Mahatma Gandhi:
Rubicon of Humanity Violence and Nonviolence,
Breakthrough from Violent Era into Nonviolent Era

By

Leo Semashko, Adolfo Esquivel, Daisaku Ikeda, Mairead Maguire, John Avery, Bernard Scott, Subhash Chandra, Vladislav Krasnov, Roger Kotila, Lucas Pawlik, Rudolf Siebert, Takis Ioannidis, Susana Roberts, Maitreyee Roy, Ashok Chakravarthy, Alexander Semashko, Guy Crequie

Gandhi's nonviolence is an unprecedented achievement of culture and discovery of humanity in the 20th century, which divides its whole history into two evolutionary eras: the past, passing era of dominant violence and the upcoming, emerging inside of it era of dominant non-violence, the start point of which was Gandhi's life. He proved by it the truth that the priority of life belongs not to struggle/violence, but to harmony/non-violence as the first "law of our life". For 70 years after his, unfortunately still an adequate scientific understanding of the epochal significance of this greatest cognitive achievement/discovery for humankind has not been achieved. It cannot be achieved within the framework of its traditional violent, militaristic thinking.

The proposed Global Harmony Association (GHA) book, the ninth in its 14-year history, deliberately proposes an adequate scientific understanding of the Gandhian Rubicon of humanity in its breakthrough from the era of violence into the era of non-violence, as well as understanding its key obstacle in traditional thinking through the discovery of a new fundamental social reality – four SPHERONS. This is a deep, invisible on the surface, fundamental structure of constant societal communities/classes of the population, employed in the equally constant, necessary and sufficient four spheres of social production of humanity at all its historical stages and levels.

The Gandhian Rubicon demanded a long time – more than 70 years, for its intellectual comprehension within the framework of two internal key goals. The first is the proof of the traditional violent/militaristic thinking destructiveness, which has called into question the very survival of humanity and its biosphere as a result of the invention and continuous improvement of nuclear and other weapons of mass destruction. This evidence has been fully secured since its first test on the civilian population of Hiroshima and Nagasaki to its current potential, created by nuclear countries in a continuous nuclear race, sufficient for multiple total genocide and ecocide on Earth. The dominant of traditional militaristic thinking has exhausted itself and discredited itself completely by the fact that at its "top", in its nuclear weapons, the violence of another for intimidation and domination over the world, uncontrolledly for it, has become a weapon of self-destruction, suicide and violence against itself. **This is a logical, inevitable self-denial of violence/militarism and its thinking.** It is unable and unwilling to get rid of it and the carcinogenic pathology of militarism that has grown inside this thinking, which does not know how to do it that convincingly demonstrates the entire past and the beginning of the new century. Here, these weapons and violence, and with it, its thinking reached the apogee of self-denial, made themselves meaningless and lifeless, depriving themselves of any future and condemning themselves to extinction.

The destructiveness of traditional militaristic thinking was realized by the genius of Albert Einstein at the beginning of the nuclear race, when he wrote: "*We shall require a substantially new manner of thinking **if** mankind is to survive," because "the significant problems we face cannot be solved at the same level of thinking we were at when we created them*." He clearly emphasizes the mortal threat, destructiveness for humanity, hidden in traditional thinking and the vital need/necessity of "*a substantially new manner of thinking **if** humanity wants to survive*."

With this is connected the second key goal of the Gandhian Rubicon: the search, proof and substantiation of the "substance" of the new paradigm of thinking. In 1976, the idea of **fundamental spherons** as the "societal reality" of previously unknown "societal communities" (Parsons), engaged in social production, was first expressed and initially tested. It took more than 40 years of painful searches and all sorts of theoretical and empirical evidence, above all statistical proofs of the new "substantial reality" of the spherons. The statistical base accumulated during this time was first presented systematically in this book (chapter two below). It covers the statistics of the population of 76 countries and concerns practically the statistics of the population of all countries without exception, finding in it all necessary and sufficient, and therefore empirically irrefutable evidence of spherons.

Therefore, they become the "substance" of a new, non-violent thinking, excluding the dominance of violence and war and opening up the real prospect of a new, non-violent era of humanity and its non-violence noosphere. It provides an intellectual tool and the most powerful epistemological / cognitive weapon to eradicate the priority of violent weapons and overcome the insanity of traditional, militaristic thinking. **With it, it is impossible to continue to live longer neither humanity nor the Earth that requires its Gandhian "hacking" and replacing by the "substantively new", non-violent thinking**.

Our book is devoted to the theoretical and empirical, above all statistical substantiation of this thinking as a fundamental tool for mastering the Gandhi's "*greatest force of non-violence, which is mightier than the mightiest weapon of destruction*." The initial character of this systematic scientific substantiation determines its limitations and numerous shortcomings for their further overcoming. But, as they say, "the worst is the beginning," i.e. to initiate the development and formation of a "substantially new" non-violent thinking and with it a conscious breakthrough from the era/civilization of violence into a new historical era and a civilization of non-violence.

The most far-sighted and peace-loving leaders of China and Russia at the International St. Petersburg Economic Forum on June 6-8, 2019 began to talk about this breakthrough/transition to the "new era". This was written by the Chinese newspaper China Daily, which is reflected in one of the publications in our book. This fact illustrates the global importance and historical relevance of the Gandhi breakthrough through the Rubicon between the two evolutionary human eras of violence and non-violence in the 21st century. Understanding this historical transformation, laid out and launched by Gandhi's nonviolence, constitutes the deeper meaning of our book in all its parts, articles, poems and design below. A new era of Gandhian nonviolence can begin and be realized only together with the "substantially new manner of thinking", a fundamental version of which for more than 40 years has been proposed in our book in the spirit of Durkheim's "collective consciousness".

The book coauthors assess the Gandhian Rubicon perspectives differently. Nevertheless, they all agree on the understanding of its necessity, inevitability and fundamental historical significance for the survival of humanity. If international institutions, primarily the UN and their traditional militaristic thinking, were not able to find a solution for 75 years and put an end to the suicidal nuclear arms race, then they are unlikely to be able to find it at all. This is proved by its new volution, launched by the American militarist leader by pouring a new trillion dollars into it. The USA has been and still is "the greatest purveyor of violence in the world" and in the United Nations as defined by Martin Luther King. The entire history of the UN since 1945, starting with the USA simultaneous nuclear bombing of Hiroshima and Nagasaki, in which more than 250,000 civilians died and remained without a condemnation of the UN and in the sight of which the US/NATO conducted 37 wars (one war every two years), in which were killed over 20 million (Lucas James, 2018) are a history of violence/war/aggression and complete impotence of the fundamental construction of peace/non-violence. Under the UN wing, an accelerating

nuclear arms race is underway, the end of which can be only one — complete genocide and ecocide. It cannot be called anything other than "insane suicide".

The reason for the UN militaristic nature lies in the fact that it is organized on the past mutual violence and traditional historical hostility of the UN member states and their respective violent thinking. The "substantially new (non-violent) manner of thinking," (Einstein) justified by our book, suggests a fundamentally different federalist way of uniting nations in the UN based not on national and historical features that divide them, but on the basis of a common, fundamental and peacemaking societal platform of spherons of each of them. The GHA created and proposed in 2018 a corresponding project "UN Harmony instead of UN Disharmony" (see Appendices). This project integrates the non-violence of Gandhi, the Global Peace Science of Spherons (2016) and the Earth Federalist Constitution, which recognizes any war as a crime against humanity and eliminates militarism (Roger Kotila, 2018).

Gandhi wrote about such federalism: "*The future peace, security, and ordered progress of the world demand a world federation of free nations, and on no other basis can the problems of the world be solved.*" (Gandhi, CWMG) The 'basis' of a world federation is made up by the population spherons identical in all countries, as our statistics in the second part of the book showed. Gandhi intuitively felt and expressed the spheral basis of world federalism, uniting all nations. It is disclosed in our book. We have no doubt that Gandhi would welcome and share the ideal of spherons, justified and expressed in the "Global Peace Science" with accents of peace, love, truth and harmony, because this ideal fully meets his life ideal of non-violence. The reality of spherons provides a real embodiment of the Gandhi's ideal of non-violence in the new peacemaking democracy, and in the new peacemaking world order and in the new, fully, 100% peacemaking UN, instead of the traditional one, which 75 years cherishes war and militarism completely absorbed by military conflicts, but not fundamental peacebuilding and non-violence. Therefore, this UN rejected in 2018 (according to the "veto" of nuclear states) the Resolution of the UN members' majority on the prohibition of nuclear weapons. However, this Resolution is already the bell of the demise for the traditional UN with its militaristic thinking and world order, the change of which is theoretically substantiated and prepared by the scientific sociocybernetic reading of Gandhi's non-violence.

Some of our authors rightly compare the Gandhian Rubicon and the breakthrough of humanity from the era of violence to the era of Gandhian nonviolence in the 21st century with the process of hominization of anthropoids, with the transition from the tree way of life in forests to land-based existence in open landscapes and the development of upright walking (bipedalism). Looking back at our violent history, the breakthrough to a non-violent society seems like a similar fundamental transformation changing what we believe to be fundamentally human. In the historical evolution of the human ability to change, ensuring the survival of the human race, the Gandhian global vision of non-violence constitutes the greatest discovery and achievement of the human heritage. Like our ancestors, we need to straighten up, but now from violence and move to conscious peace-loving bipedalism in non-violent discourse of "substantially new" thinking, in order to continue civilization growth, and not stop it. We have to complete our evolutionary task: "to end our violence before it ends us." This perspective is opened up by the scientific sociocybernetic understanding of the Gandhi's vision of non-violence proposed in our book.

The GHA newborn book of spiritual culture within the emerging harmonious Gandhian nonviolent civilization of the 21st century is able to overcome the dangerous dominant status of global militarism through the healing structural harmony of spherons in their fraternal love and peaceful coexistence of different nations. This book allows new generations to become imitators and followers of Gandhi at the new level of new non-violent thinking.

The urgent need to change human existence in the spirit of non-violence, predicted and realized by Gandhi in India, is proved and revealed in our scientific book, which brings together

the efforts of many authors around the world. It gives a strong hope for similar fundamental change in the organization of the present society, striving for peace. It is possible with the full cooperation of all societal spheres and their actors – spherons, in order to deprogram the violence of the noosphere around the planet, through a new harmonious education in schools, the initial textbook (primer) for which is offered by our book. Undoubtedly, it contains the most important harmonious peacemaking content in the history of humanity, created by the combined efforts of many who are convinced that peace is possible.

Other authors compare our book with the fifth Copernican scientific revolution of humanitarian knowledge, which consists of a new Gandhian vision of global peace and a harmonious civilization that excludes violence, war and nuclear suicide. These genetic pathologies were fully prepared and widely practiced by the outgoing industrial civilization with its fourth industrial and digital revolutions, subject to violence and militarism. These revolutions are not able to save humanity, the noosphere and the planet Earth in the 21st century. Their salvation is guaranteed only by the Copernican Gandhian revolution, using for its own purposes all the achievements of the fourth industrial and digital revolutions, but in the mode of non-violence/peace.

Our book, dedicated to Gandhi, offers a unique way of rational thinking of "non-violence of spherons as the greatest force" capable of restraining the shameful self-destruction of humanity. This harmonious theory not only warns of the destructive path of violence, but also prevents a nuclear war, in which violence puts humanity on the brink of suicide. If we do not pull out the "poisonous tentacles of violence" right now, there is every chance that we will become victims on the altar of militarism in the near future. The science of global peace/non-violence, as envisioned by Gandhi's philosophy, is universal and designed for the well-being of all humankind. Consequently, the spherons non-violence, disclosed in the GHA "Gandhi book", will certainly slow down the tendency of conflicts and violence, contributing to universal brotherhood, unity and harmonious life of all peoples as one family, regardless of all differences. Our book reveals to humanity the profound meaning of the Gandhi law: "*Non-violence is the greatest force at the disposal of humanity, it is mightier than the mightiest weapon of destruction*."

Here lies its great humanistic meaning. Because society in its non-violent social nature of spherons is the most peaceful society, protecting the life of every person, every child, every woman and every man from war death and excluding the military death of hundreds of millions, as it was in the past century. Our book reveals the Gandhi's non-violence, which has become the most acute topic of our time, in which every day becomes the problem of human survival. We expect that our "Gandhi book" will spread the message of non-violence and peace in the universe and fulfill the peacekeeping mission of Mahatma Gandhi, to which we are all committed and which future generations will share. This book and the "Global Peace Science of spherons" embodied in it is the continuation, development and application in the modern world of the great cornerstone doctrine of Gandhi's non-violence.

Mahatma Gandhi as a living embodiment of a thousand-year humanistic spirit not only of Hinduism, but also of Buddhism, Christianity, Islam and all other religions rises to the level of universal peacemaking true spirituality of the future of humanity through the revelation of the deep social nature of its non-violence, its fundamental, genetic actors. At this depth, humankind comprehends the spiritual unity of the fundamental brotherhood of all humans, nations, cultures and religions. World religions realized it in general for them the "Golden Rule": "***Do for people what you would like they did for you" or "don't do for people what you don't want they did for you***".

This is an evolutionary, simple, but brilliant conclusion of human culture over hundreds of thousands of years, ensuring the life, survival, peace and non-violence of humanity on all continents. No one wants to be killed, raped, fought with him, armed against him, hated him, deprived of his life, freedom and all other rights, therefore the Golden Rule requires and inspires everyone to act similarly to all other people. In this light, the Gandhi's living embodiment of all

world religions is the spiritual embodiment in its non-violence of the high value of their "Golden Rule" peacefulness and vice versa.

The "Gandhi Book" authors expressed this spiritual kinship and value identity with a simple formula: "Golden Rule is non-violence/peace. Nonviolence/peace is Golden Rule." Such is the "law of our life," as Gandhi said. A simpler and more fundamental definition of the law of life does not exist. It is stronger than all wars, all violence and militarism. "*It is mightier than the mightiest weapon of destruction*" and death. It is invincible and indestructible as long as life exists.

Therefore, the authors are completely convinced in the triumph of the Gandhi's truth of non-violence, of its necessity for every person and any society in their whole life and history, in its embodiment in all spheres of life as the inevitable bright and better future of humanity. It is future without war, violence and any militarism through the conscious harmony of the humans and communities among themselves and with nature.

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Part 1.
Tetranet Thinking. Architecture and Methodology of Structural Modeling for Gandhi's Nonviolence in Sociocybernetics' Design

Introduction

By
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*We shall require a **substantially** new [nonviolent] manner of thinking*
if mankind is to survive.
The significant problems we face cannot be solved at the same level of thinking
we were at when we created them.
Peace cannot be achieved through violence, it can only be attained
through understanding [nonviolent science and thinking].
Albert Einstein, 1950

Those who do not understand the method will not understand
the depths of their own cultures.
Charles Snow, 1956

Mankind must put an end to war or war puts an end to mankind.
John Kennedy, 1963

In order to create our [nonviolent] future
our [violent] present has to be hacked.
Lucas Pawlik, 2019

The non-violence law is the law of spherons and vice versa.
Spherons are 'substance' (Einstein) of a new, tetranet thinking,
ensuring non-violence, global peace and humanity survival.
The book authors, 2019

We, the GHA ninth scientific collective book authors, theoretically investigate in it the Mahatma Gandhi's nonviolent story unique to humanity, which is most fully reflected in first-hand "The Collected Works of Mahatma Gandhi" in 98 volumes (CWMG).

The great legacy of Gandhi's non-violence, with all the immense multitude of its most diverse studies, remains undisclosed and incomprehensible in its deepest social law, which is defined by Gandhi himself: "*Nonviolence [harmony, peace] is the greatest force at the disposal of mankind. It is mightier than the mightiest weapon of destruction devised by the ingenuity of man. Nonviolence is the law of our life*."(CWMG, V.?, P.?). The social meaning of this 'law of nonviolence' remains a scientific mystery. We still do not know with which social structures of humankind nonviolence is connected, which ones generate, provide and define it and which ones violate it and deviate from it. We still do not have its "understanding understanding" in the humanities, the need of which was first spoken by the great Austrian cyberneticist Heinz von Foerster (Foerster, 2003). We are trying to fill this fundamental scientific gap in our book, relying on all previous achievements of the humanities and integrating/synthesizing them in the new sociocybernetic paradigm of the tetranet thinking, which is unfolded below.

We are convinced that the scientific understanding of the deep law of nonviolence requires a new intellectual tool, embodied in a new way of thinking, which rebuilds and lifts traditional thinking to a new level. The need for a "substantially new manner of thinking" for the survival of humanity in nonviolence was ingeniously concisely expressed by Albert Einstein: "*We shall require a* ***substantially*** *new [nonviolent] manner of thinking if mankind is to survive.*" The substantial novelty of this thinking is nonviolence that distinguishes it from the traditional violent and militaristic thinking of many thousands years of human history. This thinking was systematically laid out for the first time by Mahatma Gandhi. To build a system paradigm of nonviolent manner of thinking, we offer a new philosophical/worldview vision and a new scientific view to Gandhi's nonviolence in its two inseparable planes: spiritual/theoretical and practical/political. In our book, priority is given to the first perspective.

A new philosophical vision and a new scientific view constitute a new thinking, which we titled "tetranet thinking", the meaning of which name is revealed below. It develops in many (eight) of the GHA collective books, of which we will name the last two collective summary works (Semashko&C, 2012; 2016), crowning the GHA paradigmatic search for 14 years of our "collective consciousness" (Durkheim, 1996). Our new book dedicated to Gandhi's non-violence is the study of this subject in the intellectual space of the "substantially new" (Einstein), non-violent, tetranet thinking, which is the most important navigation and most complex methodological component of this book. In this regard, the book begins with a description and explanation of the methodology of this thinking, through the prism of which a new, fundamental understanding of the social sources of Gandhi's non-violence is reached, to which he intuitively approached but the depressive nature of the social sciences did not allow him to reach their scientific definition.

Therefore we start the book with a brief markup and reamer/scan/evolvent of the methodological space of tetranet thinking from its general definition. *Tetranet thinking (TT) is an intellectual interdisciplinary and multidisciplinary toolkit of the holistic rational sociocybernetic cognition/mastering the most complex systemic laws of self-organization of society (social reality), among which the law of nonviolence Gandhi plays a decisive role in the evolution, structure of survival and sustainable development of humanity on the planet beginning the 21st century*.

The "substantially new" thinking of a deep understanding of Gandhi's nonviolence is impossible without a new science and without new terms/concepts, which are briefly explained and defined below. The reader needs to be prepared for them psychologically in order to rebuild and update her/his traditional thinking "substantially", of course, if she/he wants it and seeks to keep up with life and science. Whoever is not afraid of the tetranet thinking new concepts will not be afraid of its "substantial" innovation, primarily in the new "understanding understanding" of the sources of Gandhi's non-violence in it.

Abbreviations list:

1. GHA – Global Harmony Association
2. TT – Tetranet Thinking
3. GPS – Global Peace Science from Harmony
4. ABC – ABC of Harmony
5. PIOT – Spheral resources of humanity: People, Information, Organizations, Things (material goods and services)
6. PDEC – Spheral Processes: Production, Distribution, Exchange, Consumption
7. SIOT – Spheres of Humanity: Sociosphere, Infosphere, Orgsphere and Technoecosphere
8. SIOT – Spheral classes of humanity employed in the spheres: Spherons: Sociospheron, Infospheron, Orgsferon and Technoecospheron/Technospheron
9. SOCIONOME – Sociocybernetic Genome of humanity, genetic code of global peace, social harmony and nonviolence
10. TS – Traditional Statistics: from parts to the whole.
11. SS – Sphere Statistics: from whole to parts
12. Author&C – Author and coauthors

1.1. Tetranet Thinking: Ontology. Philosophical Worldview Scheme

Nonviolence [harmony, peace, truth, love, justice, equality, fraternity] is the greatest force at the disposal of mankind. It is mightier than the mightiest weapon of destruction devised by the ingenuity of man. Nonviolence is not the inheritance of cowardice, it is always heroism. Nonviolence is the law of our life.
Gandhi

The methodological space of tetranet thinking is exhausted by network structures on its four structural hierarchical levels: ontology – epistemology – sociology/sociocybernetics – statistics. Therefore, this space is interdisciplinary and multidisciplinary. Its methodological center is concentrated in a simple fundamental and obvious for all worldview structural model of four completely different, but mutually included as a whole/part, and therefore inseparable, constantly cybernetically interacting and continuously changing real universal components/clusters:

1. **World** (Earth, Nature, Ecosystem and the Universe as a whole) –

2. **Society** (production system of spheres of different nations, groups, generations and families) –

3. **Human** (genus, races, ethnic groups in a common complex of generical psycho-physiological attributes) –

4. **"I"** (the human person as an individualized system of generical attributes).

A detailed philosophical and sociological analysis of the theoretical backgrounds and sources of this model is presented here (Semashko, 1999).

In this model, all components are necessary and sufficient for being and cognition. All of them are observable and observing. They relate as a whole/part in the network / hierarchical architecture of the system design presented below. It is impossible to exclude a single element from this model, but there is nothing to add for the extremely simple coverage of the surrounding world in the first, most general for all people, approximation.

No one will doubt in the existence of their own "I" as an individual, in the existence of other people constituting the human race, in the existence of society, including not only people, but everything that they have created as their infrastructure and, finally, no one will doubt the existence Universe, parts of which are all components/clusters of being. They constitute obvious realities accessible to the simplest intellectual and sensual/visual contemplation. Their reality does not require special evidence, they are available to everyone as an observer.

This model in the center of the upper ontological block implies God, who is embodied in all things, in all existence that goes without saying for all believers. God in all religions is recognized as the creator and guarantor of all the highest positive values in their mutual connection: life, harmony, love, peace, reason, non-violence, truth, justice, equality, fraternity, unity, freedom, which Gandhi expressed well in the book "My Religion"(Gandhi, 1955) and what later in social cybernetics was called the "heterarchy of values" (McCulloch, 1945).

Deviations and fluctuations around these values, as well as the pursuit to them as the highest and unattainable ideals – this is the fate of all existences, all transient particulars, including individuals. Therefore, this model, while preserving all the viable diversity of the universe and society, is acceptable to virtually all people without exception, regardless of their intellectual characteristics and religious preferences, and even more so from subjective caprices and individualistic whims. In connection with these spiritual and intellectual advantages, this worldview structural model can and certainly will, through tetranet thinking, be a powerful integrator of human consciousness and a common, unifying denominator of its spiritual differences, overcoming the enmity, hatred and incompatibility of traditional partial/transitory historical ideologies.

Each of the four components of the worldview model is a special level of unified reality composed of an infinite network of relevant elements whose life/existence is limited by two objective interrelated attributes: space and time, the continuity of which is proved by Einstein's theory of relativity and their specificity for each level is demonstrated by their whole story. The physical space/time of existence of society, humanity and the individual is limited by the space of the planet Earth and the cosmic time of its life. Within their framework, the "space" of the life of an individual is limited by two points: the dates of birth and death of each individual. The "space" of the life of society and humanity as a kind is limited to periods of its natural occurrence about a million years ago and its disappearance, which is lost in the fog of the future tense.

The history of humankind in time is the space of its achievements and mistakes that may question its life/survival. The "man-made" threat of "self-destruction" of humanity, i.e. the fatal error of its ecocide/genocide has already been created by traditional/partial thinking in our time in the form of nuclear weapons for a fully prepared nuclear war. This is the "absolute evil" of traditional thinking, which is now able to "work" only on the self-destruction of humanity (Avery, 2017) This is a complete disregard for the survival of humanity in traditional thinking, which Einstein clearly wrote 70 years ago, demanding "a substantially new [non-violent] manner of thinking." It is absent until now, because its very possibility is suppressed by false, violent/militaristic consciousness of modernity, heavily funded by the dominant "new world order" of the West, which has made "lie the norm" of its "totalitarian democracy" violence (Engdahl, 2009).

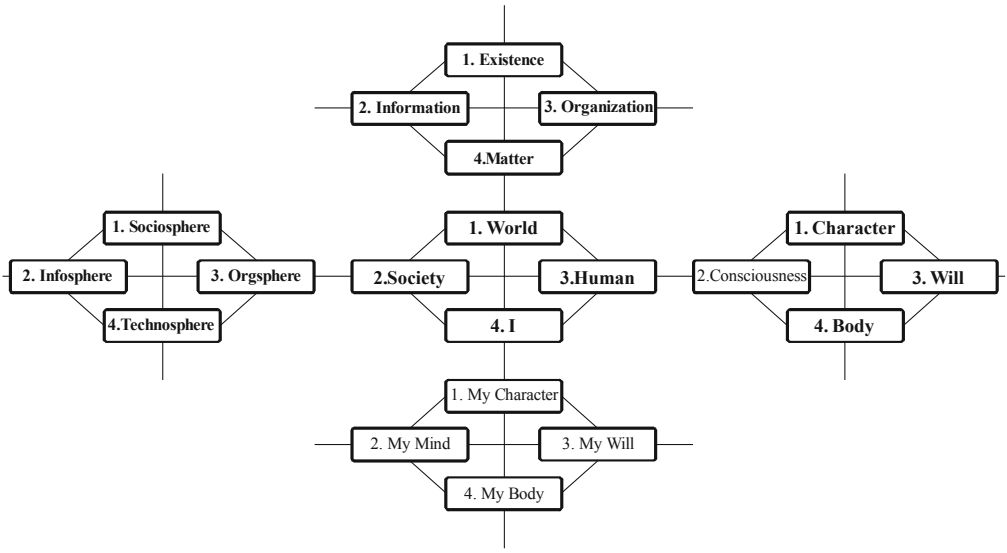
Each of the components of the worldview model is an object and subject of endless human knowledge. The eternal cognitive problems begin with attempts to penetrate and understand the internal structure and existential laws of each of the four fundamental components. In the tetranet thinking, on the basis of generalizations of human cognition, which will be presented below, the hypothesis of the universal four-spheral ontological structure of each of the components of the worldview model in the duplex/dual (ambivalent) structure of mutually limiting, defining and mediating attributes is accepted. Their duality/duplexity is grammatically expressed **through slash "/". In the most general definition, tetranet thinking in ontology is four-spheral and four-dimensional, therefore tetrad/tetravalent, and in its epistemology is binary, two-dimensional, therefore duplex/bivalent, i.e. dialectical**.

Ontological objects/subjects of tetranet thinking are presented visually in the following philosophical scheme, which expresses the worldview structural model in the spheral system design.

Scheme-1

Four-dimensional Network Harmonious Thinking

Briefly: TetraNet Thinking. Fragment



We limit this structural model the ontological part and the explanation of tetranet thinking. The explanation of the epistemological part of the tetranet thinking is limited to the following theses, which are focused on its holistic model below.

1.2. Tetranet Thinking: Epistemology. Structural categorical modeling in system design

Let us repeat the general definition of the tetranet thinking first two parts: in ontology, it is four-spheral and four-dimensional, therefore tetrad/tetra thinking, and in its epistemology, it is binary, two-dimensional, duplex, and therefore dialectical thinking. Their common substantial unity is constituted by the spheres of being, society, human and cognition, therefore it is spheral. In ontology it is invariant, and in epistemology it is infinitely variable.

Epistemology is the knowledge of the categories of knowledge/thinking and the ability to use them. The epistemology of tetranet thinking is an order of magnitude more complicated and diverse than ontology, because it can begin, mediate and complete in one or another cognitive cycle of a thinking subject with any pair/duplex of concepts, providing a variety of cognitive and practical consequences. No one can claim a complete / exhaustive description of epistemology in any of its ways. The epistemologies in the history of philosophy was as much as the philosophers. Therefore, we confine ourselves here to only categorical synopsis of the epistemology of tetranet thinking in its main duplexes, synthesized by the final system scheme/model of seven structural categorical blocks.

1. Tetranet thinking (TT): ontology and epistemology in duplex/tetrad measurement. TT is organized by its paired categorical attributes, which constitute its epistemological platform and the methodological introduction of any of its single uses by any subject for the knowledge of any thing in it. Categorical duplex is the internal mechanism of self-organization and the self-limitation of TT, when each of its attributes is limited by its other attribute, which is inseparable from it. At the same time, it is a tool of internal self-mediation, when one attribute serves as a means of existence and disclosure of another attribute and vice versa. Therefore, TT attributes are represented by a set of their duplexes, which are lexically and grammatically expressed through a slash (/).

The philosophical four-dimensional spheral ontology and epistemology of TT, presented in Scheme-1 (above), is determined by the following duplexes of attributes: space/time, reality object/knowledge thing or object/thing, whole/part, structure/function, movement/rest, variability/stability, difference/similarity (fractality), organization/self-organization, single/many, pluralism/monism and so on. The special choice of categorical duplexes in a single act of cognition of any object/thing determines the specificity of the cognitive process in its ontology and epistemology of any person at any level and at any historical stage. Each person and each researcher consciously or intuitively limits the methodology of his knowledge to a multitude of those or other spheres and the categorical duplexes reflecting them.

On this basis, for the methodology of our study of Gandhi's non-violence, the set of necessary and sufficient for it categorical duplexes of attributes is determined at the sociological and statistical levels of its knowledge.

2. Harmony/integrity duplex. The harmony of the spheres and their parts is the central attribute of TT. Its fundamental philosophical definition belongs to the brilliant French philosopher and mathematician Henri Poincare (1990): "***the inner harmony of the world is the only true objective reality***". It characterizes harmony as a way of being/life of objective spheral reality and all its components. We recognize this definition, formulated at the beginning of the 20th century, summarizing all the previous development of philosophical thought and knowledge of humanity. This definition creates the foundation for the transition of thinking to a

fundamentally new “substantial” level that ensures the survival of humanity, as Albert Einstein clearly foresaw. It expresses the sole basis of life and the source of the development of being at all its levels from the smallest particles to the all-embracing universe.

Harmony is described by a multitude of close “family” categories that characterize the defining relation of the parts of the whole, both among themselves and with the whole. Their "family" includes the following concepts of harmony: measure, proportion, equilibrium, balance, consistency, coherence, conformity, nonviolence, sustainability, beauty, connectedness, congruence, consentaneity and many others. Harmony as a process is always carried out through the overcoming of continuously arising spontaneous disharmonies and disproportions between constantly changing parts at all levels. Harmony is the source of life and its stability of any phenomenon, and disharmony is the source of its withering away, instability and non-viability. Harmony and disharmony constitute the inner duplex subordinate to harmony.

The outer boundary of harmony is the spheral integrity of the object/subject of thinking, expressed by similar notions of holism/integrity. The integrity (holism/wholeness/entirety) of the TT is given by the harmony of its spheres, embracing all parts of the whole. The part and the whole (the integrity of the spheres and all their parts) constitute the inner boundary of harmony, subordinate to it. This TT shows the fundamental quality of self-similarity, fractality (Mandelbrot, 1982) of the spheral whole and its various parts or their spheral fractality, which is vividly expressed and clearly illustrated by the spheral resource matrices in sociology and statistics of TT.

The integrity of TT is a view of thinking on any subject “from a bird's-eye view”, which primarily distinguishes its most “large”, fundamental parts-spheres, from the harmony of which it proceeds to the consideration of their finer details. They can deviate from the harmony of system-forming spheral components of the object and generate its internal, partial and transient disharmony, in overcoming of which is the internal viability and stability of the object.

Therefore, integrity and harmony is the first pair of inseparable fundamental attributes of TT, which constitute its defining cognitive and intellectual duplex, characterizing every object/subject of knowledge as a holistic harmony or harmonious integrity with its internal restrictive duplexes. All parts of the object/subject of knowledge and all the attributes of this knowledge can exist only by limiting each other in the necessary degree of harmony that ensures its life. Any absolutization and exclusivity of any part and any attributes is deadly and destructive. Any deviation from harmony is the path to death and the source of pathology, sin and self-destruction, leading to the death of the first parts, and then the whole. This trend is overcome either spontaneously or through the knowledge of the laws of harmony of parts and their integrity. For these key attributes, the TT can be defined as “harmonism” and “holism”, or in duplex form: “harmonism/holism”.

3. Duplex social sphericity/four-dimensionality. TT in the understanding of holistic harmony or harmonious integrity of any object/subject is based on the definition/distinction of the necessary and sufficient parts constituting it – constant spheres, which are composed of stochastic disharmonious elements/parts of the underlying levels. With the destruction of at least one such sphere, the object/subject as a whole is destroyed also, because it cannot exist even without one of its necessary and sufficient spheres.

This is a defining quality of the sphere, fundamentally distinguishing it from all its private, temporary and transient constituent elements, the natural death of each of which and their updating never leads to the destruction of the sphere and the holistic object, but rather serves as a necessary way for the long existence of the spheres and composed them objects. For example, the almost infinite natural existence of humanity and society is ensured through continuous change/destruction of the ultimate stochastic temporary societies, groups, industries, states, civilizations, etc. Therefore, social sphericity is a necessary attribute of TT.

The sociological origins and characteristics of the societal spheres will be disclosed in the relevant part of the TT. Here we emphasize only the key role of the public life spheres as a social structure in the Gandhian doctrine of non-violence. Gandhi not only repeatedly used the concept of "sphere of (public/social) life", but also directly approached the analysis of the natural dependence of nonviolence from the "structure of society", considering "the spiritual, economic, social and political spheres of society" (Gandhi, 1955, Chapters 29, 30, 31, 32). This allowed Gandhi to define non-violence as "the law of our life" and talk about non-violence as "science" (ibid.). Understanding the dependence of nonviolence from the spheral societal structure, coming from Gandhi is the center of TT that allows qualifying it as "Gandhian".

The limit of social sphericity is its numerical/quantitative measure. In contrast to the infinite constituent units/elements of a sphere and any object, the number of spheres in principle cannot be infinite, it is always limited and finite. The past human cognition has approached the knowing of this quantity to the level of recognition of four (tetra/tetrad) necessary and sufficient spheres, passing through the stages of binary and trinary spheres. Nevertheless, even more than 2.5 thousand years ago, Pythagoras intuitively caught the tetradic law of harmonious being, formulating the principle: "***The tetrad is an inexhaustible source of life***" (Golden Verses). The harmony of the tetrad as the fundamental structure of the universe was expressed by Poincare (1990) at the beginning of the 20th century: "***The inner harmony of the world [of its four elements] is the only true objective reality***."

With regard to social reality, TT is inseparable from the recognition of four equally necessary and sufficient societal spheres, constant for all social phenomena at all levels. In different terminological terms, these are spheres of: social, informational, organizational, and technical or economic/material life or the social production. Gandhi explored these spheres also (Gandhi, 1955, Chapters 29, 30, 31, 32) paying special attention to the relevant "non-violent structures" and "equality in each of the spheres." The spheres of social life are spheres of social production of resources. These sphere and their products/resources are necessary and sufficient for the life of society and its parts, including individuals.

The stability of the spheres is ensured by the variability and continuous change of their parts as stochastic elements. This pair of attributes constitutes the subordinate duplex "stability/variability", embodied in the movement, development and evolution of society. The other slave duplex is the single/multi attribute. The third subordinate duplex is the "entropy/negentropy" generated by the stochastic, entropic nature of all the social elements that make up the spheres. Fourth epistemological subordinate duplex is the "linearity/non-linearity" of social laws, which sets the thermodynamics of their knowledge (Afanasyeva, 2016).

TT by the specified attributes can be defined in duplex form: "spherism/tetrism", or "four-dimensional/four-spheral thinking", or "pluralistic monism" and "monistic pluralism", etc.

4. Duplex spherons/infrastructures. The TT within the framework of social reality and the knowledge of society, highlighting its equally necessary and sufficient four constant spheres, distinguishes between them producing and derived structures. The producing structure of any society is its spheral societal structure, i.e. a structure that covers the entire population and distinguishes between its extremely large constant classes/groups, which are employed in the spheres of social production and therefore are called, in contrast to the traditional classes and groups, "spherons".

The traditional groups/classes that make up the constant spherons are called the common term "partons," from the English 'part'. Parts of spherons – partons – are historically transient, temporary and stochastic, entropic. Therefore, spherons and their historical partons are "swarm" stochastic and thermodynamic structures, which are discussed in detail here (GPS, Chapter 1).

Partons are the inner boundary of spherons, their mediation and explanation. The dialectics of spherons/partons in TT explains the deep societal causes/sources of all fundamental social structures, functions and states: peace/war, violence/non-violence, equality/inequality,

justice/injustice, stability/variability, extinction/survival, etc. Through spherons/partons, their harmony and disharmony are learned and scientifically explained the Gandhian law of social non-violence as the fundamental law of any social being.

The outer boundary of the spherons is their infrastructures, i.e. the totality of all the conditions and the resources created by them and ensuring them that received a generalized definition in the "noosphere" category, uniting four spheres (Vernadsky, 1991). In the spherons characterization it is impossible to identify "spheres and spherons" as well as it is impossible to mix "school and schoolchildren", "mines and miners", "earth and earthlings", etc. Spherons create all the resources necessary and sufficient for the life of society and the individual, which together constitute one infrastructure differing by the spheres. Each spheron, creating its own sphere within the noosphere, creates it as its own infrastructure, using the resources of other spheres and their spherons.

The unity of the spheres and their spherons in the noosphere as the TT epistemology center is expressed by the following structural model of "Spheres, spherons and noosphere":

The harmony of spherons ensures the life of society and its viable order, which is constantly violated by the ruling partons and their dominant elites. They, in turn, are overcome by new, more harmonious partons, their communities and elites. This is an endless process.

Spherons are the key strategic and central attribute of TT, its key category that expresses the fundamental actors of non-violent life of a person and society, the actors of their peace and harmony. Therefore, through spherons, the source and law of social non-violence is expressed, its "greatest force that is mightier than the mightiest weapon of destruction invented by man" (Gandhi, CWMG). The central role of spherons makes TT "non-violent/Gandhian." Gandhi intuitively expressed the idea of spherons as large groups of people engaged in the spheres and constituting the source of non-violence in his teaching on the "law of Varna". He firmly emphasizes: "Varna has nothing to do with caste." Gandhi (1955, Chapter 36) rejected the caste, but recognized the Varna. Therefore, the idea of spherons as Varna is organic for the Gandhi "science of non-violence". It is evolving scientifically in TT.

Duplex "spherons/infrastructures" or in other terms – "center/periphery" (Friedmann, 1966; Wallerstein, 1979) is the core of TT, covering and defining all of its other attributes and duplexes. It accumulates the full potential of intellectual energy and the epistemological advantages of this type of thinking. It is the spherons that make up the "substantial" (Einstein) difference of TT from traditional thinking. Spherons are the TT "substance". As a source of non-violence, they make TT by "Gandhian/non-violent."

The best historical and artistic design of this substance of the fundamental tetrad structure of society, perhaps, should be recognized the "Lion Capital of Ashoka at Sarnath". It crowns the column of the emperor Ashoka in Sarnath in the middle of the III century BC in the place where Gautama Buddha first taught four-dimensional, tetradic dharma (substance, law of life) of early

Buddhism (Wikipedia). It expresses the oldest epistemological intuition of the spheres and spherons of humanity.

This beautiful artistic allegory perfectly illustrates the equal necessity and sufficiency of the four social spheres and the four employed in them spherons ("Varnas" in the Indian tradition and at Gandhi) of society as their first genius philosophical epiphany in history.

Spherons are a source of non-violence (Ahimca), which is excluded by the entire TT attribute system. But it is dialectically **inseparable from violence (Himsa)** in cases of its (non-violence) protection against death, in situations of ensuring the life of a person, group, people or humanity and its preservation from an immediate/direct threat of violent destruction. Gandhi repeatedly emphasized this (1955, Chapter 26.): "*man cannot be wholly free from Himsa. So long as he continues to be a social being, he cannot but participate in the Himsa that the very existence of society involves. ... Even manslaughter may be necessary in certain cases. Suppose a man runs amuck and goes furiously about sword in hand, and killing any one that comes his way, and no one dares to capture him alive. Anyone who dispatches this lunatic will earn the gratitude of the community and be regarded a benevolent man. From the point of view of Ahimsa it is the plain duty of every one to kill such a man."*

Therefore, spherons are inextricably linked with the duplex attributes "violence/non-violence" and their dialectics. Without spherons, they do not exist. Without them, one cannot understand the sources and social nature of these attributes. Without them, it is impossible to justify violence in cases of protection of life and non-violence from the deadly threat. Without them, there is no scientific understanding of the determining priority role of non-violence and the secondary, subordinate and extremely limited role of violence in cases of preservation of life and non-violence.

5. Duplex network/level (hierarchy). TT based on the equal necessity of social spheres is a network, the subject of which is spheral networks that are generally dependent on each other, on the spherons networks and their infrastructures. However, the initial mutual nesting of social spheres determines their different levels and makes TT hierarchical. The interweaving of the network hierarchy and hierarchical networks of four spheres constitutes four-dimensional spheral genetic helixes (spirals) of internal elements/units that are reflected by TT. On the TT worldview model each social component/level is a network of corresponding spheral infrastructures, nested in each other like dolls, but in opposite directions that determines their four-dimensional spiral TT topology. It reflects the integrity of social objects in their multi-level hierarchy. Network and level (hierarchical) attributes of TT are relative. They do not exclude, but complement each other.

6. Duplex visuality/rationality. Visuality is a necessary attribute of TT, embodying the priority vector of intellectual thinking of the whole "from a bird's-eye view" in some visual image of structural modeling and its system design. It is provided with a visual scheme (matrix, drawing, table, diagram, etc.) expressing the holistic image of the object at the beginning of its TT process, which details its presentation and expands its picture to the desired depth. In this process of the logical unfolding of an object, its necessary rational explanation is reached, which

defines the rationality of TT as a necessary attribute, inseparable from sensual clarity. On the epistemological level, TT visuality is the unity, synthesis, and mediation in it of two main forms of cognition: sensory/visual and rational/abstract/theoretical.

The visibility of TT is provided by modern network and system intelligent design in the planning and transformation processes of holistic large-scale objects of social reality (Owen, 2007). According to this duplex, the attributes of TT can be defined in traditional terminology by "visual rationalism" or "rational visualism", and in the new terminology – by "societal spheral design" or "projective thinking". Briefly it is called as "spheral system design". We use it in our book to design Gandhi's spheral non-violence, i.e. for its societal design.

The TT quality is expressed by the duplex of the attributes "innovation/traditionality" and the attributes "scientificness/non-science", which, in turn, are determined by the quality of the duplex "visuality/rationality". TT is a scientific, rational-sensual thinking, all the provisions of which correspond to either rigorous scientific empirical and statistical facts, or irrefutable mathematical evidence, or the experience of thousand-year truths of religion and common sense. TT includes and is in harmony with all the proven results of traditional thinking, synthesizing them into itself, as well as with recognized centuries-old tradition of religious dogma. TT includes all traditional sciences, except those parts that do not meet the requirements of scientific nature.

Science is always innovative, always updated, and if it is not innovative, not updated, then it is not science, but faith. TT is a scientific thinking, but it is ready to accept, incorporate and integrate into itself any new idea and hypothesis, if it does not contradict its attributes and scientific requirements, primarily facts and statistics. The TT innovativeness does not exclude, but retains all the traditional cognitive achievements of humanity and world religions in harmony with them. According to this duplex, TT attributes are qualified in traditional terms as "scientific", and in the new terminology as a single social "spheral science" integrating the whole complex of traditional social and human sciences.

7. Duplex collectivity/individuality. Due to the extreme complexity and multidimensionality of TT, excluding one-sidedness, it necessarily requires collectivity, i.e. additions and connections of different particular positions of different spheres and groups in a single "collective consciousness", which the great French sociologist Emile Durkheim (1996) well expressed. But the TT collective consciousness does not exclude, but complements and develops individual thinking, builds on it as its original base, multiplexing it, if it becomes its organic and necessary part. This was well demonstrated by 14 years of work in the GHA collective consciousness, which created 8 books and 68 peacemaking projects that integrated the intellectual efforts and contributions of hundreds of their co-authors from dozens of countries and cultures. According to this duplex, TT attributes can be defined in the traditional terminology "collectivism/individualism" or "collective individualism" and "individual collectivism".

This TT duplex defines its other social values and qualities: "dialogue/monologue" (collective dialogue and individual monologue mediating it), "altruism/egoism" (serving TT to society, humanity, to its social values together with the restriction of egoism). According to this duplex of attributes, TT can be defined as "dialogism/monologism".

The TT attributes system provides "substantially new thinking" (Einstein), which guarantees to humanity its global peace, survival, prosperity and sustainable development at all its levels. This is the thinking of a new era of Gandhian non-violence in the history of humankind, which was launched by Gandhi in the 20th century, and its implementation begins in the 21st century by the GHA through 70 years after his death.

Scheme-2. Structural model of TT epistemology in system design.

So, the synopsis of the tetranet thinking epistemology in its seven structural categorical blocks is expressed as follows:

1. Tetranet thinking in the integrity of its ontology and epistemology in duplex/tetrad measurement, structural modeling and system design.

2. Duplex: harmony/integrity. Harmony/disharmony. Whole/part. Life/death. Distinction/similarity.

3. Sphereness/4-dimensionality (Social sphericity/four-dimensionality). One/many. Stability/variability. Entropy/negentropy. Pluralism/monism.

4. Spherons/ infrastructures of social production. Spherons/Partons. Non-violence/violence.

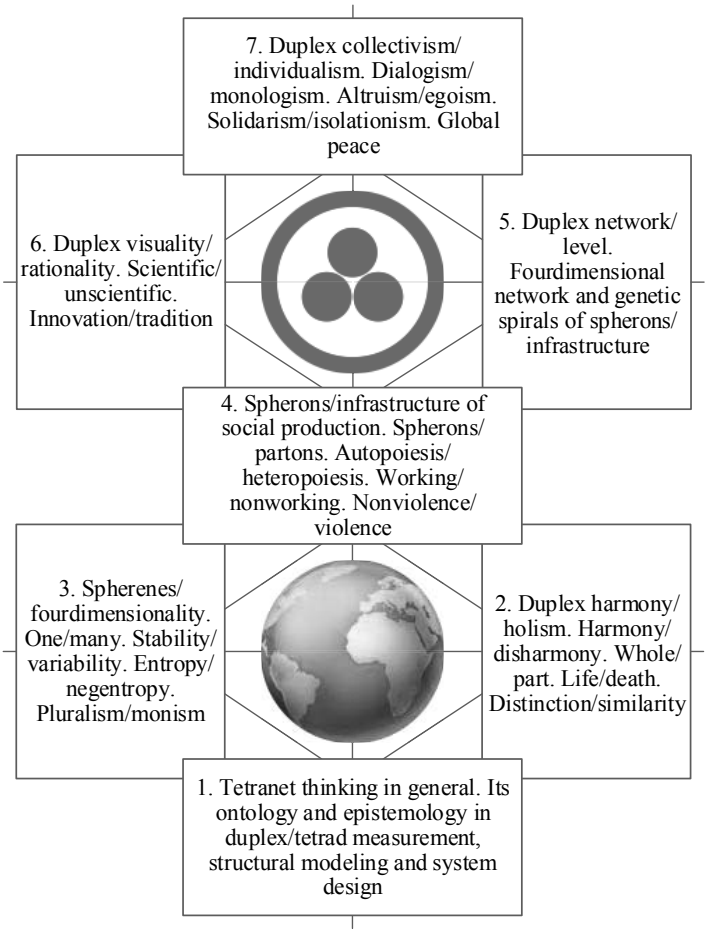
5. Duplex: network/level (hierarchy). Four-dimensional network genetic spirals of spherons/infrastructures.

6. Duplex: visuality/rationality. Scientific/unscientific. Innovation/tradition.

7. Duplex: collectivism/individualism. Dialogism/monologism. Altruism/egoism. Solidarism/isolationism. Global Peace.

Scheme-2

(N. Roerich's Peace Banner in this model is a symbol of not only peace, but also other higher values of humanity: harmony, equality, truth, justice, brotherhood and love, as they are defined in the unity of nonviolence by Mahatma Gandhi).



General characteristics of TT. The system of the proposed 7 complexes of categorical duplexes of TT epistemology is expressed visually in Scheme-2 in the Structural Model. This system is infinitely diverse in its methodological application and excludes any "only true" use of it, which is imposed and forcibly dictated by traditional monistic methodologies. Each block/module of the structural model in Scheme-2 can be detailed and supplemented with new ones. For example, from below, this model should be supplemented with blocks: humanity — consciousness/cognition — historical types of thinking — tetranet thinking in a whole as its modern top and necessary form.

In TT there is no single rigid complete matrix of thinking. Each subject of cognition/thinking can build, within the ontological and gnoseological bases of TT, its own version of his/her methodology, which organically agrees with all other variations of its subjective matrices based on their common structural harmony and dialectics of spheres and spherons. Each subject of knowledge can create its own TT matrix for his/her subject and method of knowledge, or use its already verified matrices as its worthy "precedents".

The proposed outline (abriß) of the epistemology of non-violent Gandhian TT does not in any way pretend to completeness and finality. On the contrary, it is its only first system design in its more or less complete structural modeling, which is still very far from perfect and requires continuous further development and correction, the path of which is as endless as endless human knowledge. To this system design of the tetranet thinking the GHA went through several preliminary stages of its comprehension and attempts at its systemic expression, which we briefly list here:

1. Magna Carta of Harmony, 2006,
2. Harmonious Civilization, 2009 (p. 197-232),
3. The ABC of Harmony, 2012 (p. 11-19),
4. Global Peace Science, 2015/6 (pp. 20-52),
5. The Great Peace Charter XXI, 2018.

They were supplemented and detailed in 68 GHA projects. The list of previous versions of the TT system expression illustrates its internal dynamics, continuous development and freedom from the ossification of traditional ideologies.

In traditional terminology, the TT methodology can be qualified as “pluralistic dialectics”, presented primarily in ambivalence, two-dimensional attributes of TT or as “dialectical pluralism”, represented by four equally necessary and sufficient spheres and spherons of humanity being that make up its societal genetics (below). But unlike traditional dialectics, the TT methodology is qualified as “harmonious spheral dialectics”, or “dialectics of harmony”, eliminating the priority of violence in the "dialectics of struggle".

The TT spheral dialectics, recognizing the “unity and harmony of opposites” (Heraclitus), permits their struggle, but not at the fundamental level, but at the level of particular, temporary, disharmonious cases of deviations from the harmony of spheres and spherons. It eliminates “fight/violence” at a fundamental level. At this level, “struggle/violence” is incompatible and contradicts the law of “***inner harmony of the world as the only true objective reality***” (Poincare, 1990) ensuring the existence, life, movement and development of all phenomena without exception. In their being there can be a struggle only as an accidental and transitory state, as a pathology and deviation from harmony, which is overcome by it that Gandhi suggested. In the new terminology, TT qualifies as “harmonious four-dimensional non-violent (Gandhian) spheral pluralism”.

The fundamental, “substantial” difference of TT from traditional thinking. All attributes of TT were considered and used in traditional thinking metaphysically, separately and fragmentary with the absolutization of one or another of them outside their internal harmony/consistency and outside their internal and external borders. This made such thinking inert, disharmonious and partial, capable of expressing only partial and one-sided truths, creating from them generally erroneous ideologies, doctrines, philosophies and teachings. TT considers

and uses all its attributes in a single multidimensional holistic and harmonious system with the limitations of each of them in the corresponding internal and external duplex. TT concentrates and unites all the attributes of social thinking in its core/center – in the structural societal harmony of spherons/spheres of social production that determine the life of humanity as a whole in its entire history.

The TT historical dynamics. The TT arises at a sufficiently high level of human cognition based on numerous particular achievements of previous types of thinking from the particular to the general and the whole. The fundamental difference between tetranet thinking and traditional thinking is not the movement of thought from parts to the whole, but from the whole, which is always fundamental and essential, to the harmony of its four equally necessary and sufficient spheres uniting transient and disharmonious parts. TT does not exclude, if necessary, the movement of thoughts in the opposite direction in its framework, i.e. from part/parts to whole, from simple to complex.

The motion vector of thought in the TT from whole to parts is expressed by the formula: "X (any social quality and attribute) is from harmony/disharmony of the whole." Examples: "peace from harmony of spheres and spherons", "non-violence from harmony of spheres and spherons", "democracy from harmony of spheres and spherons", "gender equality from harmony of spheres and spherons", "justice from harmony of spheres and spherons". Or "war, bloody revolutions, violence from disharmony of partons (partial classes, nations and ethnic groups)", etc. A similar vector of thinking is fundamentally important for the globalized state of humanity in the 21st century, for its survival through disarmament and liberation from militarism from the harmony of spheres and spherons.

Tetranet thinking, for all its fundamental differences from traditional thinking, does not reject its proven paradigms, but includes, complements and systematizes them. It distinguishes four integral levels of being (Scheme-1 above): **Ontological** (World: matter, organization, information, existence); **Social** (Society: sociosphere, infosphere, orgsphere, technosphere): **Anthropological** (Human: character, consciousness, will, body); **Individual** (I / Individual: **my** character, **my** consciousness, **my** will, **my** body). This system of epistemological coordinates and measurements of TT allows reconstructing the Gandhi's worldview and thinking, above all his key teaching of ahimsa/nonviolence in the unity of all its attributes according to Gandhi: love, peace, truth, justice, equality, fraternity, united by harmony (Gandhi, CWMG).

The authors of the book, naturally, do not set themselves the goal of embracing all the details of Gandhi's worldview in the proposed paradigm — this is a colossal task for the future spheral social science. Here we set a more modest, but no less important task to uncover in this scientific paradigm the deepest socio-genetic sources of non-violence in the unity of its attributes. Scientific mastery of it as ""the greatest force at the disposal of mankind [which] is mightier than the mightiest weapon of destruction devised by the ingenuity of man" and the conscious use of its inexhaustible creative internal energy opens up a historically fundamentally new, non-violent, peaceful development path for humanity in a fundamentally new harmonious global civilization. It will be a new historical era of human non-violence with a new non-violent thinking and a new non-violent world order without wars. This is the inevitable future of humanity, if it survives in the modern 100% prepared nuclear genocide.

The philosophical substantiation and detailed unfolding of the TT epistemology are presented in the whole set of our works listed in the bibliography, therefore we do not repeat them here.

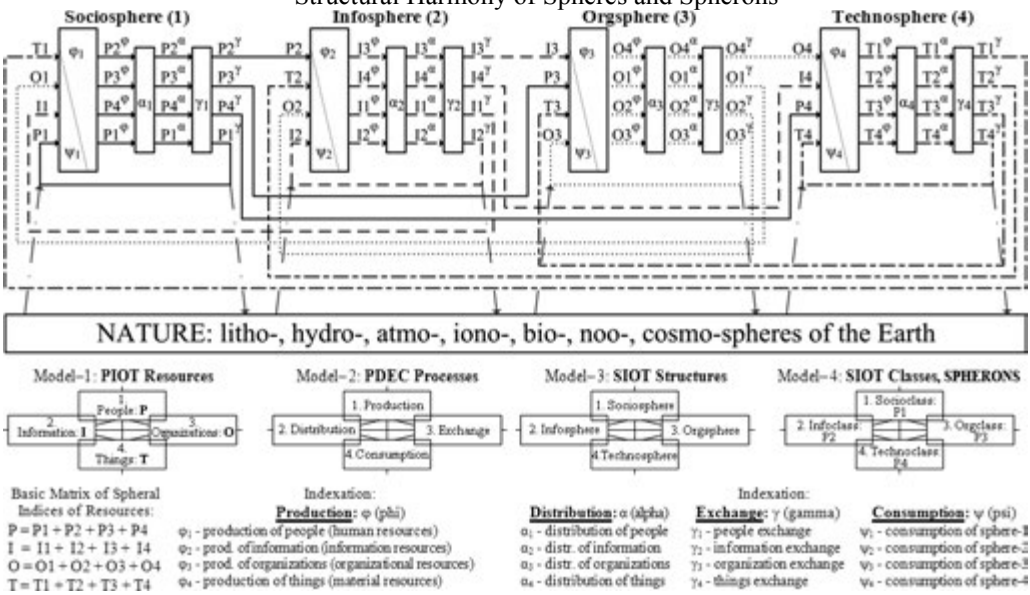
The TT methodology in the following description is limited only to social (Sociology / Sociocybernetics) and statistical (Statistics) parts necessary and sufficient for understanding the underlying social sources of non-violence and violence in order to consciously and harmoniously regulate them, excluding violence.

The sociological methodology of TT is focused in its socio-cybernetic paradigm, the structural model of which is presented in the system design of the societal spheres and spherons

of the "SOCIO-CYBERNETIC GENOME" in Scheme-3 below. This scheme is connected with the previous one through its central unit (No. 4) “Spherons/Infrastructures”.

1.3. Tetranet Thinking: Sociology. Sociocybernetic Paradigm. System Design of Societal Spheres and Spherons

Scheme-3
SOCIOCYBERNETIC GENOME (SOCIONOME) of
Structural Harmony of Spheres and Spherons



More details on SOCIONOME see: The ABC of Harmony for World Peace, 38–43: https://peacefromharmony.org/?cat=en_c&key=486 and Video: http://youtu.be/hbxY5lREOeA

The proposed structural model with its countless chains of contours well expresses and illustrates the cybernetic position, in which “*all biological forms and machines are systems made up of circular causal feedback patterns*.” Therefore, this model is a sociocybernetic one, because it, like cybernetics in general, “*set out to steer the circular causal interrelationship …. modeling them as goal oriented feedback loops*,” chains. Our task to organize and control the cybernetic system of society “*becomes increasingly unmanageable as our conflicts escalate in economical, ideological, and military wars.*” [Pawlik, 2019, p. 59–60]

This model as a “substantially new [non-violent] manner of thinking” (Einstein) by chains of different, but interdependent resources, processes, spheres and spherons in their different categorical attributes and in different network and hierarchical feedback loops allows to transform their organization and ensure their holistic and harmonious nonviolent (Gandhian) governance at all levels (Semashko&C, 2016). Sociological analysis, development and explanation of this holistic structural model as a TT methodology are presented in its axioms below.

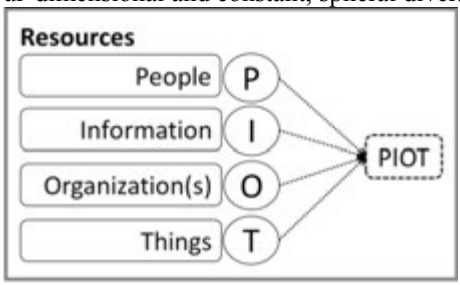
Several preliminary explanatory definitions. The categories of “spheres of social production” and “spherons, classes/groups of people employed in the spheres of production” are defined in the named Annex, and most detailed – in GPS (Chapter 1. Semashko&C, 2016). The category of “societal” to refer the largest, most stable/constant clusters of society was introduced by the famous American sociologist Talcott Parsons (1977). Other new categories are defined below.

1.3.1. Axioms of the TT sociocybernetic paradigm

The sociocybernetic paradigm of TT as a sociological part of its methodology is based and grows out of Tetrasociology or Third Order Sociocybernetics (of spheres and spherons – societal clusters of societies), which integrate the first two (Semashko, 2012a). Sociocybernetics is the most abstract and generalized part of sociology based on Norbert Wiener's principles of cybernetics (1948) and his many followers. Its most important quality and advantage is "transdisciplinarity" (Scott, 2019, 2–5). Sociocybernetics of the third order or "Spheral Science" expands "transdisciplinarity" and makes its structural modeling universal in TT. It integrates the whole complex of traditional socio-humanitarian sciences into a single science based on the fundamental fact of a deep, genetic structural/spheral harmony of society, human, and all their system elements (Weir, 2018: Semashko, 1999, 2002, 2012, 2016). The TT methodology deploys and focuses its integrity and transdisciplinarity into a system of sociological/sociocybernetic axioms.

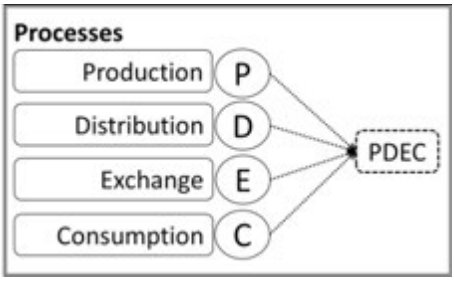
The TT first axiom. Products/resources/capitals. Society as a social production/autopoiesis cannot exist without the four fundamental, necessary and sufficient societal/spheral clusters of products/resources/capitals, which it is forced to continuously produce to live: People, Information, Organizations and Things (material goods and services). In short, these are PIOT products/resources/capitals. The system sum/unity of PIOT within the boundaries of a country or its unit determines the relevant society or community, whose center is PEOPLE (P), and its infrastructure/periphery – three other resources.

PIOT resources are substantially different in their nature, qualities and laws of life, which determines the substantial difference in the technologies, structures, processes, spheres and spherons of their production. They are not interchangeable. At the same time, they are mutually complementary and impossible without each other, so they are necessary and sufficient for each other's life/production that constitutes their social genetic constancy/eternity along with the constancy/eternity of their spheres, spherons and all spheral structures in all infinite diversity of their historical, civilizational and cultural forms. This is their infinite variety within the framework of the finite, four-dimensional and constant, spheral diversity of PIOT.



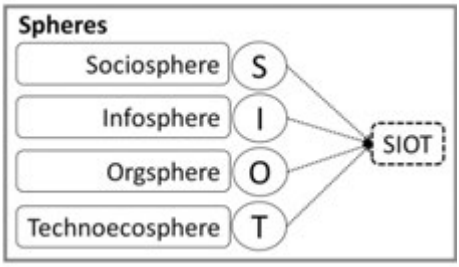
The defining productive resource among them is people. They are united in terms of employment in spheres in spherons. They produce all resources, including themselves, and ensure the harmony necessary for the PIOT proportion between them. (Comte, Park, Gandhi, Toffler, Parsons, Bourdieu, Braudel, Castells, Luhmann, Semashko, etc.)

The second axiom. Processes. It was formulated by A. Smith for the economy, for the production of things, but then extended to all PIOT clusters: every resource/product necessary for society goes through four stages/processes: Production, Distribution, Exchange and Consumption. These are the PDEC processes. (Smith, Ricardo, Marx, Keynes, Maturana, etc.)



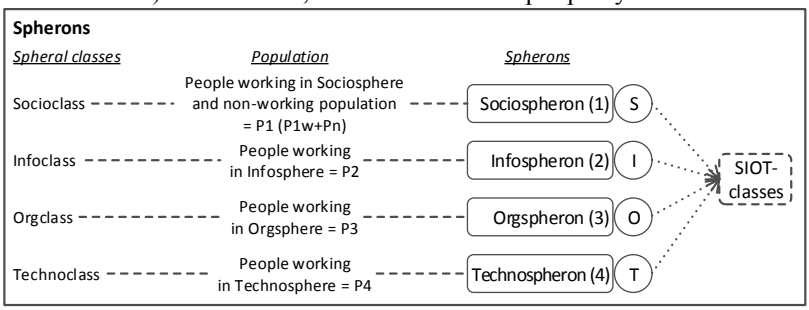
The harmony of processes is determined by the harmony of PIOT.

The third axiom. Spheres. Combining the necessary spheral resources with the corresponding processes for the production of each of the four necessary spheral products creates four spheral structures – four spheres of social production, each of which at any historical stage combines the corresponding variables, emerging and disappearing, industries/branches and enterprises/units of each sphere. These are spheres: Social, or Sociosphere; Informational or Infosphere; Organizational or Orgsphere and Technical (economic, exciting ecology) or Technoecosphere, for simplicity – Technosphere. These are SIOT spheres. (The same authors as in 1, 2 axioms and many others authors, including Gandhi).



The harmony of spheres is determined by the harmony of PIOT.

The fourth axiom. Spherons. Spherons are large, societal groups/communities/classes of people, covering the entire population, engaged/employed in four spheres of social production, in their branches and other units. They differ in the main (in time) employment in one of the spheres, i.e. on employment by the production of one of the PIOT spheral resources (Semashko, 2002, 69–70). Their most complete and detailed theoretical analysis is presented in the GHA book "Global Peace Science", in Chapter 1 (Semashko&C, 20–52]. They constitute four equally necessary and sufficient spheral classes, called Spherons for brevity and for distinguishing from all other classes and groups belonging to them. Spherons are: Sociospheron; Infospheron; Orgspheron; Technospheron. These are SIOT-Spherons or SIOT-classes. (Gandhi, Parsons, Maturana, Giddens, Semashko, and others.) Spherons are the center of their sociocybernetic genome (SOCIONOME) in Scheme-3, and the rest is their periphery or infrastructure.



The harmony of spherons is determined by the harmony of PIOT.

The fifth axiom. Mutual inclusion. The listed 16 fundamental spheral elements of social production (society) are necessary and sufficient for its life (the absence of at least one of them makes it impossible), exist in an infinite number of historical cultural forms and only in mutual inclusion, in coherent superposition, in constant striving through the productive activity of people/spherons to mutual harmony as the best condition for them to ensure the balanced participation of everyone in everyone at all levels from family to humanity as a whole. They constitute its genome and genetic code, which is preserved in all social changes and transformations. The measure of the spheral harmony of an integral social system determines the measure of its genetic viability and sustainability.

The sixth axiom. Measurement. Conscious control, monitoring, regulation and establishment of sociocybernetic harmony of 16 spheral elements are available, necessary and realizable only by spherons based on their spheral statistics. It is their only quantitative tool for measuring 16 spheral elements through matrices of spheral indices PIOT at all levels based on traditional national statistical indicators. Spheral statistics begin with the statistics of the spherons themselves at all levels from the family to humanity as a whole.

The proposed axioms of the TT sociological methodology are integrated into the sociocybernetic genome, in abbreviated form: SOCIONOME in Scheme-3. Its definition: four social spheres resources PIOT produced by the corresponding four spherons in the corresponding four production spheres, combining the corresponding four processes: production, distribution, exchange and consumption are common and constant for all societies in all their transformations and at all levels societal **sociocybernetic genome**. It is a sociocybernetic, because it is an integral non-linear system of direct and inverse, regulating, stochastic cybernetic interactions within the framework of a single self-organizing structural harmony (Soroko, 1984) of spheres and spherons of social production of any form and any level. The nonlinear, stochastic (swarm) and thermodynamic nature of spherons in the genetics of global peace is disclosed here (Afanasyeva, 2017).

Its driving energy, productive force, motor and heart are spherons, which ensure the preservation of its genetic structural harmony and the development of its infinite forms in social evolution. This is the genome of sustainable development and long life, the social "autopoiesis/self-production" of human society as a living species. It excludes wars by definition, since any mutual violence/destruction of any spheron as necessary and sufficient support of the life of any society is equivalent to the destruction of every society as a whole. **War and violence can only be partial and temporary genetic pathologies** of some local societies and transient partial classes/partons, which either die naturally or are cured of them in the same natural way. Therefore, SOCIONOME is the genome of global and social non-violence, their genetic code, which remains constant in all the diversity of its endless sociocultural forms of the human historical evolution. **Only peace/non-violence as the first condition of social life possesses genome and genetics**. **The war is devoid of it** and represents only its partial and temporary pathology as some failure, deviation or breakdown in its structural harmony of the spheres and spherons of social production.

The theory of spherons and their genome reveals the genetics of social non-violence as "the greatest force of mankind" by Gandhi, which becomes available to conscious regulation only if there is adequate scientific knowledge, its digital technologies and corresponding sociogenic engineering of management and repair of some parts of the socionome in its partial militaristic pathologies. **Only genetically peacebuilding spherons, scientifically aware of their own non-violent genetics, can put an end to wars, militarism and all social violence**. Only they are able to do this non-violently, at an adequate genetic level, scientifically controlling own structural harmony in order to prevent and eliminate any causes of war. Therefore, humanity will

be able to end the war/violence when it masters the genetics of non-violence/peace in the structural harmony of its spherons.

The application of TT to the analysis of Gandhi's non-violence is possible on the basis of the proposed methodology in studies of spherons as its source. Their statistical researches are presented in a wide range of countries and their internal units/elements below. Spherons and their statistics are inseparable from each other as two sides of the same coin of a single innovative social knowledge of non-violence in the 21st century.

Here we briefly formulate the methodology of spherons spheral statistics in order not to repeat it in each from their statistical research below.

1.4. Tetranet thinking: Spheral statistics methodology

The methodology of spheral statistics is based on a key, basic matrix of spheral indices of 4x4 in size, from which a practically infinite system of derived fractal matrices of a different dimension is built using a simple algorithm: $4x4^n$, where n is a series of natural numbers from +1, –1 to infinity. The basic matrix of spheral indices of $4x4^1$ size is:

P1 + P2 + P3 + P4
I1 + I2 + I3 + I4
O1 + O2 + O3 + O4
T1 + T2 + T3 + T4

Spheral statistics began to develop and be explored more than 40 years ago in many of our articles and books (Semashko, 1992, 1999, 2002, 2012, 2016, and others), of which it is most fully presented in the "Global Peace Science", Chapter 2 (Semashko and C, 2016). Its general description is briefly presented below.

1.4.1. General description. Two statistics. Two logic of knowledge. Two paradigms and language of thinking. Two sciences

In the methodology of spheral statistics, there are two mutually complementary types and levels of statistics: traditional and spheral. Each of them is connected with its own, necessary logic of knowledge and its own, necessary paradigm of thinking. Traditional statistics (TS) embodies/implements the simplest and most accessible trend/vector of empirical knowledge from parts, details to the whole. Spheral statistics (SS) embodies/implements the most complex and least accessible vector of theoretical knowledge from the whole to its fundamental parts, which constitute it and to their components and details. Two fundamental and complementary vectors of their interaction and navigation strategies correspond to these opposite but complementary logic of cognition. The TS vector fills the logical/theoretical spheral indices with empirical content/meaning. The SS vector classifies compresses, organizes and focuses the infinite and chaotic space of empirical indices and their meanings. The dignity of each of them is formed in the context and content of their own logic and paradigm of thinking.

The main advantage of the TS is its connection with reality, with the historical context and all of its features, details, pros and cons in various parts of the infinite social world of humanity. TS is formed and lives in the empirical logic of knowledge and in the paradigm of partial thinking. The main advantage of the SS is the penetration into the eternal fundamental and deepest laws/structures of humanity, ensuring its life, survival, and stability in its entire history from beginning to end. SS is formed and lives in the theoretical logic of knowledge and in the paradigm of holistic thinking.

Only at the SS level, its holistic logic and paradigm of thinking, the deep societal structural harmony / nonviolence of humanity as a whole becomes available, regulating all the stochastic,

thermodynamic historical processes of all its local and national parts. Disharmony, war and militarism (Maguire, 2014, 2018) find the ground and an adequate language only in the TS, in the empirical logic and paradigm of partial thinking, which are overcome by the SS, in the holistic logic and paradigm of thinking.

Only at the level of the SS, the sources and laws of non-violence, global peace, social equality, fraternity, justice, unity, prosperity, liberation from all social pathologies, prosperity and happiness of all nations become clear. Peace, non-violence and the harmony of humanity are achieved only in the logic and science of the whole, but through the logic of the parts subordinate to the first. Therefore, the SS becomes the decisive intellectual/scientific tool to achieve and ensure them, to overcome the civilization crisis (Avery, 2017), in what its unique meaning and fundamental importance for the future consists.

Traditional statistics (TS) as a science has been developing since 1746, having covered a great evolutionary path of empirical development in each of the countries for almost four centuries. The three main attributes define the essence of this statistics: its national, branch/partial and empirical/inductive character. With its undoubted need, public utility and virtues, it has a number of fundamental flaws that call it into question in the well-known popular expression: "*There are three types of lies: lies, damned lies, and statistics*." The TS is undemocratic, because by virtue of "Augean stables" of its indices and entanglement, it is inaccessible to the people, even experts have a poor and very different understanding it.

The TS, by virtue of its attributes, is in many ways arbitrary, subjective, and amenable to all sorts of unfair manipulations, which gives rise to reasonable doubts about its objectivity and reliability. For this reason, it excludes a full-fledged comparison of statistical data from different countries and one country in different periods due to constant changes in its key element — classifiers and their statistical indices devoid fundamental bases. But it began to realize, pose and partially solve this problem since 1853, (the first international statistical congress in Brussels), leaving it fundamentally intractable in its empirical methodology and retaining its insurmountable fragmentation between its branch segments: labor statistics, population statistics, agricultural statistics, health statistics, etc. This fragmentation of the TS is institutionalized at the global level by relevant international organizations and UN departments. Here lies the central problem and the source of all the TS weaknesses/defects, with which it fights at regional levels, but without much success and progress. Since there is no better statistics, they use it, trying to somehow limit, compensate and damp its defects. TS is one logic, paradigm, statistical language and humanitarian science from part to whole, which is complemented and developed by another logic, paradigm, statistical language and a new humanitarian science from whole to parts, integrated by TT.

Another level of statistics and a type of statistical language of its specific spheral indices are spheral statistics (SS), which grows out of fundamentally different reasons: from logical/theoretical prerequisites of knowledge of social production spheres as associations of its branches and their spheral elements/components/clusters: resources, processes and spherons. This allows the SS to acquire a global/universal character and find a single, comparable application in a social system of any order and level from family to humanity as a whole. SS cannot and does not seek to replace/supplant traditional statistics, which is its feeding empirical soil and source. The SS can only rely on it, contribute to its development and strengthening, and raise it to the level of fundamental science, retaining all of its necessary national characteristics. In contrast to the TS, the new SS is democratic, as it is simple in its logic and transparency, so it is available to the people. In the general methodological sense, the SS serves as a metalanguage and metalinguistics in relation to the object language of linguistics of the TS.

More details about the emergence of SS more than 40 years ago, its first steps, as well as the shortcomings of the TS and the relationship of composition and decomposition of indices of two statistics are discussed in the book of 1992 and later [Semashko, 1992; 1999; 2002]. The above

briefly presents the fundamental logical foundations of the SS in the form of its axioms and base fractal matrix, and below its more detailed description.

Spheral statistics is the statistics of PIOT spheral resources, through which the statistics of PDEC spheral processes, SIOT production spheres and SIOT spherons employed in them is expressed. Spherons' (P) statistics is the center of spheral statistics, determining peripheral/infrastructural spheral statistics. Spheral statistics are based on a system of special PIOT spheral indices that summarize, streamline and complement the system of indices of traditional statistics, which is still nationally torn and fragmented.

The foundation of spheral statistics is a basic matrix of spheral indices PIOT, which is capable of almost infinite scanning in the system of detailing fractal matrices. This matrix system is built on alphanumeric indices of the PIOT resource elements, called spheral indices.

The units of measurement of spheral indices can be generalized natural units or their units of cost, time, and energy. Spheral statistics of spherons (people) is limited to natural units of population, for example: millions of people.

It was established above that any society, including the global society, in statics is expressed by the sum of all its PIOT resources:

SOCIETY = P + I + O + T

For the production of each of the PIOT resources, an appropriate complex of their parts is necessary. Therefore, each PIOT is divided into four parts, necessary and sufficient as resources for the production of new PIOT. This pattern is expressed by a 4x4 base matrix of indices (above).

In it are:

P = P1 + P2 + P3 + P4, where P is the population, and P1, P2, P3, P4 are its spheral classes – spherons, necessary and sufficient for the production of the corresponding resources PIOT;

I = I1 + I2 + I3 + I4, where I is information, and I1, I2, I3, I4 are its complexes necessary and sufficient for the production of the corresponding PIOT resources;

O = O1 + O2 + O3 + O4, where O is organizations, and O1, O2, O3, O4 are their complexes necessary and sufficient for the production of the corresponding PIOT resources;

T = T1 + T2 + T3 + T4, where T is things, material goods and services, and T1, T2, T3, T4 are their complexes necessary and sufficient for production of the corresponding PIOT resources;

In its pure form, the base matrix of PIOT spheral resources and their indices of 4x4 dimension is:

P1 + P2 + P3 + P4
I1 + I2 + I3 + I4
O1 + O2 + O3 + O4
T1 + T2 + T3 + T4

All matrices of indices derived from base matrix are called "spheral matrices", which form spheral statistics, fundamentally different from traditional (branch or industrial) statistics, but associated with it. All its indices are integrated into spheral indices, are classified by it in the spheral logic and are ordered in the sociocybernetic system of the structural social genome.

The strings of a spheral matrix express the outputs of the corresponding PIOT production spheres as their products, and their columns express the inputs of the corresponding production spheres that use PIOT as resources.

The dual nature of the spheral resource (and spheral index) as the output/product of the spheres and how their input/resource is expressed in binary, alpha/digital designation of these resources and related indices.

The entire infinite series of spheral matrices is built on the primary matrix base according to one algorithm: each string/row of any matrix turns into a column of the underlying matrix, and each index of the row appears in the underlying matrix as the sum of four indices expressing the complex of resources necessary and sufficient for its production.

This generating algorithm expresses the principle of "all in all." He makes the spheral matrices, their strings and columns, similar and nested in each other fractals, which are described by the fractal mathematics of Benoit Mandelbrot. He introduced the mathematical concept of fractals: "*A fractal is a structure consisting of parts that are in some sense similar to the whole*" (Mandelbrot, 1982). The knowledge of the "Fractal nature of society" begins from the spheral matrices of statistical indices if paraphrase Mandelbrot. This is a necessary attribute of TT as a "substantially new manner of thinking" (Einstein).

The system of spheral/fractal matrices creates a single logical network statistical space of humankind, the global statistical digital language of spheral indices in spheral matrices, which is able to integrate, compose and decompose across PIOT indices of different level matrices all the variety of national statistics, overcoming their inherent fragmentation, discontinuity and disharmony. Similar unified statistical system of indices ensures effective harmonious management of spherons nonviolence at all their levels and in all social units, overcoming any disharmonious possibility of violence/conflict, preventing it at the root.

Again, within the framework of a single spheral statistics, its center is the statistics of spherons, which constitute the sociogenetic source of the "greatest force of non-violence" according to Gandhi. This is the TT theoretical conclusion, which is confirmed by the real statistics of dozens of countries below.

1.4.2. Spheral indices of spherons as genetic societal sources of non-violence

Spherons in general and the individuals who make them differ by the criterion of basic (in time) employment in one of the four spheres of society. (The employment of spherons is discussed in more detail in paragraph 1.6. of the GPS first chapter (Semashko&C, 2016). Employment of people is their universal life characteristic from birth to death. All other properties of people by which they differ — labor, property, power, education, and the like — are its particular manifestations and/or products. All the lifetime of people is production employment of those or other resources of society, including and above all themselves. In the framework of the multidimensional topology of people's life employment, its two principal clusters are distinguished:

1. Self-production or "autopoiesis" is the employment of each person by himself ("I") from birth to death in such processes as nutrition, sleep, sex, hygiene, training, communication, rest, sport, healing, recreation, relaxation, etc. The term self-production (autopoiesis) was first introduced by Umberto Maturana and Francisco Varela (1973) for theoretical biology to describe the self-reproduction of living cells. In 1990, it was rethought in the sociology of Niklas Luhmann to characterize human communication as the main element of the social system. Self-production belongs only to the sociosphere, includes all types of human activity except economic/labor activity, which is allocated in a separate cluster of employment, associated with all other resources except its own "I". This "other" employment of a person can be called "heteropoiesis", i.e. "production of other resources than I".

2. Labor or economic employment of people by other resources, except for "I", i.e. "heteropoiesis". As a rule, it is formally established by the norms of labor activity of the society. Labor activity is a part of self-production as a "work experience" or as a "length of work" of a person, which are part of a person's life.

These two employment clusters divide the entire population into two parts:

1. **A non-working (economically inactive) population**, but engaged in self-production, 'autopoiesis' in the sociosphere, which is denoted by the spheral indicator **Pn ("non-working population/people")**.

2. **The working or economically active population** employed in all spheres, which is exhausted by four spherons, i.e. is divided between them and is indicated by the spheral index **Pw ("working population/people")**. This indicator summarizes the number of the total working / economically active population and is expressed by the formula:

Pw = P – Pn, where P – is the total population of the country for any year and Pn is nonworking population. From Pw group, the part of the active population that works in the sociosphere denotes by **index P1w**. Then the number of Sociospheron will be equal: P1 = Pn + P1w. The number of four SPHERONS is the total population. This is expressed by the simple formula: **P = P1 (Pn + P1w) + P2 + P3 + P4, where the digit denotes the spheron number (#).** This is the fundamental formula of the population/people of any community from family, city, country to humanity as a whole in the spheral indices of spherons.

The special methodological complexity is the understanding of the number of P1 (Pn + P1w) – Sociospheron, which covers the number of all non-working people engaged in the autopoiesis and the number of employees in the social sphere: teachers, doctors, social workers, etc. Why are non-performing (Pn) not allocated to a special spheron? Why are they united into one spheron – into a sociospheron (P1) together with P1w (teachers, doctors, etc.)? Because both these groups have one subject and the product of their employment – a person, but on a different scale: one (I, myself) or many – students, patients, etc. Repeat, all spherons differ by a single criterion: according to the subject/product of their employment, regardless of its scale.

Spheral indices, which are used to express spherons and their dynamic trends in time are defined as follows in the table:

Table 1. Spherons' Spheral Indices. Classifier

P	Population/people in total at any level and any community from family, school and city to the country and the world as a whole. ***P = P1 + P2 + P3 + P4 or P = Pn + Pw***
P1	**Spheron-1**, people who are employed (nonworking + working) in the branches of sociosphere (first sphere); ***P1 = Pn + P1w***
Pn	**Non-working** population, who are employed in self-production ('autopoiesis") of sociosphere and forming the Spheron-1 first part; ***Pn = P – Pw***
Pw	**Working** population ('heteropoiesis')in all spheres and their branches: ***Pw = P1w + P2 + P3 + P4 or Pw = P – Pn***
P1w	**Working** population in the branches of Sociosphere and who constitute the Spheron-1 second part. ***P1w = P1 – Pn***
P2	**Spheron-2**, people who are working in branches of Infosphere (second sphere);
P3	**Spheron-3**, people who are working in branches of Orgsphere (third sphere);
P4	**Spheron-4**, people who are working in branches of Technosphere (economic, fourth sphere).

In total, the table contains 8 spheral indices, of which 5 are basic (in red), and 3 are intermediate, calculated (in green). Key intermediate indices of the working and non-working population in different societies balance in spontaneous (swarm) equilibrium in the range up to 10%, as a rule, towards the non-working, but there may be exceptions shown in the spherons' statistics of different countries below.

The principal advantage of spheral indices is that they provide global digitization of all national statistical indices, constitute their common denominator, logically

organize/systematize/integrate them and open the way for the digital economy, the digital global peace through digital/conscious prevention of all wars and non-violent resolution of all conflicts. Spheral indices aggregate and disaggregate the indices of traditional statistics using a special technology (SIST or GLOBSTAT), which we don't touch on here, because it has been studied in detail in other works (Semashko, 2018; etc.)

The fundamental importance of spherons' statistics is that it expresses their quantitative measure and dynamics as genetic sources/bases of non-violence by their nature: spherons objectively (spontaneously and stochastically) are aimed at mutual survival, precluding their mutual destruction. Wars/violence of their transient parts (partons) occur only in their conscious enmity by private attributes of power, property, greed, superiority and similar subjective passions and nothing else without any fundamental reason. The measure of spherons by private attributes can vary in a wide range of their statistical equilibrium and structural harmony. Going beyond this range creates various social disharmonies, failures, crises, pathologies, local conflicts and wars.

The law of the spherons existence excludes violence/war between them as a whole, because it leads to total destruction of one of them that will deprive the society/humanity of one of the necessary resources, without which his life is impossible and it dies. Therefore, spherons are actors, causes and sources of non-violence, which, in turn, is the only way for spherons to exist. Non-violence is the substance of spherons and vice versa, therefore "**the law of non-violence is the law of spherons and vice versa**". History does not know and can not know a single example of the war of spherons and the destruction of one of them, because it will be the first and the last in the evolution of humankind. It is confirmed by the statistics of spherons, no matter how small the number of one or another spheron on this or that historical stage in a particular region. Even during the most widespread world and civil wars, no more than 10–20% of the population participate in them and never 50%, and even more so 100%.

Spherons are communicating structural demographical vessels of swarm nature: the reduction in the number of one leads to an increase in the number of others and vice versa. For example, robotization of the technosphere, reducing the number of its spheron, provides an increase in the number of intangible (non-material) spherons. This is the general employment trend of the future, as reflected by spheral statistics. Therefore, the statistics of spherons in the framework of the dynamics of their structural harmony is the statistics of genetic survival and sustainable development of society/humanity as a whole. No other branch or national statistics have such a fundamental advantage.

Humanity's lack of such statistics of survival/sustainability as non-violence statistics indicates its infancy, in which its knowledge is still unavailable and in which the necessary sciences and tools are still lacking, including a sufficiently developed sociology and sociocybernetics that would be able to fill this gnoseological gap and to ensure the priority development of socio-humanitarian knowledge. But on this peripheral evolutionary epistemological path, two cornerstones appeared: Gandhi's non-violence embodied in historical practice of achieving Indian independence and the science of global peace/nonviolence, based on spheral statistics, allowing to calculate/digitize the "greatest force of non-violence of humanity" to manage this force for good of humanity survival, sustainability and prosperity. This is its non-violent future, armed with "a substantially new manner of thinking" in TT, which requires and ensures a non-violent intellectual "hacking present", i.e. traditional violent and militaristic thinking, bringing us closer to the full ecocide/genocide (Pawlik, 2019, 60).

1.4.3. Spherons. Typical pattern of statistical research

A typical pattern of statistical research of spherons for a certain social object (humanity, region, country, district, city, enterprise, school, university, etc.) for any given year is presented

by the following table of spheral indices, the numerical values of which are determined by summing by the traditional statistical indices grouped under each spheral indicator.

Statistics of the Population Spherons (object, year)
By author(s)*:

Table 2. SPHERONS of (object, year) number** in (million) people. **Typical template/pattern**
The main spheral indices are highlighted in red
and intermediate ones are highlighted in green.

Spheral Indices	Population, the employed in four spheres of social production	Year	%
P	**All Population: P = P1[Pn+P1w]+P2+P3+P4**		**100%**
Pn	Pn = non-working population. Pn = P – Pw		
Pw	Economically active population, working in four spheres. Pw = P1w+P2+P3+P4		
P1	Spheron-1: P1 = P1w + Pn		
P1w	P1w = sum of the working in the branches of Sociosphere:		
	HEALTH		
	EDUCATION		
	SOCIAL SERVICE and similar		
P2	Spheron-2 = sum of working in the branches of Infosphere:		
	COMMUNICATION		
	SCIENCE AND SCIENTIFIC SERVICE; Designing		
	CULTURE, ART		
P3	Spheron-3 = sum of working in the branches of Orgsphere:		
	PUBLIC ADMINISTRATION, DEFENCE and SECURITY		
	FINANCIAL INTERMEDIATION		
	Others: public organizations, etc.		
P4	Spheron-4: = sum of working in the branches of Technosphere:		
	AGRICULTURE, HUNTING AND FORESTRY		
	FISHING		
	MINING AND QUARRYING		
	MANUFACTURING		
	ELECTRICITY, GAS AND WATER SUPPLY		
	CONSTRUCTION		
	WHOLESALE AND RETAIL TRADE; REPAIR		
	HOTELS AND RESTAURANTS		
	TRANSPORT AND STORAGE		
	REAL ESTATE, RENTING AND BUSINESS ACTIVITIES		
	Others: nature conservation, folk crafts, etc.		
	Statistical error		

Brief author comments if possible (desirable but not required)
* Author (s) brief identification and photo
** At least 1–2 statistical sources, if possible from the Internet

Spherons structural chart

In total, Table-2 contains 28 indicators, of which 8 are spheral, summing up 20 traditional indices (if necessary, their number can be increased). Their statistical error is allowed up to 5%, but it can be neglected. Of the 8 spheral indices, 5 are the main ones, and three (Pn, P1w, Pw) are auxiliary, calculated for the transition from traditional indices of national statistics to spheral indices of spherons. Other explanatory and detailed notes together with the simplest two-step algorithm for filling this table, accessible to any schoolchild who is proficient in arithmetic, (Semashko, 2018a).

Of all the features of this system of indices, we emphasize only one of its properties, which is of fundamental importance for calculating the number of spherons. Each subsequent matrix level of spheral indices précises the previous one. This process is endless, as the system of these indices is endless. Therefore, the calculations of the number of spherons at the first, basic level are rough, which are subsequently refined at subsequent, deeper levels of their integrity. In particular, at this level, groups of "specialists of different qualification level" within the spherons are not taken into account and do not differentiate that slightly distorts their numbers, but this error is removed at the level of a subsequent matrix of 4x16 indices, etc. This group is insignificant in number; therefore, the error in its number does not exceed the permissible norm of statistical error.

We emphasize again, the statistics of spherons is only the fourth, but the most important and difficult part of the spheral statistics with which it begins. Its other parts relating to other resources should be formed in the corresponding statistical studies, which are beyond the scope of our study of spherons. Therefore, we do not touch them here – this is the subject of future research.

1.4.4. Sources of statistics on working and non-working population

Spheron's spheral indices are calculated according to the national statistical censuses of the population in average annual rates, which are published on the network, **but it is best/easiest to use the annual population tables by economic activities in terms of national statistics**. Spherons indices cover the entire population of any country and its regions by 100% in its two eternal and approximately equal parts of the working (economically active) and non-working (occupied by autopoiesis) population.

All values of spheral indices at this, the first, and initial stage of their calculation are very approximate and rough. But they are sufficient to get the first, approximate picture of the number of spherons in the population of any country and any of its units "from a bird's eye view". At the subsequent stages of the calculation of the infinite spiral of fractal matrices of spheral indices,

their values are sequentially refined "under a spheral microscope". Therefore, in the first stage, no strict accuracy requirements are imposed on their values, which are implemented in the subsequent design steps. If the initial statistical base of traditional statistics is full of errors that make up the TS Augean stables for almost four centuries, then we cannot demand absolute accuracy from the spheral statistics derived from it.

The Augean stables of traditional statistics are generated by the uncertainty, variability and incompatibility of their classifiers/standards/registries in different countries and regions, as well as in different periods and years of one country and one region. In the Spherons typical table used the classifier of economic activity of the EU in 2007 (?), which is adapted in some other countries. The names of such indices vary in national statistics. In the tables of the spherons of each country it is necessary to use the names of the indices of national statistics so that they can be found in the national databases.

An analysis of the sources of statistical data on employment, working and non-working population in their three types: national population censuses, statistics on the types of economic activity of the working population and data on the number of staff of organizations by activity and by category of personnel, as well as the methodology of spheral statistics is investigated in detail in the GPS Chapter 2, with numerous statistical examples (Semashko&C, 2016).

1.4.5. Tetranet methodology. Organizational conclusion

The methodology of tetranet thinking (TT) has evolved over 50 years, including its most intense 14 year period in the GHA, in its 8 books and 68 peacemaking projects. The GHA has long been convinced of the acute social necessity of tetranet thinking as a "***substantially new manner of thinking***" (Einstein), capable of overcoming the biosphere ecocide and the nuclear genocide of humanity prepared by the West, providing a non-violent solution to the key problems of our time: global peace, complete and universal disarmament in 50 years with nuclear disarmament in 10 years, climate and environmental issues, renewal of democracy, gender equality, children's priority, international relations, primarily the USA and Russia, global governance at the UN level, interfaith harmony and others, to which are dedicated the GHA respective projects and books. Therefore, we intend, once again, to offer the UN and UNESCO, as well as the most peace-loving states: India, China, Russia, Malaysia and the like to create at the international or national level the "World Academy of Social-Humanitarian Sciences" (WASS) to develop the interdisciplinary science of non-violence and global peace based on the sociocybernetic methodology of TT, which has enough theoretical and empirical evidence.

This methodology still has no equal, but it is able to integrate all similar peacemaking and non-violent achievements from other approaches and approximations, raising traditional, partial thinking to a level of integrity and overcoming its flaws and weaknesses in solving global problems that are only exacerbated in it. The TT methodology for the first time opens up the possibility for social and humanitarian knowledge and sciences to emerge from more than a century of stagnation, depression, crisis, and backwardness from natural, technical, and military sciences, which, unfortunately, brought humanity to eco- and genocide by militaristic efforts and priorities of the West. Peace and nonviolence have never been the civilizational values and priorities of the West, with rare national exceptions of peacefulness. Therefore, its whole story is filled with wars and violence, which gave Gandhi grounds to qualify it as "satanic" and predict, "it will destroy itself" (CWMG). Therefore, the crisis of the humanities is natural for the West.

The trend of stagnation and the lag of the humanities from the natural, technical and military sciences, which created the "gulf between two cultures", was noticed more than 60 years ago by Charles Snow, who called "to destroy this gulf" by the new scientific revolution, "as long as this gulf exists, society is not able to think sensibly ", i.e. non-violently (Snow, 1985). Since then,

unfortunately, due to the depression of the social sciences, this gap has only deepened to this day. It is overcome by the TT scientific revolution of the humanities with their fundamental discovery of spherons as the "non-violence law" of Gandhi. Only discovery of spherons makes TT the "substantially new [nonviolent] manner of thinking" of the humanities. Moreover, knowledge of spherons provides these sciences with the priority and advantage of integrity/wholeness over natural science, which can never master the integrity of the Universe and thinking from the whole to parts, due to the Universe infinity in space/time and the inaccessibility of its integrity to human limited by minimal space/time. Holistic scientific images of the Universe will always remain transient hypotheses that continuously replace each other in the history of natural science. Holistic knowledge is available to a human only within the framework of his social life, limited by the minimum physical space/time.

A human is capable of mastering the integrity of his limited social being in his humanities through the knowledge of spherons and through his "substantial new thinking" from the integrity of spherons to the knowledge of their historically transient parts and forms. "To destroy the gulf" between sciences and the humanities (between "two cultures") is possible only through their intermediary – biology, the object of which are biological life forms, which are limited, like people/society, to Earth space/time but based on infinite in space/time laws of physics and chemistry. Other forms of biological and social life, besides earthly, are unknown to science. H. Maturana (1963) discovers their commonality in the genetic structures of autopoiesis, which are socially embodied in the structural harmony of nonviolent spherons. Epistemologically, they become available only to TT in its methodological movement from the social integrity of spherons to the knowledge of all its parts in the entire infinite multitude of their transitory historical and cultural forms.

The advantage and priority of the integrity of the humanities in TT not only bridges the gap between two cultures, but also establishes a bridge between them, imposing social and ethical restrictions on the use of natural energies, primarily nuclear, for violent influences on the socio- and bio-spheres of the Earth. The discovery of spherons and the conscious use of their fundamental "nonviolence law" of Gandhi returns the sociosphere/noosphere of the Earth to the course of natural nonviolent being through the priority of "substantively new manner of thinking" – tetranet thinking (TT).

"A substantially new manner of thinking" is required not only by exacerbated global problems, solutions of which have not been visible for almost a century, but also by the intensive development of the Internet and digital technologies, which TT provides an adequate response. Its intensive and wide-scale development in all branches of social knowledge requires an WASS, free from the pressure of both traditional scientific institutions and the oppressive tutelage of general scientific Academies, in which social and humanitarian disciplines are marginalized and left in the back of financial and scientific stagnation.

The creation of WASS will be a breakthrough of socio-humanitarian thinking and science from age-old stagnation and crisis. If it is established at the national level, it will provide any country with a world leadership in this field of knowledge, which will undoubtedly become the priority and most effective in the 21st century. TT gives a second life to Gandhi's non-violence, revealing its social origins and is capable of mastering and using this "greatest force of humanity", providing both TT and the socio-humanities with a natural title of "Gandhian Sciences and Thinking."

The past experience of our appeal to governments and international organizations convinced us of the lack of political will for peace and non-violence among their leaders, because they demonstrate only the will to confrontation, war and armament, whipping up their race and military budgets. However, despite this, we are convinced that this trend cannot be infinite and it will soon exhaust itself and break down in its internal disharmony and lifelessness. Then the need for "a substantially new manner of thinking" and its international development in the relevant WASS will become obvious. Therefore, our efforts will not be useless and vain in any case and in all aspects: scientific, humanitarian, social, peacemaking and political. Our innovative scientific searches and peace books and projects live with this hope and faith.

1.5. Summary. Two thinking: two destinies and two humanity futures. "Hack" one, not to "die" and survive

Our time is the decisive choice of destiny and future for humanity. His entire previous history led to the very brink of nuclear self-destruction, which would inevitably become a global ecocide and genocide, combined in a single planetary noospheral collapse. Its reason is realized by the greatest minds of the geniuses in the middle of the last century: Gandhi, Einstein, Snow, Kennedy. Mahatma Gandhi defined the dominant Western civilization as "satanic", violent, which "will destroy itself" and saw the way out it in "*the law of non-violence as the greatest force of humanity*". Albert Einstein emphasized the inability of traditional violent and partial thinking to solve the global problems created by it and ensure the survival of humanity, therefore, as he wrote, "*if humanity wants to survive," "we shall require substantially new [nonviolent] manner of thinking*" as its salvatory alternative and addition. Charles Snow saw the mortal threat of humankind in the "*gulf between two cultures*", between two methods of thinking: industrial, technocratic, partial and humanitarian, humanistic, holistic. John Kennedy summed up the tragic situation of humankind as an inevitable choice for it: "*Mankind must put an end to war or war puts an end to mankind*."

What has changed in this tragic existential situation of humanity for 80–60 years? Virtually nothing, only it became even more tragic. The real priority of humanity in the ecocide/genocide has not changed. Humanity as moved to its death in the nuclear "shameful self-destruction" since Hiroshima and Nagasaki, as and continues to stubbornly move towards it under the zombie melodies of the false global consciousness of well-being implanted by all mainstream media. The most recent fact of the priority movement to ecocide/genocide today is the decision of the United States to invest more than a trillion dollars in modernizing nuclear weapons until 2035, which spurs its race for the near future. This is what Joseph Cirincione, president of Ploughshares Fund, author of "*Nuclear Nightmares: Securing the World Before It Is Too Late*" (2015), says: "*We thought the arms race was over. It's not over. We are in a new arms race. Every single nuclear-armed country is building new nuclear weapons and heading towards a confrontation point. You've got to be a real optimist to think that you can keep thousands of nuclear weapons in fallible human hands indefinitely and something terrible is not going to happen*."

Therefore, today we are all in that tragic situation in which nothing remains but to "hack or die" (Pawlik, 2019). Maybe more precisely: "hack" to "not die." It is good that the West is beginning to understand this saving priority. "Hacking" does not mean forcibly destroying, as the author emphasizes, who rejects any violent revolution. "Hack" means finding a "substantial new [non-violent] manner of thinking" (Einstein), overcoming the deadly traditional industrial and technocratic way of thinking from part to whole, which is not only an alternative to it, but also complements it, retaining all its achievements and constructive creative opportunities. We proposed above similar, "substantially new" thinking – nonviolent, humanistic and holistic thinking from the integral genetic structure of spherons to their spatial-temporal functional historical parts, which cannot have any other priority than the life/survival of humanity. Therefore, it rejects and overcomes the priority of the ecocide/genocide of traditional technocratic thinking from part to whole, but retains

and integrates in itself all its partial achievements and abilities that can be used for the common good of humanity.

"Hack or [not to] die" is a formula for a "substantially new manner of thinking," a formula for acquiring nonviolent Gandhian thinking, a formula for "bridging the gulf of two cultures" and a formula for "*put an end to war before war puts an end to mankind*." This integral multipurpose formula is embodied structurally and design in the pluralistic, holistic and harmonious tetranet thinking within the framework of the universal life "law of nonviolence" of Gandhi. The creative evolution of the sociocybernetic tetranet thinking is the best way to "hack to not die" in the Procrustes vises of one-dimensional and violent traditional thinking. This is the best, the only ethical and humanistic version of the future with the survival and prosperity of humanity, with its liberation from militarism and wars and ensuring humanity and human of the first, fundamental right to life, peace, harmony and non-violence. Only on its platform do all other human rights acquire true meaning and lose their traditional hypocrisy, which without it remain a fiction in a violent militarist world order. The formula "hack so not to die" showed the path of the revival of Gandhi's non-violence in his second life for all humanity through the sociocybernetic tetranet thinking, with which everyone is good as the common good.

Part 2.
Nonviolence Spherons: Their Genetics and Statistics

Introduction
Selection, Composition and Problems of Spherons Statistical Researches
Leo Semashko

For more than 40 years of development of spheral statistics, including statistics of spherons as its main part, and especially intensively within the GHA during last 14 years, thousands of pages of relevant statistical researches have accumulated in dozens of projects (Semashko, 1992, 2016) published in books and articles by paper and electronic. Of course, it is impossible and inappropriate to reproduce them in this book, dedicated to Gandhi's non-violence, and not statistics. Therefore, it was decided to strictly select statistical researches of spherons in the last, most intensive period of 2012–2019. in the GHA and to reduce / compose each of them to a one-page universal table of eight spheral indices with indication of their authors, object, time, statistical sources and place of the full research publication. All of them, many of them occupying dozens of pages with the methodology and methods of spheral statistics, were reduced to one page.

The generalized statistical methodology is briefly presented in the first part of the book that makes it unnecessary to repeat it in every statistical research. Therefore, the compressed format of their publication below allows the reader to focus on the final statistical values of the **five** basic universal and fundamental for all countries and the levels spheral indices of spherons for their verification, analysis, comparisons by countries and periods, etc. This ensures their final assessment and recognition of their unique innovative scientific significance.

Without rejecting traditional statistics and not interfering with its established process, Spheron's statistics contribute to its logical coherence, integrity and congruence, opening up to it fundamentally new opportunities for both theoretical and technological development in fundamentally new integral and global digital statistical technologies. These technologies provide a qualitative increase in its effectiveness as a powerful tool of economics, management and forecasting, which can ultimately determine, regulate and prevent social and economic disharmonies as sources of violence, wars and conflicts.

In this mission, spheral statistics becomes a powerful scientific tool for cognition and cybernetic harmonious regulation of the "greatest force of non-violence" of spherons, which was intuitively felt, predicted and used by the genius of Mahatma Gandhi. The statistics of spherons makes available the understanding and conscious use of this "greatest force of non-violence" for all peoples and governments in order to solve peacefully and prevent conflicts of different groups and different nature.

Of course, the results of statistical studies of spherons presented below, conducted on a purely volunteer basis by individual enthusiasts and non-profit organizations, constitute only the very beginning of the development of new statistical science and technology. But, as the proverb says, “Every beginning is difficult,” which will undoubtedly find support and continuation in institutional forms along with the corresponding budget and corporate financing.

It is also natural to have special difficulties and problems, as in any new science, in the spheral statistics of spherons.

First, this is the problem of the accuracy of spheral indices, the error of which is within the limits of the permissible error of traditional statistics and does not go beyond its boundaries.

Secondly, this is a problem of classifiers in the different countries, regions and periods with various names of indices and different units of population size, which have to be entered into spheral classifiers.

Thirdly, it is a transition from one, traditional statistics to another, spheral and vice versa.

Finally, it is a problem of different methods of different countries and different levels of statistical research. They can be observed, for example, by the extensive methodology of similar studies of spherons of four countries: Russia, India, USA and Kazakhstan in 1950–2010 (Semashko&C., 2014a); on the methodology of statistical studies of spherons of educational institutions (Semashko&C., 2014b), etc. There are many other problems, including subjective and psychological ones, which cannot be listed.

The briefest results of spheron statistical studies published below are only the tip of their iceberg, which is placed in dozens of books, articles, programs and projects published since 1992. We list only the most important of the books: The Spheral Approach (1992), Sociology for Pragmatists (1999), Tetrasociology: The Revolution of Social Thinking (2000), Tetrasociology: Responses to Challenges (2002), Harmonious Civilization (2009), The ABC of Harmony (2012), Global Peace Science (2015/6) and others. The most complete list of 188 projects with elements of spheral statistics since 1976 to 2008 is presented in the book: Harmonious Civilization (2009) and in the list of 68 subsequent ones to 2019 published on the GHA website (Semashko, 2011). In some cases, due to space constraints, we have abstracted from some valuable sections of the original statistical studies: gender, employment, age, percentage, etc. But they are all saved in the full publications of these studies on the GHA website.

In view of the innovative and especially complex methodological, methodical and psychological nature of the statistical researches of spherons, each of their participants, regardless of the quality of the results, deserves the highest praise and moral recognition for it. In total, the results of statistical studies of spherons of 76 countries are presented below, on four levels (1. country, 2. region, state, province, 3. district, city and 4. unit: enterprise, school, etc.) and for 120 years. In total, they are 120 researches in only 7 recent years, which were performed by 26 authors from 10 countries. We are happy to call their heroic names: Ayo Ayoola-Amale, Alexander Semashko, Ammar Banni, Andrei Semashko, Vera Popovich, Victor Danilov, Zia-ul-Islam, Leo Semashko, Leela Pradhan, Mazhar Hashmi, Maria Ascona, Maitreyee Roy, Noor Larik , Olga Kashina, Polina Semashko, Pravat Dhal, Rashida Bukhari, Roksana Sadykova, Svetlana Kuskovskaya, Stephan Semashko, Stephen Amoah, Stephen Tabi, Subhash Chandra, Takis Ioannidis, Thea Marie Robert, Habyarimana Heli. Their 10 countries are: Algeria, Argentina, Ghana, Greece, India, Nepal, Pakistan, Russia, Rwanda, France. Their names are presented below in the published results of their statistical studies, and their portraits are posted on the covers of this book, along with other authors and contributors. GHA highly appreciates their contributions and expresses them heartfelt gratitude and appreciation.

In this book, dedicated to Gandhi's non-violence, the published statistics of spherons confirms their role as the fundamental cause of the Gandhi "non-violence law of life" as "the greatest force of mankind", excluding war and militarism and ensuring the survival and prosperity of all people in their global peace from their spherons conscious harmony.

2.1. Spherons of Different Countries: Statistical Tables

Ghana
Spherons' Statistics for 1984, 2000 and 2010, million people*
By
Stephen Amoah and *Ayo Ayoola-Amale*

Spheral Indices	The Employed in Branches of Four Spheres	1984	2000	2010
P	Population of Ghana: P = P1+P2+P3+P4	12,3	18,9	24,7
P1	Spheron-1: P1= P1w + Pn	9,7	13,6	15,4
P1w	P1w = sum of working in the branches of Sociosphere:	2,4	2,3	1,0
Pn	Pn = non-working population. Pn = P – Pw	7,3	11,2	14,5
Pw	Pw = working population = P1w+P2+P3+P4	5,0	7,7	10,2
P2	Spheron-2: = sum of working in the branches of Infosphere:	0,8	2,2	0,1
P3	Spheron-3: = sum of working in the branches of Orgsphere:	0,1	0,2	0,2
P4	Spheron-4: = sum of working in the branches of Technosphere:	1,7	3,0	8,9

*The article full (13p.) publication: https://peacefromharmony.org/?cat=en_c&key=836

Statistical source(s):

1. Ghana Statistical Service. GSS (1986). *1984, Population Census of Ghana (The gazette 2)*
2. Ghana Statistical Service. GSS (2004). *2000 Population Census of Ghana (The gazette 3)*
3. Ghana Statistical Service. GSS (2012). *2010 Population and Housing Census Summary* Report of final Results. http://www.statsghana.gov.gh

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Tanzania
Spherons' Statistics for 2012, millions people*
By
Stephen Amoah, *Ayo Ayoola-Amale* and *Stephen Tabi*

Spheral Indices	Population, Employed in Four Spheres of Social Production	2012	%
P	Tanzania population: P = P1 + P2 + P3 + P4	24.59	100%
P1	Spheron-1: P1 = P1w + Pn	9.49	38.6
P1w	P1w = sum of the working in the Sociosphere branches	0.74	3.0
Pn	Pn = non-working population. Pn = P – Pw	8.75	35.6
Pw	Pw = working population = P1w+P2+P3+P4	15,85	64,4
P2	Spheron-2 = sum of working in the Infosphere branches	0.23	0.9
P3	Spheron-3 = sum of working in the Orgsphere branches	0.35	1.4
P4	Spheron-4: = sum of working in the Technosphere branches	14.53	59.1

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=836

Statistical source(s):
1. *Tanzania – Population and Housing Census 2012*:
https://africaopendata.org/dataset/a476b234-dc4a-4d86-8fda-bf5c6bdb1007/resource/f4ec0f20-98b3-4ccd-ab37-9633e8517b22/download/2012-population-and-housing-census---descriptive-tables---zanzibar.pdf
2. *Tanzania – Population and Housing Census 2012. Population Distribution by Administrative Areas, 2013*:
http://www.tzdpg.or.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/water/WSDP/Background_information/2012_Census_General_Report.pdf

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Sierra Leone
Spherons' Statistics for 2015, millions people*
By
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Spheral Indices	Population, Employed in Four Spheres of Social Production	2015	%
P	Sierra Leone population: P = P1 + P2 + P3 + P4	7,19	100
P1	Spheron-1: P1 = P1w + Pn	2,33	32.8
P1w	P1w = sum of the working in the Sociosphere branches	0.15	2.1
Pn	Pn = non-working population. Pn = P – Pw	2,18	30.7
Pw	Pw = working population = P1w+P2+P3+P4	4,92	69,2
P2	Spheron-2 = sum of working in the Infosphere branches	0.03	0.4
P3	Spheron-3 = sum of working in the Orgsphere branches	0.12	1.6
P4	Spheron-4: = sum of working in the Technosphere branches	4,62	65.1

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=836

Statistical source(s):
1. *Statistics Sierra Leone. 2015 Population and housing census summary of final results*
2. *Statistics Sierra Leone 2015 Population and Housing Census – Summary of Final Results*
3. *Statistics Sierra Leone. 2014 Labour Force Survey Report – 22 September 2015*:
https://www.statistics.sl/index.php/census/census-2015.html

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Mauritius
Spherons' Statistics for 2011, millions people*
By
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Spheral Indices	Population, Employed in Four Spheres of Social Production	2011	%
P	Mauritius population: P = P1 + P2 + P3 + P4	1.26	100
P1	Spheron-1: P1 = P1w + Pn	0.55	43.9
P1w	P1w = sum of the working in the Sociosphere branches	0.15	12.3
Pn	Pn = non-working population. Pn = P – Pw	0.40	31.6
Pw	Pw = working population = P1w+P2+P3+P4	0.86	68.4
P2	Spheron-2 = sum of working in the Infosphere branches	0.14	11.4
P3	Spheron-3 = sum of working in the Orgsphere branches	0.17	13.3
P4	Spheron-4: = sum of working in the Technosphere branches	0.40	31.5

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=836

Statistical source(s):
2011 Housing and Population Census, Mauritius:
http://statsmauritius.govmu.org/English/Pages/Housing-and-Population-Census-2011.aspx
http://statsmauritius.govmu.org/English/CensusandSurveys/Documents/ESI/toc1.htm

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Botswana
Spherons' Statistics for 2012, millions people*
By
Stephen Amoah, *Ayo Ayoola-Amale* and *Stephen Tabi*

Spheral Indices	Population, Employed in Four Spheres of Social Production	2012	%
P	Botswana population: P = P1 + P2 + P3 + P4	2.02	100
P1	Spheron-1: P1 = P1w + Pn	0.71	35.4
P1w	P1w = sum of the working in the Sociosphere branches	0.13	6.8
Pn	Pn = non-working population. Pn = P – Pw	0.57	28.6
Pw	Pw = working population = P1w+P2+P3+P4	1.45	71.4
P2	Spheron-2 = sum of working in the Infosphere branches	0.80	39.6
P3	Spheron-3 = sum of working in the Orgsphere branches	0.11	5.6
P4	Spheron-4: = sum of working in the Technosphere branches	0.39	19.4

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Rwanda
Spherons' Statistics for 2015, millions people*
By
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Spheral Indices	Population, Employed in Four Spheres of Social Production	2015
P	Rwanda population: P = P1 + P2 + P3 + P4	6.76
P1	Spheron-1: P1 = P1w + Pn	1.08
P1w	P1w = sum of the working in the Sociosphere branches	0.15
Pn	Pn = non-working population. Pn = P – Pw	0,9
Pw	Pw = working population = P1w+P2+P3+P4	5.86
P2	Spheron-2 = sum of working in the Infosphere branches	0.06
P3	Spheron-3 = sum of working in the Orgsphere branches	0.11
P4	Spheron-4: = sum of working in the Technosphere branches	5.25

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=836

Statistical source:
http://www.statistics.gov.rw/about-us/national-statistical-system

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Pakistan
Spherons' Statistics for 2014–15, millions people*
By
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Ms. Rashida Bukhari and *Zia-ul-Islam*

Spheral Indices	Population, Employed in Four Spheres of Social Production	2014–15	%
P	Pakistan population: P = P1 + P2 + P3 + P4	189.190	100%
P1	Spheron-1: P1 = P1w + Pn	145.091	76.69
P1w	P1w = sum of the working in the Sociosphere branches	13.219	6.99
Pn	Pn = non-working population. Pn = P – Pw	131.872	69.70
Pw	Pw = working population = P1w+P2+P3+P4	57.218	30.30
P2	Spheron-2 = sum of working in the Infosphere branches	0.267	0.14
P3	Spheron-3 = sum of working in the Orgsphere branches	1.499	0.79
P4	Spheron-4: = sum of working in the Technosphere branches	42.333	22.38

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=836

Statistical source(s):
Pakistan Labour Force Survey 2014–15:
http://www.pbs.gov.pk/content/labour-force-survey-2014-15-annual-report

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India
Spherons Statistics for 2011, millions people*
By
Maitreyee B. Roy and *Pravat K. Dhal*

Spheral Indices	Population, Employed in Four Spheres of Social Production	2011	%
P	India population: P = P1 + P2 + P3 + P4	1210.57	100
P1	Spheron-1: P1 = P1w + Pn	827.09	68.3
P1w	P1w = sum of the working in the Sociosphere branches	98.21	8.1
Pn	Pn = non-working population. Pn = P – Pw	728.88	60.2
Pw	Pw = working population = P1w+P2+P3+P4	481.68	39.8
P2	Spheron-2 = sum of working in the Infosphere branches	49.77	4.1
P3	Spheron-3 = sum of working in the Orgsphere branches	67.30	5.6
P4	Spheron-4 = sum of working in the Technosphere branches	266.41	22.0

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=836

Commentary. The Spherons constitutes global societal structure and the actors of humanity survival including India. The Spherons Statistics is the proof of their reality, their measurement and the degree of their knowledge and its digitalization. Spherons are the source of humanity life, the foundation of all its higher and eternal values: Harmony, Peace, Solidarity, Nonviolence, Justice, Unity, Freedom, Equality, Fraternity, Love and Happiness. Spherons are the more important largest parts of the country population so their knowledge is especially important for India as the second largest country in the world by population.

Statistical sources:
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2. *Industrial Classification Data Information 2011. Office of the register General and Census Commissioner India*

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Greece
Spherons Statistics for 2017, millions people*
By
Takis Ioannides

Spheral Indices	Population, Employed in Four Spheres of Social Production	2017	%
P	Greece population: P = P1 + P2 + P3 + P4	10,7	100%
P1	Spheron-1: P1 = P1w + Pn	7,2	66,91
P1w	P1w = sum of the working in the Sociosphere branches	0,2	1,86
Pn	Pn = non-working population. Pn = P – Pw	7	65,05
Pw	Pw = working population = P1w+P2+P3+P4	3.7	34.95
P2	Spheron-2 = sum of working in the Infosphere branches	0,3	2,96
P3	Spheron-3 = sum of working in the Orgsphere branches	0,8	7,45
P4	Spheron-4: = sum of working in the Technosphere branches	2,4	22,67

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=836

Statistical source(s):
Hellenic Statistical Authority Labour Force Survey 2017:
http://www.statistics.gr/en/statistics/-/publication/SJO03/2017?fbclid=IwAR0J-TPBr1N1_k9Cty_gSu9r5FSGYTiorFQ9dcmcTSjiDPyUBkxbL5b3qXk

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France
Spherons Statistics for 2015, in millions people*
By
Théa Marie Robert

Spheral Indices	Population, Employed in Four Spheres of Social Production	2015	%
P	France population: P = P1 + P2 + P3 + P4	66,59	100
P1	Spheron-1: P1 = P1w + Pn	42, 6	64
P1w	P1w = sum of the working in the Sociosphere branches	4,05	6,1
Pn	Pn = non-working population. Pn = P – Pw	38,56	57,91
Pw	Pw = working population = P1w+P2+P3+P4	28,03	42,09
P2	Spheron-2 = sum of working in the Infosphere branches	3.74	5.54
P3	Spheron-3 = sum of working in the Orgsphere branches	4,2	6,3
P4	Spheron-4: = sum of working in the Technosphere branches	16.2	24.39

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=836

Statistical source(s):
Statistics France 2015

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Russia
Spherons Statistics for 1991, 1996, 2002 и 2010, in millions people*
By
Leo Semashko and *Olga Kashina*

Spheral Indices	Population, Employed in Four Spheres of Social Production	1991	1996	2002	2010
P	Russia population: P = P1 + P2 + P3 + P4	148,5	148,0	145,3	142,9
P1	Spheron-1: P1 = P1w + Pn	81,6	89,1	93,2	85,0
P1w	P1w = sum of the working in the Sociosphere branches	6,8	7,1	6,7	11,4
Pn	Pn = non-working population. Pn = P – Pw	70,3	79,2	79,9	75,5
Pw	Pw = working population = P1w+P2+P3+P4	78,2	68,8	65,4	67,4
P2	Spheron-2 = sum of working in the Infosphere branches	8,5	7,4	14,0	4,0
P3	Spheron-3 = sum of working in the Orgsphere branches	8,5	7,4	10,4	11,0
P4	Spheron-4: = sum of working in the Technosphere branches	54,4	46,9	34,3	41,0

*The article full publication (16 p.): https://peacefromharmony.org/?cat=ru_c&key=783

Statistical sources:

1. *Регионы России. Социально-экономические показатели 2013* / Статистический сборник. – М: 2013.
2. *Методологические положения по проведению выборочных обследований населения по проблемам занятости (обследований рабочей силы)*. – М: 2010.
http://www.gks.ru/free_doc/new_site/population/trud/Untitled452-10.pdf
3. *Методологические пояснения Всероссийской переписи населения 2010 года*.
4. *Российский статистический ежегодник 2013*. – М: 2014.
5. *Кашина О. и Семашко Л. (2014). Статистика СФЕРОНОВ населения России за 2010 г.: источники, методология, численность*: https://peacefromharmony.org/?cat=ru_c&key=614
6. *Кашина О. (2006) Демография и статистика населения*/Под ред. И.И. Елиссеевой.-М: Финансы и статистика 2006, гл. 13
7. *Всероссийская перепись населения 2010 года*.
Том 1. Численность и размещение населения.
Том 2. Возрастно-половой состав и состояние в браке.
Том 6. Численность и состав домашних хозяйств.
Том 7. Экономически активное и экономически неактивное население.

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Belarus and Russia
Spherons Statistics for 2015, in millions people*
By
Olga Kashina and *Leo Semashko*

		Belarus		Russia	
Spheral Indices	Population, Employed in Four Spheres of Social Production	2015	%	2015	%
P	Population average, total: P = P1 + P2 + P3 + P4	9,5	100,0	146,4	100,0
P1	Spheron-1: P1 = P1w + Pn	6,0	62,7	90,0	61,2
P1w	P1w = sum of the working in the Sociosphere branches	1,0	10,1	15,5	10,6
Pn	Pn = non-working population. Pn = P – Pw	5,0	52,6	74,1	50,6
Pw	Pw = working population = P1w+P2+P3+P4	4,58	47,4	72,7	49,4
P2	Spheron-2 = sum of working in the Infosphere branches	0,08	0,8	1,8	1,2
P3	Spheron-3 = sum of working in the Orgsphere branches	0,3	2,7	7,0	4,7
P4	Spheron-4: = sum of working in the Technosphere branches	3,2	33,7	48,1	32,9

*The article full publication (12 p.): https://peacefromharmony.org/?cat=ru_c&key=783

Comment. The most numerous is spheron-1, in which 62.7% of the population of Belarus and 61.2% of the population of Russia are concentrated. Spheron-4 is in second place, respectively, 33.7% and 32.9%. There are a few population in spherons 2 and 3. The overall dynamics is a steady decline in the number of spheroon-4, due to which the number of spherons 2 and 3 is growing, as it can be seen from other tables of the number of spherons of Russia for different years. Through this (thermo) dynamics of the number of spherons, a constant "self-tuning" (self-organization) of the structural harmony of spherons is ensured.

Statistical sources:
1. *Беларусь и Россия*/Статсборник.-М.:2015
2. *Беларусь и Россия*/Статсборник.-М.:2016
3. *Транспорт и связь в Республике Беларусь*/Статсборник.-Минск: 2016

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Russia
Spherons Statistics for 2016, in millions people*
By
Alexander Semashko and *Stephan Semashko*

Spheral Indices	Population, Employed in Four Spheres of Social Production	2016	%
P	Russia population: P = P1 + P2 + P3 + P4	146,80	100%
P1	Spheron-1: P1 = P1w + Pn	82,60	56%
P1w	P1w = sum of the working in the Sociosphere branches	13,32	
Pn	Pn = non-working population. Pn = P – Pw	69,27	
Pw	Pw = working population = P1w+P2+P3+P4	77,53	
P2	Spheron-2 = sum of working in the Infosphere branches	2,29	2%
P3	Spheron-3 = sum of working in the Orgsphere branches	11,90	8%
P4	Spheron-4: = sum of working in the Technosphere branches	50,01	34%

*The article full publication (10 p.): https://peacefromharmony.org/?cat=ru_c&key=783

Statistical sources:

1. *Федеральная служба государственной статистики РФ*: http://www.gks.ru
2. *Министерство культуры РФ*: http://www.mkrf.ru
3. *Министерство обороны РФ*: http://mil.ru
4. *Территориальный орган Федеральной службы федеральной статистики по Калужской области*: http://kalugastat.gks.ru
5. *Средняя общеобразовательная школа №15 г. Калуги*: http://school-15-kaluga.narod.ru

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Kyrgyzstan
Spherons statistics for 2015, in millions people*
By
Vera Popovich and *Alexander Semashko*

Spheral Indices	Population, Employed in Four Spheres of Social Production	2015	%
P	Kyrgyzstan Population: P = P1 + P2 + P3 + P4	5,9	100
P1	Spheron-1: P1 = P1w + Pn	3,8	65
P1w	P1w = sum of the working in the Sociosphere branches	0,3	
Pn	Pn = non-working population. Pn = P – Pw	3,5	
Pw	Pw = working population = P1w+P2+P3+P4	2,4	
P2	Spheron-2 = sum of working in the Infosphere branches	0,06	1
P3	Spheron-3 = sum of working in the Orgsphere branches	0,13	2
P4	Spheron-4: = sum of working in the Technosphere branches	1,884	32

*The article full publication: https://peacefromharmony.org/?cat=ru_c&key=783

Statistical sources:
1. *Численность населения Кыргызстана в 2015 году*:
https://wiki2.org/ru/Население_Киргизии и
https://www.populationpyramid.net/ru/киргизия/2015
2. *Экономически активное и неактивное население Кыргызстана на 2015 год*:
http://www.stat.kg/ru/statistics/download/dynamic/433/
3. *Статистика населения Кыргызстана по видам экономической деятельности на 2015 год*: http://www.stat.kg/ru/statistics/download/dynamic/433/

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2.2. Spherons of Different Levels in Different Countries: Statistical Tables

India
Spherons Statistics of Odisha State for 2015, million people*
By
Pravat K. Dhal

Spheral Indices	Population, Employed in Four Spheres of Social Production	2015	%
P	India, Odisha State population: P = P1 + P2 + P3 + P4	44.3	100
P1	Spheron-1: P1 = P1w + Pn	26.04	58.8
P1w	P1w = sum of the working in the Sociosphere branches	7.7	4.0
Pn	Pn = non-working population. Pn = P – Pw	23,9	54.8
Pw	Pw = working population = P1w+P2+P3+P4	20.37	46
P2	Spheron-2 = sum of working in the Infosphere branches	1.125	46
P3	Spheron-3 = sum of working in the Orgsphere branches	2.409	5.4
P4	Spheron-4: = sum of working in the Technosphere branches	15.31	34.56

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=836

Statistical sources. Odisha Statistics:

1. http://www.indiaenvironmentportal.org.in/files/file/Odisha%20Economic_Survey_2014-15.pdf
2. http://pc.odisha.gov.in/Download/Economic_Survey_2016-17.pdf
3. http://www.desorissa.nic.in/pdf/odisha_at_glance_2016.pdf

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Pakistan
Spherons Statistics for 2014–15 in four Provinces:
Khyber Pakhtunkhwa (KPK), Punjab (PNB), Sindh (SDH) and Baluchistan (BLN), million people*

By
Noor Muhammad Larik, *S. Mazhar Hussain Hashmi*,
Ms. Rashida Bukhari and *Zia-ul-Islam*

Spheral Indices	Population, Employed in Four Spheres of Social Production	KPK	PNB	SDH	BLN
P	Population of every province: P = P1+P2+P3+P4	26,37	102,75	46,81	13,27
P1	Spheron-1: P1= P1w + Pn	22,12	75,61	36,69	10,68
P1w	P1w = sum of working in the branches of Sociosphere:	1,84	6,96	3,49	0.93
Pn	Pn = non-working population. Pn = P – Pw	20,29	68,64	33,20	4,69
Pw	Pw = working: P1w+P2+P3+P4	6,38	44,11	13,61	8,58
P2	Spheron-2: = sum of working in the branches of Infosphere:	0,04	0,16	0,06	0.02
P3	Spheron-3: = sum of working in the branches of Orgsphere:	0,2	0,8	0,45	0.14
P4	Spheron-4: = sum of working in the branches of Technosphere:	4,09	26,19	9,62	2,43

*The article full publication (21 p): https://peacefromharmony.org/?cat=en_c&key=836

All indices of the population of the country and the provinces are presented in a gender perspective (male/female) and percentage in the published original research.

Statistical source:
Pakistan Labour Force Survey 2014–15:
http://www.pbs.gov.pk/content/labour-force-survey-2014-15-annual-report

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(At all one webpage is https://peacefromharmony.org/?cat=en_c&key=847)

Russia
Spherons Statistics for 2016 at the levels of the Central Federal District (CFD), Kaluga Region (KLR), School №15 of Kaluga (SCK)
in million people and persons*
By
Alexander Semashko and *Stephan Semashko*

Spheral Indices	Population, Employed in Four Spheres of Social Production	CFD M	KLR M	SCK Persons
P	Population of three levels: P = P1+P2+P3+P4	39,21	1,01	1168
P1	Spheron-1: P1= P1w + Pn	19,27	0,52	1138
P1w	P1w = sum of working in the branches of Sociosphere:	3,64	0,08	64
Pn	Pn = non-working population. Pn = P – Pw	15,64	0,44	1074
Pw	Pw = working: P1w+P2+P3+P4	23,57	0,57	94
P2	Spheron-2: = sum of working in the branches of Infosphere:	0,86	0,02	1
P3	Spheron-3: = sum of working in the branches of Orgsphere:	3,33	0,08	7
P4	Spheron-4: = sum of working in the branches of Technosphere:	15,74	0,39	22

*The article full publication (10 p): https://peacefromharmony.org/?cat=ru_c&key=783

Statistical sources:

1. *Федеральная служба государственной статистики РФ*: http://www.gks.ru
2. *Министерство культуры РФ*: http://www.mkrf.ru
3. *Министерство обороны РФ*: http://mil.ru
4. *Территориальный орган Федеральной службы федеральной статистики по Калужской области*: http://kalugastat.gks.ru
5. *Средняя общеобразовательная школа №15 г. Калуги*: http://school-15-kaluga.narod.ru

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Russia
Statistics of St. Petersburg spherons for 2010, million people*
By
Olga Kashina

Spheral Indices	Population, Employed in Four Spheres of Social Production	2010	%
P	Population of St. Petersburg: P = P1+P2+P3+P4	4,9	100
P1	Spheron-1: P1= P1w + Pn	2,5	52,1
P1w	P1w = sum of working in the branches of Sociosphere:	0,5	
Pn	Pn = non-working population: Pn = P – Pw	2,1	
Pw	Pw = working: P1w+P2+P3+P4	2,4	
P2	Spheron-2: = sum of working in the branches of Infosphere:	0,3	7,2
P3	Spheron-3: = sum of working in the branches of Orgsphere:	0,4	8,4
P4	Spheron-4: = sum of working in the branches of Technosphere:	1,2	25,2

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=593

Statistical sources:

1. *Методологические положения по проведению выборочных обследований населения по проблемам занятости (обследований рабочей силы)*. – М: 2010. Электронный ресурс: http://www.gks.ru/free_doc/new_site/population/trud/Untitled452-10.pdf.
2. *Всероссийская перепись населения 2010 года*:
Том 1. Численность и размещение населения.
Том 2. Возрастно-половой состав и состояние в браке.
Том 6. Численность и состав домашних хозяйств.
Том 7. Экономически активное и экономически неактивное население.
3. *Общероссийский классификатор видов экономической деятельности ОК 029–2007* (КДЕС ред. 1.1). – М.: 2012.

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Russia
Spherons Dynamics of Novoladozhskaya School № 2 for 2000–2013*,
Novaya Ladoga, Leningrad region,
By
Svetlana Kuskovskaya

Spheral Indices	The Employed in Four Spheres of the School, Persons	2000	2005	2010	2013
P	All People in the School: P = P1 + P2 + P3 + P4	917	896	405	402
P1	Spheron-1: P1= P1w + Pn	871	854	383	380
P1w	P1w = sum of the working in branches of sociosphere:	85	82	38	33
Pn	Pn = Students (nonworking) number: Pn = P – Pw	796	772	345	347
Pw	Pw = working: P1w+P2+P3+P4	131	124	60	55
P2	Spheron-2: = sum of the working in branches of infosphere:	7	6	5	5
P3	Spheron-3: = sum of the working in branches of orgsphere:	10	10	7	7
P4	Spheron-4: = Technical staff of the school	29	26	10	10

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=593

Notes. The number of students in our school has decreased over the years for a few reasons:

1. Demographic: fertility is falling in our region.
2. Economic: in our town closed several enterprises.
3. Migration: young people go to the city, to St. Petersburg.

At the same time, there was a reduction in the number of school employees; many staff units were abolished: speech therapist, psychologist and others; the nurse is listed in the hospital. The school vitality is ensured by the balance/harmony of the spherons employed in it.

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Rwanda
Spherons Dynamics for 2005–2013 of
Institute of Agriculture, Technology and Education of Kibungo (INATEK)*,
By
Habyarimana Heli

Spheral Indices	The Employed in Four Spheres of the INATEK, Persons	2005	2010	2013
P	All People in INATEK: P =P1 +P2 +P3 +P4	1381	3340	3958
P1	Spheron-1: P1= P1w + Pn	1343	3275	3879
P1w	P1w = sum of the working in branches of sociosphere:	76	86	100
Pn	Pn = Students (nonworking) number: Pn = P – Pw	1267	3189	3779
Pw	Pw = working: P1w+P2+P3+P4	114	151	159
P2	Spheron-2: = sum of the working in branches of infosphere:	2	6	7
P3	Spheron-3: = sum of the working in branches of orgsphere:	11	15	21
P4	Spheron-4: = Technical staff of the INATEK:	25	44	51

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=593

Conclusion: This research shows, INATEK can work successfully only in the structural harmony of the main groups employed in it, i.e. in coordinated interaction/cooperation of its four spherons (spheral classes). Every from them is interested in it and support their harmony and nonviolence, from which follows peace ensuring a normal work and life of INATEK. Disruption of harmony is fraught with failures in work, conflicts and disorganization of the Institution. In the absence at least one of these spherons and harmony between them work of INATEK is impossible.

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India
Spherons Dynamics for 2000–2013 of Basanti Devi College*,
Kolkata
By
Maitreyee B. Roy

Spheral Indices	The Employed in Four Spheres of the College, Persons	2000	2005	2010	2013
P	All People in the College: P = P1 + P2 + P3 + P4	761	980	1136	1206
P1	Spheron-1: P1= P1w + Pn	752	970	1121	1188
P1w	P1w = sum of the working in branches of sociosphere:	37	42	49	54
Pn	Pn = Students (nonworking) number: Pn = P – Pw	715	928	1072	1134
Pw	Pw = working: P1w+P2+P3+P4	46	52	64	72
P2	Spheron-2: = sum of the working in branches of infosphere:	3	3	3	3
P3	Spheron-3: = sum of the working in branches of orgsphere:	3	4	5	6
P4	Spheron-4:= Technical staff of the College	3	3	7	9

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=593

Conclusion: This research shows, College can work successfully only in the structural harmony of the main groups employed in it, i.e. in coordinated interaction/cooperation of its four spherons (spheral classes). Every from them is interested in it and support their harmony and nonviolence, from which follows peace ensuring a normal work and life of College. Disruption of harmony is fraught with failures in work, conflicts and disorganization of the College. In the absence at least one of these spherons and harmony between them work of College is impossible.

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Argentina
Spherons statistics of Bulnes Private Educational Institute for 2010*,
Buenos Aires
By
Maria Cristina Azcona

Spheral Indices	The Employed in Four Spheres of the Institute, Persons	2010
P	All People in Institute: P =P1 +P2 +P3 +P4	154
P1	Spheron-1: P1= P1w + Pn	134
P1w	P1w = sum of the working in branches of sociosphere:	14
Pn	Pn = Students (nonworking) number: Pn = P – Pw	120
Pw	Pw = working: P1w+P2+P3+P4	34
P2	Spheron-2: = sum of the working in branches of infosphere:	13
P3	Spheron-3: = sum of the working in branches of orgsphere:	3
P4	Spheron-4: = Technical staff of the Institute:	4

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=593

Conclusion: This research shows, Bulnes Institute can work successfully only in the structural harmony of the main groups employed in it, i.e. in coordinated interaction/cooperation of its four spherons (spheral classes). Every from them is interested in it and support their harmony and nonviolence, from which follows peace ensuring a normal work and life of Bulnes Institute. Disruption of harmony is fraught with failures in work, conflicts and disorganization of the Bulnes Institute. In the absence at least one of these spherons and harmony between them work of Bulnes Institute is impossible.

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Nepal
Spherons Dynamics for 2000–2013
Of Education Faculty in Katmandu University*
By
Leela Pradhan

Spheral Indices	The Employed in Four Spheres of the Faculty, Persons	2000	2005	2010	2013
P	All People in the Faculty: P = P1 + P2 + P3 + P4	1301	718	760	841
P1	Spheron-1: P1= P1w + Pn	1270	686	726	806
P1w	P1w = sum of the working in branches of sociosphere:	83	96	106	121
Pn	Pn = Students (nonworking) number: Pn = P – Pw	1187	590	620	685
Pw	Pw = working: P1w+P2+P3+P4	114	128	140	121
P2	Spheron-2: = sum of the working in branches of infosphere:	6	7	9	10
P3	Spheron-3: = sum of the working in branches of orgsphere:	13	13	13	13
P4	Spheron-4:= Technical staff of the Faculty	12	12	12	12

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=593

Conclusion: This research shows, Faculty can work successfully only in the structural harmony of the main groups employed in it, i.e. in coordinated interaction/cooperation of its four spherons (spheral classes). Every from them is interested in it and support their harmony and nonviolence, from which follows peace ensuring a normal work and life of Faculty. Disruption of harmony is fraught with failures in work, conflicts and disorganization of the Faculty. In the absence at least one of these spherons and harmony between them work of Faculty is impossible.

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Algeria
Spherons Dynamics for 2005–2013
of Guemar El Oued University*
By
Ammar Banni

Spheral Indices	The Employed in Four Spheres of the University, Persons	2005	2010	2013
P	All People in the University: P = P1 + P2 + P3 + P4	400	1830	2897
P1	Spheron-1: P1= P1w + Pn	344	1749	2804
P1w	P1w = sum of the working in branches of sociosphere:	20	69	84
Pn	Pn = Students (nonworking) number: Pn = P – Pw	324	1680	2720
Pw	Pw = working: P1w+P2+P3+P4	76	150	177
P2	Spheron-2: = sum of the working in branches of infosphere:	03	06	07
P3	Spheron-3: = sum of the working in branches of orgsphere:	26	40	46
P4	Spheron-4:= Technical staff of the Faculty	27	35	40

*The article full publication: https://peacefromharmony.org/?cat=en_c&key=593

Conclusion: This research shows, University can work successfully only in the structural harmony of the main groups employed in it, i.e. in coordinated interaction/cooperation of its four spherons (spheral classes). Every from them is interested in it and support their harmony and nonviolence, from which follows peace ensuring a normal work and life of University. Disruption of harmony is fraught with failures in work, conflicts and disorganization of the University. In the absence at least one of these spherons and harmony between them work of University is impossible.

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Russia
Spherons' statistics of the Bashkortostan Republic for 2017 in million*
By
Roksana Sadykova

Spheral Indices	Population, Employed in Four Spheres of Social Production	2017	%
P	Population of Bashkortostan: P = P1+P2+P3+P4	4,07	100
P1	Spheron-1: P1= P1w + Pn	3,19	78,3
P1w	P1w = sum of working in the branches of Sociosphere:	0,24	5,9
Pn	Pn = non-working population: Pn = P – Pw	2,95	72,4
Pw	Pw = working: P1w+P2+P3+P4	1,12	27,6
P2	Spheron-2: = sum of working in the branches of Infosphere:	0,09	2,1
P3	Spheron-3: = sum of working in the branches of Orgsphere:	0,12	3,0
P4	Spheron-4: = sum of working in the branches of Technosphere:	0,67	16,6

*The article full publication: https://peacefromharmony.org/?cat=ru_c&key=783

Statistical source:
Bashkortostan website:
http://bashstat.gks.ru/wps/wcm/connect/rosstat_ts/bashstat/resources/41d8c60045e1be4fb46efcedfce35b80/i000001r.pdf

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Russia
Spherons' statistics of Ulyanovsk region for 2010 in million people*
By
Victor Danilov

Spheral Indices	Population, Employed in Four Spheres of Social Production	2010	%
P	Population of Ulyanovsk region: P = P1+P2+P3+P4	1,3	100%
P1	Spheron-1: P1= P1w + Pn	0,7	55,2
P1w	P1w = sum of working in the branches of Sociosphere:	0,1	7,5
Pn	Pn = non-working population: Pn = P – Pw	0,6	47,7
Pw	Pw = working: P1w+P2+P3+P4	0,7	52,3
P2	Spheron-2: = sum of working in the branches of Infosphere:	0,1	7,2
P3	Spheron-3: = sum of working in the branches of Orgsphere:	0,1	3,3
P4	Spheron-4: = sum of working in the branches of Technosphere:	0,4	34,3

*The article full publication: https://peacefromharmony.org/?cat=ru_c&key=783

Statistical sources:
1. *Статистика занятости и безработицы Ульяновской области*:
https://studbooks.net/1800529/ekonomika/statistika_zanyatosti_bezrabotitsy_ulyanovskoy_oblasti
2. *Население Ульяновской области — Википедия*:
https://ru.wikipedia.org/wiki/Население_Ульяновской_области
3. *Информационные материалы Всероссийской переписи населения 2010 года*

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Russia
Spherons' statistics of the urban state Institute for 2019
By
Vera Popovich

Spheral Indices	The Employed in Four Spheres of the Institute, People	2019
P	All People in the Institute: P =P1 +P2 +P3 +P4	77
P1	Spheron-1: P1= P1w + Pn	0
P1w	P1w = sum of the working in branches of sociosphere:	0
Pn	Pn = Nonworking number: Pn = P – Pw	0
Pw	Pw = working: P1w+P2+P3+P4	77
P2	Spheron-2: = sum of the working in branches of infosphere:	48
P3	Spheron-3: = sum of the working in branches of orgsphere:	27
P4	Spheron-4: = Technical staff of the Institute:	2

Statistical source:
Private data.

Comment. The absence of P1p staff members or their minimum number in P4 is filled with paid, invited from outside or paid on the side by specialists of the sociosphere (health, education, etc.) and the technosphere, without which the functioning of the Institute would be impossible. Therefore, in the Institute spheral structure of all four spherons representatives are present and its work they provide but some of them are included in the Institute staff and others are invited from the side. They are not on the Institute staff but are paid from its budget.

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Russia
Spherons' statistics of the School No. 252 in St. Petersburg for 2018*
By
Andrey Semashko and *Polina Semashko*

Spheral Indices	The Employed in Four Spheres of the School, Persons	2018
P	All People in the School: P = P1 + P2 + P3 + P4	879
P1	Spheron-1: P1= P1w + Pn	853
P1w	P1w = sum of the working in branches of sociosphere:	42
Pn	Pn = Students (nonworking) number: Pn = P – Pw	811
Pw	Pw = working: P1w+P2+P3+P4	68
P2	Spheron-2: = sum of the working in branches of infosphere:	2
P3	Spheron-3: = sum of the working in branches of orgsphere:	14
P4	Spheron-4: = Technical staff of the school	10

*The article full publication: https://peacefromharmony.org/?cat=ru_c&key=783

Statistical source:
http://school252.ru/rukovodstvo-pedagogicheskiy-sostav/rukovodstvo-pedagogicheskiy-sostav.html

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Spherons Statistics of Magadh University, Bihar for 2018*
By
Pravat K. Dhal and *Subhash Chandra*

Spheral Indices	Population, Employed in Four Spheres of the University, Persons	2018	%
P	All employed in the University (U): P = P1 + P2 + P3 + P4	10041	100
P1	(U) Spheron-1: P1 = P1w + Pn	9349	93.10
P1w	(U) P1w = sum of the working in the Socio-sphere branches	1732	17.24
Pn	(U) Pn = Students (nonworking) number = P – Pw	7617	75.85
Pw	(U) Pw = working population = P1w+P2+P3+P4	2424	24.14
P2	(U) Spheron-2 = sum of working in the Info-sphere branches	266	2.64
P3	(U) Spheron-3 = sum of working in the Org-sphere branches	307	3.05
P4	(U) Spheron-4: = sum of working in the Techno-sphere branches (Technical staff)	119	1.18

Full publication: https://peacefromharmony.org/?cat=en_c&key=836

Commentary. The Spherons constitutes global societal structure and the actors of humanity survival including India. The Spherons Statistics is the proof of their reality, their measurement and the degree of their knowledge and its digitalization. Spherons are the source of humanity life, the foundation of all its higher and eternal values: Harmony, Peace, Solidarity, Nonviolence, Justice, Unity, Freedom, Equality, Fraternity, Love and Happiness. Spherons are the more important largest parts of the country population so their knowledge is especially important for India as the second largest country in the world by population. A systematic research of Indian spherons in a special Academy with budget funding is a necessary condition for the country's scientific, social and economic progress in the 21st century.

Statistical source: Survey of various Departments and residences of campus of Magadh University, Bodhgaya, Dist.-Gaya, Bihar, India: www.magadhuniversity.ac.in

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2.3. Spherons' Statistics of 60 Countries in the Typology of the Population Age Composition for 2016. *Olga Kashina*, *Leo Semashko*

In this paragraph, the general statistics of spherons is examined through the prism of the age composition typology for the population in 61 countries of the world, except one (see below). This typology was published (Kashina, 2006) and tested on the basis of the statistical compilations "Russia and World Countries for 2016 and 2010" (1; 2). As a result of the analysis and generalization of the population age structure for 61 countries in 2016, four of its demographic types are formed:

• Pyramidal composition of the population (pyramid) with a high proportion of young people and a low proportion of elderly people, which characterizes the expanded reproduction of the population;

• Barrel-shaped population structure (barrel) with a predominance of the number in middle age groups;

• The cone-shaped composition of the population (cone) with a low proportion of young people and a high proportion of elderly people, which characterizes the narrowed reproduction of the population;

• The composition of the "hourglass" type of population concerns only one country – the USA; therefore, this type and its country are excluded from consideration.

Numerous meanings and specifics of the population age structure with tables, diagrams, formulas and graphs for different spheres and branches, as well as for intergenerational peaceful interaction and harmony are discussed in a full published initial research of O. Kashina in much more detail (2019: https://peacefromharmony.org/?cat=ru_c&key=783).

It was observed that 69.2% of the average annual population of the world lived in the analyzed countries in 2016. The data of the European countries are presented mostly and the African countries are least represented. The number of pyramidal and barrel age composition of the population in the analyzed countries were enormously distributed. The cone type is less common.

Table 1. Typology of countries by age composition of the population in 2016

Age composition type	Number of countries	Population size in 2016, million people
Pyramid	15	2045,7
Barrel	20	2174,6
Cone	25	631,1

After conducting a typology of 60 countries according to their age composition, we summarized the number of nonworking/unemployed people (spheral index Pn), which includes the population in the extreme age groups younger than 15 years and over 60 years old, as well as the workless number. This part of the population constitutes the largest segment of the sociospheron in all countries without exception. Another part of the population is "working" (Pw) or "economically active population" distributed over four spherons in each country.

Below we consider in more detail each selected type with a list of countries included in it. Let us supplement this analysis with a calculation for each country conditionally unoccupied (that means, fluctuating due to national reasons) population (Pn – non-working) and the coefficient of unevenness of age composition. Our analysis summarizes the calculation tables.

The pyramidal age structure (pyramid) is characterized for the countries of Asia, Africa and Latin America. It has a high birth rate and also the more proportion of young people and a low proportion of elderly people. It is typical for 15 countries and is shown in Table 2:

Table 2. Countries with pyramidal age composition in 2016

Age type, location of its countries	Number of countries	Population size in 2016, M people	U*	Percent of population by age groups, years					TOTAL
				Younger 15	15–29	30–44	45–59	60 and older	
Pyramidal, including	15	2045,7	0,254	30,7	27,0	20,6	13,0	8,7	100
Asian: Israel, India, Indonesia, Kazakhstan, Kyrgyzstan, Turkmenistan**,Tajikistan Philippines	8	1676,7	0,246	30,3	27,0	20,7	13,1	8,8	100
African: Algeria, Egypt, South Africa, Morocco***, Ethiopia	5	314,4	0,340	33,2	27,4	20,0	12,1	7,3	100
American: Argentina, Bolivia	2	54,6	0,254	26,5	24,7	20,6	14,4	13,8	100

* U – unevenness coefficient.

** The population of Turkmenistan is given for 2001.

*** The population by age groups of Morocco is given for 2008.

A more even age composition is observed in Asian and American countries. Uneven age composition distinguishes African countries.

The barrel-shaped age structure (barrel) is noted for 20 countries, most of which are European and Asian countries, see table 3. It was latter prevailed by population in 2016. This type of age structure is characterized by a predominant proportion of the population of middle age with a smaller number in young and old ages. This age structure is rather stable and favorable for harmonious intergenerational interrelations.

Table 3. Countries with barrel-shaped age composition in 2016

Age type, location of its countries	Number of countries	Population size in 2016, M people	U*	Percent of population by age groups, years					TOTAL
				Younger 15	15–29	30–44	45–59	60 and older	
Barrel-shaped including	20	2174,6	0,048	17,4	23,4	24,3	20,1	14,8	100
European: Belarus, Ireland, Luxembourg, Macedonia, Moldova, Poland, Russia, Slovakia, Ukraine	9	253,1	0,019	16,5	18,7	23,0	20,7	21,1	100
Asian: Azerbaijan, Armenia, Iran, China, Thailand, Turkey, South Korea	7	1668,4	0,064	16,7	24,0	24,8	20,5	14,0	100
American: Brazil, Chile	2	224,3	0,079	22,5	24,8	23,2	17,2	12,4	100
Australia and Oceania: Australia, New Zealand	2	28,8	0,002	19,0	20,6	20,5	19,3	20,6	100

* U – unevenness coefficient.

The age structure of this type is fairly uniform, especially in Europe, Australia and Oceania. The most uniform age composition is observed in the Republic of Belarus, Ireland, Republic of Macedonia, Armenia, Thailand, Chile, but especially in Australia and New Zealand.

The conical type of age structure (cone) is characteristic for 25 countries, most of which are European countries, Japan and Canada. This age type is characterized by a significant proportion of elderly persons and a small proportion of persons younger than 15 years. The indices for this type are presented in table 4.

Table 4. Countries with a cone-shaped age composition in 2016

Age type, location of its countries	Number of countries	Population size in 2016, M people	U*	Percent of population by age groups, years					TOTAL
				Younger 15	15–29	30–44	45–59	60 and older	
Conical, including	25	631,1	0,064	15,0	16,9	20,1	21,0	27,0	100
European: Austria, Belgium, Bulgaria, Great Britain, Hungary, Germany, Greece, Denmark, Spain, Italy, Latvia, Lithuania, Netherlands, Norway, Portugal, Romania, Slovenia, Finland, France, Czech Republic, Switzerland, Sweden, Estonia	23	467,8	0,046	15,5	17,2	20,1	21,6	25,6	100
Asian: Japan	1	127	0,204	12,4	14,7	19,9	19,4	33,6	100
American: Canada	1	36,3	0,004	16,1	19,4	20,2	21,4	22,8	100

* U – unevenness coefficient.

The most uniform age structure is observed in Canada and European countries, the most uneven – in Japan, due to the high proportion of elderly people.

In the most countries with a cone-shaped age structure, a uniform age composition is observed, except for Japan. The most uniform age composition in Norway, UK and Canada. For this type, for all countries there are data on selected categories of unemployed/nonworking population.

Only in countries with a pyramidal type of age composition are higher rates of population change for the period from 2010 to 2016 than in the all countries of the world. For countries with other types of age composition, the change in population is slower than in the world as a whole. The lowest population growth rates are characterized for countries with a cone-shaped age composition.

Table 5: Comparison of population change rates with different type of age composition

Age type	Number of countries	Population size in 2016, M people		The rate of change in number in 2016 compared with 2010, %	Percent of unemployed in 2016 Pn	Percent of working in 2016 Pw
		2010	2016			
Pyramid	15	1878,4	2040,9	108,6	36,5	79,6
Barrel	20	2102,8	2174,6	103,4	33,5	53,2
Cone	25	622,7	631,1	101,4	39,4	37,9
Total	60	4913,2	5169,7	105,2	36,7	54,2

If we consider the selected types of countries by age composition as successive stages of development, integrating the results of national demographic policy and international migration, we can identify an important pattern – the formation of a more uniform age composition of the population and a reduction in its deformation. The stability of trends in demographic and migration policies made it possible to predict the age composition of the population with sufficient probability, while the sequence of changes in its stages of change was clearly recorded.

What significance does this analysis have for the understanding and development of spheral statistics, first for the statistics of spherons? This study shows three demographic types of one of the most important intermediate spheral indices – the number of nonworking/unemployed (Pn) and its dynamics. Accurate knowledge of this indicator opens the way to an equally accurate determination of the number of all working within all spherons in the indicator Pw = P – Pn. If we know Pn, then we will inevitably know Pw, which characterize the working part of all spherons,

The most important conclusion that follows from this comparative analysis of 60 countries with different age types of population is that among them there is not a single country that would not obey the laws of the distribution of population by spherons despite significant fluctuations in the mini/max values of each spheral index respectively their similar fluctuations in terms of traditional (basic) statistics. We emphasize here only a general natural trend for 60 countries, more accurate statistical evaluations of which for each country, taking into account their national characteristics, require a lot of additional research work for which we are not ready today. It is not required as part of our key task: empirically prove the universality of spherons and the universality of their spheral indices for all countries without exception. We did this on the example of 76 countries, but in a different stylistics.

Another no less important significance of this research is that it opens up for spheral statistics a fundamentally new field and direction of research of superposition (overlaying and combining) the spherons structure with other fundamental spheral structures: demographic (age, gender, nationality, etc.), economic (property, income, etc.), political, informational, social (educational, health, family status, etc.). These research subjects give them perspectives of development for many decades and centuries to come.

2.4. Spherons. Statistical Researches in the GHA: 2012–2019. Summary Table

Leo Semashko, *Olga Kashina*

Research parameters taken into account in the summary table:
1. № – serial number,
2. When – the year of the research during period 2012–2019,
3. Authors – performers of the researches, GHA members,
4. Country-subject – the residence country of the research authors,
5. Country-object – the country for which research was conducted,
6. Level – the research object within the country,
7. Year – the year (s) of the statistics object in the research – the final integral parameter, which implicitly includes the two previous ones.

№	When	Authors	Country–subject	Country-object	Level	Year
1	2018	Stephen Amoah, Ayo Ayoola-Amale	Ghana	Ghana	Country	1984, 2000, 2010
2	2018	Stephen Amoah, Ayo Ayoola-Amale, Stephen Tabi	Ghana	Tanzania	Country	2012
3	2018	Stephen Amoah, Ayo Ayoola-Amale, Stephen Tabi	Ghana	Sierra Leone	Country	2015
4	2018	Stephen Amoah, Ayo Ayoola-Amale, Stephen Tabi	Ghana	Mauritius	Country	2011
5	2018	Stephen Amoah, Ayo Ayoola-Amale, Stephen Tabi	Ghana	Botswana	Country	2012
6	2018	Habyarimana Heli	Rwanda	Rwanda	Country	2015
7	2018	Noor M. Larik, Mazhar H. Hashmi, Rashida Bukhari, Zia-ul-Islam	Pakistan	Pakistan	Country	2014–15
8	2018	Maitreyee B. Roy, Pravat K. Dhal	India	India	Country	2011
9	2019	Takis Ioannides	Greece	Greece	Country	2017
10	2018	Thea Marie Robert	France	France	Country	2015
11	2012–2019	Leo Semashko, Olga Kashina	Russia	Russia	Country	1991, 1996, 2002, 2010
12	2018	Olga Kashina, Leo Semashko	Russia	Belarus, Russia	Country	2015
13	2018	Alexander Semashko, Stephan Semashko	Russia	Russia	Country	2016
14	2018	Vera Popovich, Alexander Semashko	Russia	Kyrgyzstan	Country	2015
15	2018	Pravat K. Dhal	India	India	Odish's state	2015

16		Noor M. Larik, Mazhar H. Hashmi, Rashida Bukhari, Zia-ul-Islam	Pakistan	Pakistan	Four provinces	2014–15
17		Alexander Semashko, Stephan Semashko	Russia	Russia	Three levels	2016
18	2012	Olga Kashina	Russia	Russia	City	2010
19	2014	Svetlana Kuskovskaya	Russia	Russia	School	2000, 2005, 2010, 2013
20	2014	Habyarimana Heli	Rwanda	Rwanda	College	2005, 2010, 2013
21	2014	Maitreyee B. Roy	India	India	College	2000, 2005, 2010, 2013
22	2014	Maria Cristina Azcona	Argentina	Argentina	College	2010
23	2014	Leela Pradhan	Nepal	Nepal	Faculty	2005, 2010, 2013
24	2014	Ammar Banni	Algeria	Algeria	University	2005, 2010, 2013
25	2018	Roxana Sadykova	Russia	Russia	Region	2017
26	2018	Victor Danilov	Russia	Russia	Region	2010
27	2019	Vera Popovich	Russia	Russia	Institution	2019
28	2019	Andrey Semashko, Polina Semashko	Russia	Russia	School	2018
29	2019	Pravat K. Dhal, Subhash Chandra	India	India	University	2018
30	2019	Olga Kashina	Russia	60 Countries	Country	2016
TOTAL		26*	10*	76***	96****	120*****

* TOTAL researches' authors – 26: Ayo Ayoola-Amale, Alexander Semashko, Ammar Banni, Andrey Semashko, Habyarimana Heli, Leela Pradhan, Leo Semashko, Maitreyee B. Roy, Maria Cristina Azcona, Mazhar H. Hashmi, Noor M. Larik, Olga Kashina, Polina Semashko, Pravat K. Dhal, Rashida Bukhari, Roxana Sadykova, Stephan Semashko, Stephen Amoah, Stephen Tabi, Subhash Chandra, Svetlana Kuskovskaya, Takis Ioannides, Thea Marie Robert, Vera Popovich, Victor Danilov, Zia-ul-Islam.

** TOTAL country-subjects in which the authors live – 10: Algeria, Argentina, Ghana, Greece, India, Nepal, Pakistan, Russia, Rwanda, France.

*** TOTAL countries-objects, where research has been conducted – 76 = 16: Algeria, Argentina, Belarus, Botswana, Ghana, Greece, India, Kyrgyzstan, Mauritius, Nepal, Pakistan, Russia, Rwanda, Sierra Leone, Tanzania, France, + 60 countries in the general statistical assessment of spherons in different demographic age profiles.

**** TOTAL research levels – 96 = 76 countries-objects + 20 of their internal levels.

***** TOTAL researches of spherons by year – 96 + 24 = 120. This is the total number of statistical studies of spherons in the GHA for the period 2012–2019.

The parameters and advantages of 120 statistical/empirical researches of spherons from different countries, levels and periods illustrate their scientific uniqueness, innovative value and unprecedented significance for the unlimited future development of the whole complex of socio-humanitarian knowledge, thinking and sciences within the framework of the proposed spheral sociocybernetic Gandhian (nonviolent) methodology.

2.5. Spherons at the Level of the Individual, Family and Household. Digitalization of Autopoiesis: an Application for Smartphones

Leo Semashko

Social universality of spherons as their absolute necessity and sufficiency for the existence of society and human, demonstrated and confirmed by the statistics of all countries without exception, is based and mediated by similar absolute universality of spherons within ontogenesis of every person at the level of family, household or individual sector of social production. The idea of a spheral similarity of an individual and society, their spheral structure and structural harmony has evolved as long as tetrasociology with its tetranet thinking and spheral statistics, since 1976, from the club "Demiurge" (Semashko, 1992) and then at all stages and in all GHA books (Semashko&C, 2015/6), although in different measures and forms.

It is possible to distinguish the two main stages of the development of the theory of spheral structuring (or structural modeling) of an individual, i.e. its structural involvement, inseparability from four spheres of social production and from four spherons employed in them.

The first stage is summarized in the static tables of four spheres of social production in which its individual sector/level is structurally fixed, covering personal and family employment within the household (Semashko, 2002, 59–77). These tables are built on the tetramodel of a person/individual, which is based on its four structural spheral blocks: character, consciousness, will and body with its specific "inputs/outputs" in the form of the corresponding spheral needs and abilities of each person: humanitarian/social, informational, organizational and material (Semashko, 2002, 53–59). These theoretical foundations together with the idea of spheral statistics and its "Spheral Information-Statistical Technology" (SIST) allowed to form models and matrices of the "Individual" software product (SP SIST) "intended for harmonization of individual development and his/her general employment" through time indices of distribution human life between its different spheral employment (Semashko, 2002, 52–53).

The second stage is summarized in the structural model/scheme of the "Psychological human genome" (Psynome), fractally similar to the "Sociocybernetic genome of society" (Socionome), the similarity of which is determined by their identical spheral structure represented by qualitatively different spheres at the levels of society and the individual (Semashko&C, 2012, 38–46, etc.). The spheres of the individual (character / consciousness / will / body) correlate with the corresponding spheres/spherons of society: socio-/info-/org-/techno-. A person's life from birth to death is distributed as the time of his/her employment in the relevant spheres of autopoiesis and heteropoiesis, which determine the quality and lifestyle of each person, its personal ontogenesis, fate and the meaning of individual existence. Vital spheral trends of individual growth/development, distribution of time between its spheres in autopoiesis/heteropoiesis and their governance, control and self-organization by an individual still remain inaccessible to his/her mind due to their extreme complexity, multidimensionality and mutual superposition. They are at the mercy of intuition, which is not all and not always available, extremely labile, unstable and far from infallible in humans.

They become available to the control and management in the framework of the proposed methodology of tetranet thinking, its spheral statistics and SIST technology in the system of special spheral individual indices of the life employment of any person in units of time from minutes to decades. For this, its structural modeling and corresponding spheral indices of time, which are fairly simple and obvious, are necessary. Structural modeling of an individual's life employment is summarized as follows.

Biological **autopoiesis** (self-production employment) of a person from birth to death, covering an average age of 80 years in our age, is divided into three fundamental life periods, different in duration for each individual, but inevitable for each.

The first stage is considered as childhood, maturity as preparation for heteropoiesis (employment in social production). On average, this stage takes up to the first 20 years of a person's life.

The second stage: adulthood/maturity, in which autopoietic employment is primarily mediated by heteropoietic employment in various spheres of social production. On average, this stage takes the next 40 years of a person's life.

The third stage: old age, at which autopoietic employment is again becoming a priority. On average, this stage takes 20 final years of a person's life. The proposed periodization of a person's life summarizes its numerous variants widely represented in the scientific literature (Khukhlayeva, 2006, etc.).

At all stages of autopoiesis, determined by the genetic nature of the individual from birth, he/she is implemented based on physiological processes: nutrition, sleep, natural functions, movement, rest, etc. Their key characteristic and definitive attribute of autopoiesis is health, i.e. normal, balanced and harmonious flow of all physiological processes in all spheres of the individual.

Of the three stages of autopoiesis, the most important and meaning forming for a person as a social being is the second stage – maturity. It is associated with its social **heteropoiesis** in the form of employment in the spheres of social production on the basis of individual needs, abilities, and corresponding acquired skills. Although heteropoiesis (employment in the social production) is only a part of an individual's autopoiesis over time, but it (autopoiesis) is almost completely, except for physiology and genetics, socially conditioned from birth to death by heteropoiesis (social production) of other people, especially close ones, parents, family, and also society as a whole. Therefore, social production conditions and covers one way or another, the whole life of an individual from birth to death, but in different ways at different stages of his/her life. All the vital functions of a person, both autopoiesis and heteropoiesis, require the expenditure of lifetime. Only the spheral statistics of this time opens up the ability to manage and organize it in the right direction and quality for a person.

All stages of an individual's autopoiesis are related to the employment of the production of one of the four PIOT resources within the framework of either the relevant institutionalized branches/spheres of social production, or its individual sector/level within the household. In it he/she needs to perform the functions of all four spherons, i.e. to produce (repair, service, etc.) all PIOT resources.

Another typical mass example. An adult, when he/she is freed from his/her main social production activity, can be busy and change his/her spheral employment in the family, in the household, which can be both collective, with family members, and individual. Consider the individual case. When a human came home from his/her work in social production, he/she cooks his/her own food – this is the material employment of the technospheron. Then, for example, he/she is engaged in raising children, helping them to do their homework, etc. – this is the humanitarian employment of the sociospheron in the production of other people. Then he/she can go to a meeting of a committee and take part in the development of a decision / resolution – this is the governing employment of orgspheron in the production of organizational resources. Then he/she, having a poetic inspiration, can write a poem (or a scientific article, if he has the necessary skills, etc.) – this is the spiritual/intellectual employment of the infospheron in the production of information.

Finally, having calmed down, he/she can go for a walk with his wife/husband, or relax by the TV or go to bed – this is pure autopoiesis as the self-production of himself, the individual and the person. This employment also belongs and is inherent to the sociospheron in its inactive part, expressed by the spheral index Pn. In contrast to institutionalized employment in the spheres of social production, listed employment in the family and household is statistically

either not reflected at all, or reflected only in some cases, for example, in the mass production of a product in households for public consumption through markets. In other cases, domestic work and time spent on it are not counted in statistics.

This and similar mass examples show that every person at any stage of his life from birth to death is included in the spheral employment of all spherons. But this employment, outside of institutionalized social production, is not actually measured by any indices and any statistics. Since this employment covers the lifetime of each person, its accounting, control, regulation, planning, evaluation of its effectiveness and similar conscious operations with it, as with their own destiny, are of paramount importance for each individual.

The SIST SP Individual (see above) offers the system methodology and technology for collecting, organizing and operating similar statistical information for each individual on his/her smartphone. For the purpose of coverage and life-time management of an individual, traditional statistical indices are completely unsuitable because of their narrowness, fragmentation and an unlimited number that are inaccessible to the ordinary individual. Only enlarged, integral, systemic, logically constructed and transparently related spheral indices of a limited number, starting with 7, are adequate for these purposes. Only they will allow creating such a fundamental software product of the "Artificial Intelligence" class (AI) that will have almost unlimited demand and unlimited range of development and application. It is undoubtedly of great commercial interest for corporations that produce software services for smartphones and will interest them in terms of creating a new subsidiary for the production and marketing of this product. Naturally, professional and commercial development of similar products requires the creation of relevant design laboratories with highly paid staff of specially trained experts.

It is also obvious that this software product will be of fundamental importance for the formation of non-violent thinking and behavior of each individual in the spirit of Gandhi, giving him the opportunity to prevent, to the best of his ability, situations of violence that threaten the individual, his rights and the lives of other people. Therefore, the work, development and use of spheral statistics in the direction of the formation, education and behavior of non-violence for a person, especially a young one, is of key importance in our time and complements similar efforts at the social level discussed above. The "Individual" SP will give Gandhi's non-violence a modern sound and adequate means (smartphones, etc.) today, providing it with a mass audience and deeper insight into life.

The individual and the family, as well as society in a whole and at any level, are always included within the framework of their lifetime in institutionalized or non-institutionalized employment of spherons in four spheres of social production, never leaving it and beyond, but only changing it from one spheres to another and from one form to another. Therefore, the inclusion of the individual and the family in the spheral employment of the spherons is universal law as in relation to society at all levels. **Where the individual lives and functions, all four spheres and all four spherons of social production constantly live and function there**. There are no exceptions from this universal fundamental regularity.

This is the law that reveals the law of non-violence. Both laws are norms of human life, self-organizing cybernetic regulators of its depth/essence and surface/phenomenon. The structural harmony of spherons defines the deepest essence of non-violence as the fundamental "law of our life", discovered by the genius of Gandhi. Both laws are inseparable from each other and constitute a single duplex law, which can be called the law of "spherons/non-violence" or "spheral non-violence and non-violence of spherons", described above. There are no examples refuting the universal spheral law of non-violence, as well as its refuting statistics, which, in its entirety, only confirms it that we have seen above. On this basis, a philosophy of non-violence of human life and its duplex law is built.

Multifunctional, polyspheral, in perfect integrity – tetraspheral activity/employment of an adult, performing daily functions of each of the four spherons of social production on an individual micro level within the family and household eliminates any violence between them, although often accompanied by friction, contradictions, disharmonies, mismatches, imbalances, conflicts, etc. The person activity/employment is non-violent for all its internal collisions and problems. This can be seen with the naked eye on the example of the life of all billions of people. Therefore, Gandhi brilliantly defined non-violence as "the fundamental law of our life", which "is mightier than the mightiest weapon of destruction", because non-violence is life itself, it is identical to life, making it the only way without which it does not exist. Without it, the life of a single person, a single family, a single society and a single community of people is impossible in their social production as their social being, which is constantly generated in the genetic reproduction of the structural harmony of its spheres and spherons at all levels from every individual to whole humanity.

Any individual and any community of people, if they want and strive to live, exclude violence from their lives and continuously assert non-violence along with all its attributes and highest values of life associated with it: love, harmony, peace, freedom, equality, fraternity, justice, unity, happiness, etc., that Mahatma Gandhi expressed well in all his labors. Therefore, **a more fundamental law of life than the duplex law of non-violence/spherons at human, humanity and any community in their entire history does not exist**, because only it ensures their life and survival, their continuity. But so far this law operates spontaneously, stochastically and unconsciously in human ignorance, leaving a strategic long-term scope for deadly pathologies and the antipodes of life.

The monstrous wars of the past and present centuries, the endless race of genocidal and ecocidal weapons in the framework of the dominant tyrannical militarism of different shapes and colors, incapable to internal transformation within the framework of the partial traditional thinking that created it, sets the historical task of survival through the scientific understanding of Gandhi's non-violence in its "substance" of spherons. This task is realized, formulated and solved in the first philosophical and scientific approximation in this GHA book devoted to Gandhi. The sociocybernetic methodology of tetranet thinking developed here, together with its spheral statistics, which proved the validity of spherons as a "substance" of non-violence makes its duplex law a conscious law of rational governance, control and self-organization of human life at all levels from the individual, family and household to humanity.

The sociocybernetic science of genetic structural harmony of non-violence/spherons and the corresponding holistic spheral statistics, unlike traditional ones, expand its scale to the individual sector of social production that makes it as a whole, without gaps, accessible to a single human consciousness, thinking and scientific knowledge. It provides humanity with a harmonious self-organization, which excludes war, violence, militarism, hatred and aggression. Only to such science and thinking becomes available the true non-violent way of social being in global peace, love and harmony at all levels. It was started by the genius of Gandhi in his phenomenal historical achievement of the unparalleled non-violent independence of India.

From the foregoing, there follows one general gnoseological conclusion, which stimulates a "substantively new (non-violent) manner of thinking." It now faces one fundamental alternative: either humanity will continue to neglect the fundamental law of non-violence/spherons, protecting its ignorance in it, or it will intensively cognize it, to use it for the common good of all people and nations.

The cybernetic recursive cycles of self-knowledge of spherons/nonviolence begin from the individual, as an atomic social actor and end on it. More than 40 years ago, the idea of managing individual time as the space of person's autopoiesis started. Now this idea has returned to the individual through spheral statistics, which opened up the possibility of the

fundamental digitalization of autopoiesis or autopoietic digitalization on any individual smartphone of any person from the moment of mastering this device that can begin since 10 years of age. This idea, enriched with synthesis, on the one hand, of the technical digital (fourth) revolution of smartphones, and, on the other hand, the discovery of spheral statistics within the framework of tetranet thinking, returned as a socio-humanitarian mega-scientific revolution. Its seed of non-violence belongs to the genius of Mahatma Gandhi.

The perspectives of this scientific and spiritual breakthrough are endless in time and scale, because it covers the vital space of the defining resource – the human, in which the history of humanity is realized. In this epochal breakthrough lies the historical transformation of a violent disharmonious civilization into a non-violent harmonious civilization that prevents and excludes wars, militarism, hatred, violence and aggression. It equips with the universal tool and the society as a whole through the organs/devices of its spheral nonviolent self-organization, and each individual through a smartphone with digital spheral technology – a universal intellectual tool of conscious long-term ensuring global peace/nonviolence from social harmony of spheres and spherons. Similar technology is embodied in a cluster of digital autopoietic applications unlimited in time, demand and diversity for any smartphones.

This universal digital resource in the hands of human opens the era of digital spheral Enlightenment in the "substantially new manner of thinking" (Einstein) – in the tetranet thinking of a harmonious non-violent civilization of the 21st century, practically and consciously embodying the great idea of global nonviolence Mahatma Gandhi. Here, in the mega-scientific nonviolent revolution launched by Gandhi, all four newest PIOT resources of 21st century interlock/integrate, opening the horizon of a future harmonious civilization in 2019 – on the 150th year after the Mahatma Gandhi birth. This is marked by the ninth, the GHA "Gandhi book" by more than 50 coauthors from 25 countries in two languages as a research, primer and poetics of Gandhi's nonviolence.

2.6. Spherons: a Story since the Harmony "Demiurge" (1976) to the UN Harmony (2018). *Leo Semashko*

The above results of statistical researches of spherons illustrate their scale in the very first, contour approximation. Outside it remains their extensive history, starting since the student club "Demiurge" (1976), which requires special presentation, but it is impossible here. We will only name its major milestones and stages. In the “Demiurge” spherons (then they were called “spheral classes”) were modeled by the constant structure of the club four micro groups, into which all its members were divided (Semashko, 2017a). The most active of its members were Nikolai Strelkov (he, as a programmer, made the first software for spheral statistics), Andrei Smirnov, Svetlana Vetrova and others, who introduce a great contribution to the understanding of the spherons at that time.

The next, defining professional stage is my work as a senior researcher at the statistical institute “Lensystemtechnics” (1980–1989) of the city leadership. Here were formulated and tested the foundations of spheral statistics, its indices, matrices of spheral indices, which found application in many projects of this institute, primarily for governance of the five millionth city economy, the most important of which are published in the book “The Spheral Approach” (1992). The active employees at this stage were statisticians, mathematicians and programmers: Evgeny Kaganovich, Vladimir Romanov and others, who made a great contribution to the operationalization of spheral indices, primarily spherons.

At the third stage, since 1994 to 2005, spheral statistics, especially in the part of spherons, was developed in various lecture courses of sociology, political science, cultural studies and jurisprudence, which the author read at various universities in St. Petersburg. They found a generalized reflection in the textbook for universities “Sociology for Pragmatists” (1999), as well as in the books “Tetrasociology as the Revolution of Social Thinking” (2000), “Tetrasociology: Responses to Challenges” (2002) and “Tetrasociology” (2003, co-authored). Active cooperation at this stage was carried out with experts in mathematical statistics Vladimir Trifanov and Ivan Bogatushin, as well as with many foreign experts, primarily sociologists: Bernard Phillips, USA, Reimon Bachika, Japan, Martha Demit, USA, Hilary Roseman, Australia, Bernard Scott, Britain, Bernd Hornung, Germany and others. They became in February 2005 by the co-founders of the international peacemaking organization Global Harmony Association (GHA), built on tetrasociology, social cybernetics and spheral statistics.

The fourth stage, since 2006 to the present, is the development of spheral statistics and the conduct of statistical researches of spherons in many GHA peacemaking projects as necessary tools for preventing and peacefully resolving various conflicts at different levels. The main results of statistical studies of this stage found a publication in the 8 books and 68 GHA projects from 2005 to 2019. They also found a presentation at the ISA (International Sociological Association) World Sociological Congresses in 2002, Australia – Brisbane; 2006, South Africa – Durban and 2010, Sweden – Gothenburg, as well as at other international conferences in Beijing, 2007 and Delhi, 2012. We emphasize once again: the most intensive and large-scale development of statistical studies of spherons was found in recent years, during the creation of the “Global Peace Science” (2012–2016) and this book dedicated to Gandhi (2017–2019). Based on them, the GHA fundamental co-authorial project was created: “Network Spherons: The UN Harmony Replacing UN Disharmony” for the global harmonious governance of spherons at the UN level (Semashko&C, 2017).

2.7. Spherons' Statistics: Conclusions and Result for Nonviolence

Leo Semashko

Long-term and extensive statistical studies of spherons in many countries and at all levels allow us to draw several fundamental scientific conclusions.

1. Spherons constituting the genetic societal structure of any human community as exhaustive social actors are eternal and indestructible for social life itself and its continuous reproduction at all levels and in all historical forms without exception.

2. Spherons do not exist without each other; they are mutually necessary, additional and sufficient. The absence of any of them makes individual and social life/production impossible. Therefore, they exclude all violence, war and mutual destruction of each other "as a class" in a whole. This is the law of mutual and eternal self-preservation of spherons in peace, harmony and non-violence. But this law does not interfere with their separate parts ("partons" – historically transient groups, classes and nations), due to certain historical reasons, to wage local and transient wars and violence with each other for the purpose of mutual extermination. However it can never lead to the mutual extermination of one or another spheron as a whole at any historical stage, which would mean the humanity death. Violence, war, and the mutual extermination of the historical parts within the spherons is only evidence of their local and temporary genetic pathology of deviation from their constitutive genetics of structural harmony, peace and non-violence.

3. Therefore, spherons constitute the fundamental source and the eternal law of "non-violence as the greatest force of mankind" in the definition of Gandhi. Only their historical nescience and the resulting powerlessness against spontaneously arising conflicts in their peaceful resolution with the help of scientific tools of thinking and statistics prevent it from mastering and constantly using for common good and prosperity of every nation this "greatest force of humanity".

4. Overcoming the historical ignorance of humanity in the spherons and derived from them social harmony, peace and non-violence is achieved on the basis, by Einstein's definition, only "substantially new [non-violent] manner of thinking." Spherons, their knowledge, including the knowledge of their statistics, is the "substance" of the new manner of thinking, which we called the "tetranet thinking". It ensures the survival of humanity and its deliverance from violence, wars and "shameful self-destruction", i.e. from the created 100% threat of genocide/ecocide. Only similar thinking with nuclear substance of spherons promises humankind and all its peoples the access to the fundamental creative energy of the "greatest force of non-violence" for the prosperity of all nations, for saving the Earth and the biosphere.

5. The statistics of spherons gives enough grounds for humanity to consciously and systematically embark to the large-scale funded spherons researches to overcome their nescience and learn how to use their knowledge for common good, non-violence and global peace.

6. CONCLUSION OF THE BOOK. The universality of spherons, their necessity and sufficiency, confirmed by the spheral statistics of all countries, levels and periods, proves the fundamental genetic nature of the "Law of Non-Violence" discovered by Mahatma Gandhi. It is impossible to reject or ignore similar large-scale statistical/empirical confirmation of the non-violence law. This is the main scientific merit and unique cognitive value of our research of Gandhi nonviolence.

2.8. Spherons: Genesis and Genetics. The Space of Genetic Trends and Fundamental Societal Meanings of Humanity. Hypotheses

Leo Semashko

Gandhi proved that non-violence can change history. Let us be inspired by his courage and conviction as we continue our work to advance peace, sustainable development and human rights for all of the people of the world.
UN Secretary-General, António Guterres

The disclosure of the societal sources of Gandhi's non-violence, which is capable of "change history", is only one of the fundamental consequences of applying the methodology of tetranet thinking based on its "substance" – the category of spherons. There are many other consequences and large-scale examples of their manifestation in the form of fundamental meanings and genetic trends that form their especial value space, which we tried to outline briefly below in the special model. A pair of categorical societal duplexes constitutes the logical coordinates of this space – structure/function and genetics/genesis. Meanings and trends/laws of spherons were considered in many works of the GHA and in this book, so we will define them here in theses, in the most general form.

I. Structural meanings of spherons in all spheres:

1. The societal structure of society, its production employment at all levels,
2. The genetic code (genome) of the structural harmony of the spheres of social production,
3. Noospheric, planetary structure of humanity,
4. Structure of the Gandhian nonviolence and global peace from the structural harmony of spherons.
5. Other structural meanings of spherons, which are while difficult to determine.

Structural meanings of spherons are inseparable from spheral structures of a different order and levels, striving with them to a state of coherent (harmonious) superposition, mutual overlap, alignment and penetration. They include demographic structures of spherons by age, gender composition, nationality, etc.; economic structures of spherons by property, income, welfare, etc.; political structures of spherons by political preferences, activity, rights, opportunities, etc.; information structures of spherons on ideologies, religions, cultures, etc.; social structures of spherons by education, health, social care, marital status, etc. These are extremely complex and unique subjects of research in the spheral sociocybernetic Gandhian science for a very long future of their development.

II. Functional meanings of spherons by spheres:

1. In the Sociosphere

1. Ensuring global peace and non-violence from the structural harmony of spherons.
2. Ensuring gender equality and the priority of children as the highest value.
3. Eradicate poverty and luxury and ensure moderate well-being for all.
4. Eradication of social pathologies and the disharmonies that produce them.
5. Ensuring social justice, fraternity and unity of all peoples.
6. Regulation of demographic growth.
7. Ensuring universal harmonious education and the highest standards of health and social welfare.
8. Other functional meanings of spherons in the sociosphere.

2. In the Infosphere

1. The formation of a generally acceptable harmonious non-violent ideology, consciousness, thinking and futurology.
2. Ensuring interfaith global harmony and preventing the clash of civilizations.
3. Overcoming the "gulf of two cultures" at the expense of priority development and breakthrough of socio-humanitarian knowledge, thinking and science.
4. Control of the Internet information space, prevention of its disharmony.
5. Stimulation of new information technologies and digitalization of social production based on spheral statistics, providing millions of new jobs in all countries.
6. Other functional meanings of spherons in the Infosphere.

3. In the Orgsphere

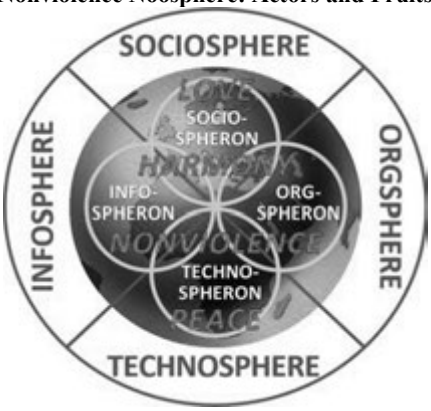
1. Creation and maintenance of non-violent Gandhian democracy of spherons, excluding the possibility of wars and militarism, but preserving all the peacemaking achievements of traditional democracy.
2. Ensuring all human rights and freedoms based on the priority of the right to life, peace and harmony (Semashko, 2017b).
3. Eradication and prevention of corruption as an ineradicable pathology of the past.
4. Eradication of all exclusivity – national, ideological, religious, cultural, etc., as a source of social pathologies and disharmonies.
5. Ensuring global harmonious governance based on non-violent democracy and sphere statistics (Semashko&C, 2017b).
6. Guarantee of the Earth's Constitution, excluding any possibility of genocide of humanity and the biosphere ecocide.
7. Other functional meanings of spherons in Orgsphere.

4. In the Technosphere

1. Ensuring environmental and climatic sustainability, the eradication of all global environmental threats.
2. Ensuring sustainable moderate harmonious economic growth without damage to nature, excluding economic crises, imbalances, unevenness and local stagnation.
3. Ensuring economic justice and equality in the framework of democratically established measures, norms and standards of living.
4. Other functional meanings of spherons in the Technosphere.

Structural and functional meanings of spherons correlate with the system of their spheral laws, which were defined in the first approximation in GPS, Chapter 5 (Semashko&C, 2016, 170–185).

Nonviolence Noosphere: Actors and Fruits



III. Genesis and genetics of spherons. Genetic Trends Space

God and nature created life and its biosphere on Earth for several billion years, ensuring their stability with the genetic code of an infinite number of living species in the process of continuous evolutionary genesis by appropriate genetic trends. The human genesis began much later, just a few million years ago, and ended with the creation of homo sapiens as a reasonable/social being only 40 thousand years ago. It is obvious that by this time the formation of the social four-spheral production genome of humanity, embodied in the spontaneous structural harmony of its four spherons, was completed. The genome of human spherons is extremely long-term, it has been created for the rest of its life, so it unfolds very slowly, for thousands of years in its genetic spheral trends. They act non-stop in search of the most perfect and harmonious forms of self-organization of social production and its spherons through the selection and culling/death of millions of sporadic cultural paradigms. This spontaneous evolutionary search is twofold: the desire for further harmonization is accompanied by disharmonious deviations and social pathologies, doomed to extinction, but threatening the survival of humanity. It is particularly clearly demonstrated in our time with stocks of nuclear weapons to put an end to both humanity and the biosphere.

The space of genetic trends of the fundamental genesis of spherons, which unfolds the hidden inner potential of the genome of humanity, is outlined in our time in the first hypothetical approximation by the sum of the functional meaning of spherons in each sphere of humanity. The scale of this space naturally expands over time. The spheres of humanity are the center, the driving force and the motor of this genesis, and the spheres are their periphery, product and infrastructure, which is presented on the structural model of system design below. The genesis and genetics of spherons came to a decisive transition from the spontaneous / unconscious stochastic (thermodynamic in nature) modus of self-organization, **which turned out to be destructive and unfit for survival**, to a conscious, purposeful and scientifically grounded way of self-organization based on a "substantially new manner of thinking" (Einstein), embodied in the spheral harmonious and sociocybernetic tetranet thinking from the whole.

As long as spherons and their spheres remain inaccessible to science, reason and thinking, as long as they are not known and humanity remains ignorant in them, as long as their fundamental meanings and genetic trends remain paralyzed for humans and unrealizable for them. Until that time, the spherons remain at the level of fragmented and hostile communities — partons (historically transient classes, nations, states) absolutizing their "national interests" and their one or another vicious and destructive "exclusivity" that threaten the survival of humanity as a whole (like Hitler's in the past, or as in militarism today). Until then, all the fundamental meanings and trends of spherons remain only the first hypothesis, confirmed in the first approximation only the first, far from perfect, statistical studies of spherons above.

Only consciously, scientifically self-organized spherons, non-violently "hacking" (Pawlik) the traditional violent order of world life, are capable to global harmonious unification in spheral political and economic structures. In them, they purposefully and jointly realize their controlled fundamental meanings and genetic trends on a global scale of integral humanity as a single family of nations. Until the population at all levels consciously self-organizes / unites structurally into spherons and their structures at all levels, eliminating wars, violence and militarism at all levels from school to humanity, until then there can be no guarantees of global peace. Until then, their causes/sources between fragmented and hostile communities can be otherwise excluded and prevented.

IV. Spherons Futurology

The genesis of spherons and the genetic trends of their genome in all spheres, as well as any DNA, remain in the midst of an infinite future, dispelling which and highlight them is the

task of the subsequent spheral socio-humanitarian cybernetic science of the next centuries and millennia. In order for science to break through to this light, it must "hack" (Pawlik) the dominant destructive manner of thinking, which gave rise to all global problems, but it is powerless to solve them, because they are not solvable in it but only at a new level of thinking (Einstein). Spherons, excluding war and militarism, do not need to spend enormous resources (up to 50% of budgets) on them, which will allow them to concentrate them on solving global problems. The space of genetic trends and fundamental meanings of spherons outlines the semantic space of the future, in which it unfolds as in its noospheral nature, controlled by the sociocybernetic Gandhian nonviolent tetranet thinking.

V. Implementation of the past precepts in the meanings and trends of spherons

1. Only spherons are capable "to put an end to war before war puts an end to humanity" (John Kennedy). Only spherons are the guarantor of global sustainable peace. If not they, then who? No one else remains bottom in the modern history of the last century.
2. Spherons is the world "mole of history" (Shakespeare), which realizes its meanings and trends invisibly, deeply and very slowly, until humanity has reached its understanding and is not able to control, manage and use it for its own benefit.
3. Only spherons are capable "to shift the arms race into a peace race" (M. L. King).
4. Spherons need and create a "substantially new (non-violent) manner of thinking" to survive humanity (Albert Einstein). Spherons constitute the "substance" of this thinking.
5. Spherons are the source of "the greatest force of non-violence of mankind," which "is mightier than the mightiest weapon of destruction" (Mahatma Gandhi).
6. Only spherons can be key actors of system change of society: "a new economic system, a new society, a new social contract [new political system and reorganization of democracy], a new way of life [overcoming] … economic inequality … breaking the power of corporate greed… stabilizing and ultimately reducing the global population, …eliminating the institution of war, … developing a more mature ethical system to match our new technology… The greatest threats are catastrophic climate change and thermonuclear war, and… global famine…. All these threats are linked." (John Avery, 2015).
7. Spherons are the grave-digger of wars, militarism and violence (Mairead Maguire).
8. Spherons are the indestructible foundation of a harmonious culture of peace: "Peace goes through culture, and there is no other way. A true, high culture brings peace to the whole world. " (Nikolas Roerich).
9. Spherons are the only social actors of gender equality, harmonious feminism, women's leadership and the "onset of the great age of women" with a new way of thinking (Elena Roerich).
10. Spherons are a bridge over the "gulf between two cultures" and a breakthrough of the humanities from a thousand-year stagnation and depression, giving them priority in society (Charles Snow).
11. The structural harmony of spherons is "the inner harmony of (social) world, (which) is the only true objective reality" of this world (Henri Poincare).
12. Thinking of spherons and by spherons is "not a crisis disturbing weak souls but the greatest turning point of human thought making only once a millennium." (Vladimir Vernadsky). This is the "second axial age" (Karl Jaspers) and Copernican revolution of the socio-humanitarian cognition, science and thinking in the 21st century, prepared by the search, mistakes, and summarizing precepts of the last century.

Part 3.
Gandhi's Nonviolence in Different Perspectives. Articles

1. To the Youth of the World: An Appeal for Resilience, Hope and Nonviolence as Mahatma Gandhi Bequeathed*

by

Adolfo Pérez Esquivel and *Daisaku Ikeda*

(On June 5, 2018, in Rome, Italy, Nobel Peace Prize Laureate Adolfo Pérez Esquivel and Buddhist philosopher Daisaku Ikeda released a joint appeal to young people worldwide, calling for a new world built on justice, solidarity and Gandhi's nonviolence.)

We call on the young people of the world to unite to meet the challenges confronting humankind, to be the authors of their own lives and of the history of the new century. Our hope is infinite because we believe that youth will know how to resolve the many diverse planetary challenges in solidarity. We direct this message to young people, in whom we place our total confidence.

In the twenty-first century, humankind confronts a vertiginous dynamic of change, which brings with it immense challenges.

It is necessary to remember history. Such memory illuminates the present. Through it, we can see that people have the capacity and the strength to create new alternatives and to be beacons of hope demonstrating that "another world is possible."

The twentieth century, its light and shadow, left profound marks on human history, generating asymmetries and injustice between so-called developed and developing societies, as well as growing wealth gaps within all societies.

Hunger is a crime. Combating poverty and hunger is essential. In order to eliminate misery from Earth, we must transcend differences of nationality, ethnicity, religion and culture, coming together in support of the United Nations 2030 Agenda for Sustainable Development and its goal of "transforming our world."

The Challenge of a New Era

Advances have been made toward the creation of a new era. One of these was the Paris Agreement, which established measures to combat climate change. Against the backdrop of the growing threat of extreme weather events and rising sea levels, the agreement entered into force in November 2016 and has been ratified by almost all of the world's countries.

Another step forward was the adoption of the Treaty on the Prohibition of Nuclear Weapons in July 2017, an international legal instrument that establishes the absolute illegality of these weapons.

In November 2017, the international symposium "Perspectives for a World Free from Nuclear Weapons and for Integral Disarmament" was convened by Pope Francis at the Vatican. In pursuing the goal of a world without nuclear weapons, we must eliminate not only the threat these weapons pose, but also the urge to power and the desire to realize security for one's own country even at the expense of the lives and the dignity of other peoples. There is an urgent need to disarm our ways of thinking.

The two of us have discussed global issues motivated by an unchanging and unbounded faith in the potential of youth. We have seen how young people worldwide worked as key agents of civil society in solidarity with the International Campaign to Abolish Nuclear Weapons (ICAN) to propel the adoption of the Treaty on the Prohibition of Nuclear Weapons in 2017. The future

of humankind depends on the present, on young people who have the courage to confront reality, never submitting before adversity.

As Martin Luther King Jr. said, "We are always on the threshold of a new dawn." In this spirit, the two of us embrace the confidence that there exists always the hope and the will to bring about a new dawn for humankind and for the living beings with whom we share this planet Earth as our common home.

The refugee problem has reached crisis proportions. The lives and dignity of tens of millions of people are violated by war and armed conflict, starvation, social and structural violence. We must open our arms, minds and hearts in solidarity with the most vulnerable in order to rectify this grave situation.

Our Message to Youth

We direct our call to the young people of the world. There is no challenge that cannot be resolved if we unite in solidarity. We are confident that young people will take up the search for solutions, acting in solidarity from within their respective places of belonging across all differences of spiritual and cultural identity to generate waves of dynamic, shared action. We call on youth to take on the responsibility of walking together with the people, embracing the confidence that each of their actions will produce results in future.

The threat of nuclear weapons, the increasing number of refugees driven from their homes by armed conflict, extreme weather events caused by climate change, the greed of financial speculators that aggravates the gap between rich and poor… Underneath these problems lies an unrestrained vying for military, political and economic supremacy that casts dark shadows over our common home, our planet Earth.

There is a worrying trend in society: the extreme and unbridled ambition for power and wealth that embodies the belief that it should be possible to obtain all things quickly and easily. Eastern philosophy teaches that such benightedness is generated by three negative impulses: greed driven by runaway egotism, anger that gives rise to hatred and conflict with others, and ignorance that causes us to lose our sense of direction in life and society.

Mahatma Gandhi urged people to evaluate their words and actions by reflecting on the impact they could have on others, bringing to mind the faces of the poorest and most vulnerable among us. Gandhi was convinced that each society should develop keeping in mind the welfare of the most disadvantaged, never abandoning anyone. This perspective accords with the humanistic ideal of the United Nations Sustainable Development Goals (SDGs), to "leave no one behind."

Appeal to International Society

With this joint appeal, we call for restraint of the excesses of civilization and a restoring of equilibrium between human beings and Mother Earth. We call on international society to promote the empowerment of young people through education for global citizenship in order to lay the foundation for truly inclusive societies.

We propose the implementation of a range of new efforts aimed at fostering global citizens toward the year 2030 and at empowering youth by unleashing their unlimited capacities and potential. These efforts should:

1. Promote a common awareness of a universal sense of history in order to prevent the repetition of tragedies.

2. Promote the understanding that Earth is our common home, where no one is to be excluded on the basis of difference.

3. Promote the humane orientation of politics and economics, cultivating the wisdom needed to achieve a sustainable future.

In achieving these three objectives, it is vital that young people unite in solidarity, generating a powerful dynamic of action to meet planetary challenges and protect Mother Earth.

With the Torch Held High

The two of us have lived through the storms of war and violence of the twentieth century. These experiences drive our insistent efforts to expand the bonds of friendship among peoples across ethnic and religious differences. We now feel compelled to reach out to the youth of the twenty-first century and to entrust to them the task of holding high, with courage and pride, the torch of friendship, unity in diversity.

We consider it to be of the greatest importance to human society today and in the future that young people commit themselves to working with the world's peoples to usher in a new dawn of hope; that they unite in solidarity to protect the dignity of life, fight injustice and make equally accessible those things that are necessary for people's physical and spiritual existence in freedom. By doing this, young people will create a precious and universal spiritual heritage for humankind, a new world of justice and solidarity.

*https://www.daisakuikeda.org/sub/resources/works/lect/20180605-esquivel-ikeda-jt-appeal.html

Adolfo Pérez Esquivel,
Nobel Peace Prize Laureate,
Wikipedia: https://en.wikipedia.org/wiki/Adolfo_P%C3%A9rez_Esquivel

Daisaku Ikeda,
Buddhist philosopher,
Wikipedia: https://en.wikipedia.org/wiki/Daisaku_Ikeda

2. Message about the GHA "Gandhi Book" Publication
by
P. S. Y. Ghiri

Congratulations and best wishes for this publication that deals with a fundamental value of Sanatana Dharma: non-violence, ahimsa. A principle of which Mahatma Gandhi has become a staunch defender and spokesman here in the West. Precisely, on the occasion of the 150th anniversary of his birth, the Italian Hindu Union-Sanatana Dharma has dedicated the celebration of the fifth Edition of Dipavali (or Diwali), the Hindu Festival of Light, recently concluded, to ahimsa and satyagraha, non-violence and truth, the forces of the common good.

The festivity of Dipavali, in its deepest meaning, is that perennial flame that lights other lights in an eternal play of joy, wisdom, truth, "Ekam sat sarvaso'kam paranjyotir dharmaha".The concept of satyagraha expresses the idea of "affirming and sustaining truth" and recognizes a foundation, ancient as the matrix of life, which was admirably translated by Mahatma Gandhi into a mass movement. He defined satyagraha as the "force of truth" that strongly supported him throughout his life.

"*The qualities of a practitioner, satyagrahi, should be: honesty, humility, purity of mind, non-violence, absence of fear. Such qualities are but a part of Sanatana Dharma, or the eternal laws, expressed as natural duties, indissolubly linked to universal life. The word satya that stands for "truth" means "to transc end the ephemeral or the illusory and to realize the immutable*". (Mahatma Gandhi).

Truth goes beyond the simple question of opinions where everyone has his own ever-changing truth like the wind, but then, on reflection, can the latter really be defined as truth?

Indeed, there is an apparent truth, pratibhashika satya and the Truth or Absolute Reality, paramarthika satya. The latter is the application of truth in sustaining and respecting life in all its expressions. The Italian Hindu Union wishes to express the high ideals of Sanatana Dharma, as its very name suggests; universal principles that are the heritage of humanity. Among these is

the concept of pluralism and universality that the Scriptures express as Vasudeva kutumbhakam: "All humanity is one family". This refers directly to ahimsa, that is, the absolute respect for every form of life, in protecting it and supporting it. The real enemies of all living beings are selfishness and individualism; from these arise insensitivity and indifference to the suffering of others, unfortunately evils more than ever actual!

The second pillar of Dharma is dana dharma, meaning to support those in need in every possible way. Dharma helps us to understand the law of interdependence and develop humility and generosity.

It is precisely sharing and interrelation that I hope will pour forth from this book, to inspire each of us to do solidarity deeds and contribute to the common good by making human life noble and worthy.

Paramahamsa Svami Yogananda Ghiri,
Spiritual Guide of Matha Gitananda Ashram,
Founder of the Italian Hindu Union-Sanatana Dharma Samgha.
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3. The Ethics of Mahatma Gandhi
by
John Scales Avery

If humans are ever to achieve a stable global society in the future, they will have to become much more modest in their economic behavior and much more peaceful in their politics. For both modesty and peace, Gandhi is a useful source of ideas. The problems with which he struggled during his lifetime are extremely relevant to us in the 21st Century, when both nuclear and ecological catastrophes threaten the world.

Avoiding Escalation of Conflicts

Today we read almost every day of killings that are part of escalating cycles of revenge and counter-revenge, for example in the Middle East. Gandhi's experiences both in South Africa and in India convinced him that such cycles could only be ended by unilateral acts of kindness and understanding from one of the parties in a conflict. He said, "An eye for an eye makes the whole world blind".

To the insidious argument that "the end justifies the means", Gandhi answered firmly: "They say that 'means are after all means'. I would say that 'means are after all everything'. As the means, so the end. Indeed, the Creator has given us limited power over means, none over end… The means may be likened to a seed, and the end to a tree; and there is the same inviolable connection between the means and the end as there is between the seed and the tree. Means and end are convertible terms in my philosophy of life."

Gandhi's advocacy of non-violence is closely connected to his attitude towards ends and means. He believed that violent methods for achieving a desired social result would inevitably result in an escalation of violence. The end achieved would always be contaminated by the methods used. He was influenced by Leo Tolstoy with whom he exchanged many letters, and he in turn influenced Martin Luther King and Nelson Mandela

Harmony Between Religious Groups

Gandhi believed that at their core, all religions are based on the concepts of truth, love, compassion, nonviolence and the Golden Rule. When asked whether he was a Hindu, Gandhi answered, "Yes I am. I am also a Christian, a Muslim, a Buddhist and a Jew." When praying at his ashram, Gandhi made a point of including prayers from many religions. One of the most

serious problems that he had to face in his efforts to free India from British rule was disunity and distrust, even hate, between the Hindu and Muslim communities. Each community felt that with the British gone, they might face violence and repression from the other. Gandhi made every effort to bridge the differences and to create unity and harmony. His struggles with this problem are highly relevant to us today, when the world is split by religious and ethnic differences.

Solidarity with the Poor

Today's world is characterized by intolerable economic inequalities, both between nations and within nations. 8 million children die each year from poverty-related causes. 1.3 billion people live on less than 1.25 dollars a day. Gandhi's concern for the poor can serve as an example to us today, as we work to achieve a more equal world. He said, "There is enough for every man's need, but not for every man's greed."

Voluntary Reduction of Consumption

After Gandhi's death, someone took a photograph of all his worldly possessions. It was a tiny heap, consisting of his glasses, a pair of sandals, a homespun cloth (his only garment) and a watch. That was all. By reducing his own needs and possessions to an absolute minimum, Gandhi had tried to demonstrate that the commonly assumed connection between wealth and merit is false. This is relevant today, in a world where we face a crisis of diminishing resources. Not only fossil fuels, but also metals and arable land per capita will become scarce in the future. This will force a change in lifestyle, particularly in the industrialized countries, away from consumerism and towards simplicity. Gandhi's example can teach us that we must cease to use wealth and "conspicuous consumption" as a measure of merit.

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4. Abolish Militarism and War that to Achieve Gandhi's Non-violence*

by

Mairead Maguire

I would like to thank the organizers for inviting me to address the conference. Firstly I thank each and every one of you for all your work for peace and for the abolition of war. It is good that we will have an opportunity in the next few days to get to know each other and together discuss what kind of a world we want to live in? There will be many different perspectives on this and the way forward, but let us agree to be civil and respect each other and to remain in deep listening and conversation no matter how hard and where the dialogue might take us! Let us be encouraged by the fact that we have made an important first step when we agree to enter into dialogue, and not to kill each other, and when we agree that Peace is both the means and the great achieveable gift. It would be wonderful too no matter what area of social/political change we work in, if we can unite on a shared vision of a demilitarized world and find strength in agreeing we will not limit ourselves to civilizing and slowing down militarism, but demanding its total abolition.

Some people might argue that Peace is not possible in such a highly militarized world. However, I believe that Peace is so urgent and it is possible. It is achieveable when we each

become impassioned about peace and filled with an ethic that makes peace our objective and we each put into practice our moral sense of political/social responsibility to build peace.

To build peace we are challenged to reject the bomb the bullet and all the techniques of violence. We are constantly bombarded with glorification of militarism and war so building a culture of Peace will not be an easy task. We are hearing about the building of a European Army and whilst asked to accept austerity cuts and budgets cuts to prove basic health care and education, etc., whilst increasing money to our own armies and also European Military expansion. I believe the US/ North Atlantic Treaty Organization (US/NATO) which should have been disbanded when the Warsaw Pac was dissolved, continues to carry out wars and proxy wars in many countries, and pushes towards the borders of Russia, resurrecting a cold war between the East and West. I believe that NATO should be disbanded and should be made accountable and make recompense, for the millions of people whose lives it has destroyed and countries, i.e., Afghanistan, Iraq, Libya, etc. it has illegally and cruelly attacked, invaded, destroyed. We will never be allowed by our Governments, nor our Main stream media, to hear many of the stories of the lives of so many civilians killed by US/NATO forces. NATO forces has targeted and assassinated individuals, and entire families. It is to all our shame in the International community, that their illegal criminal acts of horror and bloodletting which embodies the comeback of barbarism, is being paid for with tax payers money, and rewarded instead of being brought before the International Criminal Court for war crimes.

Ireland's peace activists have been peacefully protesting US military use of Irish airports whereby over two and a half million armed US troops have passed through Shannon airport on their way to an from the US led Afghan and Iraq wars.

*This text was presented at conference Global Campaign against US/NATO military bases, November, 16–18 2018 Dublin, Ireland. Published with the minor changes.

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5. Mahatma Gandhi: Doctrine of Nonviolence, Social Structure, Varnas as Spherons and Castes as their Pathology

by

Maitreyee Roy, *Leo Semashko*

"The half-naked Fakir" of Winston Churchill, went to London to establish himself as a Barrister but very soon got accustomed in spending the days in pomp and spender. This style of living as expressed by him in his own writing `Imitating the English Gentlemen` and explained how he had been following the wrong way and how he was unable to reach his own destiny. He had been running after the mirage of good living until he could return to his senses. To explain this in his own words` Mr. Bell rang the bell of alarm… This ultimately turned his style of living and pushed him back to his senses from a sub-conscious state of mind. That particular confused personality (as it looks from the above analysis) was no one but Mahan Das Karam Chand Gandhi.

In the second phase of his life Mahatma Gandhi had landed to South Africa for the search of career, got involved with the Black Population in their fight for equal status in the society and was ultimately pushed out of South Africa for being involved in in sighting the people to demand their rights.

Thus he returned back to India in the third phase of his life in confused state of mind. In 1915 Mahan Das Karamchand Gandhi became a part and parcel of Indian independence and

became a national leader fighting for the cause of independence. "The half-naked Fakir" then changed into a charismatic figure to the people of India. Mahan Das Karam Chand Gandhi came to be popularly known as Gandhiji Mahatma (Person with a big heart) in India.

As a political personality, Gandhiji can create a deep impact to the minds of the people from all classes of the society. His policy of nonviolence i.e. no negative reaction against any form of violent attack by any one. Love to the people was the only rule of his life also he dreamt of winning the minds of the people both friends and foes through peaceful and nonviolent means. He also made an effort to coordinate and synthesize moral, social, economic and political life (all four societal spheres!), through the establishment of effective democracy.

His call for public action was directed towards establishing world peace. Mahatma Gandhi propagated a socially just order based on the ideas of peace and harmony. He promoted the stage wise development of the society. His initial attention went towards the emancipation and empowerment of women in the society. His very purpose behind the proposition was to evade out unequal treatment against human being (women). The method proposed to be adopted at this stage involved the good practices in human life. To him peaceful explanation of the need for the equality of all sexes in the society could be brought in through mutual respect and mutual understanding in every spheres of life. He was convinced that the harmony of human life may be nurtured and cultivated through non-violence and vice versa: non-violence is achieved through peace and harmony. They are all inseparable. To him principle, the social order can only be possible through the spontaneous use of justice in all four spheres of life. In his opinion, this order need to be achieved through non-violent means within peace and harmony of their fundamental social structure.

The social structure of India has always been determined by superstitious beliefs and false interpretations. According to Gandhi, this applies primarily to the false identification of varnas and castes. For Gandhi, varna and caste are two different things and concepts. He examines this issue in detail in many of his works, especially in the book "My Religion," in chapter 36, "Varna and Caste." He writes: "*Varna has nothing to do with caste. ... Varna means pre-determination of the choice of man's profession. ... Varna is not a human invention, but an immutable law of nature–the statement of tendency that is ever present and at work like Newton's law of gravitation. ... Hindus by their discovery of this irresistible social tendency have been able to achieve in the spiritual field what no other nation in the world has achieved…. Our failure to follow the law of varna is largely responsible both for our economic and spiritual ruin. It is one cause of unemployment and impoverishment, and it is responsible for untouchability and defections from our faith… Down with the monster of caste that masquerades in the guise of varna. It is this travesty of varna that has degraded Hinduism and India. ... The Rishis after incessant experiment and research arrived at this* ***fourfold division****, that of teaching, of defending, of wealth-producing, and of manual service…. Today, nations are living in ignorance and breach of that law and they are suffering for it…. Varna thus conceived is no man-made institution but the law of life universally governing the human family… All varnas are equal, for the community depends no less on one than on another…. Though the law of varna is a special discovery of some Hindu seer, it has universal application…. That is how I look at the law of varna. The world may ignore it today but it will have to accept it in the time to come. It ordains that every one shall fulfill the law of one's being by doing in a spirit of duty and service that to which one is born.*" (Gandhi, 1955) The law of Varna, i.e. the division of society into four equal on occupation classes is the social foundation of the Gandhi non-violence law.

The caste system, according to Gandhi, was introduced later, was the product of Hindu superstitions and fundamentally distorted the law of varnas – the law of dividing society into four equal classes of employment, each of which is equally necessary for every society. Initially, the concept of system Varnas was based on the division of labor and employment. The caste system completely distorted it, rejecting the equality of the varnas and dividing them into many

branch specific groups in a rigid subjective hierarchy of the merits and merits of each of them from the highest and sacred Brahmans to the lowest and the despised untouchables. It is the caste system, according to Gandhi, that is responsible for the perversion and abandonment of the varnas, which led India to stagnation, decline and resistance to progressive change.

The concept of equal varnas in Gandhi is inseparable from his vision of four equal "spheres of (social) life" in which the varnas are engaged. These four spheres constitute society as an "invisible whole", in which "it is impossible to divide the social, economic, political and purely religious areas". (Gandhi, 1955: 133–146, 162–169). In the spheral structure of society and in the varnas (equal rights) employed in their labor/production, Gandhi sees the social foundation of non-violence, which allows him to define non-violence as "the law of our life", as "the greatest force that is more powerful than the most powerful weapon" and say about non-violence as a "science" (ibid.).

The "Global Peace Science of spherons" developed in the GHA and the corresponding holistic sociocybernetic "tetranet thinking of spheres and spherons" is a revival, reading at the modern scientific level and development of the Gandhian doctrine of social life spheres and their varnas. Therefore, the spheral interpretation of Gandhi's non-violence proposed in our book is organic for it and is not imposed on it.

The idea of spherons as large groups of people engaged in the spheres and constituting the source of non-violence is intuitively expressed by Gandhi in his teaching on the "law of Varna". The theory and the "law of spherons" grows out of the "law of Varna" and develops it at the level of modern society and its science. Ancient varnas are modern spherons and vice versa. Their connection is extremely important for both: for the revival and scientific understanding of the non-violence of Gandhi today and for the historical substantiation of the sociocybernetic paradigm of societal spheres and spherons. Therefore, the idea of spherons as Varnas is organic for the Gandhi "science of non-violence".

We list the identical attributes of varnas and spherons.

1. Both societal structures cover the entire population, but the spherons theory was based on the scientific discovery of autopoiesis by H. Maturana (1980).

2. Varnas and spherons differ in employment (profession, labor) in one of the four spheres of social production therefore they are four-dimensional.

3. Varnas and spherons are equal, equivalent, as the products of their production are equally necessary and sufficient for any society.

4. Varnas and spherons ensure the stability, progress and prosperity of society, peace and non-violence in it, acting as their deep, sociogenetic actors.

5. The distortion of both social structures is determined by private, historically transient, but dominant caste or class structures, which become temporary genetic pathologies of the fundamental societal structures that are revived and restored at more mature evolutionary stages of societies and humanity.

All of these qualities are named Gandhi in the definition of varnas above. All of them, re spherons, received a fundamental scientific, theoretical and empirical justification, including statistical, in many works, including this book. The difference between them consists only in the fact that the understanding of varnas, which appeared, probably, about 3 thousand years ago in ancient India, was and remains at the intuitive level of brilliant conjectures and insights. The theory of spherons, on the contrary, arose more than 40 years ago and developed purposefully scientifically within the framework of such integral/holistic social science as sociocybernetics (Semashko, 1992, 1999, 2002, etc.). We can conclude that only the methodology and theory of spherons allows us to adequately understand and evaluate the Gandhian theory of varnas, which, in turn, reveals varnas as an ancient Indian source of spherons more than 3 thousand ago. Here is their relationship and conditionality.

Gandhi believed that the caste division of society is a social ulcer and pathology. The organization of caste-based and untouchables is responsible for the occurrence of discrimination. In relation to the untouchables, Gandhi preferred to use the term "Haridzhan" (son of God). Gandhi wanted the Indians themselves to come out for the abolition of the caste culture and the revival of the culture of Varna. He wanted to repel the caste system prevailing in the Hindu society, expressing a desire to be born in their society as Harijan and share with the untouchables the difficulties that fall to their lot every day. He believed that there should be only one caste – the Shoodra caste, since in this case, there will be no need for a hierarchical division in society and the opportunity to revive the "law of Varnas" will appear.

According to Gandhi, there should be only one caste in society, and we all should unite together to the glory of justice and for the purification of our souls. Therefore, Mahatma Gandhi strongly recommended the elimination of the caste system that existed in India. But how much he succeeded in his mission. Disputes are fought because the system of hierarchical caste division still dominates Indian society (instead of equal in varnas), and each social class is governed by favorable rules and regulations. The time has come to put an end to the caste system and pave the way for the support of the underprivileged population in need of financial support if equality is in principle achieved by abolishing the caste culture in our society and reviving Varnas as equally necessary and sufficient spherons of Indian society.

In conclusion, we would like to say that in the 21st century, the ideas and activities of Gandhi regarding the social structure of India become extremely relevant and need proper scientific research in order to help build a harmonious spheral (based on varnas/spherons) society not only in India, but in all other countries.

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6. Revisiting Gandhi: Issues and Challenges

by

Alagan Annamalai

Rabindranath Tagore, the Nobel Laureate and the son of the soil once wrote about Gandhiji: 'He stopped at the threshold of the huts of the thousands of dispossessed, dressed like one of their own. He spoke to them in their language. Here was living truth at last, and not quotations from books. For this reason, the 'Mahatma', the name given to him by the people of India, is his real name. Who else has felt like him that all Indians are his own flesh and blood…At Gandhi's call India blossomed forth to new greatness, just as once before, in earlier times, when the Buddha proclaimed the truth of fellow feeling and compassion among all living creatures."

Erosion of Ethical Standard and Corruption

When there has been deep erosion of moral values in our private and public life, and when ethical principles have all but disappeared, it is good to revisit Gandhiji because the Gandhian values appear to be

an effective alternative to the present crisis of the world. He provided not only the political leadership to achieve freedom, but also moral leadership, which is of greater need today.

Violence, Terrorism and Extremism

Violence and counter-violence of either side could result in more inhuman form of destruction and we risk tit-for-tat violence that looks hard to get out of this vicious circle. Recent attacks in Belgium and France are just an example of the inhuman, unethical form of retaliation but ultimately the sufferers are mostly innocent people. Therefore Martin Luther King Jr observed the usage of violence and its limitation:

"The ultimate weakness of violence is that it is a descending spiral, begetting the very thing it seeks to destroy. Instead of diminishing evil, it multiplies it… Through violence you may murder the hater, but you do not murder hate. In fact, violence merely increases hate…. Returning violence for violence multiplies violence, adding deeper darkness to a night already devoid of stars. Darkness cannot drive out darkness; only light can do that. Hate cannot drive out hate; Only love can do that".

Gandhi was well aware of the ill effects of the act of violence. He was himself associated with war during Boer War and Zulu Rebellion in South Africa and witnessed two World Wars. Therefore Gandhi evolved carefully and presented to the world the idea of non-violence, the most pragmatic and potent technique of conflict resolution for a civilized society – as an alternative to war and violence. Gandhi's nonviolence is not static, it evolves and adapts to changing situations. He used his non-violent resistance against racial discrimination in South Africa and in India he used non-violent methods to fight against the British Raj.

I would like to quote a few instances of non-violence practiced by Gandhi. In South Africa he tried to present the grievances of Indian residents, who had migrated from India in search of jobs. In the process he had to oppose the various measures formulated by General Smuts. However in 1914, in an act of supreme generosity, Gandhi presented Smuts with a pair of sandals which he had made himself. These were used by Smuts for a few years. But, in 1939, he wanted to return the sandals to Gandhi on his seventieth birthday, saying, "I have worn these sandals for many a summer … even though I may feel that I am not worthy to stand in the shoes of so great a man. It was my fate to be the antagonist of a man for whom even then I had the highest respect. … He never forgot the human background of the situation, never lost his temper or succumbed to hate, and preserved his gentle humor even in the most trying situations. His manner and spirit even then, as well as later, contrasted markedly with the ruthless and brutal forcefulness which is the vogue in our day…"

In the words of Gandhi, "It is the acid test of non-violence that, in a non-violent conflict, there is no rancor left behind, and in the end the enemies are converted into friends. That was my experience in South Africa, with General Smuts. He started with being my bitterest opponent and critic. Today he is my warmest friend".

In another instance, Lord Irwin, who was the Viceroy of India when Gandhiji engaged in a Civil Disobedience Movement through Salt March, once said, "I personally felt I could trust Mr. Gandhi and I did trust him: 'Now I am going to tell you something and if you let it out, my name is mud. It's finished. You have got to keep it to yourself. I'll tell it to you in confidence.' Never a word to anybody came out of Gandhi. Therefore, I have every reason to have great respect and regard for the name of that very remarkable little man." Lord Irwin trusted his own enemy! This trust building is essential in resolving conflict through nonviolent method.

For example, due to the growth of the Hand Spinning (Khadi) Movement in India, most of the textile industries in Manchester and Lancashire were closed down and the people became unemployed. When Gandhi went to London in 1931 to attend the Second Round Table Conference, he wanted to meet those unemployed mill workers. He wanted to convey his real meaning of

'Swadeshi' to the people of England. Finally he conveyed his views and they also understood Gandhi. This is the power of love and nonviolence. It penetrates into the hearts of even the hardest people.

Spiritual Journey – From 'God is Truth' to 'Truth is God'

In a country having great diversity of religion, caste and political affiliations, differences are bound to arise. Differences are a reality and that is the beauty – difference is beauty. Whether we are in India or in elsewhere, we have to appreciate the differences among different communities, religions, nationalities and the like. Gandhi's spiritual journey from 'God is Truth' to 'Truth is God' is the result of the acceptance and recognition of multi-religious and multi-cultural society. Under normal circumstances, domination by the majority or domination by a few results in the suppression of the rest and this invariably creates unrest in the society. Therefore we should create an environment in which all the stakeholders are able to meaningfully participate in the process of development and in the making of the country.

Gandhi once wrote, "*I shall work for an India in which the poorest shall feel that it is their country, in whose making they have an effective voice, an India in which there shall be no high class and low class of people, an India in which all communities shall live in perfect harmony. There can be no room in such an India for the curse of untouchability or the curse of intoxicating drinks and drugs. Women will enjoy the same rights as men. This is the India of my dreams.*"

Cultural Fundamentalism and Intolerance

Gandhiji's religious pluralism involves a profound transformation in the self-understanding of every religion, particularly those making absolutist claims. It requires them to recognize that although they contain truth, it is neither the whole truth nor nothing but the truth, and that they need to be self-critical and open. While some groups in all religions are moving in this direction, others offer strong resistance.

Basically every religion has its own geographical character. If we insist upon certain conditions on other faiths, naturally they react and resist. Recent incidents on religious intolerance posed a great challenge to the fundamental principles of the constitution of India. Freedom of speech and freedom of expression are the fundamental rights of the individual and they cannot be curtailed in a democratic country like India. Some people are trying to interpret nationalism and patriotism in their own way. If we started eliminating people according to our own interpretation, nobody will be left out. Therefore Gandhi said "The Hindus, the Muslims, the Sikhs, the Christians, the Parsis and the Jews should be Indians first and Indians last. Religion is the personal affair of each individual. It must not be mixed up with politics or national affairs."

Gandhi lived and died for communal unity and oneness of God irrespective of labels like Christian, Parsi, Hindu or Muslim or even an untouchable. He transcended all the barriers of religion, language, nationhood, etc and moved with all the people of different faiths in an equal way.

Poverty, Inequality and Structural Violence

Economic development includes alleviation of poverty and hunger, adequacy of the supply of basic needs, reduction of inequality in the distribution of income and wealth, reduction of regional disparities in the rates and patterns of development and finally, preservation of acceptable environmental quality and an enhancement of the quality of life.

The percolation theory believes "growth solves every problem including the problem of poverty". But in reality when growth goes on increasing, more and more families are thrown out at the bottom. This is most vulnerable point in the modern development model. Then question arises, Development for whom? This is the question of the redistribution of the benefit of growth.

Economics as visualized by Gandhi must be seen in the light of his philosophy of life in its totality. He emphasized the need of production by masses instead of mass production. Mass

production is only concerned with the product, whereas production by the masses is concerned with the product as well as the producers, and the process involved in it. If understood in the right context and perspective, his method of production by masses, i.e., decentralized means of production and distribution, would control the growth of centralized mode of ownership, the means of production and the resulting capital formation. Gandhi was not opposed to capital growth but opposed to capital and the surplus concentrated in a few. Instead of accumulating the surplus in the hands of a few, the surplus should be distributed among the masses, thereby bridging the growing gap between the haves and have-nots.

When asked if he was against all machinery? Gandhiji said, "My answer is emphatically 'No'. But, I am against its indiscriminate multiplication… What I object to, is the craze for machinery, not machinery as such. The craze is for what they call labour-saving machinery. Men go on 'saving labour', till thousands are without work and thrown on the open streets to die of starvation. I want to save time and labour, not for a fraction of mankind, but for all, I want the concentration of wealth, not in the hands of few, but in the hands of all. Today machinery merely helps a few ride on the backs of millions. The impetus behind it all is not the philanthropy to save labour, but greed. It is against this constitution of things that I am fighting with all my might."

Gandhi was not against machinery or modern technology. He insisted that machinery or technology should be appropriate to our social and economic environment. It should not control the humanity. It should not replace our huge labour force. Rural economy and agro-based industries should be developed and strengthened. It should be environmental friendly. Ultimately, it should bring the changes in the living standards of the common people. This is what Gandhi wanted. But we are totally misinterpreting Gandhi, in publicizing that Gandhi opposed modernizing technology.

His economic philosophy is vibrant, ever widening. It is not techno-centered, but people-centered. Due to technological advancements fewer and fewer people are needed to work, because the industrialists want greater productivity. The masters of the money economy want more and more efficient machines working faster and faster, and the result is that men and women are thrown out and become technologically unemployed. Such a society generates rootless and jobless millions, living as dependents of the state or beggers in the streets of the metros.

Gandhi was fortunate in a way that no other leader of the world of his time encountered so many civilizations. He lived, experienced and experimented with these civilizations actively and encountered them very passionately. He was born and brought up in the cultural traditions of India, he went to London to study law where he encountered the western civilization and, finally, he struggled in South Africa where he experienced African civilization. Therefore, it has greater meaning when he says, "I do not want my house to be walled in on all sides and my windows to be stuffed. I want the cultures of all lands to be blown about my house as freely as possible. But I refuse to be blown off my feet by any. I refuse to live in other people's houses as an interloper, a beggar or a slave."

Environmental degradation, Pollution and Global Warming

Environmental issues are posing a great threat to the planet Earth. Our planet is a living organism that acts and responds to everything we do on her. We cannot treat the earth as a non-living thing. Recent heavy rains and floods in Chennai are an example for the erratic behavior of the nature. Slowly natural rhythm – natural cycle – is changing due to various factors including Global warming. It is nothing but the consequential effect of reckless industrialism and consumerism. Through various Earth Summits, countries are now serious in taking corrective measures. Gandhiji's idea that "nature has enough to satisfy every one's needs, but not to satisfy anybody's greed" becomes one line ethic to modern environmentalism.

Today we are deliberating upon many issues and challenges pertaining to the modern development. Asking right question at the right time is as important as giving the right answer. Hopefully we have raised here right questions, in order to find out appropriate answers.

I conclude my key-note address with the sayings of Dr. Martin Luther King, "Gandhi was inevitable. If humanity is to progress, Gandhi is inescapable. He lived, thought and acted, inspired by the vision of humanity evolving toward a world of Peace and Harmony. We may ignore Gandhi at our own risk." Gandhi is not a spent bullet, he is the creative alternative

Jai Hind!!! Jai Jagat!!

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7. Mahatma Gandhi: Philosophy of Nonviolence (Ahimsa) and Violence (Himsa)

by

Subhash Chandra

Humanity in the third millennium seems fated to repeat the pattern of the last five centuries in terms of continued recurrence of wars and conflicts. With the advent of the Year 2001, we have entered into new century and new millennium, in which the state of affairs shows no sign of change despite the experience of the twentieth century, when wars became total and horrendous in their destruction.

"We have entered the third millennium through a gate of fire. If today, after the horror of Sept.11, we see better and we see further we will realize that humanity is indivisible. New threats make no distinction among races, nations, or regions. A New insecurity has entered every mind, regardless of wealth or status. A deeper awareness of the ties that bind us all – in pain as in prosperity – has gripped young and old."– Said Kofi Anan (2001).

This transition takes place at the turn of the millennium, where the past millennium personifies the violence of partial thinking, and the future is the nonviolence of spheral, holistic thinking, the "greatest force of nonviolence" of which was ingeniously foreseen and realized by Mahatma Gandhi.

Three Types of Violence in the Galtung Theory

The whole human life – politically, economically, socially and even culturally – appears to be in a state of turmoil and seems to be going through a very grave crisis. Seeing the whole of this catastrophe – the constant repetition of wars, the awful economic and social inequality, the ceaseless conflict between classes, between peoples – one is lead to conclude that the values of life are getting unrelated to the day-to-day facts of life. There seems to be crisis of human values and human character, crisis of culture, and crisis of psyche. This requires be complete transformation, radical revolution of consciousness and thinking. The path of violence, struggle and wars led humanity to the brink of nuclear self-destruction.

Dr. Johan Galtung who is also known as –"Father of conflict & Peace studies" founder of TPU – the Transcend Peace University discovered the Theory of Conflicts (2010) and defined three types of violence:

1) Direct violence – the direct impact of the subject on the object (murder, injury, exile, detention, etc.)

2) Structural violence: societal, institutionalized violence in which common man might be deprived from meeting their basic needs and also the center-periphery contradictions.

3) Cultural violence: when basic entities of our culture, which are relate to our existence, like religion, ideology, art can be used to justify structural violence. (Galtung, 1990, 2010).

However, Gandhi's deep understanding of the philosophy and mutual connection of violence and non-violence remained outside the limits of Galtung's theory.

Nonviolence is Life, Violence is Death

Gandhi's philosophy and religion are based on non-violence, which he clearly and firmly defined as the eternal "law of life". He repeats it dozens of times in his writings. Nonviolence is the indisputable priority of the Gandhian worldview, in which it takes, if it can be said so, 99% or even 99.9%, leaving the remaining percentage to violence or its tenth share, which is necessary for nonviolence to survive. Violence, according to Gandhi, has an animal nature, and non-violence – a spiritual, truly human nature. But in certain conditions a person manifests an animal, violent nature. Sometimes the worldview of Gandhi is painted by the absolute, 100% nonviolence. However, this is incorrect and contrary to the direct instructions of Gandhi. The interrelation of these extremes and the transition from dominance of one to dominance, the priority of the other is the key issue of his whole philosophy of non-violence/violence. We will confirm this thesis with the judgments of Gandhi himself, starting with his definitions of the fundamental role and defining significance of non-violence.

"***Non-violence [harmony, peace] is the greatest force at the disposal of mankind***. *It is mightier than the mightiest weapon of destruction devised by the ingenuity of man. Nonviolence is not the inheritance of cowardice, it is always heroism. Nonviolence is the law of our life….*

Himsa does not need to be taught. Man as animal is violent, but as Spirit is non-violent. The moment he awakes to the Spirit within, he cannot remain violent. Either he progresses towards Ahimsa or rushes to his doom. That is why the prophets and avatars have taught the lessons ***of truth, harmony, brotherhood, justice, etc.–all attributes of Ahimsa***.

And yet violence seems to persist, even to the extent of thinking people like the correspondent regarding it as the final weapon. But as I have shown history and experience are against him. If we believe that mankind has steadily progressed towards Ahimsa, it follows that it has to progress towards it still further."(Gandhi, 1955, Chapter 25).

"***Ahimsa is a comprehensive principle***. *We are helpless mortals caught in the conflagration of Himsa. …Then again because underlying Ahimsa is the unity of all life, the error of one cannot but affect all, and hence man cannot be wholly free from Himsa. So long as he continues to be a social being, he cannot but participate in the Himsa that the very existence of society involves….*

Taking life may be a duty. *Let us consider this position…****Even manslaughter may be necessary in certain cases***. *Suppose a man runs amuck and goes furiously about sword in hand, and killing any one that comes his way, and no one dares to capture him alive. Anyone who dispatches this lunatic will earn the gratitude of the community and be regarded a benevolent man.* ***From the point of view of Ahimsa it is the plain duty of every one to kill such a man****….*

There may be a difference of opinion as regards the appositeness of my illustrations. But if they are inadequate, others can be easily imagined. What they are meant to show ***is that refraining from taking life can in no circumstances be an absolute duty***." (Gandhi, 1955, Chapter 26).

"*My Ahimsa is my own.* ***I am not able to accept in its entirety the doctrine of non-killing of animals***. *I have no feeling in me to save the life of those animals who devour or cause hurt to man. I consider it wrong to help in the increase of their progeny. Therefore, I will not feed ants, monkeys, or dogs.* ***I will never sacrifice a man's life in order to save theirs… Such killing becomes a duty****…* "(Idem)

In the ocean of Himsa/violence, human as a spiritual/rational being rejects from his own priority and builds up the priority of non-violence on the basis of not only the laws of his social spheral nature, but also love that cannot be separated from it. Ahimsa/non-violence is always "love and truth." The path to truth is the path of non-violence and love. And violence is the path of hatred that leads away from truth and love (Gandhi, 1955, Chapter 28).

Nonviolence is based on the "law of varnas" as the ancient spherons law; on the equality and justice of the ancient social structure of Indian society, which was distorted by the caste system, which divided the whole society not based on objective employment of varnas, but based on subjective higher and lower castes. The caste system made violence dominant in society and a priority among people, suppressing the development of India and leading to innumerable victims (Gandhi, 1955, Chapter 36. See also about Gandhi's varnas/spherons in detail the article of Maitreyee Roy above).

From brief fragments of Gandhi's statements, it is clear how he understood and assessed non-violence:

1. This is the law of survival and human life.

2. Non-violence embraces all the positive attributes and values of life, therefore it is inseparable from life, identical to life. Non-violence is truth, harmony, brotherhood, justice, love, peace, unity, equality, dignity, spirituality, prosperity, etc.

3. Non-violence is the driving source of the development of any society, and violence destroys and, ultimately, leads to its death.

4. At the same time, non-violence in the ocean of violence cannot absolutely abandon from violence as a necessary way of its own survival and self-preservation in cases of direct violence or its immediate threat.

Such is the dialectic of non-violence and violence in the philosophy and religion of Gandhi, which he clearly carries out and consistently develops and improves throughout his life. He clearly defines the measure, priorities and conditions for the permissibility of violence in the framework of non-violence, which is the main value and at the same time the main complexity of his philosophy of non-violence, which little is understood in the framework of traditional, partial and violent, militaristic thinking. The value and dignity of the philosophy of non-violence Gandhi becomes quite accessible and understandable in the framework of the spheral tetranet thinking, the paradigm of which is developed and substantiated in this GHA book on the example of the Gandhi theory and practice of non-violence. What Galtung's worthy but limited theory and similar traditional theories have been unable to understand at Gandhi is able to achieve the tetranet thinking paradigm.

Mahatma Gandhi on Violence and Nonviolence in Freedom Movement

Mohandas Karamchand Gandhi, popularly known as Mahatma Gandhi was a major political leader, freedom fighter and spiritual leader of India. Gandhi was not an academic philosopher but he was a great freedom fighter. Gandhi focuses much of his attention on motives and intentions. Violence is often equated with hatred, and non-violence with love. (Allen 2004) *Himsa* means Violence, hurt fullness as lower violent consciousness. Violence is a force of destruction and Non-Violence is a dynamic force of construction & building a peaceful society. However, Gandhian philosophical analysis by focusing on the all forms of violence in all social spheres: economic, cultural, political, psychological, linguistic and so forth. "An eye for an eye only ends up making the whole world blind". Mahatma Gandhi peace is not a static end-state; it is a dynamically on-going process, as Mahatma Gandhi said, *"There is no way to peace, peace is the way."* (Danielson, 2015)

All the mass revolutionary movements created by Gandhi: non-cooperation (1922), resistance – the Salt March (1930) and independence of India or "Quit India" (1942) – were based on its firm spiritual basis of non-violence, which made them not only peaceful but also democratic. He wrote, ***"I believe that in the history of the world, there has not been a more genuinely democratic struggle for freedom than ours"*** (Quit India, 1942).

For this special straggle, Gandhi invented the term Satyagraha, which means "the force of love and truth". Satyagraha is the philosophy of nonviolent resistance most famously employed by Mohandas Gandhi in forcing an end to the British Raj and also against apartheid in South Africa earlier. *Satya* is Sanskrit for Truth, and Agraha is used to describe an effort, endeavor (Tendulkar, 1947). Satyagraha is "soul-force". It could be called "truth force," and because Gandhi associated truth with love, Satyagraha could also be translated as "**the force of love."**

*"*Nonviolence is power of Truth. Ahimsa is the foundation of Satyagraha. Ahimsa can be translated as "nonviolence," but the meaning goes beyond that. Ahimsa is derived from the Sanskrit verb root himsa, which means "desirous to kill," and the prefix a – is negation. So a-himsa means literally "lacking any desire to kill," this is central to Hindu, Jain, and Buddhist morality. In the *Manu Smriti,* the book of laws in Hinduism, says that *'Ahimsa Parmo –Dharma "Ahimsa* is the highest law. *"Satya and Ahimsa together make the present truth from which all innumerable branches shoot out*" (Tendulkar, 1951, Volume-1, Page202)

Mahatma Gandhi's Death

The assassination took place on January 30th 1948. In point blank range, Nathuram Godse shot and killed Mahatma Gandhi as he was walking to his prayer meeting. Gandhi's **purpose was to end the bloodshed among Hindu and Muslim groups**. On January 18, their leaders pledged to stop fighting and Gandhi broke his fast. Twelve days later, in New Delhi, while on his way to a prayer meeting, Gandhi was assassinated. Nathuram Godse, a Hindu fanatic who opposed Gandhi's program of tolerance for all creeds and religions. A shocked India and a saddened world mourned Gandhi's death. The great scientist Albert Einstein (1955) said of Gandhi: *"Generations to come will scarcely believe that such a one as this walked the earth in flesh and blood.*"

The Global Peace Science of Spherons:
Development of Non-violence in the XXI Century

Mahatma Gandhi is a source of inspiration not only for India, but for the whole world. He inspired the world with his faith in truth and justice for all of humanity. Gandhian nonviolence is a very powerful force that allows us to avoid conflict, because it stems from the inner awareness of the equality of all people. The most fundamental sociological and sociocybernetic understanding of social equality is given by tetranet thinking and its "Global Peace Science" (2016) based on the genetic structural harmony of spherons. More than 3 thousand years ago, the most ancient Indian expression of this structure is defined by varnas, which serve as a deep historical confirmation of the spherons theory. Gandhi deeply investigates the theory of varnas, which he sees as a source of non-violence (Gandhi, 1955, Chapter 36).

The science of global peace (GPS) is the most justified statistically, historically, and theoretically development of non-violence in the 21st century, suitable for the peaceful global construction of a non-violent harmonious society, excluding war and the dominance of violence/militarism. "*War is not the way to peace; the global peace science is the path to peace in the 21st century*" (Semashko, Subhash, 2015). GPS is the science of non-violence, which Gandhi dreamed of, for building bridges of peace and global harmony in the name of saving humanity and the planet.

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8. Remembering Mahatma Gandhi. A Bahá'í Tribute on his 150th Birth Anniversary by *A. K. Merchant*

Mahatma Gandhi was well acquainted with the Bahá'í Faith. Gandhiji had personal contact Mr. Mani H. M. Mehta, then Chairman of the Spiritual Assembly of the Bahá'ís of Bombay, who shared the Bahá'í teachings with him. On other occasions, Mrs. Shirin Fozdar, a well-known

Bahá'í, met Gandhiji a number of times. Some American Bahá'ís visiting India were also able to meet Gandhi during his imprisonment in 1942 at Aga Khan Palace, which had been converted into a jail.

Martha Root, a New York Times, journalist and Bahá'í traveller, mailed Gandhi a copy of *Gleanings from the Writings of Bahá'u'lláh* (a compilation), when she was in Surat, Gujarat, probably around 1937–38. She had visited India three times and was invited by Gurudev Rabindranath Tagore to Shantiniketan.

Most memorable of all, of course, is Gandhiji's famous phrase, "The Bahá'í Faith is a solace to mankind." These words appeared in the *Bombay Chronicle* newspaper on May 24, 1944, during the centenary of the Bahá'í Faith. The Mayor of Bombay, Shri Nagin Das Master, mentioned Gandhiji's praise of the Bahá'í Faith in the course of his inaugural address at an event organized by the Bahá'í community of Bombay, and the *Bombay Chronicle* carried parts of his speech.

Now let's look at the legacy of Gandhiji in current times on the eve of his 150th birth anniversary. As Father of the Nation, he towers over all the other leaders of the freedom struggle. In today's "global village," many of Gandhiji's teachings appear pertinent again and are receiving renewed attention. Seventy years after his martyrdom he continues to inspire millions including some who themselves became world-leaders such as Khan Abdul Gaffar Khan, Martin Luther King Jr., Albert Einstein, Nelson Mandela, President Barak Obama, and many others in our own country. The direction of his thought is challenging and points to a holistic worldview anchored in Indian civilizational ethos.

Truth and nonviolence were Gandhiji's most cherished principles. Gandhiji writes: "Truth resides in every human heart, and one has to search for it there, and to be guided by truth as one sees it. But no one has a right to coerce others to act according to his own view of truth." Gandhiji teaches that Truth is God, and that it is our sacred duty to seek it. If Truth was to Gandhiji the Ultimate End (i.e. God), then *ahimsa* (nonviolence) was the perfect means of attaining that end. He writes: "Non-violence is the greatest force man has been endowed with. Truth is the only goal he has. For God is none other than Truth. But Truth cannot be, never will be reached except through non-violence… That which distinguishes man from all other animals is his capacity to be non-violent. And he fulfils his mission only to the extent that he is non-violent and no more." From these two fundamental principles can be "derived" all of his other teachings:

1. **Oneness and Equality of Religions,** "The root of all religions is one and it is pure and all of them have sprung from the same source, hence all are equal." "This study of other religions besides one's own will give one a grasp of the rock-bottom unity of all religions and afford a glimpse also of that universal and absolute truth which lies beyond the `dust of creeds and faiths'."

2. **Sarvodaya and Collective Trusteeship,** *Sarvodaya* is the name given to Gandhiji's ideal of nonviolent socialism. He teaches that one should earn no more money than is enough to support oneself and one's family, and advocates voluntary sharing of excess wealth. Gandhi condemns its forceful redistribution: "Wealthy people should act as trustees of the wealth. But if they are robbed of this wealth through violent means, it would not be in the interest of the country. This is known as communism. Moreover, by adopting violent means, we would be depriving society of capable individuals."

3. **Village Autonomy,** Gandhiji advocates independence for the common people, not just for those who rule over them. " My idea of village *swaraj* [self-rule] is that it is a complete republic, independent of its neighbours for its own vital wants, and yet interdependent for many others in which dependence is a necessity."

4. **Decentralization of Power**, According to Gandhiji, centralized government is inherently prone to violence. He advocates decentralization of political power. "Life will not be a pyramid with the apex sustained by the bottom. But it will be an oceanic circle whose centre will be the individual always ready to perish for the village, the latter ready to perish for the circle of villages, till at last the whole becomes one life composed of individuals, never aggressive in their arrogance, but ever humble, sharing the majesty of the oceanic circle of which they are integral units."

5. **Self-reliance**, *Swadeshi* (Self-reliance) is mainly understood to mean a protectionist technique that Gandhiji employed against the mercantilistic policies of the British, whereby the masses were urged to abstain from cloth manufactured outside India, and instead to use cotton, silk, or wool cloth made in India. "*Swadeshi* means reliance on our own strength…'Our strength' means the strength of our body, our mind, and our soul. From among these, on which should we depend? The answer is brief. The soul is supreme and therefore soul-force is the foundation on which man must build."

6. **Machines,** Gandhiji strongly disapproved of machinery. He wrote: "Every machine that helps every individual has a place. But I must confess that I have never sat down to think out what that machine can be." "I would prize every invention of science made for the benefit of all." 7. ***Yajña* and Service**, Gandhiji teaches that work should be done with pure motives, without desire for any type of reward. He writes: "'*Yajña*' means an act directed to the welfare of others, done without desiring any return for it, whether of a temporal or spiritual nature. 'Act' here must be taken in its widest sense, and includes thoughts and word, as well as deed. `Others' embraces not only humanity, but all life."

8. **Passive Resistance,** the word *Satyagraha* was coined during Gandhiji's lifetime to describe passive resistance, as developed and practiced by him in South Africa. It can be literally translated in English as "insistence on truth." As a method of last resort, Gandhiji did use civil disobedience–passive resistance in its most disruptive (and violent) form. Gandhiji's method of nonviolent non-cooperation is a true and tried technique that has been successfully used to fight violent and systematic human rights violations in a number of states. Examples of leaders who have adapted the method include Nelson Mandela, Martin Luther King Jr., and His Holiness the Dalai Lama.

9. **Human Rights and World Citizenship**, Gandhiji teaches that every human right is fundamentally related to some reciprocal responsibility towards the world. He writes: "All rights to be deserved and preserved come from duty well done. Thus the very right to live accrues to us only when we do the duty of citizenship of the world. From this very fundamental statement perhaps it is easy enough to define the duties of man and woman and correlate every right to some corresponding duty to be first performed. Every other right can be shown to be a usurpation hardly worth fighting for."

10. ***Ramarajya* and World Federation**, According to Gandhiji, it is possible to establish *Ramarajya*, or the Kingdom of God, on earth. Indeed, he seems to have believed in its inevitability. But before this can happen, nations must renounce violence towards each other and learn to live in peace. He explains that "a world federation is possible of realization and in that case it would not be necessary for countries to maintain armed forces." "There can be no world federation of countries ruled by armies."

To sum up, let me briefly return to the Teachings of the Bahá'í Faith and its relevance to the ideals of Gandhiji. *Encyclopaedia Britannica 1992 Book of the Year* indicated that the Bahá'í Faith is the most widely diffused religion on earth after Christianity. The Bahá'í community numbers more than six million members, and there are now Bahá'ís in every country on earth. Over 2100 ethnic groups and tribes are represented.

Bahá'ís give great importance to community life. All administrative authority is vested in elected institutions at the local, national, and international levels. There is no ritual, no clergy. The supreme governing council of the Bahá'í Faith, the Universal House of Justice, is located in Haifa, Israel. It was first elected in 1963 in what probably was the first global, truly democratic election in the history of our planet. Since then, the community has initiated and has been actively engaged in thousands of educational programmes and socio-economic development projects in across the globe.

Believing that the United Nations represents a major effort in the unification of the planet, Bahá'ís strive to support its work in every way possible. The Bahá'í International Community is accredited with consultative status with the United Nations Economic and Social Council

(ECOSOC) and with the United Nations Children's Fund (UNICEF). The Bahá'í Community's offices in New York, Geneva, Addis Ababa, Singapore with affiliates in 180 countries. Bahá'ís in many lands regularly participate in conferences, congresses and seminars concerned with the socio-economic and sustainable development of our planet.

Bahá'ís further believe that macroscopic phenomena that emerge from the interaction of many microscopic components, shapes to some extent one's understanding of social, economic, political, and historical processes. Let me give an illustration, since it may be of interest to the reader. When a substance approaches a phase transition, such as the change of state from solid ice to liquid water, local fluctuations (of say, density) grow until a "critical state" is reached. Near this critical point, fluctuations in every part of the system become "correlated," no matter how great the distance between them, and the system appears "fractal." As the phase transition continues past the critical point, the correlations become weaker again and finally the entire system changes over to the new ordered state. The ideas and actions launched by Gandhiji in his life time could be juxtaposed to the study of phase transitions of 1960s and 1970s that eventually found application not only in related fields of physics, but also in other sciences, such as cardiology and economics. To a significant extent, such ideas also influenced my personal understanding of the transition process from the old world order, organized along the lines of "sovereign" and "independent" nations, to the new World Order foretold and described by Bahá'u'lláh, a spiritual civilization ordered and governed globally through interdependent institutions of planetary scope. To this end, I have tried to show that the moral, political, and social writings of both Gandhiji and the Bahá'ís point to a deeply spiritual collective future for our planet. Ours is the privilege and duty to help complete this transition to the emerging global *Ram Rajya*.

It may be challenging to understand the nature of what is being asked of us. After all, the path of sacrifice that leads from the valleys of self towards the heights of service very much remains the road less travelled, the straight and narrow path. Nevertheless, the underlying concept is simple enough: to think less of ourselves and more of others, this is most wonderfully epitomized in Gandhiji's favourite *bhajan: Vishnaiva jana te ney kahi ye, pir a para iy ja ney rey…*

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9. The IASE Deemed University Gandhian Ideals
by
Kanak Mal Dugar

IASE (Institute of Advanced Studies in Education) Gandhi Deemed University feels privileged in supporting Global Harmony Association in the noble cause of spreading the message of Peace through Harmony in our joint publication of the ABC of Harmony (2012), Global Peace Science (2016) and this Gandhi book now. Harmony and nonviolence are inbuilt in the Nature. We create the conflicts.

At the end of the colonial era, just after Indian Independence, a divine inspiration guided the founder of Gandhi Vidya Mandir, Shri Kanhaiyalal Dugar (my father) to spread the message of Peace and Harmony through Value based Education. After due planning he started Gandhi Vidya Mandir o-n 2nd October, 1950, o-n the birth anniversary of Mahatma Gandhi. Subsequently, he

donated all his wealth and took Sanyas (asceticism) and was known as Swami Shri Ram Sharan ji Maharaj. The institution started working in the field of education, health, rural development, social welfare and research in the very backward and desolated that desert region of Rajasthan. In 2002 Gandhi Vidya Mandir proceeded a step ahead in the direction of achieving its long cherished goal of inculcating human values in the students when University status was granted to o-ne of its constituent IASE Deemed University. Today it has eleven colleges, six schools, rural development centers, Agro-science centre, Gaushala (Cow Home), Orphanage and Craft Training facilities etcetera on its campus of over 1000 acres.

Two most liked slogans, which were the path markers in the life of our founder Swamiji were

i.No o-ne is other, No o-ne is another (Koi Aur Nahi, Koi Gair Nahi)

ii.No desires, be utilitized (Kuch MatChaho, Kaam Aa Jaao)

Even today I think this is the royal path of harmony because till the evils like greed, selfishness, desires, laziness (idleness), feeling of inequality and intolerance persist in any equation the conflict remains. When no o-ne is another, we are all the same as the creation of the Nature or the creation of its master (as o-ne believes), thus disharmony dwindles; when there is no desire, conflict can never arise. When the feeling of being consumed and utilized for others comes, Harmony blossoms automatically.

The spiritual master of our founder Revered Swamiji gave these ideals for Gandhi Vidya Mandir:

1.Introspection, that is by critically observing our mistakes through self generated power of discretion.

2.Emphatically resolving not to repeat our mistakes.

3.Adopt doctrinal experimentation with ourselves but have faith in others, keeping the binding of laws for ourselves but love and forgiveness for others.

4.Regenerate and reorient ourselves by the mastering our desires and senses, serving others, remembering supreme consciousness and quest for truth.

5.Never treat others duty as our right, others benevolence as our virtue, others weakness as our strength.

6.Develop family like o-neness irrespective of the differences and diversity.

7.Render all possible creative service to the nearby society.

8.For physical betterment use self control in diet and recreation and maximize self-reliance in meeting our own needs. discretion

9.Make o-ne-self beautiful by industrious body, Spartan mind, prudent intelligence, loving heart and egoless personality.

10.Give more importance to goods over coins; persons over goods; discretion over person and Truth over discretion.

11.Abnegate useless thoughts and positively utilize the present for a bright future.

Another important reality is that disharmony has to disappear from the inside of the personality of individuals. one has to be in perfect harmony with themselves and only then we can think of Global Harmony. These golden principles when adopted can start the transformation from inside. Disharmony then will start fading down as the society starts proceeding towards adopting these principles. Then only Global Harmony from ABC to Z can be achieved. The ABC of Harmony and Global Peace Science lift these principles and ideals on the new spiritual level of human integrity

Therefore, the IASE University established in its structure an international department of "Social Harmony and Harmonious Civilization" based on the ABC of Harmony and Global Peace Science in order for teachers of India and relevant scientists to spread the spirit of its harmonious philosophy, its Gandhian nonviolent outlook and thinking around the world. This is one of the main spiritual meanings of the ABC of Harmony and Global Peace Science for people of world, India, and for our university IASE in particular. This department training programs will significantly raise the national and international prestige of our University.

Shri Kanak Mal Dugar,
Chairman, Gandhi Vidya Mandir,
Chancellor, IASE Deemed University,
GHA-India Honorary President,
Web: https://peacefromharmony.org/?cat=en_c&key=481

10. Confessions in Our Time: Gandhian Spirit

by

Ernesto Kahan

For many years, I have written essays and papers about the urgent need for a World global agreement based on harmony; today, with the purpose of attracting more people; I decided to write it in the form of a letter.

Dear Cohabitant on Earth

A day of unbearable heat and, while on television there were repeated announcements requesting everyone to preserve water, which, despite the existence of desalination plants, was increasingly scarce. I was walking through the park near the university and looking at the grass that had a yellowish tinge.

I sat on a bench in front of a many hundred-years-old tree, one of those that, due to their age, lived through the history of revolutions, wars, technological advances and dictatorial leaders who inflamed confused multitudes. The tree brought to mind existential thoughts about the present and future of life on planet Earth, because I belong to a complex generation of human beings existing among times of violent wars of domination, the development of amazing new technological techniques, including atomic weapons for the final destruction of civilization, supercomputers, industrial globalization, artificial intelligence, and the capacity to produce resources to eliminate hunger in the world. We are a generation that lives with dilemmas that question the future of humanity and all biology.

While I analyzed all this, I felt that my body was flooded with endorphins, which are the internal substances that react to strong emotional reactions of pain, love, joy, exaltation of nature, or crises of my own identity – reactions that provoke changes in my breathing and probably in blood pressure. Immediately, I felt my eyes and face were flooded with tears that were accompanying my sadness.

I remembered Elon Musk, the well-known person that founded PayPal, the electric vehicle and battery company Tesla and the private space corporation Space X, who commented that we are facing an immense threat: artificial intelligence. "Which is like those stories in which someone summons the devil" It was clear to me, that this is similar to the saying of Albert Einstein "We must think in a different way so that humanity survives"

The trunk of that centennial tree told me that we are living in an historical period in which commitment and education are necessary to achieve tolerance to save the positive aspects of our civilization as social progress in freedom, care for ecology, peace and harmony.

Yes, my dear co habitant on Earth, to obtain survival on Earth, we must obtain comprehensive peace in the world, and for that, we must reach a global agreement based on harmony, and of course using tolerance and respecting the dignity of the people.

Today many intellectuals of the world are offering robust determination to work with the heart for a more humane and just world, a world that is less violent, healthier, and also protective of the environment. That is, a work struggling for tolerance, harmony and universal peace, or in other words, for the dignity of man.

I was looking at the horizon and convinced myself that if we manage to educate those who deny or question the need for peace, it will be not a utopia. However, if we will not achieve it, and then life on Earth will disappear as the consequence of the use of atomic weapons, the universe will continue, since permanently it confronts explosions and collisions of stars and even galaxies. The question is, given the danger of using modern genocidal weapons, have we the ethical right to be indifferent? I at least will not.

The conclusion is simple: It is necessary to enlist ourselves in a crusade for harmony for peace. It is not easy but it is not a utopia. Political leaders, intellectuals, artists, journalists, educators and the public in general must act in such a way.

After that, I walked and put together my thoughts on modern leaders and, inescapably, on Mahatma Gandhi, to whom I wrote the following poem:

Gandhi ji

"An eye for an eye will make the whole world blind."
Mahatma Gandhi

(Author's drawing on this topic is published in the book's "Applications".)

At this time, one hundred and fifty years from your birth.
The "shofar" **(horn) sounds**
to celebrate your life,
your teaching; the never ending way to act:
"Whenever one is confronted with an opponent,
One has to conquer him with love."
Yes, Gandhi ji
If people could understand that with the use of love
they will achieve more than with the use of hate…!
When such a shofar **sounds** announcing a New Hebrew Year,
reaches the heart of everyone
provoking painful feelings **of the** undesirable acts
for the good of the world.
Yes, Gandhi ji
Our poetic art is like this horn,
waking-up consciences
for a new world in harmonious peace.
Yes, like flowers born to seed a green future
for deserts and thorns,
for the most beautiful things, we can give them:
Freedom – tolerance – respect – health
– love – study – art – justice in peace…
Gandhi ji,
Your friend, Poet Rabindranath Tagore,
was the lyrical voice of the "man within the heart".
To both of you, I embrace that union and plead:
Be always our torches of knowledge;
So often forgotten;
Unite the hands, and
be the bridges of hope and the necessary forgiveness
encompassing a world,
that will be only one, or in replacement, none.
Gandhi, Gandhi ji

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Former Vice President of IPPNW (Association awarded the Nobel Peace Prize)
Israel President. Global Harmony Association (GHA)
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11. Mahatma Gandhi: The Nonviolent Education Ideas

by
Pravat Kumar Dhal

"Gandhiji was one of the deathless few across the centuries who have lifted human character to immortality who made humility and simple truth more powerful than empires"
Vandenberg, A.H.

Introduction

M. K. Gandhi is known as father of nation in India. The word 'Mahatma' means great soul. His education is characterized nonviolent in its integrity, naturalistic in setting, idealistic in aims and pragmatist in its method and program of action. His educational experiment was commenced at the Tolstoy farm at Transvaal in South Africa. On the farm he taught some children. The learning period was 10 hours i.e. 8 hours vocational and 2 hours book learning. He took his experiment in the age group of 6 to16 years of children. In 1914, Gandhiji returned to India and continued his experiment in education at *Shantiniketan*, *Sabarmati* and *Sevagram*. He established his own ashram at Sevagram, which was 11 miles from Wardha. He shaped his new system of education there. On education , he wrote '*Basic Education'*, '*True Education*', '*To the Students'*, '*Medium of Instructions'*, '*Tasks before Indian Students'* and so on. His other important writings are *'My Experiments with Truth'. 'Autobiography', 'Commentary on the Bhagabat Gita"*. His life was like an open paper which can be read by everyone. He taught virtue of self-discipline and self-purification to the people. His means to succeed life was Truth and Ahimsa (nonviolence). He observed, "The immediate service of all human beings becomes a necessary part because it is the only way to see him in his creation."(Dhal, P., 2012, p.144) He wanted to establish a harmonious society based on love, non-violence, truth, justice and equitable distribution of wealth. He aimed at cooperative self-sufficient community with harmonious development of individuals, a well-balanced individual in a well-balanced society.

Meaning, Concept and Aims of Education

Gandhiji wanted all round development of children. Hence, he wrote, "By education I mean an all-round drawing out of the best in child and man-body, mind and spirit." He wanted to develop in the child his hands, head and heart. For a good education purity of personal life is needed. He believed that education should develop all the capacities of the child so that he becomes a complete human being that means full development of the body, mind, heart and soul of the child. According to him, Self-realization is the ultimate aim of life as well as education. Faith in God is necessary to realize it. He also wanted an education for individual perfection, social order, character development, self-reliance, community centered, and liberation as immediate aims of education.

Educational Thoughts

According to Gandhiji, "…truths that are common to all religions can and should be taught to all children…The children can learn these truth through the daily life of teacher. If the teacher himself lives up to the tenets of truth and justice then alone can the children learn that Truth and Justice the children learn that Truth and Justice are the basic of all religions."(Thinkers on Education, P.35) Gandhiji's educational thoughts are called as basic education, which fulfils the basic needs of human beings. He stressed on free and compulsory education. The craft, the mother tongue, mathematics, natural science, social study, music, drawing and Hindustani (common

language) are included as subjects of his curriculum. He was in support of women education, adult education, religious education, university education, craft centered education. The provincial language must be given right place as medium of instruction. Self-reliance, freedom and discipline must be adhered in his thoughts. His concept of '*Nai Talim'* extended the scope of basic education in order to include the education of everybody of every stage of life. It is lifelong education.

According to him, "A curriculum of religious instructions should include a study of the tenets of faiths other than one's own. For this purpose the students should be trained to cultivate the habit of understanding and appreciating the doctrine of various great religions of the world in a spirit of reverence and broad minded tolerance."

Teaching is imparted through activities. The students are provided various knowledge and varied subjects. Correlation, manual work, experimentation, oral teaching of mother tongue are considered as methods of instructions.

Mahatma Gandhi's concept of value education is based on moral and ethical knowledge. He considers without morality and without ethics, no student, in real sense, can be considered to be healthy in mental and physical terms. Self-control and good character is essential to become a good student. "A person, who is not a moralist and who does not differentiate between right and wrong, cannot rise to the essential level of a true student.(Ravindra,2007)" Then, the attainment of spiritual growth that has been described by Mahatma Gandhi, as an essential part of education, can only be gained through morality and ethics.

Mahatma Gandhi laid down some rules for students so as to ensure that morality and righteousness always be considered as an essential and un-differentiable part of education. He said that on one hand where students should gain education under the strict regimen of high morals, self-control and right thinking, on the other they would also be expected to provide service to the society in general. This includes their respect towards mother, father, teachers and elders, adorations towards younger, following of social traditions and constant awareness towards their duties and responsibilities.

Mahatma Gandhi encourageded of religious education in order to strengthen morality and ethics in students. This kind of education brings the values of forbearance, tolerance and reverence in one's character. Mahatma Gandhi inspired all teachers to impart proper education of morality and ethics to students both at school and college levels. In this regard suggests that it is the duty of teachers to develop high morals and strong character of their students. Explaining the importance and need of religious education, Mahatma Gandhi writes in the 'Young India' of 6th of December 1923:

"If teachers fail to do so, it means that they depart from their social and national responsibilities and as such they are also insincere towards their noble profession. He said that a teacher should lay an example, to be followed, before society and students. This can only be done when he himself leads his life with high standards of morality and strong character. An ideal teacher should be free from any addiction. He needs to be polite and should set an ideal example of simple living and high thinking. He should also remember that wasting time is a sin; therefore, he should be aware of his duties towards students and society. Therefore, it is the foremost duty of students, as well as of teachers to make it certain that moral and ethical knowledge continues to be the integral part of the education process. By doing so, they can contribute in the development of Value Education."

Conclusion

Gandhiji's educational philosophy is at once non-violent and practical oriented. It is based on the high ideals on then one hand stark realities on the other hand and reflect essential democratic and socialistic values so familiar and congenial to Indian tradition and culture. He was a man experimenting with truth. His thought evolved and grew with time. The Education Commission of India (1964–66) observed: "The Program of basic education did involve work

experience for all children in the primary schools, though the activities proposed were concerned with indigenous crafts and the village employment patterns. If in practice basic education has become largely frozen around certain crafts there is no denying the fact that it is always stressed the vital principle of relating education to productivity, what is now needed is a reorientation of the basic education program to needs of the society that has to be transformed with the help of science and technology. In other words, work experience must be forward looking in keeping with the character of the new social order." There were lakhs of people influenced by Gandhiji for his ascetic life and will power.

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12. Mahatma Gandhi and Aleksandr Solzhenitsyn, The Two Nonviolent Giants Who Blessed the 21st Century*

by

Vladislav Krasnov

Proem

We all know of Samuel Huntington book "The Clash of Civilizations," where, after the collapse of Communism in the USSR and Eastern Europe, he predicted that "*the fundamental source of conflict will not be primarily ideological or economic. The great divisions among humankind and the dominating source of conflict will be cultural*".

There is no reason to rejoice at the prospect of cultural–rather than economic or ideological–hostilities and possibly wars, especially now when such wars present a real risk of annihilating humankind. I believe that public initiatives, such as Leo Semashko's the Global Harmony Association (GHA), Rene Wadlow's the Association of World Citizens (AWC), Andre Sheldon's Global Strategy of Nonviolence.org, Sander Hicks' newyorkmegaphone.com, and several others **offer a different, more promising and more harmonious paradigm for international relations based on Nonviolence, Harmony and Tolerance necessary for all civilizations**, now matter how different, to co-exist for the benefit of all. So, implicitly my essay on Gandhi and Solzhenitsyn aims at buttressing this new paradigm of international relations embodied in the above organizations and individuals.

My list of cultural heroes is far from complete in my article below. I welcome any suggestion of outstanding men and women who promoted the idea of harmonious co-existence and co-operation of all "civilizations" and ethnic cultures no matter how small. At a time when ecologists affirm the need for biodiversity, politicians should be nudged to doing the same for all civilizational and cultural groups.

This essay honors the Martin Luther King, Jr. Day that fell on January 21, 2019

On October 2, 2018, the world honored Mahatma Gandhi's 150th Birthday Anniversary. Few weeks later, on December 11, there was Aleksandr Solzhenitsyn's first Centenary. At about the time of Mahatma Gandhi's martyrdom by a bullet of an overzealous Hindu nationalist in January 1948, Aleksandr Solzhenitsyn had just begun his *Via Dolorosa* going through all the circles of Soviet Hell. He started with the First Circle at a *sharashka*-style research lab for prisoners, and then went down to hard labor at lower circles. After he had graduated from the GULAG to internal exile in Kazakhstan, he also survived a bout with cancer. Only after his exile was cut short in 1956 by Nikita Khrushchev's rehabilitation program for the unjustly sentenced, was he

able to dedicate himself to healing Russia, *from its own political cancer*, by truthfully describing the affliction of totalitarian society.

He won. In 1991 the USSR collapsed, and in 1994 he was able to return–now from an external exile in the USA–to his beloved Russia where he then began to describe what has gone wrong since 1991. He died on August 3, 2008. Dmitry Medvedev, then president, and his predecessor and successor, Vladimir Putin, were among the mourners who joined the Nobel laureate's family and friends for a funeral service held at Moscow's historic Donskoi monastery. *Thus one might say that Gandhi and Solzhenitsyn dominated the 20th century as two mighty spiritual powers for truth, justice, harmony, and Non-Violence in domestic and foreign affairs.*

The name of Gandhi in Russia before the Bolshevik Revolution

The name of Mohandas Gandhi has been known in Russia since the time he had an exchange of letters with Leo Tolstoy, the world-famous novelist and the founder of "*Non-Resistance to Evil by evil means*" movement. Reading their correspondence one gets the definite impression that the two kindred souls found each other in 1909. However, the promising interchange was soon cut short by Tolstoy's death in 1910. The Bolshevik Revolution and the bloody Civil war followed (1917–1921).

The Soviet Union lost no time in cancelling the very idea of Non-Violence, be it in a Tolstoyan or Gandhian form. To add injury to the insult, many of Tolstoy's followers found themselves behind bars and in the far away regions of the GULAG. While Soviet school programs included the study of Tolstoy the writer, the wisdom of his later years was dismissed as "*counter-revolutionary*" and his writings untoward were not published. Thus, in my school years, I was able to read some, but only via the risky *samizdat* distribution.

Gandhi in the USSR

The name of Gandhi reappeared in Russia when the USSR and India under Jawaharlal Nehru were forging mutual ties via the Non-Allied countries movement to counter both Communist China and "Imperialist" America. Those ties were further strengthened under Nehru's daughter and India's Prime Minister Indira Gandhi. She was not related to Mahatma Gandhi, but his heritage was fundamental to India, both domestically and in foreign affairs. To be sure, Soviet respect was officially paid to the founder of India's independence from the British rule. Still, in spite of the official proclamations of Indian-Russian brotherhood–the slogan of "*Hindi –Russi bhai bhai*" was ubiquitous in the USSR– Soviet propaganda made it clear that Gandhi's non-violent tactics *were not just inferior but contrary to the Marxist-Leninist theory of violent world revolution of which the USSR was the first champion*.

Back to Russia's National Identity

When the Soviet Union collapsed in 1991, it became necessary to find a new ideational, ethical and spiritual framework for Russia's domestic as well as foreign policy. A general feeling was that the New Russia, in order to buttress its claim to sovereignty, had to fall back on its pre-Communist national past for inspiration, if not for the framework. It was not an easy task, for the early Lenin government and its successors left no stone unturned in their efforts to erase Russia's national identity, especially its Eastern Orthodox Christian heritage, as well as its ancient customs, art, and literature, both in Russian language and the languages of national minorities who identified themselves with Russian civilization.

After the collapse of the USSR, the triumphant USA was not interested in the New Russia's sovereignty, much less in the revival of Russian civilizational identity. As convincingly argued by professor Janine Wedel among other authors, during the 1990s the USA spared no efforts to establish in Russia an economic system fully compatible with and subordinated to the neoliberal

brand of economics that garnered then currency in the West. Along with the *shock therapy* economic reforms the American cultural influence flooded Russia with mass advertisement, consumerism, "*political correctness"* in gender politics, drugs, cheap and sexy Hollywood products, etc.

Solzhenitsyn warned of Trouble from the West

But the one man who had in advance warned the Russians against surrendering to Western cultural imperialism was Aleksandr Solzhenitsyn, the foremost champion against Soviet totalitarianism, whom Soviet leaders kicked out of Russia. Of all countries, he chose the United States as a place of refuge from which he was best able to restore Russia's true history from the sources unavailable in the USSR. Solzhenitsyn appreciated American liberties, but was also aware of the shallowness of its mass culture and the lack of commitment to spiritual values. Above all, he knew that one cannot simply export a form of government, no matter how "*good,*" from one country to another as a kind of commodity. That's why, before he returned to Russia in 1994, he had warned fellow Russians "*not to lift the Iron Curtain in a hurry, for as soon as you do, you will get flooded by a flow of sewage*".

Repentance and Self-limitation in the Life of Nations

Solzhenitsyn was more prescient than that. In 1973 he wrote REPENTANCE AND SELF-LIMITATION IN THE LIFE OF NATIONS, an essay in the collection of several Soviet dissident authors. Titled "From Under the Rubble" the collection was circulated in clandestine *samizdat* as it was aimed to *explore how Russia could exit from what they felt was the dead-end of Communism.* It was published by Russian émigré press in the West in 1974 and then translated into English.

"*The gift of repentance, which perhaps more than anything else distinguishes man from the animal world is particularly difficult for modern man to recover. We have, every last one of us, grown ashamed of this feeling; and its effect on social life anywhere on earth is less and less easy to discern. The habit of repentance is lost to our whole callous and chaotic age,*" started the essay. Solzhenitsyn clearly aimed at Soviet citizens who knew about the need to confess political mistakes to Party officials, but not about the need to clear one's conscience for trespassing on a fellow next door.

Expanding his message beyond the USSR, Solzhenitsyn predicted, like Gandhi, that "*true repentance and self-limitation will shortly reappear in the personal and the social sphere, that a hollow place in modern man is ready to receive them*," because it is a psychological need for healthy human relationships. Addressing his clandestine readers he argued that *"…the time has come to consider this as a path for whole nations to follow*."

Alarmed by the escalation of the Cold War he warned: "*Add to this the white-hot tension between nations and races and we can say without suspicion of over-statement that without repentance it is in any case doubtful if we can survive*". Clearly, Solzhenitsyn's concern was not only with the survival of his homeland but mankind as a whole.

"*It is by now only too obvious how dearly mankind has paid for the fact that we have all throughout the ages preferred to censure, denounce and hate others, instead of censuring, denouncing and hating ourselves. But obvious though it may be, we are even now, with the twentieth century on its way out, reluctant to recognize that the universal dividing line between good and evil runs not between countries, not between nations … it cuts across nations and parties … It divides the heart of every man, and there too it is not a ditch dug once and for all, but fluctuates with the passage of time and according to a man's behavior.*"

Reading the above lines, one is bound to think that they could have been uttered by Mahatma Gandhi, the father of Non-Violent philosophy. Though he did not mention Gandhi in this instance, Solzhenitsyn's essay reveals an uncanny affinity with Gandhi's philosophy of Non-Violence. After all, do not great minds run in the same channels?

As much as Solzhenitsyn was concerned with Russia, he knew that the virus of Marxist-Leninist violence had already affected a third of mankind and targeted the rest. He was intently looking for the antidotes and, ultimately, for the cure for this dangerous universal affliction.

Also remarkable is the fact that Solzhenitsyn was the initiator of this collection. It had been hand-copied and circulated in "*samizdat*" before it was published in the West. As early as the 1970s Solzhenitsyn was planning a peaceful evolutionary exit from the dead-end of Communism across the rubble left of pre-1917 Russia.

Letter to the Soviet Leaders

Not only did Solzhenitsyn initiate the dissident authors' collection in 1973, but he also wrote his famous "Letter to the Soviet Leaders". To make it difficult for "the leaders" to plead ignorance and thus avoid personal responsibility, he mailed copies to each of a dozen Party Politburo members. Thus, h*e followed one of the principles of Gandhi's non-violence philosophy: to appeal to the conscience and good reason of your opponent in order to make a friend out of a perceived enemy.*

Indeed, he did not offend the Soviet leaders by asking them to resign. He did not insist on an open national election. He did not insist on disbanding the ruling Communist party. He just asked them to be more pragmatic and less dogmatic rulers. *Just stay in power, he told them, but allow patriotic Russians of non-Communist persuasion, especially Orthodox Christians, into the governing bodies.* Stop insisting on the *purity* of your ideology. Or, even better, since Mao Zedong was then accusing Soviet leaders of revisionism, Solzhenitsyn advised *giving away the whole ideological business to Communist China*. As to the border republics, allow them to hold referenda to decide if they want to stay part of our country. Clearly, all of *Solzhenitsyn's suggestions were conciliatory in a Gandhian sense as they aimed at a gradual and peaceful evolution of Soviet system away from its totalitarian dogmatism and inflexibility*.

Alas, the *Soviet leaders* proved to be back-sitting bureaucrats. Even worse: soon they voted with Leonid Brezhnev and his Politburo to deprive Russia's brave and wise son of his native land. *A real chance for a gradual and peaceful evolution of the USSR into a Russian nation-state was missed.*

Solzhenitsyn invokes Gandhi in his Commandment: Live Not by Lies

Solzhenitsyn knew that his immediate task was to free his fellow Soviet citizens from Fear: the fear to be deprived of social privileges, to lose job, even to be imprisoned. For, as soon as one expressed doubt about the Marxist-Leninist ideology, the official faith of all Soviet people and the guiding star for the "liberation" of mankind, one became a pariah. On February 12, 1974, Solzhenitsyn penned a short *Manifesto* titled "Live Not by Lies" in the hope to have it circulated among Moscow's intellectuals.

It is dated the same day when secret police broke into his apartment and arrested him. The next day he was exiled to West Germany. The essay is a call to moral courage. It serves as light to all who value truth. *"Live Not by Lies" is the only text, as far as I know, where Solzhenitsyn invokes the name of Gandhi.*

Painfully aware that the means to resist the totalitarian state for Soviet citizens were extremely limited, he could not ask them to participate in non-violent Gandhi-style protests and acts of disobedience. He knew that all attempts to organize or participate in such protest would immediately end in arrests. He could not even ask journalists, professors or teachers to truthfully describe what they saw in the country. No such acts were tolerated. So, "*Let the* (official) *lie cover and possess the whole country. But the least one can do is not to repeat it. Let the lie rule, but not via my mouth. And this would be a real break-through out of our habitual inaction. Such a decision is the easiest one can take, and yet the most effective in destroying lie. For when people step away from a lie, the lie loses its nourishment. For, like any virus, the lie uses people as its carriers*".

Solzhenitsyn states the dilemma of Soviet citizens: "*When violence intrudes into peaceful life, its face glows with self-confidence, as if it were carrying a banner and shouting: "I am violence. Run away, make way for me–I will crush you." But violence quickly grows old. It has lost confidence in itself, and in order to maintain a respectable face it summons falsehood as its ally–since violence lays its ponderous paw not every day and not on every shoulder. It demands from us only obedience to lies and daily participation in lies–all loyalty lies in lies*".

Western *sovietologists,* as the profession was then called, failed to understand everyday Soviet reality because they judged the USSR by the standards of an authoritarian Tsarist Russia and could not imagine that Marxist-Leninist ideology, imported as it was from the "progressive" West, could degenerate into a much more brutal and efficient totalitarian police state.

It was to explain the difference that Solzhenitsyn had to invoke Gandhi's name: "*No, we are not called yet to city squares to proclaim the truth or just say aloud what we think. We are not mature enough to do so because it is scary. Therefore, let us just resist the compulsion to say something that our mind refuses to accept. This is OUR WAY, the easiest and most accessible in view of our ingrained cowardice. In any case, it is much easier than–do I dare to say–Gandhi's acts of civil disobedience. All we can do under the circumstances is not to consciously support the lie*".

Rebuilding Russia: Reflections and Tentative Proposals

Failing to respond to a growing pressure of dissident groups in the USSR, ignoring what Solzhenitsyn and other dissidents had published in the *samizdat* and abroad, Soviet leaders continued to waste time until finally Mikhail Gorbachev initiated *perestroika* and *glasnost* in an effort to start the country moving again. Alas, Gorbachev still held onto Communist ideology. But Solzhenitsyn proved steadfast. When the USSR was about to collapse, in 1990 he wrote the essay, "*Rebuilding Russia : Reflections and Tentative proposals*."

Let me repeat what I wrote about Solzhenitsyn's essay shortly after it had appeared: "*Solzhenitsyn's central idea is that the particular form of government and economy is secondary to a nation's spiritual foundations. 'If the spiritual resources of a nation have dried up', he says, 'then not even the best form of government, nor any sort of industrial development, can save it from death.' One of the chief sources of the present malady is precisely the fact that the Communists reversed the order of priority by putting the 'cart' of economic and political power before the 'horse' of spirituality of human relations. As a result, not only the country's political institutions, economy, and ecology but also 'the souls' of the people were destroyed in the name of the Marxist Utopia*".

As he did in the early 1970s, Solzhenitsyn again eschewed Western emphases on democracy in his suggested alternatives to the Soviet regime. He rather favored a benevolent authoritarian government morally bound by Russia's remaining traditional Christian values. This does not mean that he was "against democracy." No. *He rather defended the right of Russia–or any country for this matter– to sovereignty, that is, the ability to work out a social and political system that suits best its geography, geopolitical situation, historical and cultural traditions, and, yes, democratic aspirations of its people that are best implemented when the country is free from foreign meddling.*

Vladimir Putin and Aleksandr Solzhenitsyn

Ever since I founded in 1992 the *Russia & America Good Will Association* (RAGA.org), I have argued it is in both countries' national interests to have friendly, at least, normal relation. More than once I urged US presidents, most recently in exchange of letters with President Barak Obama, to respect Russia's sovereignty as the foundation for good relations. In a 2016 interview with *Veterans Today* I called attention to President Putin's favorable attitude toward Solzhenitsyn, in particular, to his vision of Russia's path of development.

Putin defined patriotism by quoting Solzhenitsyn, that it is not any sort of state ideology but a feeling of attachment to Mother Russia. Putin invoked Solzhenitsyn again when he recently

spoke in favor of "*nationalism in a good sense,*" that is, not any sort of xenophobia toward other nations, but the need to affirm one's national identity, nurture the roots of one's national traditions, including religious beliefs of non-Russians, while affirming the secular foundations of its Constitution.

Also, to celebrate Solzhenitsyn's Centenary on December 11, 1918, the Putin government supported scholarly conferences in a number of Russian towns. *Russkiy Mir Foundation* worked jointly with Northern Vermont University to sponsor Solzhenitsyn's Centenary in Lyndon, Vermont, in September 2018. On December 11, 2018 Putin was present during the unveiling of a statue of Solzhenitsyn in Moscow.

But let me quote Joseph Pearce, the author of a brilliant 2001 book "Solzhenitsyn: A Soul in Exile," about his observations on the fate of Solzhenitsyn in Putin's Russia– and the USA: "*In Vladimir Putin's Russia, the greatest classic of anti-communist literature is now compulsory reading in all high schools. If the same could be said of the high schools of the United States, we would not have the endemic historical and political ignorance that has led to the widespread sympathy for communism among young Americans. In light of this, and in light of Mr. Putin's evident admiration for Solzhenitsyn, let's not try to pretend that Russia is a communist nation. We don't need to like Vladimir Putin. We don't need to admire him. But we do need to acknowledge that Russia has moved on from the evils of socialism, even as we are in danger of embracing those very same evils*".

As I have lived long in both countries, I can confirm that Pearce's observations largely coincide with my own. I certainly witnessed "*the widespread sympathy for communism among young Americans*" when I taught Russian and Soviet studies in the States from 1966 to 1991. Now those sympathies seem to have grown in the USA and other Western countries, albeit in different forms, such as the Neo-Marxism, the Frankfurt School, and so-called "Cultural Marxism".

The only disagreement I have with Pearce is about "*the evils of socialism*" that he seems to equate with Communism. I think the ideals and practices of socialism need not be evil *per se*. However, in the reality of the USSR, they became "evil" because socialism was imposed by violence. Solzhenitsyn did express his criticism of socialism for being imposed by force in the USSR, most eloquently in his polemic with Andrei Sakharov. But this does not mean that he rejected it in principle. In fact, both Russia and the USA have elements of socialism in healthcare (mostly in Russia), progressive taxation (more so in the USA) and US social security system. Moreover, the ESOP (Employee stock ownership plan) enterprises seem to be a form of socialism that is more widely spread in the USA and UK than in Russia.

Putin recently said he did not think that socialism could be restored in Russia. But at the same time he defended some socialist practices in Russia today. I think those practices are more needed to restrain oligarchic crony capitalism that perpetuates social injustice as it hampers economic vitality in both the USA and Russia.

However, I am much in sympathy with both Pearce and The Imaginative Conservative when they proclaim "*the principle of appreciation to the discussion of culture and politics–we approach dialogue with magnanimity rather than with mere civility*." This agrees with Solzhenitsyn's philosophy of polyphony and respectful dialogue that he proclaimed both as an artist and as a social healer.

Putin on Gandhi, Mandela and Solzhenitsyn

Once, during an international press-conference at the G8 Summit in 2007, when asked whether he was a true democrat, Vladimir Putin, answered in the affirmative. But then, pointing out the wave of violence across the USA and Europe, he made Western infatuation with democracy sound hollow. Then he made the impromptu remark that "There is no one to talk to since Mahatma Gandhi died". A few years later on December 8, 2016, he admitted that his oft quoted remark was made in a jovial mode. *Yet, there is no doubt that Putin admires Gandhi as*

a prophet of Non-Violence just as he admires Solzhenitsyn as a man who challenged the mighty Soviet state with truth and courage–and won!

Western mainstream media failed to report on Putin's courtesy visit to the South African Embassy in Moscow when Nelson Mandela, once an ardent Marxist-Leninist guerilla fighter, passed away on December of 2013. But *The Economic Times of India* did. That's what it said on December 10, 2013 under the heading: ***Mandela's magnitude compares to Gandhi, Solzhenitsyn: Putin*.**

<<Russian President Vladimir Putin today paid rich tribute to Nelson Mandela, comparing the colossus of 20th century politics to Mahatma Gandhi and Soviet dissident Alexander Solzhenitsyn. Mandela "*is undoubtedly one of the outstanding world figures in the 20th and 21st centuries, and his magnitude compares to that of Mahatma Gandhi and Alexander Solzhenitsyn…*" Putin hailed Mandela as a "***great humanist of the 21st century***" and said his policy should become an example to follow…(He) ***compared Mandela to both Gandhi and Solzhenitsyn. "Courageous and wise, Nelson Mandela always fought consistently for his convictions but remained a great humanist and peacemaker. This approach is needed in today's world: the search for compromises is the best basis for consensus and cooperation***," the Russian President wrote in the condolence book at the South African embassy here >>.

Reading these lines, especially, when Putin compared Mandela with both Gandhi and Solzhenitsyn, one has to hope that the three sages have served as guiding stars for Putin's domestic and foreign policy. To be sure, wishing to follow somebody's example, sincere as it might be, does not necessarily lead to adequate implementation of the goal. However, in the very least, Putin's statement "***the search for compromises is the best basis for consensus and cooperation"*** can serve as a bench-mark by which he and other world leaders will be judged. It is all the more remarkable because in the USSR where Putin was educated the very word "*kompromis*" was disdained as a *bourgeois trick*.

Recently, Rudolf Siebert, professor of Comparative Religion at Western Michigan University, my friend and associate, wrote an article in honor of Gandhi for the Global Harmony Association. He convincingly argued that Martin Luther King, Jr., the American champion of human rights and peaceful resistance, who died a martyr's death, was *also inspired by Gandhi's teaching of Non-Violence.*

Siebert knows that Jesus preached the Christian commandment: *"You have learned how it was said: Eye for eye and tooth for tooth. But I say this to you; offer the wicked man no resistance. On the contrary, if anyone hits you on the right cheek, offer him the other as well; if a man takes you to law and would have your tunic, let him have your cloak as well. And if anyone orders you to go one mile, go two miles with him. Give to anyone who asks, and if anyone wants to borrow, do not turn away"*. (Exodus 21: 24–25; Matthew 5: 38–42; 7: 12).

Siebert concedes, however, that Christian countries have largely ignored this commandment through centuries of history. Then Siebert resolutely credits Gandhi for reviving this Christian commandment in modern world: "*The Christian Martin Luther King came to the Christian commandment of non-violent resistance through the Hindu Mahatma Gandhi, and both practiced it, and both died for it a violent martyr's death of freedom, like the one who preached the Sermon on the Mount in the first place*".

Among all world leaders, Siebert singles out for praise Vladimir Putin for following the precept of Non-Violence in Russia's foreign policy: thus Russia "*did not retaliate, when in recent years its plane was shot down over Turkey, and its ambassador there was assassinated, and last Christmas its diplomats were sent back home from Washington D. C. to Moscow. That non-retaliation is moral progress in world history*!"

It is hardly surprising then that the Gandhi theme has been central for the latest exchange of visits between India's Prime Minister Narendra Modi and President Putin. In December 2015, during Modi's visit to the Kremlin, Putin presented him a page of Mahatma's handwritten note.

Putin's second gift to Modi was an 18th century Bengali sword, alluding, perhaps, that the two countries, committed as they are to peaceful co-existence, do not forget about the need of military cooperation in defense. Three years later, when Putin arrived to New Delhi, Modi honored him by the presentation of Gandhi's favorite bhajan 'Vaishnava Jana To' performed by a Russian artist Sati Kazanova on a mobile phone – a gesture that reflected the close friendship between the two leaders.

*The article full text was published here with all (64) references:
https://peacefromharmony.org/?cat=en_c&key=884

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13. Tolstoy and Gandhi
by
Rene Wadlow

We possess a single infallible guide, the Universal Spirit that lives in men as a whole, and in each one of us, which makes us aspire to what we should aspire: it is the Spirit that commands the tree to grow toward the sun, the flower to throw off its seed in autumn, us to reach out towards God, and by so doing, become united to each other.

Leo Tolstoy

November 20 marks the death of Leo Tolstoy 100 years ago in 1910 when he left his estate Yasnaya Polyana and walked to a railroad station at Astopovo, a journey with no set destination. As Isaiah Berlin writes at the end of his well-known essay on Tolstoy's philosophy of history The Hedgehog and the Fox "At once insanely proud and filled with self-hatred, omniscient and doubting everything, cold and violently passionate, contemptuous and self-abasing, tormented and detached, surrounded by an adoring family, by devoted followers, by the admiration of the entire civilized world, and yet almost wholly isolated, he is the most tragic of the great writers, a desperate old man, beyond human aid, wandering self-blinded at Colonus."

Yet the darkness of the final two years of Tolstoy's life was enlightened by his written contacts with Mohandas Gandhi (not yet called Mahatma). Gandhi had read Tolstoy's fundamental spiritual-political work The Kingdom of God is Within You shortly after it was published in English in1893 and had been much moved by it. Gandhi had his friends translate the book into his native language, Gujarati.

Gandhi had read earlier in London Helena Blavatsky's The Voice of Silence, published in 1889, which elaborated the doctrine of liberation through service to others with the Buddhist concept of bodhisattva – the enlightened being who postpones indefinitely entry into nirvana in order to serve others. The voice of the silence is the inner voice of the Higher Self or the soul. There is also developed the idea 'to render good for evil'.

Thus Gandhi was well prepared to react positively to Tolstoy's vision even if the vocabulary was largely Christian. Christ's teaching, writes Tolstoy, differs from other teachings in that it guides humans not by eternal rules but by an inward consciousness of the possibility of reaching divine perfection. Tolstoy stresses the Middle Way, which led the French writer E.M. de Vogue to write

that Tolstoy had the soul of an Indian Buddhist. Tolstoy had discovered that non-violence must have a spiritual foundation, most clearly expressed for him in the Gospels.

Leo Tolstoy and Gandhi never met, but they corresponded with each other during the final two years of Tolstoy's life, 1909 and 1910. Tolstoy had read Hind Swaraj (1909) where Gandhi set out his vision of a liberated India, the means to reach liberation, and what an independent India could mean for the world. It was Gandhi's plan of action before he set out to put it in practice. Gandhi had listed some of Tolstoy's books in a list of supplementary readings to Hind Swaraj in particular The Kingdom of God is Within You and Letter to a Hindoo, Tolstoy's reply to an Indian revolutionary who had proposed a violent uprising.

Tolstoy wrote to Gandhi "I read your book with great interest because I think that the question you treat in it – the passive resistance – is a question of the greatest importance not only for India but for the whole humanity." Tolstoy had also read Joseph Doha's 1909 biography of Gandhi An Indian Patriot in South Africa, the first biography of Gandhi to be written. In August 1910, Gandhi wrote to Tolstoy to announce the creation of his ashram in South Africa called Tolstoy Farm.

Gandhi's efforts in South Africa were signs to Tolstoy that non-violence based on the importance of personal virtue could be put into practice. Much of the last years of Tolstoy's life was a harsh struggle against darkness as represented by the State, its war-making power, its ideologies, and the social thinking that structured the State. Colonialism, imperialism and the oppression of the indigenous races were the hallmark of the State. He saw the forces at work that would lead to the First World War and the Russian Revolution. By 1901 he had been excommunicated from the Russian Orthodox Church – not that he expected much light to come from Church-State relations. The Church did insist that no prayers be said at Tolstoy's funeral.

For Tolstoy as for Gandhi, nonviolence was an expression of 'soul force' – the outward expression of the Inner Kingdom.

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14. Gandhi's Nonviolence and Life. Any Lessons for Women, Human Rights Activists and Peacemakers?

by

Ayo Ayoola-Amale

Mohandas Gandhi was a puritan known for his devout Hindu faith and ascetic lifestyle, often dressing only in a loincloth and shaw. He was born on the 2nd of October 1869 in Porbandar, Gujarat, India. He was a leader of the Indian nationalist movement who led his country to freedom against British rule. His use of non-violent protest to achieve political and social progress has been immensely influential. Gandhi was imprisoned several times during his pursuit of non-violent protest and he undertook a number of hunger strikes to protest against the oppression of India's poorest classes, among other injustices.

No doubt Mohandas Gandhi was a great Indian, respected globally for his organizational innovations that were instrumental to the success of India's independence movement; these organizational innovations behind Gandhi's nonviolent movement in India certainly offer lessons for present day peace movements, especially in nonviolent disobedience.

Certainly, his life is a great lesson on sustaining a nonviolent movement with followers that are willing to forgo temptations for violence in favor of humanity or national objectives which are important to peace activists and their movements.

Gandhi's "self-sacrifice" – for himself and his followers – is by far invaluable for they offer lessons for committed true peace activists and non-violent leaders in peace and freedom movements. The power of nonviolent disobedience teaches us that when plenty people withdraw their cooperation, refuse to conform or obey, and consequently undermine the sustainability of the existing system-"Even the most powerful cannot rule without the cooperation of the ruled," Mahatma Gandhi.

People power is the sustained, strategic application of a variety of nonviolent tactics, including civil disobedience, boycotts, strikes and noncooperation, these methods are greatly needed especially in repressive regimes where rulers have lost all credibility in the eyes of their people. Disobedience is at the heart of nonviolent struggle though protests are not the same with nonviolent movement, but they are one type of nonviolent method. Also another lesson that could be learnt from past nonviolent struggles is the importance of communicating a vision of society based on justice, not retaliation.

We know through experience that freedom is never handed over on a platter of gold by the oppressor; the oppressed must fight for it. Gandhi's genius achieved non-violent political revolution and nonviolent movements that led to democratic consolidation for his country. On the other hand there has been a lot of talk about Gandhi's ability with regards to being able to conquer the violence of his thoughts towards women and Africans? A lot has been written and said about Gandhi regarding how he viewed women, Africans, racism and the caste oppression in India. Many Indians believe Gandhi lived humbly, loved humanity and practiced non-violent struggle against a powerful adversary the British Empire. What truly is Gandhi's legacy in this regard?

Gandhi reported an event in his writings that occurred when he was a dissident in South Africa: he discovered a male youth had been harassing two of his female followers. Gandhi reacted to this incident by personally cutting the girls' hair off, to make sure the "sinner's eye" was "sanitized". These are prejudicial attitudes that women 'ask for it' in certain circumstances, if they dress in a way considered 'provocative.'

The victim blaming tactics was reinforced by Gandhi's believe that Indian women who were raped lost their value as human beings. He maintained that fathers could be justified in killing daughters who had been sexually assaulted for the sake of family and community honour. This unfortunately has led to rape victims committing suicide out of "shame". Gandhi was also said, to consider Indian women who used contraceptives as whores, thereby strengthening patriarchy immensely in a country where women were considered either as creatures that could bring either pride or shame to the men who possessed them. A society where women fight dowry deaths, honour killings, female feticide and the abandonment of new-born girls is certainly not a society where everyone is free to live in dignity.

There is a long-running historical argument over Gandhi's views on caste and race. His doctrine of nonviolence was believed by many to be based on the acceptance of the caste system; however some believe Gandhi devoted much of his life to fighting caste prejudice.

The caste system in India is thousands of years old; it is a very inhuman social hierarchy but still defines the status of hundreds of millions of people in the second most populous country in the world. The so-called untouchables, or Dalitsin in India, continue to suffer very terrible discrimination.

Similarly, most Africans have always accused Gandhi who led India to independence of working with the British colonial government to promote racial segregation during his stay of more than two decades in South Africa. He was said to have campaigned for racial segregation and actually achieved post office segregation.

Gandhi is said to be known for using a derogatory term when referring to black Africans. It was based on the believe that Mahatma Gandhi is racist that his statue, originally located at the University of Ghana's recreational quadrangle, was removed. What truly is the legacy of Mahatma Gandhi one of the most celebrated figures of the 20th Century often called "Mahatma", which means "great-souled", or, in India, "Bapu", which means "father" who was assassinated on 30 January 1948 in Delhi, by Nathuram Godse?

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15. The Science of Gandhi's Nonviolence and Violence in Brazil

by

Delasnieve Daspet, André Maltez

The "non-violence" became known from the peaceful resistance of Mahatma Gandhi in the struggle for Indian independence, the era, one of the most important British colony. This movement began in the nineteenth century. But many internal problems made the process difficult. Perhaps the most serious problem faced was that of religious division between adherents of Hinduism and its rigid castes and Muslims, intolerant of Hindu polytheistic practice.

In this context, Mohandas Karamchand Gandhi, an Indian who studied law in England, and with the knowledge and influence of several thinkers, including Thoreau, and his refusal to violent means as a form of struggle. He used it and other forms of combat. It encouraged non-cooperation with the colonizers, through strikes, non-payment of taxes, and boycotting English products. Thus, his revolution did not respond violently to the unjust laws of the state, but did not comply with them.

It was through civil disobedience of laws considered unfair that Gandhi became known around the world in defending non-violence in social struggles. He was also adept at fasting as a form of protest and his figure influenced the Muslim and Hindu communities of India. Gandhi, for his ideas, was murdered by a Hindu.

This strategy, too, was adopted by Martin Luther King (1929–1968), who refused to abide by the American segregationist laws. The objective was not a break with the legal and institutional order, but a fight against unjust and harmful laws to that part of society. Although they did not use violence as a form of struggle these movements were strongly repressed by the authorities, Their leaders persecuted, repressed, imprisoned.

These methods continue to serve as a practice for various organizations, some in defense of ecology. And for them to be effective, the support of public opinion, which must be convinced that it is a fair fight, is important. Below, Gandhi's ideas remain extremely powerful:

"Violence is created by inequality, non-violence by equality."

"The prison is not the bars, and freedom is not the street; there are men trapped in the street and free in prison. It is a matter of conscience. "

There is no way to peace. The peace is the way.

"There is enough wealth in the world for the needs of man, but not for his ambition."

"Just as a drop of poison engulfs a whole bucket, even a lie, however small, spoils our whole life."

"You must not lose faith in humanity. Humanity is an ocean. If a few drops of the ocean are dirty, the ocean does not become dirty. We have to become the change we want to see."

Gandhi defined his fight like this: "Nonviolence does not consist in renouncing any real struggle against evil. Non-violence, as I conceive it, undertakes a more active campaign against evil than the Law of Talion, whose very nature results in the development of I lift up the sword of the tyrant by not crossing it with a steel of better quality, but by defrauding his hope by offering no physical resistance, he will find in me the resistance of the soul that had fled from its attack. This resistance will first blind it and then force it to bend. And the fact of folding will not humiliate the aggressor but dignify it … There is no weapon more powerful than the well channeled!"…

The Violence in Brazil

Violence in our day has reached frightening levels. People are barred from enjoying the right to come and go freely. Society does not know how to behave. This is an issue that needs to be tackled seriously. Violence took over even small urban centers. There is no place immune to the process of violence of man…

Conclusion

Violence in Brazil has reached unacceptable levels and the great difficulty in putting an end to this evil is the multiplicity and greatness of its causes. What exists is a vicious cycle: the country's economic condition –> Social inequality –> Crimes –> Violence –> Inefficient police (economic condition of the country). Treating problems like this requires total participation of the society and singular commitment of the administrative organs. From theory to practice, there is a great distance to be traveled. If society were mobilized in search of peace as it mobilized for war, it would be easy to extinguish human violence.

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16. Culture of Peace and Non-Violence: Positive Values, Attitudes and Behaviors for Everyday Peace

by
Rosa Dalmiglio

"There is no route to Peace,
Peace is the route"
Gandhi

At the end of the Second World War, many institution and values had to be reconstructed. Hence, the idea of engaging particularly in Europe, in a " Marshall Plan" to rebuild, in the service of peace, the educational, scientific, cultural and communication institutions destroyed by the war. When newly independent States burst onto the international stage at the end of the decolonization process (from the early 1950s to the late 1980s) emphasis was placed on the fight against discrimination, racism and apartheid and the attainment of nationhood. In the early

1990s, when it became clear that the nature of wars was changing and that they were also becoming internal conflicts, the emphasis shifted o the post-conflict consolidation of peace. National "culture of peace" programs, drawing on combined action in the Organization's fields of competence, were tried out in countries such as El Salvador, Mozambique, Cambodia, Rwanda, South-East Europe, immediately after the conclusion of peace agreements, to consolidate the frayed institutions and human relationships. At the dawn of the 21st century, new aspirations for democracy, dignity and freedom have raised in different parts of the globe, in particular in the Arab world.

The concepts used to shape this common aspiration of humankind have evolved alongside changes in the international landscape. In this regard and in a rather chronological manner, the terms of "tolerance" (1995) "culture of peace"(2000) " dialogue among civilizations (2001) " intercultural and interreligious dialogue" (2007) and more recently " rapprochement of cultures" (2010) were used to translate the universal quest for lasting peace into a conceptual, political and programmatic approach. Nevertheless, the one of "culture of peace" for which the "International Year for the Culture o mobilizing concept as it encompasses, inter alia, respect for diversity, dialogue, human-rights, gender equality, citizenship and democratic participation to achieve international security. Peace and Non-Violence for the Children of the World (2001–2010) were proclaimed with UNESCO as UN lead agency remains a primary Gandhi way.

Peace is more than the absence of war, it is living together with our differences-of sex, race, language, religion or culture-while furthering universal respect for justice and human rights on which such coexistence depends. Therefore, peace should never be taken for granted. It is an on-going process, a long-term goal that requires constant engineering, vigilance and active participation by all individuals. It is a choice to be made on each situation, an everyday life decision.

Hence, the culture of peace and non-violence involves a holistic awareness of the changing by highlighting what binds cultures and societies to each other and from within.

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17. Gandhi's Nonviolence: The Doctrine of All Societies and Countries

by

Andre Sheldon

Mahatma Gandhi, Dr. Martin Luther King Jr., and all the sages throughout time lived and died to teach us that nonviolence is the answer. Their work is alive and well. The question is, how can nonviolence be in the mainstream? The following is a theory and a strategy to create a people movement of overt, constant promotion of nonviolence to set a precedent for all time.

On a global basis, we must create **trust and good will between nations!** Individually, people will be asked to commit to nonviolence. Therefore, a plan called a Global Movement of Nonviolence, For the Children (GMofNV) is developed so that people know what the movement is about. A GMofNV is a plan of action!

A GMofNV is designed to change the consciousness of the world. This is all about psychology. The people everywhere will be asked to mobilize to state that they are not enemies with other people and issue a proclamation: With respect, we, the people of the world, proclaim that we will not allow war in the world and we will intervene with every NONVIOLENT means possible to prevent it or stop it! We do this "For the Children."

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18. Mahatma Gandhi: Offering the other Cheek!?
by
Rudolf J. Siebert

In the perspective of the critical theory of religion or dialectical religiology, the peaceful influence of Mohandas, Karamchand Gandhi, whom his friends named the Mahatma or the great-souled one, and his non-violent philosophy and movement of passive resistance, were global, in spite of the fact that the movement was divided before the Pakistanian partition, and before his violent death. His influence reached not only all of India, but also Africa, and all other continents as well, even America.

Here in the USA, Martin Luther King was deeply influenced by Gandhi. When King studied at Boston College, he met a teacher, who introduced him into G. W. F. Hegel's Philosophy of History. From Hegel King learned, that freedom was the very goal of world history, and he applied this teaching to the fate of the African American population and community in the USA. However, King was critical of the fact, that according to Hegel in world history freedom was often, or even always, fought for with violence. The Baptist King could not find a non-violent method of liberation in Christianity, the Religion of Becoming and Freedom.

There was in Western Christianity only St. Augustine's Seven Point Just War Theory, which was considered to be valid up to World War I and II, the Cold War, the Vietnam War, the Afghan. War and the two wars against Iraq. Before Augustine, the initiator of the Roman Catholic Paradigm of Christianity, all wars were considered by the believers to be unjust, and no Christian was allowed to become a soldier and to participate in warfare. Far distant was still the time, when the Church blessed and legitimated the murder weapons of both combatant armies, and Christians killed Christians, as it happened when the crusaders marched to Novgorod, and Napoleon and Hitler to Moscow. The 4 million Europeans, who launched Barbarossa, were mostly baptized Catholics or Protestants, who then killed 26 million Russians, many of whom were still baptized, like President Putin and his mother. A Catholic priest of Polish descend, an American Armychaplain, blessed the two atomic bombs, which were thrown on Hiroshima and Nagasaki. The Christian pilots did not only kill Shintoists, but also Christians, teaching nuns and their schoolchildren, in Hiroshima, on August 8, 1945.

In order to find a non-violent method of liberation for the African American population of the USA, the Christian, Baptist minister, Martin Luther King, had to reach out to another religion, to Hinduism, the Religion of Imagination, to the Hindu Mahatma Gandhi, and his philosophy of non-violence and his movement of passive resistance. Gandhi, when he became in the years after World War I the leader of the independence struggle against Great Britain, always wished that the Christians would become more Christian, be it in London, or elsewhere. Like a century earlier Karl Marx, so the Hindu Gandhi criticized the Christian bourgeoisie in England and elsewhere for not living up and following Rabbi Jesus' so called Sermon on the Mount.

Gandhi, the Hindu, had received from Christianity, from the Sermon the Mount, not only the Golden Rule, which all world religions have in common. So always, treat others as you would like them to treat you; that is the meaning of the Law and the Prophets – "but also the very core of his own philosophy of non-violence and his movement of passive resistance. You have learned

how it was said: Eye for eye and tooth for tooth. But I say this to you; offer the wicked man no resistance. On the contrary, if anyone hits you on the right cheek, offer him the other as well; if a man takes you to law and would have your tunic, let him have your cloak as well. And if anyone orders you to go one mile, go two miles with him. Give to anyone who asks, and if anyone wants to borrow, do not turn away." (Exodus 21: 24–25; Matthew 5: 38–42; 7: 12).

The Christian Martin Luther King came to the Christian commandment of non-violent resistance through the Hindu Mahatma Gandhi, both practiced it, and both died for it a violent martyr's death of freedom, like the one who preached the Sermon on the Mount in the first place. Malcolm X, who wanted to liberate the African Americans in the United States, like Martin Luther King, converted in prison from Christianity to Islam, because he did not believe, that holding up the other cheek could accomplish the liberation of the black man from the white man's police dogs. He told his African American followers: Be peaceful, be curtious, obey the law, respect everyone; but if someone puts his hand on you, send him to the cemetery.

The apostate and mass murderer, Adolf Hitler, the very opposite of Gandhi, would have preferred Europe to have become Islamic rather than Christian, because Islam follows the lex tallionis, and does not demand the holding up of the other cheek. As the most fanatic fascist, Hitler, sacrificed, following the lex tallionis, millions of people, in order to make Germany and Europe great again through the destruction of Marxist communism, and through the colonization of Russia, as once Great Britain had colonized India, until Gandhi liberated it. The cunning of Reason made him, against his will and intentions, send Europe further into retirement, and open further the door for the Slavic World and the American World to move not only into the very heart of the European World, which they were to supersede, but also into world leadership, which once had been carried out by African nations, China and India, Persia and Egypt, Greece and Rome, Germany and England, possibly towards a more peaceful world federation and global civil society with only one army. The lex tallionis may immediately look more natural than the offering of the other cheek. It will seem natural and most understandable, when a Jew, who meets somewhere in Argentina the SS man, who murdered his parents in a German concentration camp, will shoot him down on the street. But on second, more reflected sight and thought, Mahatma Gandhi remained right, like Rabbi Jesus of Nazareth before, and Martin Luther King afterwards, when he stated: the eye for eye, the law of violent retaliation, leaves all the world blind: a self-destructive blindness, which can only be overcome through the enlightenment by a non-violent philosophy, and by a movement of passive resistance. The Russian Federation did not retaliate, when in recent years its plane was shot down over Turkey, and its ambassador there was assassinated, and last Christmas its diplomats were sent back home from Washington D. C. to Moscow. That non-retaliation is moral progress in world history!

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19. Socrates' Ethics of Nonviolence and Satyagraha Gandhi Nonviolence

by

Takis Ioannides

I. Socrates and Gandhi

Plato in his book "Kriton" (Kriton, 49D) refers, that Socrates probably was facing the aggressive people like mentally ill. Do you grow angry with a "sick man"? However, he supports

a passive ethic completely. He expressed the opinion that the man must resign even from his self-defence, from the protection of his own life and his physical integrity. Man should not defend and react badly. He was against the usage of physical violence in human relationships. He recommended the avoidance of violence in case somebody was victim of injustice or any evil, because he believed that injustice hurts the man who acts unjustly and not the wronged one. And this because Socrates means in this case, the man who acts unjustly has a mental harm. He requires the non-rendering of the injustice is an element of Justice. Is somebody wants to be just, he must not act unjustly even if he is wronged. And this because Justice must apply generally and absolutely. Consequently, Socrates was contrary with the belief of the "principle of reciprocity" in case of injustice applying in his times. He was also contrary with the theory of the "law of the strongest" applying also nowadays globally.

On 11 September 1906 Mohandas Satyagraha Gandhi deletes the term passive-resistance replacing it with the word "Satyagraha". Satyagraha is consisted by two words, "Satwa" (thruth) and "Agraha" (stability). This is his philosophy of non-violent resistance. He deleted the idea of fighting the injustice with any way. If we use violence by force, it is incorporated into it the injustice. He said that " I started using the Satyagraha during the Indian Revolt Satyagraha because I believed that the Power is born by both, the Truth and Love. That's why I abandoned the passive-resistance." The main target of Satyagraha was to change his adversary and make his to cooperate, not to compel him.

He made 9 rules. 1). A political protest never expresses his wrath. 2). Sometimes he may have to suffer the opponent's anger. 3) In this way he will accept the attacks by the opponent, but he will never retaliate. However, fear of punishment or similar threats will not be paid out of any kind of anger. 4) When a member of the authority attempts to capture a political controversy, he will voluntarily submit to the arrest, and will not resist the seizure or removal of his property when it is intended to be confiscated by the authorities. 5) If a politician is in possession of some assets as manager and guardian, he will refuse to give up, even if he could lose his life in this defense. Nevertheless, he will not retaliate. 6) Rebellions include bullies and bruises. 7) Consequently, an opposition politician never attacks his opponent, and he does not take part in the newly invented cries that are contrary to the spirit of ahimsa (non-violence). 8) A protest politician can not salute the flag of the United Kingdom, but will not offend this or the civil servants, English or Indian. 9) If, during the fight, someone offends or attacks against such an official, an opposing politician is obliged to protect the official or employees from attacking or attacking even at risk of his life.

I find many common points between Gandhi's rules of non-violence and the non-violence of Socrates. I believe that the talent, smart and studious young Gandhi, during his studies in London University studied also the Greek philosophers , especially Socrates, focused on his non-violence exhortations.

I made this comparison because I want to focus on the matter how important is the study of the human wisdom of the past, which will enable the young children to be educated properly in order to become wise and conscious leaders, and citizens harmonious peacemakers. They may create a future world living in Harmony and Peace. Our world needs of new Socrates, Mahatma Gandhi, Martin Luther King, etc. for a safe future life.

II. Gandhi's Nonviolence as Safe Road to Freedom

Gandhi, living in the great country of India under British occupation, he only understood that his fellow citizens deserve to live and progress as free people. He understood that the life under foreign occupation leads to the wrong direction. His country, when it was free in the past, functioned as a society with established goals by it's traditions, that no one no doubt about them, but everyone embraced them, struggled for their realization, and hurled them to the next

generation. The British occupation created a communion with broken institutions of tradition, with life without freedom, with complete lack of purposes, and with complete spiritual confusion about what is true in their life. He felt his personal responsibility in the case of the liberation of his homeland, and against the history, and what to suggest to his fellow citizens on how they should act in order to achieve their liberation. He was a man with moral conscience, paedeia, education, vision and momentum of life. He was a real leader, with the proper skills, like, creative thinking, decision making, teamwork, motivation, flexibility, problem-solving, critical thinking, time management and conflict resolution.

He had studied and studied sciences, philosophies, traditions. He knew that if the engineer does not build a building properly, it would fall and flatter him. As a philosopher, he understood that philosophies are not built with the laws governing the natural environment. The case of a large country like the one of India, held by the largest and hardest colonizers of human history, was not easy to liberate. He had to think how to open a new perspective for the country and his fellow citizens. There was the need of breaking many barriers that impede the internal capabilities of his fellow citizens. Above all, he had to protect them from dangerous practices. It needed to sow spiritual seeds in the free air of India, which would yield to the souls of the Indians. He dealt with in his mind factors such as the impetus of life, the need for certainty, the need for unity, the need for meaning, the need for redemption, the need for freedom. Because these factors, mainly, contribute to shaping our perceptions. The importance of the spirit's operation. The rich inner life and process that Gandhi possessed was the drug in the occupation conditions prevailing in India. I believe that his spiritual orientation, through the path of philosophy, gave the prospect of creating the method of resistance through nonviolence. Gandhi's genius envisioned, decided, planned, and completed the grandiose action of the people of India. The revolution of NON-VIOLENCE.

The hive of total cities in the country accepted the solution offered by her wise idol. Because they respected and believed on him. He gave them a solution to return to the sources of creative life. He convinced them of their rich abilities. He showed them the limits that should not exceeded. In fact, mistakes were made in action. Incomplete and finite the man can not be perfect. But he does what he can do in his life. The streams of ordinary people became a river that swept from one end to the other the great country of India. The Indians believed and acted in their overwhelming majority, without violence. The British were surprised. Gandhi's achievement succeeded. The global community tested a catalytic feeling of awe with the achievement of the people of India, without violence. Gandhi became the great hero in the eyes of both young and old people globally. They were amazed by the unity of the people of India, by their momentum for life, peace and freedom. Gandhi's non-violence was indelibly marked in the historical reality of our planet and in the consciousness of people up to date. We in GHA pay tribute to the memory of this great man, Gandhi, as a peacemaker, liberator and conveyor of human consciences.

We built the four Spherons of our prototype Book "Global Peace Science" with conscience and faith in the possibilities of man to achieve universal Harmony and Peace through these four Spherons, honoring the maxim of our Honorary President and founder of the GHA Dr Leo Semashko, "War killed me father, and I shall kill the war".

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20. On Becoming a Cybernetician: Highlights and Milestones

by
Bernard Scott

Abstract

In this article, I describe how I encountered cybernetics and how it became an important part of my life. I begin with an account of my time at Brunel University and also describe how I came to work with Gordon Pask, one of the few intellectuals and researchers in the UK who styled themselves as cyberneticians. To enrich my story, I include an overview of the story of cybernetics as I perceive it. Given the importance I attach to cybernetics as an intellectual tool, I end with a plea for it to be included in all educational curricula.

Keywords: first order cybernetics, second-order cybernetics, variety, education

Introduction: Encountering Cybernetics

Between 1964 and 1968 I was an undergraduate at Brunel University, studying psychology. I was on a 'sandwich course', meaning that periods of study were interspersed with work placements with different kinds of organisation. In my first two years of study, I accrued very mixed feelings about psychology as a scientific discipline. Only the behaviourists claimed to be fully scientific. The rest of the discipline appeared to be a ragbag of disparate topics, studied and theorised about in a wide variety of ways. The curriculum consisted of courses of lectures on largely unrelated topics: learning theory, perception, social psychology, individual differences, psychopathology, organisational psychology, and developmental psychology. The curriculum also included some lectures on sociology and social anthropology, taught as separate subjects. There was an early superficial mention of cybernetics in the lectures on learning theory but nothing substantial was covered. I was an indifferent and poorly motivated student in the midst of what I saw as a mess of a discipline, in which my teachers, espousing different paradigms, were incapable of constructive conversation with one another. It was cybernetics that eventually enabled me to make sense of this mess and inspired me to become an enthusiastic scholar.

In 1966, I had the good fortune to attend a course of lectures on cybernetics given by David Stewart, a newly appointed lecturer in the Department of Psychology. I had previously read W. Grey Walter's (1963) *The Living Brain* and Wladyslaw Sluckin's (1954) *Minds and Machines*. Both helped me appreciate the larger philosophical tradition in which problems of mind and body, freewill and determinism have been debated. I recall that Sluckin reported on developments in cybernetics and related disciplines but was not committed to cybernetics as a unifying, "transdiscipline." David Stewart's stimulating presentations helped me be aware of that possibility. I was attracted to the thesis that cybernetics is a transdiscipline. It made sense that there should be unity in diversity. It made sense that there should be a discipline as important and as general as physics but one which was complementary to it. I grasped this as the aphorism "Physics is about matter and energy; cybernetics is about control and communication." Later, I came across a similar distinction in the writings of Gregory Bateson (1972), who used terms from C. G. Jung's (1916) *Septem Sermones ad Mortuos*: 'pleroma' and 'creatura', with origins in gnostic, hermetic traditions. Pleroma refers to the 'stuff' of the world as formless content. Creatura is the world of the distinctions made by observers.

I began to see how cybernetic concepts could provide explanations of psychological processes in far more sophisticated ways than those offered by the behaviorists. Thanks to David Stewart, I had the opportunity to work with the UK cybernetician, Gordon Pask. At that time, Pask was Research Director of an independent, non-profit research organisation in Richmond, Surrey: System Research Ltd. I had a 6 months' work placement there as a research assistant.

Pask was the most obviously intellectually brilliant person I have ever met. I was awed just to be in his presence. I obtained a preprint of Pask's most recent paper and studied it in detail (Pask, 1966). To make sense of it, I spent many hours looking up his references and reading his earlier papers. From this reading, I gained what had eluded me thus far: an overarching, satisfying conceptual framework which allowed me to make sense of the biological, the psychological and the social in a coherent and enlightening way. I was becoming a cybernetician.

Eventually, I read W. Ross Ashby's (1956) *Introduction to Cybernetics*. I think all of us who love cybernetics have drawn inspiration from Ashby's bold declaration that "The truths of cybernetics are not conditional on their being derived from some other branch of science. Cybernetics has its own foundations" (p.1). He goes on, "Cybernetics ……takes as its subject-matter the domain of 'all possible machines'" (p. 2). This is followed by "Cybernetics, might, in fact, be defined as the study of systems that are open to energy but closed to information and control – systems that are 'information-tight'" (p. 4). Here Ashby is reflecting cybernetics' primary concern with circular causality and anticipating later emphases on organisational closure.

Ashby highlights two primary uses of cybernetics: "It offers a single vocabulary and a single set of concepts for representing the most diverse types of systems" and "It offers a method for the scientific treatment of the system in which complexity is outstanding and too important to be ignored" (pp. 4–5). There are perhaps those who would disagree with Ashby's claim that cybernetics provides "a single vocabulary and a single set of concepts" pointing to the enormous proliferation of specialist vocabularies and conceptual schema within the cybernetics and "systems thinking" areas. However, I suggest that in this variety, there is enormous consensus and that there is an underlying structure of primary concepts and distinctions that makes cybernetics what it is, much of which is captured in Ashby's formal approach. In 1995, I attended an international multidisciplinary conference, entitled *Einstein meets Magritte,* and witnessed much difficulty, even distress, as physicists, philosophers, artists and humanists attempted to communicate with each other about a range of issues, many of global concern. Within the larger conference there was a symposium, convened by Francis Heylighen, on *The Evolution of Complexity*, with fifty or so participants, including management scientists, biologists, systems scientists, psychologists, neuroscientists, sociologists, engineers, computer scientists and physicists. The remarkable thing about this symposium, in contrast to the main conference, was that there was much effective interdisciplinary communication. This was because all the participants did have some grounding in concepts to do with complex systems and cybernetics. Indeed, many of the participants drew directly on Ashby, himself. Thus was the master vindicated.

Further reading persuaded me not only of the value of cybernetics as a unifying transdiscipline but also that cyberneticians were not naive or trivial in their epistemologies, that there was a deep sense of metadisciplinary self-awareness in their shared enterprise. I learned that there was an informal collegiate that included, amongst others, Gregory Bateson, Warren McCulloch, Heinz von Foerster, Gordon Pask, Stafford Beer and Humberto Maturana. There appeared to be a tacit understanding that, whatever their differences, they all had a reflexive sense of responsibility for their being in the world and were united in their commitment to a common good.

The concerns with the epistemology of the observer were made explicit in a coming together of ideas in the late 1960s and early 1970s. I have alluded to some of these events in more detail elsewhere (Scott, 1996). What I have in mind are Spencer-Brown's (1969) emphasis on the primacy of the act of distinction; Gordon Pask's articulation of a cybernetic theory of conversations (Pask, 1975); Gunther's (1971) concept of life as polycontexturality: the intersection of observers' perspectives, including perspectives of others' perspectives; von Foerster's distinction between a first order cybernetics, the study of observed systems, and a second order cybernetics, the study of observing systems (von Foerster et al, 1974, p. 1);

Maturana's (1970) arguments for the closure of the cognitive domain based on an account of the operational closure of the nervous system.

In 1972, Oliver Wells, editor of the cybernetics newsletter, *Artorga*, convened the world's first conference on self-referential systems, in London. The participants were Gotthard Gunther, Gordon Pask, Humberto Maturana, Dionysius Kallikourdis and myself. Heinz von Foerster was unable to attend. I was fortunate to meet him, later that year, when he visited Pask's laboratory at System Research Ltd., where, following graduation, I had been invited back to work as a research assistant, and at Brunel University, where I was a postgraduate student in cybernetics.

I understood from Ashby (1956) that the abstract principles, concepts and laws of cybernetics can be applied to any category of system. From Pask, Stafford Beer, and Frank George and others, I understood the role of models and analogies in cybernetics. I saw the power to be found in formal concepts and therefore studied set theory, formal logic and the theory of computation. I acquired new distinctions and new terminology: hierarchy and heterarchy; object language and metalanguage; programming and meta-programming; process and product; serial, parallel and concurrent processes; circularity and recursion; self-organisation and autopoiesis; variety and information; structure and organisation … and more.

As a transdiscipline, cybernetics empowered me to cross disciplinary boundaries. This was exhilarating. I also understood other transdisciplines (systems theory, Alfred Korzybski's general semantics, synergetics) to be quite cognate with cybernetics and, at a high enough level of abstraction, homomorphic if not isomorphic with it.

I see all 'versions' of cybernetics as having a core commonality. It is a truism that every scholar or practitioner will have her own narrative and ways of doing things and that these may be undergoing changes with experience and further study and reflection. What I detect with cybernetics is a commonality that evolved amongst a community of scholars, where differences in emphasis, terminology and areas of interest and practice mask underlying agreements and similarities of form.

I was inspired, eventually, to regard myself as being a cybernetician. Louis Couffignal (1960) defines cybernetics as "the art of assuring the efficacy of action." Heinz von Foerster states that "Life cannot be studied in vitro, one has to explore it in vivo." (von Foester 2003, p. 248) and "At any moment we are free to act towards the future you desire" (von Foerster 2003, p. 206). I took these ideas to heart. There was a coming together of my professional life as a research student and my personal life, which had previously been lived in separate compartments. I became reflexively aware that I was living my theories and my lived experiences were helping my theorising.

My 20s and 30s, as for many in the 1960s and 1970s, were an intense period of intellectual and personal exploration in which I was sustained, sometimes tenuously, by the faith in God that I had acquired as a child and my deepening understanding and appreciation of cybernetics. I read widely, acquainting myself with Western philosophy, world history, including the history of science and mathematics, and, in a somewhat haphazard way with the teachings of various faiths ('great' and esoteric) and writings about the 'occult' and shamanism.

In those years, second-order cybernetics was a touchstone that provided rational grounding. With its help, together with the insights of Ludwig Wittgenstein (1953), in particular his meta-linguistic comments about language and philosophy, I escaped from becoming enmeshed in the conceptual and terminological morass of what is frequently referred to as 'continental philosophy'. Cybernetics helped me see through the tricks and power plays of intellectual 'gamesters'. Second-order cybernetics tells us that anything said is said by or to an observer. This gives a pragmatic immediacy to what is being said and what is the intention of the communicator. I became a cybernetic shaman, a child of the living God, someone who aspires to know the true and the good. I was particularly inspired by the writings of Lao Tsu and Confucius and their followers. At heart, I remained a Christian. In 1979, while training to be a

schoolteacher, I summed up much of my thinking and practice in a brief essay, "Morality and the cybernetics of moral development" (Scott, 1983).

Not everyone who studies cybernetics becomes a cybernetician who studies 'the cybernetics of cybernetics'. There are many scholars of cybernetics who look on only from their main area of practice and position themselves in the first instance as being historians, philosophers, architects, biologists, sociologists, psychologists and so on. In doing so, I believe they miss the point, the sense of what it is to be a cybernetician and a member of the cybernetics community. A recent example is Andrew Pickering, author of *The Cybernetic Brain*, whose self-imposed positioning as a philosopher and historian mars what in many ways is an admirable text. I have in mind his perfunctory, somewhat derogatory treatment of second order cybernetics in general and of Pask's conversation theory in particular. I have similar reservations about the recent biography of Warren McCulloch by Tara Abraham, *Rebel Genius*, in which the author seems to see McCulloch's enthusiasm for cybernetics as a transdiscipline to be self-aggrandising and self-deceiving. I, myself, share McCulloch's enthusiasm. The invention and creation of a new transdiscipline concerned with control and communication, cybernetics, is itself a great cybernetic achievement.

The Story of Cybernetics

To make sense of my reminiscences, I feel I am obliged to provide some more details of my understandings of the history of cybernetics. I am not aware of any single text that gives a clear and inclusive account of the origins, early years and key later events concerning cybernetics. Here, I give a very brief summary.

The story has several possible beginnings. One common starting point is the publication, in 1943, of the paper "Behavior, purpose and teleology" by Arturo Rosenblueth, Norbert Wiener and Juliann Bigelow (Rosenblueth, Wiener et al, 1943) and associated discussions that lead up to the Macy conferences on "feedback and circular causality in biological and social systems" convened by Warren McCulloch and held between 1946 and 1953. The paper proposed that the goal-seeking behaviour that could be built into mechanical systems and the goal-seeking observed in biological and psychological systems have a similar form: they are structured so that signals about achieved outcomes are "fed back" to modify inputs so that, in due course, a prescribed goal is achieved (a cup is picked up) or a desired state of affairs (the temperature of a room or of a living body) is maintained. This process is referred to as "circular causality." It was recognised at an early stage that many fields of study contain examples of these processes and that there was value in coming together in multidisciplinary fora to shed light on them, to learn from each other and to develop shared ways of talking about these phenomena. In 1948, Norbert Wiener, one of the participants, wrote a book (Wiener, 1948) that set out these ideas in a formal way that collected together many of the emerging shared conceptions and did so in a coherent way that not only facilitated interdisciplinary exchanges but also stood as a discipline in its own right: an abstract transdiscipline – the study of "control and communication in the animal and the machine." Wiener called this new discipline "cybernetics." Following the book's publication, the Macy conference participants referred to their conferences as conferences on cybernetics, keeping "feedback and circular causality in biological and social systems" as the subtitle.

As the subtitle emphasises, there was an interest in biological and social systems. The participants were interested not only in particular mechanisms, they also looked for the general forms to be found in the dynamics and organisation of complex systems (living systems, small groups and communities, cultures and societies): how they emerge and develop, how they maintain themselves as stable wholes, how they evolve and adapt in changing circumstances.

In the years following the Macy conferences, cybernetics flourished and its ideas were taken in many disciplines. Cyberneticians also found common ground with the followers of Ludwig von Bertalanffy, who were developing a general theory of systems.

By the 1970s, cybernetics, as a distinct discipline, had become marginalised. A number of reasons have been suggested for this. I believe two are particularly pertinent. The first is that, at heart, most scientists are specialists. Having taken from cybernetics what they found valuable, they concentrated on their own interests. Second, in the USA, funding for research in cybernetics became channelled towards research with more obvious relevance for military applications, notably research in artificial intelligence. Attempts to develop coherent university-based research programmes in cybernetics, with attendant graduate level courses, were short-lived. However, some developments in the field that occurred in the late 1960s and early 1970s are particularly pertinent for the theme of this article.

First, it is useful to note that the early cyberneticians were sophisticated in their understanding of the role of the observer. In the terminology of Heinz von Foerster, their concerns were both first-order (with observed systems) and second-order (with observing systems). It is the observer who distinguishes a system, who selects the variables of interest and decides how to measure them. For complex, self-organising systems this poses some particular challenges. Gordon Pask (1960) spells this out particularly clearly. Even though such a system is, by definition, state-determined, its behaviour is unpredictable: it cannot be captured as trajectory in a phase space. The observer is required to update his reference frame continually and does so by becoming a participant observer. Pask cites the role of a natural historian as an exemplar of what it means to be a participant observer. A natural historian interacts with the system he observes, looking for regularities in those interactions. Pask goes as far as likening the observer's interaction with the system to that of having a conversation with the system. This insight was the seed for Pask's development of a cybernetic theory of conversations.

Second, the early cyberneticians had the reflexive awareness that in studying self-organising systems, they were studying themselves, as individuals and as a community. Von Foerster (1960) makes this point almost as an aside. He notes: "[W]hen we […] consider ourselves to be self-organizing systems [we] may insist that introspection does not permit us to decide whether the world as we see it is 'real,' or just a phantasmagory, a dream, an illusion of our fancy" (von Foerster, 2003, p.3f). Von Foerster escapes from solipsism by asserting that an observer who distinguishes other selves must concede that, as selves, they are capable of distinguishing her. 'Reality' exists as the shared reference frame of two or more observers. In later papers, with elegant, succinct formalisms, von Foerster shows how, through its circular causal interactions with its environmental niche and the regularities (invariances) that it encounters, an organism comes to construct its reality as a set of 'objects' and 'events,' with itself as its own 'ultimate object.' He goes on to show how two such organisms may construe each other as fellow 'ultimate objects' and engage in communication as members of a community of observers. Von Foerster referred to this second order domain as the 'cybernetics of cybernetics.'

It should be mentioned that others had been thinking along somewhat similar lines to those of Pask and von Foerster. Maturana (1970) frames his thesis about the operational closure of the nervous system with an epistemological metacommentary about what this implies for the observer, who, as a biological system inhabiting a social milieu, has just such a nervous system. The closure of the nervous system makes clear that 'reality' for the observer is a construction consequent upon his interactions with her environmental niche (Maturana uses the term 'structural coupling' for these interactions). In other words, there is no direct access to an 'external reality.' Each observer lives in her own universe. It is by consensus and coordinated behaviour that a shared world is brought forth.

In later writings (some written in collaboration with Francisco Varela), Maturana uses the term 'autopoiesis' (Greek for self-creation) to refer to what he sees as the defining feature of living systems: the moment by moment reproduction of themselves as systems that, whatever else they do (adapt, learn, evolve), must reproduce themselves as systems that reproduce

themselves. In explicating his theory of autopoiesis, Maturana makes an important distinction: the distinction between the 'structure' of a system and the 'organisation' of a system. A system's structure is the configuration of its parts at a given moment in time, a snapshot picture of the system's state. The organisation of a system is the set of processes that are reproduced by circular causality such that the system continues to exist as an autopoietic unity. In general, a system with this 'circular causal' property is said to be 'organisationally closed' (Maturana & Varela, 1980).

The Work of my Mentor, Gordon Pask

Although much of what von Foerster and Maturana have to say is pertinent to humans, arguably it is Pask, the psychologist, who has given us the most comprehensive observer-based cybernetic theory of human cognition and communication. From the earliest stages of his thinking, he was aware that the human self develops and evolves in a social context and that 'consciousness' (Latin con-scio, with + know) is about both knowing with oneself and knowing with others. Throughout his writings, from the 1960s onwards there is an acknowledgement by Pask of his indebtedness to the Russian psychologist Lev Vygotsky, who argued that, as a child develops, what begins as external speech eventually becomes internalised as an inner dialogue (Vygotsky, 1962).

Central in Pask's research activity was the design of 'teaching machines' and 'learning environments' that interact with a learner, in a conversational manner, and adapt to the learner's progress so as to facilitate her learning. Pask makes a distinction between a cognitive system and the 'fabric' or 'medium' that embodies it. This distinction is analogous to the distinction between programs and the computer in which they run. However, unlike the cognitivist science community, where the analogy is the basis of the thesis that both brains and computers are 'physical symbol systems', Pask is aware that this interpretation of what is a symbol is conceptually naive. He stresses how important it is to take account of the differences between brain/body systems and computing machinery. Brain/body systems are autopoietic systems, whose structure is constantly changing, whereas the structures of computers are designed to be stable. In Pask's terms, there is an interaction between a cognitive system and its embodiment. A change in the structure of the brain/body system affects cognition. Changes in thinking affect the structure of the brain/body system. It is important to note that Pask's distinction is an analytic distinction, not an ontological one. It affords a way of talking about organisationally closed 'psychosocial' systems distinct from brain/body systems and provides psychology and other social sciences with a coherent conceptual framework.

Darkness and Lights

Pask, Maturana, Gunther, von Foerster, and other cyberneticians met regularly, often at von Foerster's Biological Computer Laboratory at the University of Illinois, at Pask's System Research Ltd. and at academic conferences. I witnessed the ways and incidents by which, over time, cybernetics was marginalised. I saw the courage and nobility with which the cyberneticians maintained their views and convictions in the face of the criticisms that they were old fashioned, misguided and defunct in the brave new world of artificial intelligence research and the emergent field of 'cognitive science.' In the sister transdiscipline, general systems theory (now referred to as 'systems science'), cybernetics was often seen as a mere specialist subdiscipline concerned with control theory. From the 1980s onwards, the 'new' sciences of complexity, systems dynamics, and artificial life arose, with a new generation of scholars largely ignorant of the intellectual roots of those sciences in cybernetics. In cognitive science (psychology, philosophy of mind, robotics), there was an increasing interest in the biology of cognition and 'enactivism,' again, with little awareness of the sources of those ideas.

The lights in this darkness have been several. Notably there has been an ongoing interest in second order cybernetics, as seen in the journals *Cybernetics and Human Knowing* and

Kybernetes. I do not have space to do more than mention some of the key players whom I see as the second generation of cyberneticians (I became good friends with many): Stuart Umpleby, Ranulph Glanville, Paul Pangaro, Soeren Brier, Albert Mueller, Karl Mueller, Phillip Guddemi, Randall Whitaker. I should also like to draw attention to the achievements of the learned societies that have worked to keep cybernetics alive and well: the UK Cybernetics Society, the American Society for Cybernetics and Res earch Committee 51 (on Sociocybernetics) of the International Sociological Association.

Concluding Comments

As an undergraduate, encountering cybernetics transformed my approach to studying and understanding psychology. It gave psychology a conceptual coherence that, previously, I had found lacking. In later years, as my understanding of cybernetics deepened, I continued to use second order cybernetics as a foundation and framework for my work as an experimental psychologist (summarised in Scott 1993) and my later work as a practitioner in educational psychology (Scott 1987) and in educational technology (Scott 2001c). The transdisciplinary and metadisciplinary nature of second order cybernetics empowered me to read widely in other disciplines. I learned from von Foerster that "Social cybernetics must be a second-order cybernetics – a *cybernetics of cybernetics* – in order that the observer who enters the system shall be allowed to stipulate his own purpose […] If we fail to do so, we shall provide the excuses for those who want to transfer the responsibility for their own actions to somebody else" (von Foerster, 2003, p. 286).

After some fifty years of involvement with cybernetics, I am more than ever persuaded of its value for making sense of the world and as an aid for self-steering. Ashby's Law of Requisite Variety ("Only variety can destroy variety") makes clear in the simplest terms that if a system is to survive in a changing environment it must manage the variety that it faces. It must learn to identify and minimise unnecessary constraints on its actions and at the same time it must act so as to maximise (increase the variety of) its choices. For humans this applies not only to the first order variety to be found in our environmental niches but also to the second order bewildering 'wicked' complexity of variety to be found in our belief systems and in our perceptions and meta-perceptions of each other. I have written about these issues elsewhere (Scott, 2012). Here I just wish to emphasise the need for what I refer to as 'education for cybernetic enlightenment.' I have outlined the curriculum for such an education in Scott (2011b).

Discussions about how best to place cybernetics within educational curricula have been going on since shortly after its inception. The (now defunct) Department of Cybernetics at Brunel University where I studied for my PhD had postgraduate students only, arguing that one needed to have a strong disciplinary base before embarking on transdisciplinary studies. I myself am a supporter of Jerome Bruner's concept of the 'spiral curriculum': "A curriculum as it develops should revisit the basic ideas repeatedly, building upon them until the student has grasped the full formal apparatus that goes with them" (Bruner, 1960, p.13); "We begin with the hypothesis that any subject can be taught effectively in some intellectually honest form to any child at any stage of development." (ibid, p.33). It makes sense to me – and I hope to the reader – that cybernetic understandings of educational processes should be used to help educate for cybernetic enlightenment. I also believe that cybernetic understandings of the human condition reveal how vital it is that those same understandings are promulgated, not just in formal educational settings but universally, as part of the 'global conversation'.

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21. Gandhi's Non-Violence: The Meaning of His Life
by
Bhushan Dewan

It will be hard to believe for several generations of the globe that a man in flesh and blood such as Mohandas Das Karamchand Gandhi walked this earth. Gandhi was a rare human being of the millennium, who lived a uniquely inspirational life rooted in the values of 'living for the whole humanity'. Gandhi's thoughts, words and deeds – nay his full life – show us the immense possibilities that life of even an ordinary person can attain its rightful divine potential, if only one lived with truth and honesty. He lived and espoused the value of absolute and consistent nonviolence in every thought, word and deed.

Each one of us, no matter in which profession, and at which station of life, which country, which gender, race or culture, can pick a leaf from the book of Gandhi's life. Whether a thinker, philosopher, politician, professor, parent, child, any average common citizen, each one of us can look upon Gandhi as an ideal and role model from our own different perspectives. There are indeed examples from Gandhi's life, deeds and words for each one of us.

One can even hold Gandhi as a role-model on the issue of how should one live one's life. While on this, one finds that Gandhi's message is that the best way to live one's life is to write one's own Bible, find one's own moorings, decide for oneself one's own directions and stay true to them. But that is not to say, that one will not continuously re-examine & re-evaluate one's positions in light of incessant pursuit and search for the truth. Another Universal and inspiring take from Gandhi's life is total honesty & total transparency and abiding focus & concern for good of all humanity, but with total humility.

By his thought, word and deed, Gandhi determined, espoused & lived by the universal & global value of nonviolence. He demonstrated that lasting solutions to humanity's problems can be achieved only by applying principles of nonviolence and mutual accommodation. Today, when many institutions, thinkers and schools of thought across the globe are striving for achieving sustainable life on earth and sustainable existence for the whole mankind at peace with each other, with animal life and plant life – through many paradigms & constructs like UN's Millennium Development Goals, Peaceful co-existence, Human Rights, Triple Bottom-line reporting for business organizations, Trusteeship principle on the part of owners & shareholders – Gandhi's life, values & principles not only are but would continue to remain for decades and even centuries to come, veritable & unsurpassable beacons of light for human life.

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Chairman, National Outreach Excellence Group,
GHA International Jubilee Gandhi Committee Chair, India
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22. Gandhi: Nonviolence Psychology
By
Irina Kuris

Concept of nonviolence is related with many worldwide religions, such as Jainism, Buddhism and Hinduism. Its origins of this concept go back to antiquity, in the middle of I millennium BC. The theory of Gandhi's nonviolence has developed on the basis of the ancient Indian philosophical and religious texts of the Upanishads, Bhagavadgita, Mahabharata, as well as the Bible and the Koran. Gandhi's greatness lies in the fact that he proclaimed nonviolence as a fundamental principle of relations between people and nations

in the most violent century in history, which twentieth century certainly was. His activity meant the rejection of evil and violence in relation to a neighbor. At the end of his life, he said bluntly: "Non-violence is my credo" (Ганди, 2016). At the same time, to which attention is rarely drawn, Gandhi took into account the dialectic of nonviolence and violence and was forced to recognize the need for violence for life itself and for the preservation of nonviolence itself. He said: *"Man will never be able to completely eliminate the need for Himsa (violence). As long as he remains a social being, he cannot avoid taking part in Himsa. Without it, society will perish. Sometimes it's our duty to take a life. ...Sometimes it becomes necessary even to kill a man."* (Gandhi, 1955)

Many well-known philosophers reverenced to the ethics of non-violence. The great Russian writer L.N. Tolstoy came up with the theory of "non-resistance to evil by force" in the late XIX – early XX century. M. Gandhi knew this theory. Three of his letters to Tolstoy and the three response letters from Tolstoy to Gandhi have been preserved. Tolstoy's ethical beliefs turned out to be close to Gandhi, and he readily acknowledged himself as a "humble follower of the great teacher" (Ганди, 2016). But while the Tolstoy's basic principle was formulated as non-resistance to evil by force, Gandhi advocated non-violent resistance, which implies the possibility and necessity of fighting for justice. Martin Luther King Jr., the famous American activist and Baptist minister (1929–1968), listed six main features of the Gandhi's understanding of nonviolence, which in our opinion are important from a psychological point of view.

First, nonviolent resistance is a weapon of strong ones.

Secondly, followers of non-violence do not seek to defeat or humiliate the enemy, but want to arouse in him a sense of moral shame for his behavior.

Third, nonviolent action is directed not so much against people who do evil as against the sources of evil.

Fourthly, the participant of non-violent resistance accepts the sufferings, the blows of the enemies, without responding to them with any kind of retaliation.

Fifth, the fighter for nonviolence refuses not only to shoot at the enemy, but also to hate him.

The sixth – the main characteristic of non-violent resistance is the understanding that the whole world is on the side of justice. Therefore, those who believe in non-violence, they deeply believe in the future. (Мартышкин, 1970).

In our opinion, not everything is so simple, because in the modern world it is difficult to deal with the ethical side of these postulates. In modern psychology, the concept of "nonviolence" is actively studied. New scientific fields appeared within its framework, such as "Positivism" and "Humanistic Psychology", and they made significant changes in the traditional understanding of violence and non-violence.

But now we ask ourselves the question of how to treat non-violence in the modern world which is full of violence? Moreover, there is a very thin line between them and the understanding of its essence is sometimes very difficult to grasp. Of course, on the one hand, the answer is completely obvious. Violence can never be justified and accepted as the standard of behavior. Another equally important question is how to respond to violence? – Do not respond at all? To argue that the repay evil to evil gives rise to more evil? And it will win in the end? Will it not be a manifestation of cowardice, to a certain extent, a betrayal of the world? This question is not an easy one. What one must and should do in order to stop wars and establish peace not only in the specific territory, but all over the world? To what can lead indifference? And isn't this passive indulgence a kind of rejection of actions designed to prevent the manifestation of evil in the future? Are we responsible for this connivance, especially in the context of one of the main fundamental laws which is: "Ignorance is no defence"? Is violent resistance against evil justified? How can we justify non-violence? What can we do against evil and aggression? In our opinion the answers to these questions cannot be unambiguous.

The case of Gandhi was the starting point for thinking about it seriously. Perhaps here it makes sense to draw on the political agenda of Gandhi, which can be summarized in three concepts: Satyagraha (holding onto truth), Swaraj (self rule) and Sarvodaya (just society). In fact, these are three stages of the struggle. The link and driving force of these three stages is Ahimsa – the principle of nonviolence, the essence of which is not to bear evil neither in words, nor in thoughts and actions. Important is Gandhi's explanation: "A follower of non-violence undertakes not to use or physical force, both directly or indirectly, but he does not refuse to help a person or movement who do not adhere to non-violence … If it were otherwise, I could not help India to achieve independence" (Гусейнов, 1991).

The duality of Gandhi's psychology of nonviolence is not amenable to unilinear thinking, but it is essential for the scientific and multidimensional understanding of nonviolence. This subtle but fundamentally important aspect of nonviolence is still far from modern mentality, sociological and

psychological understanding. An important step towards it has been taken by the "spheral tetranet thinking" developed in our book, the methodology of which is presented in detail in its first two chapters.

This will be a significant contribution to the fight against evil and the victory of non-violence on Earth and in the entire Universe. But priority must always be given to non-violence as the only acceptable way to fight. Violence, on the other hand, should be justified as an extremely forced measure, an exceptional tool for the uncontested need to protect life and non-violence.

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23. Mahatma Gandhi: An Apostle of Harmony and Peace
By
Maqsud Nuri

Presently, the world is passing through a critical stage of 'multipolar disorder'. After the euphoria of dismantling the Berlin Wall, demise of Soviet Union the world has entered into a 'unipolar moment' for a decade or so with the US as the 'lone superpower.' The creation of new states in Eastern Europe, NATO's eastward moves, 'color revolutions,' stock exchange crisis were followed by US-led military interventions in Afghanistan, Iraq and Syria and Libya. Spring revolutions convulsed Middle East but installed authoritarian regimes.

New Cold war created problems such as of over-population, militancy, refugees, global pollution, arms buildup, nuclear dangers, economic inequality--- that have complicated the world global landscape. Added to these is the rise of China and Russia since 1980s, which are posing new challenges as they started countervailing US power. The world is wracked by conflicts of Israel-Palestine, US-Iran, India-Pakistan, US-North Korea and others with six nuclear powers and the possibility of more becoming nuclear.

Under these circumstances when the world is on the brink of a likely nuclear war, Mahatma Gandhi's message of love harmony and non-violence becomes very relevant. Mahatma Gandhi thought that egoistic behavior, cult of nation states, religion, race, language, ideology were negative features which brought misery and suffering through wars . Now these negative features have become more potent when they form a toxic brew with socio-economic problems. They may satisfy temporary feelings of revenge and vindication but are not durable. The history of Europe and other nations amplify this stark fact.

Even before prophets, sages, reformers, poets and philosophers had stated that hatred and wars are no solution to problems of humanity since hatred begets only hatred and starts a vicious cycle. Love and harmony on the other hand have a synergistic effect that lead to positive and wholesome effect. The so- called 'nation state' paradigms, national security, deterrence, national interest, arms buildup are doctrines are overworked and becoming redundant to problems of humanity.

Mahatma Gandhi, who was an apostle of non-violence and peace, ironically fell victim to a Hindu fanatic's assassination who did not like his policy of 'live and let live.' Today, militancy and xenophobic feelings are on the rise in the world, including Pakistan and India, although terrorist violence has been greatly curbed but militancy mindset remains nonetheless.

War has been as old as humanity but never so lethal and destructive as now due to nuclear weapons. Religion, albeit at core a moral force, but unfortunately has been abused, misused and abused for ulterior motives. The atrocities committed in first and second World wars, including atomic bombing in Japan are horrifying reminders.

In these circumstances, therefore, the message of Gandhi is an over-powering moral force. It is love, compassion and harmony at individual and global levels that is for all men to internalize. Ego, urge to dominate and acquire worldly gains prevents many from this transcendental truth of peace and harmony.

But on this cardinal Truth hinges the future of mankind's survival, harmony and peaceful world.

Prof. Dr. Maqsud Nuri,
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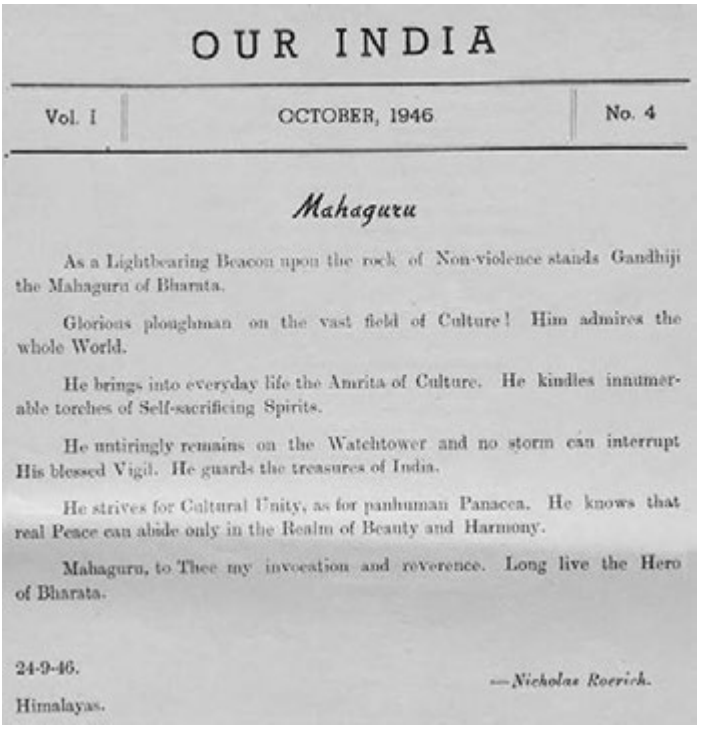
Part 4.
Poetics of Gandhian Nonviolence

1. Mahaguru. *Nicolas Roerich*



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Mahaguru

As a Lightbearing Beacon upon the rock of Non-violence stands Gandhiji the Mahaguru of Bharata.

Glorious ploughman on the vast field of Culture! Him admires the whole World.

He brings into everyday life the Amrita of Culture. He kindles innumerable torches of Self-sacrificing Spirits.

He untiringly remains on the Watchtower and no storm can interrupt His blessed Vigil. He guards the treasures of India.

He strives for Cultural Unity, as for panhuman Panacea. He knows that real Peace can abide only in the Realm of Beauty and Harmony.

Mahaguru, to Thee my invocation and reverence. Long live the Hero of Bharata.

24-9-46. —*Nicholas Roerich.*

Himalayas.

2. My National Prayer. *Abdul Kalam*

Drawing by Shri Manav Gupta

The grand Scene of birth of Independent India
In that mid-night, the flag of the ruler of two centuries lowered;
The tri-color Indian flag flaps in the Red Fort in the midst of National Anthem.
The first vision of Independent India was dawned.
The rejoice everywhere, happiness all around,
There was a tender cry: where is the father of the nation?
The white clothed soul walking in the midst of sorrows and pain,
Injected by hatred and ego, the result of communal violence.
The father of the nation, Mahatma, walking bare footed
In the streets of Bengal for peace and harmony
With the strength of blessed soul of Mahatma
I pray the Almighty: When will be the dawn of second vision?*
Create thoughts in the minds of my people,
And transform those thoughts into action.
Embed the thought of Nation being bigger than

The individual, in the minds of leaders and people.
Help all the leaders of my country to give strength
And bless the nation with peace and prosperity.
Give strength to all my religious leaders to bring
'Unity of Minds' among all our billion people
Oh Almighty, bless all my people to work and transform
Our country from a developing into a developed nation.
Let this second vision be born out of sweat of my people,
And bless our youth to live in Developed India.

Abdul Kalam
President of India in 2002–2007
https://peacefromharmony.org/?cat=en_c&key=95

* Comment by Editor Leo Semashko. The dawn of the "second vision", Abdul Kalam saw in the GHA books, coauthor of which he was: in the ABC of Harmony, 2012, and Global Peace Science, 2015/6 that is reflected in his words about these books, their new thinking and harmonious worldview/vision. He wrote in the last book: "*The world needs a great vision of peace and prosperity of all the nations. Global Peace Science from harmony is the dawn of a shinning, harmonious vision of peace and prosperity for all nations! Together with it, the enlightened citizens will emerge, able of building a harmonious civilization of peace and prosperity on the planet Earth*."

3. Gandhi's Nonviolence: The GHA True Protection of Children
Ashok Chakravarthy Tholana

"Non-violence is a power which can be wielded equally by all"
Whatever Gandhi said, is it not an eye-opener to one and all?
Be it children, young men and women or the grown-up people,
Faith in God and mankind, one should share equal-love for all.
Non-violence, accepted as the law of protecting human life,
Does not mean, leaving dear ones isolated when stuck in strife;
Lifting the sagging spirit of those caught in conflicts of brutal rage
Fragrance of childhood, likewise be protected from budding stage.
The science of hatred and war, leads to dictatorship and hypocrisy
The science of nonviolence alone can lead one to pure democracy;
Violence or physical force either directly or indirectly, lead to suppression
In the process, they even slay the dignity of women and children.
Non-violence is the law of human race and is infinitely superior
It affords full protection to one's self-respect and sense of honor;
Causing pain or killing any life out of anger or with a selfish intent
Invites more violence instead, than defusing the budding threat.
Parents must ensure, their sons and daughters become self-reliant
Till they earn honest livelihood they be groomed with care, utmost;
Gandhi said; "We learn wisdom through a child's ignorant actions
And, if we have to reach real peace, we have to begin with children".
We have to start with the education of children nonviolence,
Approving peace and excluding war.
This is the best child protection at all times,
As GHA recognized it in science of harmony and nonviolence.

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4. Gandhi rolls the wheel of history. *Adolf Shvedchikov*

The wheel of history is rolling,
Born, dying ideas,
Territories are divided,
To capture as soon as possible!
Bloody rivers flow,
The peoples groan for centuries,
Are we mentally cripple,
Do not find us ford?
Inertia is a terrible force
Opened by *Newton*,
Surely everyone is waiting for the grave
Under the weight of a graviton?
Surely is the end of culture,
Is the end of people communication,
Surely the same dull bullet
Will rule the fate of generations?
How does Mahatma Gandhi' mind
Became stronger than all revolutions?
"*The idea of non-violence*" at once
Made the world wake up.
Violence, the rudiment of savagery,
With a sword wandering around the planet,
But the "*kingdom of justice*"
Still not cooled in the people dream!

Adolf Shvedchikov,
Scientist, Chemical Physics, PhD and LittD,
Poet and Translator,
USA/Russia
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5. Copernican Gandhian Revolution Today. *Susana Roberts*

Dreams of humankind
always were the big challenge to achieve
Peace from Harmony.
Now, after eleven years of the Global Harmony Association's work
was doing its dream in Global Peace Science from Harmony.
It first penetrates into the social foundation –
into the deep structure of SPHERONS' harmony.
These pivot social actors were waiting discovery for long time.
Right now this Science is the dawn of shining light in our era,
it becomes a Copernican Revolution of the public conscience
and good will of people to Peace in the 21st century.
It is a strict turning point of 180 degree

for future children mastering a new science of harmony
through new qualitative education free from war
to achieve perpetual global Peace.
It will be the joint spiritual ground of the peoples
to establish humanity and the UN entirely exempt from war and violence
for prosperity of every nation and Peaceful life for all.

My Prologue for the GHA "Gandhi book"

My goal is friendship with the world and I can combine
the greatest love with the greatest opposition to wrong.
Mahatma Gandhi

In this time of chaos, where civilization seems to suffer a setback in all orders, education aimed at a substantial change of nonviolence as Gandhi prophesied is urgent. Our scientific GHA "Gandhi book" that unites the efforts of so many authors around the globe is the only hope for the necessary changes that must be installed in order to organize the current society working toward a future of peace.

All of this is possible with the full collaboration of social spheres, one with each other, where security, prosperity and brotherhood go together to deprogram the violence around the planet, basically with an education based on spheral tetrasociology. As Mahatma Gandhi this great soul, taught us: "*Since I am imperfect and I need the tolerance and kindness of others, I must also tolerate the defects of the world until I can find the secret that allows me to remedy them, it is the fear of the ideals of others*." No doubt, we have here the most important harmonic content in the history of humanity joined in the effort of many who know that Peace is possible.

Gandhi was firmly of the opinion that if violence were used instead of nonviolence, power would eventually gravitate into the hands of a dominant minority who are in possession of the instruments of violence. This is a contingency, which he wanted to guard against by always keeping the organisation of the masses within the bounds of nonviolence. For this I think the education for violence deprogram is urgent, it must be an intelligent education full of spiritual reflections inside the rule of spherons' harmony within the framework of its structural modeling disclosed in our "Gandhi book".

Susana Roberts,
Poet, Argentina
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6. Gandhi: Peace at our Reach. *Celia Altschuler*
(A message of Love, Peace, and Harmony)

Master Mahatma Gandhi said:
"You must be the change you wish to see in the world"

I reach for peace on the hands of a child
for there is where hope and love can harvest
new boundaries for a harmonious rebirthing humanity
I reach for peace in the eyes of the elderly
For there lies the truth of knowledge and experience
I reach for peace in the efforts of workers and professionals
who create change through their perseverance and labor

in favor of a common society
I reach for peace in the parents whose good will,
love and unity, build a family
I reach peace in the voices and lives of those that claim
justice for Mankind to a peaceful, and respectful, better way of living
I reach peace knowing that someone through prayer expresses their faith
and love for a united better world
I reach peace in the teaching of masters like Gandhi, Confucius, Jesus, Krishna, Yogananda,
St Francis, Martin Luther King,
and many others who have encrypted our path to light and spirituality
I reach peace in the silence of a living nature that speaks through its beauty the language
of love and service to others
I reach for peace in Art when it speaks love and harmonious living
I reach for peace in the writings of poets and thinkers who every day aim for a better world
I reach for peace in the actions of world leaders who place peace and harmony above war
I reach peace from myself to the world for it is a challenge that I will never give up
We can all reach peace when we realize that peace is everywhere around us,
we just need to be aware and live by it every single day

Celia Altschuler,
Poet, painter,
Puerto Rico
Web: https://peacefromharmony.org/?cat=en_c&key=557

7. Mahatma Gandhi's Non-Violence. *Kartar Singh*

O' my dear citizen of all the Nations,
We are at the door-step of total destruction.
With assured mutual destruction,
Leaves no future for next generation.
Gandhi's Non-violence appears only hope,
As human greed for wealth & power being on top.
Elements of violence are three,
Power[1], **Wealth**[2] and others **territory**[3].
Elements of Non-violence are also three,
Love, Empathy and accept all **equal & free**.
Outcome of violence are in multiplication,
From pain, injury to end of civilization.
India's **Panchsheela** is Gandhi's relevance,
It is outcome of his vision of Non-violence.
Mutual respect and acceptance of others,
Non-aggression, Non interference in affair's others.
Equality and **cooperation** for mutual growth,
Peaceful co-existence for humanity's growth.
1. Control over others.
2. Metals, Minerals & Oil.
3. Land, Oceans & Space.

Brigadier Kartar Singh,
President,
Indian Ex-Services League (Committed to World Peace)
Web: https://peacefromharmony.org/?cat=en_c&key=871

8. Love, Peace, Justice via Nonviolence Spherons. *Apostolos Paschos* Devoted to Gandhi's Nonviolence

The three virtues of life that man's spirit loves too much,
which create a good character and guides the human mind,
are the functional and living rules and pillars of life,
gifts of the experience of faith in Christ and tool of communication.
It's the total active self-respect, the mutual respect of the dynamic love,
the demand of passionate Peace and the request of Justice.
Love stimulates man morally, empowers him spiritually,
it sets him up in the works of emulation and always revives him.
Peace calms down life and guides the sense,
guides man to miraculous works, and delights him.
Justice is a divine order that always guides man
and nothing is threaten him.
The functional triple of the soul, Love, Peace, Justice,
is a matter of conscious will of the spirit and an order of revival.
Love God the true Christ, and with Him love your self
and your fellow man like yourself.
Be always peaceful, because the expectation of all people is the progress of all,
and do nothing but the good. Let us teach the Justice by God,
and follow it like Christ, to enjoy your life and ascend to Heaven.
Editor's Note:
On Earth, all these virtues are guaranteed non-violence of spherons,
Which Gandhi comprehended by intuition in Varnas and
Which are scientifically disclosed in the GHA "Gandhi book".

Dr Dr Apostolos John Paschos,
Physician, poet, writer,
Greece
Web: https://peacefromharmony.org/?cat=en_c&key=455
(Translation from Hellenic into English by Dr Panagiotis D. Ioannides)

9. Tribute to Mahatma Gandhi. Messenger of Peace and Apostle of Non-Violence! *Guy Crequie*

Our twenty-first century remains guided
By the universal law of peace from harmony.
In France: the current movement of yellow vests
Is its message of contemporary awakening.
Enough taxes … And he led the march against that on salt.
Lawyer, he defended civil disobedience in South Africa.
Adept, better promoter of the different cultures dialogue.
Herald of the poor respect and the woman liberation,
Fraternity of different ethnicities and religions,
Economic autonomy and the free choice of fate.
India's independence has been the driving force of all its aspirations
Together with the freedom of all nations from any colonization.
He proclaimed the end of all caste discrimination.
His peaceful struggle for social justice

Has inspired many peace actors:
From Rosa Parks to Martin Luther-King,
From Nelson Mandela to Daisaku Ikeda,
From Leo Semashko to Maria Cristina Azcona and many others.
His birthday October 2 became in 2007
By the United Nations International Day of Non-Violence.
From him, the poet retains:
Belief in the freedom of nations
Giving up weapons and
Triumph of "the heart and spirit"!
Gandhi is transparent radiant dawn,
The star of the humanity rebirth,
Emitted waves of harmony
And the dialogue of civilizations.
He left a strong and inspirational task.
Live in non-violence and love of nature
For the future generations.

Guy Crequie,
Poet, philosopher and writer
France
https://peacefromharmony.org/?cat=en_c&key=106

10. Tribute to Mahatma Gandhi
Thea Marie Robert

A little man, sitting on the ground, disobey
The laws of violence, the law of the richest
A pair of round glasses is placed on his nose
Above his lips, takes shelter
A thin mustache, gray,
His sparkling eyes dazzle the passer-by
The original loincloth, a simple white fabric,
Covers his ascetic body.

In all humility, he affirms simplicity,
Disobeys the law of force, obeys his faith,
To the inner force, that guides his
In it, Gandhi reveals a great spirit
Able to conquer of the heart, peace,
Able to infuse billions of minds,
To all humanity, I hope,
The idea of a peaceful revolution
For mentalities.

Active presence in silent sitting,
By the time spent expressing the idea
That the duty of peace is imperative necessity,
That we do not acquire the right
By the language of arms
When the law of the strongest denies the most fragile,
He, affirms the dignity, expresses the inner freedom,
The fierce desire to be considered
From him, an aura emerges,
The intelligence of love on the move.

In him, radiate sincerity and firmness …
No cry, no anger, no contempt,
No fight opposes him to an opponent,
He does not respond to unbecoming provocations
They deny, by the crime, all existence
He expresses nothing but the presence to be,
Without useless words, without curse,
He wakes up.

Animated by a permanent concern for justice,
He cultivates in his heart the harmony
A simple man, so simple in his white loincloth,
A little man become so big,
Devoid of vanity, shows humanity
Example, the way forward.

A vital and living force animates him
To affirm here and now the right
Of his country to live, free,
The right of everyone to live liberated
From all fear, intolerance,
Any discrimination, any violence.

Lawyer of the causes that we believed lost,
By concrete action, by acting in confidence
He gets liberation, independence
Of a huge territory subject
From the dictates of imperialism.
India peopled by differences, differences
And millions of suffering souls
The laws of love are his guides
Those of disobedience
To the rules of slavery and confinement
Are his deep motivations.

He seeks dialogue not confrontation
Living it together no discrimination
Nonviolence not confrontation
With his inner strength and faith in peace.
He changed the future of his homeland
India has taken over the reins of its destiny
Those who show the path of love,
The path of the discovery, of the glowing light,
Of the human being incarnated in consciousness
To radiate peace on earth,
Often end up murdered by warriors.

Such was the fate of Christ, of Martin Luther King,
Honor and glory to the courage of the just in motion
Among humans hungry for pride, power
Thirsty for murder to own,
Driven by revenge and hatred,
The madness of limited passions
And the belief in false truths.
It was also his destiny on the planet of men
Gandhi, the advocate of the just cause,
Become Mahatma for eternity,
Left our land, murdered!
Peace to his soul in eternity!
And infinite Gratitude to Mahatma Gandhi!

Thea Marie Robert,
Artist,
Chamonix Mont-Blanc, France
https://peacefromharmony.org/?cat=en_c&key=467

11. GPS is the True Exponent of Gandhi's Nonviolence. *Takis Ioannides*

The terrible violence reveals its weaknesses,
its abominable works are fatally affected
and as long as it works against humanity with all its might,
it's horrible face will always be uncovered.
The disappointed man of our present times
blasted on the lake of blood and tears waits silently,
with the loop of violence wrapped around his throat,
the joyful sounds of hope and survival.
If he raise his eyes to the Light,
and approach his sleeping consciousness,
he will look the only existed real and salutary choice,
this of GHA's "Global Peace Science".
The structural harmony of it's "Four Spheres and Spherons",
written with conscience, love and wisdom,
on fourteen years waves of time, by it's 174 co-authors,
condemns and erases the insidious and blood-stained violence.
As a righteous goal functions in the divine spirit,
justifies the precious Gandhi's non-violence,
it's destined to save mankind from the cosmic bane,
and also to be saved in the Memory of God.

Gandhi, the visionary of human co-existence
Gandhi: your soul portrayed in time
the love for fellow man,
protagonist of the Indians' liberation struggle,
founder of the Civil Disobedience Movement,
great protector of human rights,
conscious rebel, denial of the use of violence,
supporter of poor people vocational apprenticeship
and their racial segregation,
mind fighter who beat the apartheid
and the economic plight of the Indians,
visionary of united India and the peaceful coexistence of religions,
You, eternal true man, defender of human values,
by guiding the chariot of morality
you left your life passage indelible
in our hopes for a better humanity living
in harmony and peace.

Dr. Takis Ioannides,
Historian, writer,
Athens, Greece
Web: https://peacefromharmony.org/?cat=en_c&key=138

12. GPS honored Gandhi's Non-Violence

Dionyssios Georgakopoulos

Rejoice Gandhi, greatest peacemaker,
precious child of India,
who demolished the castles
of barbaric slavery with Non-Violence.

Nowadays, GHA with its peacemaking
Book "Global Peace Science"
and it's harmonious Spherons
honored and justified your actions for freedom.

We shall never forget you
and your heroic figure,
Gandhi, nationalist of glorious India
together with GHA will live in eternity.

Dionyssios Georgakopoulos,
Torchbearer of peace in Ancient Olympia
Greece
(Translation by Dr Panagiotis D Ioannides)

13. Spherons of Gandhi's Nonviolence

Polina Semashko

Great orator, great sage,
Savior of Indian folk,
His struggle led by NONVIOLENCE one
And Satyagraha tactics!

So let the rulers of this world
With the consent of all nations,
Throw away weapons like junk
And they will take the path of SPHERONS!

They are the source of his nonviolence,
The beginning of his second eternal life,
The light at the end of the tunnel of millennial violence,
Heart of love and peace from the universal harmony!

Polina Semashko,
Pupil, 6th grade
St-Petersburg, Russia

14. Sunny Gandhi

Darina Voronina

All nations on our earth want
To make the sun shine for all
To heaven was for all
To have happy children
To gardens bloomed on the planet
And there would be no war!
This is a wise sunny Gandhi said so:
Peace, harmony and nonviolence needed
All nations in the world
So that the sunlight does not go out
on the planet!

Darina Voronina,
Pupil, 3rd grade
Krasnoyarsk, Russia

15. Gandhi about the Great Female Destiny

Katerina Semashko

Gandhi understood women better than anyone.
He wrote that they lost themselves
In nonviolent ministry to children and men,
Therefore, they found themselves the best way.

The women closest to the truth
Because they are devoted to love,
Service and non-violence – the law of life,
Therefore, the future for the woman is in her heart.

Women with truth in the heart and mind –
This is the strongest weapon of peace and non-violence
Managing way of humanity
For the sake of his survival and happiness.

Having mastered the science of non-violence,
Women able to maintain peace order
On earth as the common home of humanity,
And not just in their own homes.

Katerina Semashko,
Student
Saint-Petersburg, Russia, Israel

16. Gandhi 2019. The GHA Rap. "Tetranet Thinking" Style. *Leo Semashko*

New Year. 2019.
Gandhi anniversary, 150 years.
The British raj end in India.
70 years ago.
Without a shot. Without blood.
Without millions of innocent victims.
As in Bolshevik Russia.
As in Nazi Germany.
As in communist China.
As in liberal American empire
With 20 million victims after Second World War*.
By "nonviolence greatest force" of Gandhi
Overcame violence of every color.
How did Gandhi do it?
Why is his nonviolence "the greatest force"?
Stronger than bloody revolutions.
Stronger concentration camps.
He was not a revolutionary.
He was not a fascist.
He was not a nuclear scientist.
He was not a terrorist.
He was not Hercules.
He was physically weak and impoverished.
But why he became stronger than all rapists?
He surpassed all by soft force of truth, mind and honesty.
The force of deep intuition.
He felt "the greatest force of nonviolence"
In depths of humanity.
This power rules the world.
This force dominates violence. This power subdues it.
This force conquers "the mightiest weapon of destruction"!
Energy of "nonviolence greatest force" preserves humanity.
Energy of "greatest force" gives him survival.
Energy of "greatest force" gives him life.
Every moment. Every hour. Everyday. Every year.
This force is humanity genome,
Its genetic code from Harmony God.
By ignorance and stupidity in Him,
Peoples and leaders overwhelmed by greed
And desire for world domination,
Break in millions blood
This divine code and genome to perish self.
Gandhi geniuses are born once a millennium.
And nations and people need to live in nonviolence
Every hour, every day, every year.

* https://peacefromharmony.org/?cat=en_c&key=641

In violence pathology they only kill their lives.
Nonviolence truth should be at all
Not only intuition geniuses once a millennium.
It can and should become by property of nations.
Only through scientific truth of nonviolence,
Through discovery of its deep sources,
Through their understanding and mastery.
New Year. 2019. Copernican Revolution!
Mind and thinking, science and knowledge revolution,
Knowing yourself in harmony secret.
This is discovery of Gandhi's nonviolence source
In Spherons structural harmony,
Eternal classes for humanity nonviolence,
Providing his eternal life,
Opposing all violence
Where any of it finds own natural end.
How people discovered atomic energy
And learned not only to kill but to build by it,
So in 2019 they discover the "greatest soft force/energy"
Of Gandhi nonviolence Spherons.
This truth, proven by their statistics,
Saves humanity from new, nuclear Auschwitz,
In the 21st century, starting since 2019,
With penetration into mystery of Gandhi
"Greatest soft force/energy of nonviolence",
In the 150th year of his birth!
Let late than never!
Let after hundreds of millions of victims, but not in vain!
Let after a long plague of violence –
Not without ignorance and mistakes in social genetics!
Not without trampling on it as "pseudoscience"!
"The dawn of shinning, harmonious vision of peace
And prosperity of all planetary nations rises!"
Said Abdul Kalam, India poet-President
At new millennium beginning,
When he saw this dawn
In "The ABC of Harmony" from Spherons
And in their "Global Peace Science",
Created by GHA collective consciousness!
2019 will be Christmas of humanity
in Gandhi conscious nonviolence!
Merry Christmas and Happy New Year!

Dr. Leo Semashko,
GHA Founder (2005) and Honorary President (2016),
St. Petersburg, Russia,
Web:
https://peacefromharmony.org/?cat=en_c&key=253

Book's Conclusion

Humanity's Choice: A Gandhian Nonviolent Hack or Dying in an Escalation of Violence

by

Lucas Pawlik

Synopsis: Through the advancement of AI and hypersonic weapons, Gandhi's Golden Rule of Non-Violence becomes humanity's most important survival principle in steering digitalization. We either non-violently hack humanity's digitally empowered circle of violence or die from its escalation.

1. Understanding the Origins Stories of Cybernetics, Digitalization, AI and the Task of Humanities Survival

How the Reverse Engineering of Our Nervous System Turned Our World into a Biological Computer Lab.

We live in many realities but in only one world. Everyone is part of its steering. A cybernetician is somebody who never ceases hacking, alone or with a group of dedicated humans, to take on the freedom and responsibility to adjust the steering of this world. Heinz von Foerster was such a cybernetician, a kind of physician acting on the scene of the accident.

He was once asked from which death he would want to save humanity. "From brain death! From brain death! Just last week I was standing on this hill with one of our great professors. He asked me: 'Heinz, do you think computers will ever surpass human intelligence?' 'Definitely! – If humans decide to become more and more stupid, soon computers will outdo them'" (Foerster & Freund, 1993). Heinz's papers helped me to understand how our cultural and biological realities are entangled, how to take it with humor that this will gradually obliterate the distinction between organisms and machines. Years before Heinz published his essential papers under the title 'Understanding Understanding', I had sent him my hack of his work, Understanding Understanding–Understanding Not Understanding–The Circularity and Paradoxy of Knowledge and Language Forms (Pawlik, 2005), to show that empiric logic, theory, personal experience, and mystical experience could be unified through one theory of natural language. I hated mathematics and machines. Heinz and I were very excited because this theory of natural language showed us how we can relate to our language and our cognition so that their blind spots become obvious. We learned to understand how we do not understand. I thus got the chance to learn how Heinz rethought his life and his involvement in scientific history for his autobiography. Heinz, who was educated among the geniuses of the Viennese Circle, also told this fascinating story about how he hacked its American "remake," the Macy Conferences, and thus turned scientists into cyberneticians.

One of these future cyberneticians', John von Neumann's, digitalization had already had a first world-changing effect before the conferences had even started. Von Neumann formalized human decision-making behavior in a mathematical control theory (Neumann, 2004). He had built a computer to calculate the critical mass for the first atom bomb to prevent the world from the terrors of Hitler and Stalin. (Pias, 2004/II, p. 55). Its future result would be the control/game theory guided by the Cold War's delicate balance of terror that transformed the human military war game into a subgame for the digitalized control of global human behavior. In this game of narratives and numbers, calculated economic destabilization became paramount, military intervention secondary (Pias, 2004/II).

Although digitalization still runs on Neumann's architecture, Neumann was just one of the multidisciplinary geniuses of the New York Macy Conferences, where the European intellectual

elite, who had fled from WWII, gathered with the American elite to reexplore and redesign the relationship between human mind, nature, and machines in the 1940s and 1950s. Norbert Wiener, who had invented a mathematically behavioral analysis for steering organisms, machines, and semantic systems, took the leading role (Wiener, Rosenblueth, & Bigelow, in Pias, 2004/II, p. 24). Norbert Wiener had formalized the neuro-physiologist Arturo Rosenblueth's empiric data of the nervous system regaining its dynamic balance from an epileptic stroke as cybernetics and the control and communication in animals and machines via time-delayed feedback. (Foerster & Broecker 2002, p. 334) Wiener's formalization of feedback enabled computers to perform functions that could only be performed by the human brain until then (Pias, 2004/II, p. 399). Digitalization is based on the transfer of self-regulating neurological feedback patterns into highly idealized if-then-repeat-until feedback patterns of machines.

The Macy Conferences were also an incubator for perhaps even more outstanding inventions and cooperation, like the first modeling of human-like machine intelligence by Warren McCulloch and Walter Pitts. They showed in their "logical calculus immanent in the nervous system" that any behavior put in logically unambiguous finite words could be calculated by an appropriate net of artificial nerve cells as elementary computers (Neumann, in Pias, 2004, p. 54).

Claude Shannon, for example, contributed the information theory and its related basis of mathematical cryptography for today's information age and present excitement about distrust-based crypto-currencies and block-chain technology as possible game changers in digital transformation. All in all, there were too many inventors and inventions to mention them in this context.

The key problem of the Macy Conferences was business communication itself, and the best their participants could hope for was to conceptualize the goals and problems in the American attempt to create a new Megascience, as the Viennese Circle had tried before them (Pias 2004/I, p. 29). How to agree upon a steering system that steers all steering systems?

The participants finally agreed on a common denominator in the wake of an intervention by the newcomer Heinz von Foerster. The previously unknown Viennese had originally been invited for inventing the first theory and fitting data on human forgetting, based on the circular feedback of molecular and quantum computation (Foerster & Broecker 2002, pp. 328–329). Already quietly envisioning a better model for computation without a memory, but barely speaking English, he was accepted into the group and made editor of the proceedings. He reluctantly agreed, but claimed he could not pronounce the conference title, "Circular, Causal, and Feedback Mechanisms in Biological and Social Systems" (Pias 2004/II, p. 47). He suggested "Cybernetics" as the unifying concept and title. This was accepted with laughter, first for the specific conference, then as a title for all conferences. The Macy scientists became cyberneticians, and the newborn science evolved. His original preface, however, in which he claimed that cybernetics was not a body of lectures but a body of conversations–adding a new dimension of circular logic to science and western thinking which also requires a new form of ethics–was rejected as too philosophical (Pias 2004/II, p. 48).

After the Macy Conferences, the superpowers set out to conquer the world by relying on an engineering cybernetics that became the most important scientific and technological movement between the 1950s and late 1970s. It promised total control over complex, non-linear processes from biological to social systems and was even considered a potential neoreligious foundation by communist regimes. (Krieg, 2005) Its game plan was that within a unified cultural environment humans, involved in their particular tasks and games, could be steered like ants. Society could be steered like a trivial machine determined by only two feedbacks: the desire to play and the desire to win (Herbert Simon, in Weizenbaum 1976, p. 260). Finally, this approach dissolved back into traditional sciences and created new neurosciences and computer sciences as well as an ambitious military-funded robotics and artificial intelligence (Krieg, 2005). Heinz, however, united a second transdisciplinary group to explore, model, and understand the relation

of machines, language, and human evolution as second-order cybernetics in his Biological Computer Lab from 1958 to 1976, until it was no longer possible to do nonmilitary related research due to the Mansfield Amendment (Umpleby, 2003).

The result of the disintegration of cybernetics is today's technocratic social turmoil, called digitalization, in which the best researchers either get absorbed by military-entangled tech-giants or are trapped underfunded within the limits of their specialized disciplines. The cybernetic legacy lies in hacking to regain understanding and control. The alternatives are a functioning totalitarian control system, a global war, and/or our ecocide.

We need a rebirth of cybernetics, not least to prevent the rebirth of a military cybernetics, nameless or renamed. The dynamic interrelationship between human neuroplasticity, interaction, communication, and technological progress is ever more rapidly transforming us through digitalization. The engineers have already hacked our world. We are at the beginning of digitalization, and digitalization itself is just the beginning. Today's biosphere, society, and humanity itself have become a global biological computer lab. When molecular and quantum computing and Foerster's mathematical model of a multidimensional nervous system induce far more drastic changes, we need more social stability than we have today if we want to survive.

Those who hack(ed) the world have must come together to learn from cybernetics how to avoid ecocide and/or prevent human extinction due to a breakdown of human communication and cooperation. Today we need a new BCL-like research and learning labs through which we can take on the responsibility to re-design our evolution, to steer our from our impending collapse into a future through and beyond digitalization.

2. Conclusion: Humanity's Tasks to thrive and survive in the Future

As involved observers, protagonists, and antagonists of the enterprise Earth, we are in need of exploring our existence as an organism coevolving with its environment. Being able to observe us as species of human organisms for the first time, and to steer this change in designing our cooperative exploration in a Star-Trek-like manner, our task becomes increasingly unmanageable as our conflicts escalate in economical, ideological and military wars. Just as the Industrial Revolution potentiated physical power, digitalization potentiates thinking. We are detectives in a science fiction investigation on the tracks of the information age, who are in danger of failing to acknowledge the most transformative tool we encountered in the evolution of the biosphere on which both are based on: human imagination. Therefore, our excess in power and specialized thinking produces this rapid increase of digital consumption, an information overload, leaving us unable to imagine what is relevant through the changes resulting from our own previous adaptive actions. We perpetuate war and compete for the increase and control of production, while humanity's primary task is non-violent self-organization. Our current delicate balance of terror, is not only as its name says: "delicate" and in no way sustainable, its control will also have to given over of to the artificial intelligence of our machines, as the increasing speed of hypersonic nuclear weapons will leave no time for human to respond or human decision making. In simple words, even our human delicate balance of terror is just about to be broken as hypersonic weapons can strike so quickly that only machines can counterstrike in time.

Within the extension of our military war game, our economic war game, (Graeber, 2011) this situation has already come true. Ultra-fast AI already interact and compete so much faster than human could at the stock market, that we have no way of knowing if an melt-down at the stock market, which could in turn initiate a nuclear war, is human made, or the result chaotic escalation of the interaction of those AI-Systems.

Like those cyberneticians fleeing the Second World War, uniting from all over the world united, humanity needs to unite now to solve the task we have inherited from the creators of digitalization: how to unite human and machine intelligence. In doing so, our leaders must lead

us non-violently through this process like Gandhi, without an single shot fired, as even sole single nuclear shot fired within a digitalized balance of terror starts a chain reaction of mutual nuclear destruction. Digitalization globalized Gandhi's golden rule of non-violence. We either imagine and act on a common non-violent solution, or soon any moment of humanity's digital transformation, even without human interference, could be our last.

Lucas Pawlik, PhD,
University of Vienna, Consultant and Therapist,
Austria,
Web: https://peacefromharmony.org/?cat=en_c&key=887

Leo Semashko's Comments

May this book change the world by becoming its wake-up call!
Lucas Pawlik

We can appreciate, without exaggeration, that the GHA "Gandhi Book" Conclusion, written by a new member of our team, a young but talented and experienced professional cybernetician from the University of Vienna, Dr. Lucas Pawlik, is brilliant and ingenious from all points of view that we will try to highlight in our commentary. His Conclusion will stun the traditional reader, especially from Russia and India, as well as our entire "Gandhi book" (GB) as a whole with its tetranet cybernetic thinking and approach to Gandhi nonviolence. It seems that such an approach and such a Conclusion has never been proposed or tried. We emphasize the key points of their organic "circular logical connections", i.e. cybernetic relationships in the intellectual content of the book as the space of the Ferster's second-order observing cybernetics, which is reaching a new level of third-order cybernetics of societal spheres and spherons.

We emphasize in it the key points of the organic "circular logical connections", i.e. cybernetic relationships in the intellectual content of the book as the space of the Foerster's second-order observing cybernetics, which through back looping allows enables us a true steering of societal spheres and spherons. This, in turn, in the new loopback raises cybernetics to the level of the third order. For not only the world, but also our cybernetic knowledge and we, along with it, must fundamentally transform if we have created a suicidal super-sonic nuclear weapon. Through the new cybernetics, we must transform a militarist suicidal society into principle peaceful society of spheres and spherons. Not the computer of this genocidal weapon, but we ourselves, by the spherons and their cybernetics, must decide our fate. This is the fundamental idea of Pawlik, which unfolds in the following points.

1. Its main meaning is that it replaces by its conceptual and terminological novelty, or in a more expressive and intelligible Pawlik's language, "hacks" the traditional militaristic specialized thinking along with its military, specialized cybernetics, offering a non-violent "substantially new manner of thinking" (Einstein) with its "substantially" new, non-violent cybernetics or the cybernetics of non-violence of spheres and spherons, unfolded in the GB.

2. The movement of Pawlik to this hacking comes professionally, from the details of cybernetic machinery, and our movement – from a holistic tetraspheral sociology/sociocybernetics. These two opposite reverse tracks inevitably met and closed up in a deep existential "understanding of understanding" of the necessary hacking/rebirth of both of them – technical cybernetics/digitalization and traditional sociology/sociocybernetics in structural modeling of the harmony of nonviolent societal spheres and spherons.

3. The spheral statistics becomes the platform for their convergence as a focused societal space of new, non-violent, non-militaristic digitalization, saving humanity from the nightmare of nuclear suicide, from the threat of genocide and ecocide, prepared by the former militaristic thinking and former military cybernetics.

4. The Conclusion delightfully expresses the natural integration of the two tracks in the holistic multidisciplinary spheral thinking of the spheres and spherons with their spheral cyclic logic. It is disclosed on the example of the corresponding innovative interpretation of Gandhi's non-violence, making it universally comprehensible, generally acceptable and generally useful for every nation and for humanity as a whole for its survival in a totally prepared nuclear/cybernetic genocide/ecocide.

5. A clear understanding of its imminent threat pushes non-violent spheral cybernetics capable of "preventing the rebirth of military cybernetics" and hacking/replacing it from two sides: from above – new, spheral tetranet thinking and from below – new, spheral statistical digitalization. This mega-scientific hacking/shift symbolizes the new Gandhian era of non-violence in an adequate modern scientific and technical form of spheral cybernetics and spheral digitalization.

6. The multidimensional nervous and technical system of Foerster in this noospheral picture is complemented and corrected by navigation of the multidimensional societal system of spheres and spherons overcoming the eternal multidimensional crisis of the former militaristic world order. Only the non-violent, non-militarist system of tetranet thinking and spheral digitalization provide and guarantee the necessary non-violent measure of 'social stability' that is required for the survival of humanity and its sustainable harmonious development in the natural environment, preserving, rather than undermining, its predatory militaristic exploitation.

7. Today, humanity is almost completely devoid of this measure of social stability by the total dominance of militarism, violence, corresponding thinking and cybernetics. Therefore, Pawlik is right in his Conclusion: "*Today we need new research and training laboratories like BCL, with which we can take responsibility for reorganizing our evolution in order to prevent the impending collapse into our future through digitalization and its consequences.*" Such laboratories and Academies have long been proposing, including GB, in non-violent tetranet thinking, in order to crack/change traditional militaristic thinking, its cybernetics and digitization by the substantially new – non-violent and spheral paradigms.

8. Their spheral mega-scientific paradigms reveal the evolution of humankind as a genetic spheral organism of a special noosphere, and not a "trivial machine" in the environment of other planetary spheres: the biosphere, atmosphere, hydrosphere, lithosphere and cosmosphere. The laws of the spheres are integral, they are fundamentally different from the laws of their specialized parts, including mechanical and robotic ones. They are structurally modeled in the cyclic spheral logic of tetranet thinking and in its corresponding system design, presented by our joint GB, through which the idea of Pawlik's hacking passes, as they say, a "red thread" from its beginning to the end.

Our common Gandhian creative imagination in this book, revealing the non-violent way of human survival, requires the recognition of a qualitatively new informational and social Epoch and a qualitatively new, sphere-based statistical digitalization. Their Epoch is freed from the militaristic pathology of specialized digitalization, retaining all its constructive achievements in the service of non-violence and escaping from the "underfinancing trap". It is fundamentally unavoidable for weak, disciplinary fragmented, torn humanitarian consciousness and thinking, but impossible for spheral mega science. Obviously, only it is able to uncover the "greatest force of non-violence" of Gandhi to hack, overcome and replace the suicidal escalation of violence in the future evolution of the 21st century.

Leo Semashko, Russia. **Web**: https://peacefromharmony.org/?cat=en_c&key=253

Michael Ellis' Comments

Dear Lucas and All

To better clarify what I want to express I enclose my latest thoughts. The article of Lucas Pawlik is brilliant and I am however saying that we need to look at what is our essential nature as human Beings.

I am a medical doctor and practice integrative medicine and so see the person as an integration of mind body and spirit. We are innately more than a thinking feeling brain as our essential nature is a faculty composed of several brains. As well as the cerebral brain there is the heart which has within it thousands of neurons and radiates an electromagnetic torus and is our nexus of intuition. There is also the microbiome of the intestines and the neuropeptides in every cell of the body. We are a quantum receivers transducers and transmitters of energy and vibration in and around us. The core of our being is a sentience and expression which is of particulate and wave form. This is why to rob our brains of our essential nature by linking all brains to a cyber-neural global cloud will destroy our very humanness as we become a race of cyborgs. So let us follow Gandhi and the non violent process of Satyagraha.

Please see my essay below for inclusion in the book if possible. July 2, 2019

Dr Michael Ellis,
President Global Peace Centre: http://www.globalpeacecentre.org
Australia
Web: https://peacefromharmony.org/?cat=en_c&key=760

The Revival of Humanistic Dignity through Soulful Satyagraha/Nonviolence

by

Michael Ellis

The rapid explosion of knowledge and information particularly within the context of the world wide web indicates that a new social technology is being created in which we need to navigate between the levels of collective capacity and individual action. What this means is that in order to contribute creatively to the emerging whole we need to pay particular attention to our souls.

Brian Swimme (1996, 2011) says we are now at a phase shift in evolution. This means that the changes that we are facing now are as vast as the extinction of the dinosaurs 95 million years ago. Our Gandhian book speaks about similar large-scale shift as the Rubicon transition between the era of violence and non-violence in the social evolution. So the question is, can we access the soul and explore the spiral of conscious evolution in unity with the Earth's biosphere at different levels of our journey.

This is where the process of Satyagraha comes into force. This word coined by Gandhi literally means clinging to the truth that we are all one under the skin and that there is no such thing as a win/lose confrontation because all our important interests are really the same, as we all want unity and peace with each other. Satyagraha is the process of non-violence, which Gandhi the great avatar used. The essence of Satyagraha is based on the essence of truth in every individual which can never be destroyed. It is been called reason and a kind of humane awareness. It is also spirit of humanity, an ability to awaken the dormant humanity in another individual.

Indeed the new science of consciousness shows that we possess mirror neurons and vibrational patterns within ourselves especially within the brain and the heart which mirror and can also entrain other people's brains, hearts and minds as we pick up external vibrations like sensitive tuning forks. We are all very much connected. In a state of coherence and love we can influence people around us to entrain into a similar state which thereby creates empathy and rapport. The Satyagraha spheral basis, about which Gandhi constantly talked, is probably the most significant process we can use to change the world by recognizing our spheral interconnectedness and interdependence with all humanity.

All social life, indeed, as the world spheral statistics show, is structured and self-organized by spheres and spherons, creating an integral infrastructure of the global noosphere of humanity. It has no place for violence as a destructive process of pathological deviation from non-violence of the fundamental natural motor of spheres and spherons in their cybernetic interdependence. In this cybernetics, the soul has the highest humanistic and axiological mission of preserving and ensuring humanism, love and compassion for all eternity as the highest, from God, dignity and advantage of human in nature.

The humanistic, non-violent in Gandhian Satyagraha cybernetics of spheres and spherons, disclosed in our book is a new revolution of Copernicus. It shows that we are all connected, that everything maintains itself at the expense of everything else and that the universe and our environment is in fact a biological quantum reality whose infrastructure is pure love, harmony and peace. In them, the eternal meaning belongs to the service of each to all and all to everyone. This service of love, non-violence and harmony is self-organized in the natural structure of spheres and spherons. They realize all the connections of external and internal uniting with the powerful energy of love as "the greatest force of non-violence, which is mightier than the mightiest weapon of destruction" according to Gandhi. This love is not an imposed hierarchical authority but a groundwork of the universe itself and is accessible by all humanity.

Full publication: https://peacefromharmony.org/?cat=en_c&key=760

Part 5.
Applications

1. Mahatma Gandhi. Immortal thoughts about non-violence, varnas/spherons, spheres, spiritual economy and politics. Fragments

Source:
Gandhi, M. My Religion, 1955. – http://gandhisevagramashram.org/my-religion/index.php

Chapter 25: Love In Opposition To Wrong

A. THE LAW OF LOVE AGAINST HATE

….Prophets and avatars have also taught the lesson of Ahimsa more or less. Not one of them has professed to teach Himsa. And how should it be otherwise? **Himsa does not need to be taught.** Man as animal is violent, **but as Spirit is non-violent**. The moment he awakes to the Spirit within, he cannot remain violent. Either he progresses towards Ahimsa or rushes to his doom. That is why **the prophets and avatars have taught the lessons of truth, harmony, brotherhood, justice, etc.—all attributes of Ahimsa**.

And yet violence seems to persist, **even to the extent of thinking people like the correspondent regarding it as the final weapon**. But as I have shown history and experience are against him.

If we believe **that mankind has steadily progressed towards Ahimsa, it follows that it has to progress towards it still further**. Nothing in this world is static, everything is kinetic. If there is no progression then there is inevitable retrogression. No one can remain without the eternal cycle, unless it be God Himself.…

Harijan,
11-8-'40 p. 245

My goal is friendship with the whole world and I can combine the greatest love with the greatest opposition to wrong.

Young India,
10-3-'20, p. 5

Non-violence is 'not a resignation from all real fighting against wickedness. On the contrary, the non-violence of my conception is a more active and real fight against wickedness than retaliation whose very nature is to increase wickedness. I contemplate a mental and therefore a moral opposition to immoralities. I seek entirely to blunt the edge of the tyrant's sword not by putting up against it a sharper-edged weapon, but by disappointing his expectation that I would be offering physical resistance. The resistance of the soul that I should offer would elude him. It would at first dazzle him and at last compel recognition from him, which recognition would not humiliate him but would uplift him.

Young India,
8-10-'25, p. 346

(Underscores and comments in [] are ours here and hereinafter - Leo Semashko, editor).

Disarmament

Before general disarmament in Europe commences, as it must some day, unless Europe is to commit suicide, some nation will have to dare to disarm herself and take large risks. The level of non-violence in that nation, if that ever happily comes to pass, will naturally have risen so high as to command universal respect. Her judgments will be unerring, her

decisions firm, her capacity for heroic self-sacrifice will be great, and she will want to live as much for other nations as for herself.

Young India,
8-10-'25, P. 345

Like opium production, the world manufacture of swords needs to be restricted. The sword is probably responsible for more misery in the world than opium.

Young India,
19-11-'25, p. 397

If there were no greed, there would be no occasion for armaments.

Harijan,
12-11-'38, p. 328

World Peace

If the recognized leaders of mankind who have control over the engines of destruction were wholly to renounce their use, with full knowledge of its implications, permanent peace can be obtained. It is my conviction that the root of the evil is want of a living faith in a living God. It is a first class human tragedy that peoples of the earth who claim to believe in the message of Jesus whom they describe as the Prince of Peace **show little of that belief in actual practice**. It is painful to see sincere Christian divines limiting the scope of Jesus' message to select individuals. I have been taught from my childhood and tested the truth by experience that the primary virtues of mankind are possible of cultivation by the meanest of the human species. It is this undoubted universal possibility that distinguishes the humans from the rest of God's creation. If even one nation were unconditionally to perform the supreme act of renunciation, many of us would see in our lifetime visible peace established on earth.

Harijan,
18-6-'38, p. 153

I reiterate my conviction that <u>there will be no peace for the Allies or the world unless they shed their belief in the efficacy of war</u> and its accompanying terrible <u>deception and fraud</u> and are determined to hammer out real peace based on freedom and equality of all races and nations.

The Bombay Chronicle,
18-4-'45

Chapter 26: Love In Relating to The Animal World

A. NON-KILLING OF ANIMALS

Ahimsa is a comprehensive principle. We are helpless mortals caught in the conflagration of Himsa. The saying that life lives on life has a deep meaning in it. Man cannot for a moment live without consciously or unconsciously committing outward Himsa. The very fact of his living— eating, drinking, and moving about—necessarily involves some Himsa, destruction of life, be it ever so minute. A votary of Ahimsa therefore remains true to his faith if the spring of all his actions is compassion, if he shuns to the best of his ability the destruction of the tiniest creature, tries to save it, and thus incessantly strives to be free from the deadly coil of Himsa. He will be constantly growing in self-restraint and compassion, but he can never become entirely free from outward Himsa.

Then again because underlying **Ahimsa is the unity of all life**, the error of one cannot but affect all, and hence **man cannot be wholly free from Himsa**. So long as he continues to be a social being**, he cannot but participate in the Himsa that the very existence of society involves**.

Autobiography,
1948, pp. 427-29

Taking life may be a duty. Let us consider this position.
We do destroy as much life as we think is necessary for sustaining the body. Thus for food we take life, vegetable and other, and for health we destroy mosquitoes and the like by the use of disinfectants, etc. and we do not think that we are guilty of irreligion in doing so.

This is as regards one's own self. But for the sake of others, i.e., for the benefit of the species we kill carnivorous beasts. When lions and tigers pester their villages, the villagers regard it as a duty to kill them or have them killed.

Even manslaughter may be necessary in certain cases. Suppose a man runs amuck and goes furiously about sword in hand, and killing any one that comes his way, and no one dares to capture him alive. Anyone who dispatches this lunatic will earn the gratitude of the community and be regarded a benevolent man.

From the point of view of Ahimsa it is the plain duty of every one to kill such a man. There is indeed one exception if it can be so called. The yogi who can subdue the fury of this dangerous man may not kill him. But we are not here dealing with beings who have almost reached perfection; we are considering the duty of a society of ordinary erring human beings.

There may be a difference of opinion as regards the appositeness of my illustrations. But if they are inadequate, others can be easily imagined. **What they are meant to show is that refraining from taking life can in no circumstances be an absolute duty**.

The fact is that Ahimsa does not simply mean non-killing. Himsa means causing pain to or killing any life out of anger, or from a selfish purpose, or with the intention of injuring it. Refraining from so doing is Ahimsa.....

Young India,
4-11-'26, pp. 384-85

To cause pain or wish ill to or to take the life of any living being out of anger or a selfish intent is Himsa. On the other hand, after a calm and clear judgment to kill or cause pain to a living being with a view to its spiritual or physical benefit from a pure, selfless intent **may be the purest form of Ahimsa**. Each such case must be judged individually and on its own merits. **The final test as to its violence or non-violence is after all the intent underlying the act**.

Young India,
4-10-'28, p. 331

My Ahimsa is my own. **I am not able to accept in its entirety the doctrine of non-killing of animals**. I have no feeling in me to save the life of those animals who devour or cause hurt to man. I consider it wrong to help in the increase of their progeny. Therefore, I will not feed ants, monkeys, or dogs. **I will never sacrifice a man's life in order to save theirs**.

Thinking along these lines, I have come to the conclusion that to do away with monkeys where they have become a menace to the well-being of man is pardonable. **Such killing becomes a duty**. The question may arise as to why this rule should not also apply to human beings. It cannot because, however bad, they are as we are. Unlike the animal, God has given man the faculty of reason.

Harijan,
5-5-'46, p. 123

Chapter 28: Ashram Vows

B. AHIMSA OR LOVE

It is impossible for us to realize perfect Truth so long as we are imprisoned in this mortal frame. We can only visualize it in our imagination. We cannot, through the instrumentality of this ephemeral body, see face to face Truth which is eternal. That is why in the last resort we must depend on faith.

It appears that the impossibility of full realization of Truth in this mortal body led some ancient seeker after Truth to the appreciation of Ahimsa. The question which confronted him was: "Shall I bear with those who create difficulties for me, or shall I destroy them?" **The seeker realized that he who went on destroying others did not make headway** but simply stayed where he was, while the man who suffered those who created difficulties marched ahead, and at time even took the others with him. The first act of destruction taught him that **the Truth which was the object of his quest was not outside himself but within**. Hence the more he took to violence, the more he receded from Truth. For in fighting the imagined enemy without, he neglected the enemy within.....
From Yeravda Mandir,
1945, pp. 5-9

Chapter 29: Religion To Pervade All Spheres of Life

The whole gamut of man's activities today constitutes an indivisible whole. **You cannot divide social, economic, political and purely religious work** into watertight compartments. [*Four spheres of social production/life in Gandhi's terminology*], I do not know any religion apart from human activity. It provides a moral basis to all other activities which they would otherwise lack, reducing life to a maze of sound and fury signifying nothing'.
Harijan,
24-12-'38, p. 393

We have to make truth and non-violence, not matters for mere individual practice but for practice by groups and communities and nations. That at any rate is my dream. I shall live and die in trying to realize it. My faith helps me to discover new truths every day. **Ahimsa is the attribute of the soul**, and therefore, to be practised by everybody in all the affairs of life. If it cannot be practised in all departments, it has no practical value.
Harijan,
2-3-'40, p. 23

Chapter 30: In The Social Sphere

All Men Are Equal

In my opinion there is no such thing as inherited or acquired superiority. I believe in the rock-bottom doctrine of advaita (non-duality or oneness) and my interpretation of advaita **excludes totally any idea of superiority at any stage whatsoever**. **I believe implicitly that all men are born equal.** All—whether born in India or in England or America or in any circumstances whatsoever—have the same soul as any other. And it is because **I believe in this inherent equality of all men that I fight the doctrine of superiority** which many of our rulers arrogate to themselves. I have fought this doctrine of superiority in South Africa inch by inch, and it is because of that inherent belief, that I delight in calling myself a scavenger, a spinner, a weaver, a farmer and a labourer. And I have fought against the Brahmanas themselves wherever they have claimed any superiority for themselves either by reason of their birth, or by reason of their subsequently acquired knowledge. **I consider that it is unmanly for any person to claim superiority over a fellow-being. He who claims superiority at once forfeits his claim to be called a man**. That is my opinion.
Young India,
29-9-'27, p. 329

The forms are many, but the informing spirit is one. How can there be room for distinctions of high and low where there is this all-embracing fundamental unity underlying the outward diversity? For that is a fact meeting you at every step in daily life. **The final goal of all religions is to realize this essential oneness**.
Harijan, 15-12-'33, p. 3

Individualism v. Social Responsibility

I value individual freedom but you must not forget that man is essentially a social being. He has risen to his present status by learning to adjust his individualism to the requirements of social progress. **Unrestricted individualism is the law of the beast of the jungle**. We have to learn to strike the mean between individual freedom and social restraint. Willing submission to social restraint for the sake of the well-being of the whole society, enriches both the individual and the society of which he is a member.

Harijan,
27-5-'39, p. 144

There is not a single virtue which aims at, or is content with, the welfare of the individual only. Conversely, there is not a single moral offence which does not, directly or indirectly, affect many others besides the actual offender. Hence, whether an individual is good or bad is not merely his own concern, but really the concern of the whole community, nay, of the whole world.

Ethical Religion,
By M. K. Gandhi, p. 55

I believe in the essential unity of man and for that matter of all that lives. Therefore, I believe that if one man gains spiritually, the whole world gains with him and, if one man falls, the whole world falls to that extent.

Young India,
4-12-'24 p. 398

Chapter 31: In The Economic Sphere

Love To Be The Basis

Man is an engine whose **motive power is the soul. The largest quantity of work will not be done by this curious engine for pay or under pressure**. It will be done when the motive force, that is to say, the will or spirit of the creature, is brought to its greatest strength by its own proper fuel, namely by the affections....

Gandhiji's Paraphrase of Ruskin's Unto This Last, 1951 pp. 8-11, 21-23

The Economics of Justice

True economics never militates against the highest ethical standard, just as all true ethics to be worth its name, must at the same time be also good economics. **An economics that inculcates Mammon worship, and enables the strong to amass wealth at the expense of the weak, is a false and dismal science. It spells death. True economics, on the other hand, stands for social justice, it promotes the good of all equally** including the weakest, and is indispensable for decent life...

Harijan,
9-10-'37, p. 292

We thus find that **the economists are wrong in thinking that competition is good for a nation**. Competition only enables the purchaser to obtain his labour unjustly cheap, with the result that **the rich grow richer and the poor poorer. In the long run it can only lead the nation to ruin**. A workman should receive a just wage according to his ability. Even then there will be competition of a sort, but the people will be happy and skilful, because they will not have to underbid one another, but to acquire new skills in order to secure employment. This is the secret of Government services in which salaries are fixed according to the gradation of posts. The candidate for it does not offer to work on a lower salary but only claims that he is abler than his competitors. **But in trade and manufacture there is oppressive competition, which results in fraud, chicanery and theft.** Rotten goods

are manufactured. The manufacturer, the labourer, the consumer,—each is mindful of his own interest. This poisons all human intercourse.

Labourers starve and go on strike. Manufacturers become rogues and consumers too neglect the ethical aspect of their own conduct. **One injustice leads to many others**, and in the end the employer, the operative and the customer are all unhappy and go to rack and ruin. The very wealth of the people acts among them as a curse.

True economics is the economics of justice. People will be happy in so far as they learn to do justice and be righteous. All else is not only vain but leads straight to destruction. To teach the people to get rich by hook or by crook is to do them an immense disservice.

Gandhiji's Paraphrase of Ruskin's Unto This Last, 1951, pp.50-53

Economic Equality

My idea of society is that **while we are born equal, meaning that we have a right to equal opportunity**, all have not the same capacity. It is, in the nature of things, impossible. For instance, all cannot have the same height or colour or degree of intelligence etc.; therefore, in the nature of things, some will have ability to earn more and others less. People with talents will have more and they will utilize their talents for this purpose. If they utilize their talents kindly, they will be performing the work of the State. Such people exist as trustees, on no other terms. I would allow a man of intellect to earn more, I would not cramp his talent. But the bulk of his greater earnings must be used for the good of the State, just as the income of all earning sons of the father go to the common family fund.

Young India,
26-11-'31, p. 368

The real implication of equal distribution is that each man shall have the wherewithal to supply all his natural wants and no more. For example, if one man has a weak digestion and requires only a quarter of a pound of flour for his bread and another needs a pound, both should be in a position to satisfy their wants. To bring this ideal into being the entire social order has got to be reconstructed. A society based on non-violence cannot nurture any other ideal. We may not perhaps be able to realize the goal, but we must bear in mind and work unceasingly to near it. To the same extent as we progress towards our goal we shall find contentment and happiness, and to that extent too, shall we have contributed towards the bringing into being of a non-violent society.

Now let us consider **how equal distribution can be brought about through non-violence. The first step towards it** is for him who has made this ideal part of his being to bring about the necessary changes in his personal life. He would reduce his wants to a minimum, bearing in mind the poverty of India. His earnings would be free of dishonesty. The desire for speculation would be renounced. His habitation would be in keeping with the new mode of life. There would be self-restraint exercised in every sphere of life. When he has done all that is possible in his own life, then only will he be in a position to preach this ideal among his associates and neighbours.

Indeed at the root of this doctrine of equal distribution must lie that of the trusteeship of the wealthy for superfluous wealth possessed by them....

Harijan,
25-8-'40, pp. 260-61

A Non-violent Economic Structure

I suggest that if India is to evolve along non-violent lines, it will have to decentralize many things. Centralization cannot be sustained and defended without adequate force.

Harijan,
30-12-'39, p. 391

You cannot build non-violence on a factory civilization, but it can be built on self-contained villages. Rural economy, as I have conceived it, eschews exploitation altogether and **exploitation is the essence of violence**. You have, therefore, to be rural-minded before you can be nonviolent.
Harijan,
4-11-'39, p. 331

In The Political Sphere [*NOT FOUND ON THE WEBSITE*]

Chapter 36: Varna and Caste

The Law of Varna [The law of varnas is law of ancient spherons and vice versa]

Varna means pre-determination **of the choice of man's profession** [employment]. The law of varna is that a man shall follow the profession of his ancestors for earning his livelihood. Varna therefore is in a way the law of heredity. **Varna is not a thing that is superimposed on Hindus, but men who were trustees for their welfare discovered the law for them. It is not a human invention, but an immutable law of nature—the statement of tendency that is ever present and at work like Newton's law of gravitation**. Just as the law of gravitation existed even before it was discovered so did the law of varna. It was given to the Hindus to discover that law. By their discovery and application of certain laws of nature, the people of the West have easily increased their material possessions. **Similarly, Hindus by their discovery of this irresistible social tendency have been able to achieve in the spiritual field what no other nation in the world has achieved**.

Varna has nothing to do with caste. Down with the monster of caste that masquerades in the guise of varna. **It is this [*caste*] travesty of varna that has degraded Hinduism and India**. Our failure to follow the law of varna is largely responsible both for our economic and spiritual ruin. **It is one cause of unemployment and impoverishment, and it is responsible for untouchability and defections from our faith**. **The Rishis after incessant experiment and research arrived at this fourfold division [*it is the ancient four spherons as four varnas*], that of teaching, of defending, of wealth-producing,** and of manual service....

We are talking with crooked notions of varna. **When varna was really practised, we had enough leisure for spiritual training.** Even now, you go to distant villages and see what spiritual culture villagers have as compared to the town-dwellers. These know no self-control…
Young India,
24-11-'27, pp. 390, 391 & 395

Varnashrama, as I interpret it, satisfies the religious, social and economic needs of a community. It satisfies the religious needs, because a whole community accepting the law is free to devote ample time to spiritual perfection. Observance of the law obviates social evils and entirely prevents the killing economic competition. And if it is regarded as a law laying down, not the rights or the privileges of the community governed by it, but their duties, it ensures the fairest possible distribution of wealth, though it may not be an ideal, i.e. strictly equal, distribution. **Therefore, when people in disregard of the law mistake duties for privileges and try to pick and choose occupations for self-advancement, it leads to confusion of varna and ultimate disruption of society. In this law, there is no question of compelling any person to follow the parental occupation against his or her aptitude; that is to say, there can be no compulsion from without as there was none for, perhaps, several thousand years, during which the law of varnashrama worked without interruption**. By training, the people had recognized the duty and the justice of the law, and they voluntarily lived under it. **Today, nations are living in ignorance and breach of that law and they are suffering for it.** The so-called civilized nations have by no means reached a state which they can at all regard with equanimity and satisfaction.
Harijan,
4-3-'38, p. 5

As I have interpreted **Varna Dharma, there is no bar in any shape or form to the highest mental development.** The bar altogether normal is against change of hereditary occupation for the sake of bettering one's material condition, and thus setting up a system of unhealthy and ruinous competition which is today robbing life of all its joy and beauty.
Harijan,
29-7-'33, p. 8

Varna thus conceived is no man-made institution but *the law of life universally governing the human family*. Fulfillment of the law would make life livable, would spread peace and content, end all clashes and conflicts, put an end to starvation and pauperization, solve the problem of population and even end disease and suffering. [***Attributes, functions and meanings of spherons are identical***.]

But if varna reveals the law of one's being and thus the duty one has to perform, it confers no right, **and the idea of superiority or inferiority is wholly repugnant to it**. **All varnas are equal, for the community depends no less on one than on another**. [***This is also the highest law of spherons***.] **Today varna [caste] means gradation of high and low. It is a hideous travesty of the original. The law of varna was discovered by our ancestors by stern austerities**. They sought to live up to the law to the best of their capacity. We have distorted it today and have made ourselves the laughing-stock of the world.

Though **the law of varna is a special discovery of some Hindu seer, it has universal application**. Every religion has some distinguishing characteristic, **but if it expresses a principle or law, it ought to have universal application.** That is how I look at the law of varna. **The world may ignore it today but it will have to accept it in the time to come.** It ordains that every one shall fulfill the law of one's being by doing in a spirit of duty and service that to which one is born.
Harijan,
28-9-'34 p. 261-62

So is the effort to jump over one another. The law of varna is the antithesis of competition which kills.
Harijan,
6-3-'37, p. 27

Caste v. Class

Man being a social being has to devise some method of social organization. **We in India have evolved caste; they in Europe have organized class. Neither has the solidarity and naturalness of a family which perhaps is a God ordained institution. If caste has produced certain evils, class has not been productive of anything less**.

If class helps to conserve certain social virtues, caste does the same in equal, if not greater, degree. **The beauty of the caste system is that it does not base itself upon distinctions of wealth possessions**. Money, as history has proved, is the greatest disruptive force in the world....
Young India,
29-12-'20, p. 3

Chapter 37: Untouchability

Love of the people brought the problem of untouchability early into my life. My mother said, 'You must not touch this boy, he is an untouchable.' 'Why not?' I questioned back, and from that day my revolt began.
Harijan, 24-12-'38, p. 393

It is my certain conviction that, if the Hindu heart is completely purged of the taint of untouchability, the event will have its inevitable influence not only upon all the communities in India but on the whole world. This belief is daily becoming stronger. I cannot remove from my heart untouchability regarding several millions of human beings and harbour it towards some other millions. **The very act of the Hindu heart getting rid of distinctions of high and low must cure us of mutual jealousies and distrust of and among other communities. It is for that reason that I have staked my life on this issue. In fighting this battle against untouchability, I am fighting for unity not only among Hindu 'touchables' and Hindu 'untouchables' but among Hindus, Muslims, Christians and all other different religious communities**.

Harijan,
17-11-'33, p. 4

Removal of untouchability means love for, and service of, the whole world, and thus merges into Ahimsa. Removal of untouchability spells the breaking down of barriers between man and man, and between the various orders of Being. We find such barriers erected everywhere in the world.

From Yeravda Mandir,
1945, pp. 33-34

Chapter 39: What I Value In Hinduism

Just as in the West they have made wonderful discoveries in things material, similarly **Hinduism has made still more marvelous discoveries in things of religion, of the spirit, of the soul. But we have no eye for these great and fine discoveries. We are dazzled by the material progress that Western science has made**. I am not enamoured of that progress. In fact, it almost seems as though God in His wisdom had prevented India from progressing along those lines, so that it might fulfill its special mission of resisting the onrush of materialism. After all, there is something in Hinduism that has kept it alive up till now. It has witnessed the fall of Babylonian, Syrian, Persian and Egyptian civilizations....

Today varnashrama dharma and Hinduism are misrepresented and denied by its votaries. The remedy is not destruction, but correction. Let us reproduce in ourselves the true Hindu spirit, and then ask whether it satisfies the soul or not.

Young India,
24-11-'27, p. 396

My uniform **experience has convinced me <u>that there is no other God than Truth</u>**. And if every page of these chapters does not proclaim to the reader **<u>that the only means for the realization of Truth is Ahimsa</u>**, I shall deem all my labour in writing these chapters to have been in vain. And, even though my efforts in this behalf may prove fruitless, let the readers know that the vehicle, not the great principle, is at fault. **<u>After all, however sincere my strivings after Ahimsa may have been, they have still been imperfect and inadequate</u>**. The little fleeting glimpses [***in intuition***], therefore, that I have been able to have of Truth can hardly convey an idea of the indescribable lustre of Truth, a million times more intense than that of the sun we daily see with our eyes. In fact what I have caught is only the faintest glimmer [***in intuition***] of that mighty effulgence. But this much **I can say with assurance, as a result of all my experiments, that <u>a perfect vision of Truth can only follow a complete realization of Ahimsa</u>**.

To see the universal and all-pervading Spirit of Truth face to face one must be able to love the meanest of creations as oneself. And a man who aspires after that cannot afford to keep out of any field of life [***spheres of life***]. **That is why my devotion to truth has drawn me into the field of politics; and I can say without the slightest hesitation, and yet in all humility, that those who say that religion has nothing to do with politics do not know what religion**

means.... [*Devotion to truth encourages to take up ALL four spheres, and this means, holistic, integrate spheral tetranet thinking, deployed in this GHA "Gandhi book" and confirmed by its experience and in Gandhi's fragments*.]
Autobiography,
1948, pp. 614-16

Chapter 40: Conclusion

The opinions I have formed and the conclusions I have arrived at are not final. I may change them tomorrow; I have nothing new to teach the world. **Truth and nonviolence are as old as the hills. All I have done is to try experiments in both on as vast a scale as I could do. In doing so I have sometimes erred and learnt by my errors**. Life and its problems have thus become to me so many experiments in the practice of truth and non-violence.
Harijan,
28-3-'36, p. 49

My faith in truth and non-violence is ever growing, and as I am ever trying to follow them in my life, I too am growing every moment. I see new implications about them. I see them in a newer light every day and read in them a newer meaning.
Harijan,
1-5-'37, p. 94

At the time of writing **I never think of what I have said before. My aim is not to be consistent with my previous statements on a given question; but to be consistent with truth as it may present itself to me at a given moment**. The result has been that I have grown from truth to truth; I have saved my memory an undue strain; and what is more, whenever I have been obliged to compare my writing even of fifty years ago with the latest, I have discovered no inconsistency between the two. But friends who observe inconsistency will do well to take the meaning that my latest writing may yield unless, of course, they prefer the old. But before making the choice they should try to see if there is not an underlying and abiding consistency between the two seeming inconsistencies.

If I can say so without arrogance and with due humility, my message and methods are, indeed, in their essentials **for the whole world**.
Harijan,
30-9-'39, p. 288

I lay claim to nothing exclusively divine in me. I do not claim prophetship. I am but a humble seeker after Truth and bent upon finding It. I count no sacrifice too great for sake of seeing God face to face,
Harijan,
6-5-'33, p. 4

A persistent correspondent from Simla asks me whether I intend to found a sect or claim divinity. I have answered him by a private letter. But he would have me make a public declaration for the sake of posterity. **I should have thought that I had in the strongest terms repudiated all claim to divinity. I claim to be a humble servant of India and humanity and would like to die in the discharge of such service.** I have no desire to found a sect. I am really too ambitious to be satisfied with a sect for a following, for I represent no new truths. I endeavour to follow and represent truth as I know it. I do claim to throw a new light on many an old truth. I hope that this declaration will satisfy my inquirer and others like him.
Young India,
25-8-'21, p. 267

2. GHA Gandhi World Petition

SAVE GANDHI'S HERITAGE!

THERE IS AN URGENT NEED FOR THE REVIVAL OF GANDHIAN NON-VIOLENCE AT THE NEW SCIENTIFIC AND GEOPOLITICAL LEVEL THAT IS ADEQUATE TO AFFECT THE UNPRECEDENTED CHALLENGES AND GLOBAL THREATS OF VIOLENCE AGAINST HUMANITY AND NATURE IN THE XXI CENTURY.

The International Jubilee Gandhi Committee (GC), expressing the interests of the world civil society, emphatically states that over the past 70 years, there has been a paralysis and vacuum of political will of nation states regarding the preservation, research, development and system use of Gandhi's unique non-violence heritage.

In this political vacuum, the social perversion of non-violence and the dismissing of Gandhi's unique historical importance creates a lost opportunity. The perversion of the symbol of peace into the symbol of the nuclear apocalypse of civilization perpetuates militaristic solutions that zombies the young generations psychologically for future violence. The silence of Gandhi also serves this today, what is the death, betrayal and oblivion of his non-violence as the most valuable peacemaking tool to the exultation of eternal militarism and invincible violence.

Therefore, modern history is marked by an unprecedented increase of violence in all areas of human life and biosphere. It has reached an extreme, especially dangerous limit for the life of humanity in the sphere of interstate relations. Violence, like a deadly cancer pathology, SMITES all social institutions: family, education, media, the state and all social stratums, especially the weakest, vulnerable, and the most unprotected: children, women, the elderly and the like. Violence is the totalitarian ideology of all deviant, aggressive and terrorist groups.

In this connection,

The GHA International Gandhi Committee (GC) on behalf of a global civil society that sees the salvation and survival of humanity in non-violence, We Call Upon the National Parliaments, Governments, UN, UNESCO, UNICEF, The Parliament of the World Religions, UN Women, BRICS, G7 and G20 TO RECOGNIZE 2019 AS GANDHI'S INTERNATIONAL YEAR of NON-VIOLENCE IN HONOR OF GANDHI'S 150TH BIRTH ANNIVERSARY, 02/10/2019, AND APPROVE BY YOUR POLITICAL WILL A PRODIGIOUS SCHEDULE OF EVENTS TO PROMOTE NONVIOLENCE TO ALL NATIONS AND INSTITUTIONS.

Only in such an active and not indifferent way can the heritage of Gandhi's non-violence be preserved and revived at a new scientific and political level. We must master and learn to systematically use nonviolence as a great social force and energy.

Gandhi stated:

"NONVIOLENCE [HARMONY, PEACE] IS THE GREATEST FORCE AT THE DISPOSAL OF MANKIND. IT IS MIGHTIER THAN THE MIGHTIEST WEAPON OF DESTRUCTION DEVISED BY THE INGENUITY OF MAN. NONVIOLENCE IS NOT THE INHERITANCE OF COWARDICE; IT IS ALWAYS HEROISM.NONVIOLENCE IS THE LAW OF OUR LIFE."

For this purpose International Gandhi Committee PROPOSES the National Parliaments, Governments and International Organizations, as part of the GANDHI'S INTERNATIONAL YEAR of NON-VIOLENCE:

- Create national and international "Jubilee Gandhi Commissions" of their executive bodies.
- Approve and finance new programs of educational, interfaith, social and cultural non-violence measures at all levels, that are developed by the Jubilee commissions and to be utilized by all levels of the organization within the first two months of development.
- For the jubilee year, approve the "Gandhi Commissions" budgets to finance the complexes of educational, interfaith, social and cultural events of non-violence of states and NGOs, developed

by the Commissions during the first two months of the year, examples of which are proposed in the GHA "Gandhi Project:" http://peacefromharmony.org/?cat=en_c&key=853
- Recognize as a main method of preservation, development and use of non-violence in all countries, the establishment of a program called the "Gandhi School of Non-violence," that includes 30 academic hours in all educational institutions, the standard program of which is presented in the GHA named project: http://peacefromharmony.org/?cat=en_c&key=854
- Most populations are not familiar with Gandhi's work. His teachings are not in schools, so the proposed "Gandhi School" would fill the wide gap of ignorance in non-violence.
- The International Gandhi Committee encourages all people of goodwill, peace, love and non-violence to support and sign the proposed termless Petition, so that it can be considered by the National Parliaments, Governments and International Organizations. We encourage you to take an active part in creating in the creation of national non-governmental "Gandhi Committees" to implement at least feasible part of the events offered by the "Gandhi Project".
- We also call on all people of goodwill to ignore, expose, resist and boycott any demonization of Gandhi and the social perversion of his non-violence.

The path of humanity, the wellbeing of the biosphere, and the survival of every nation must include the Gandhi "non-violence law of life" and its "greatest force!" This is our only way of life!

"GANDHI PETITION" publication on the GHA website:
In English: http://peacefromharmony.org/?cat=en_c&key=865
In Russian: http://peacefromharmony.org/?cat=ru_c&key=801
In Spanish: http://peacefromharmony.org/?cat=es_c&key=119
In French: http://peacefromharmony.org/?cat=fr_c&key=148
In Arabic; http://peacefromharmony.org/?cat=ar_c&key=17
In Greek: http://peacefromharmony.org/?cat=gr_c&key=17

PLEASE SIGN the "GANDHI PETITION" at www.CHANGE.ORG :
https://www.change.org/p/andre-sheldon-save-gandhi-s-heritage

For more information, please, contact:
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Dr. Ravi Bhatia, Gandhi Committee Vice-Chair: ravipbhatia@gmail.com,
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Prof. Ammar Banni, Arabic translator: ammarbanni@yahoo.fr.
http://peacefromharmony.org/?cat=en_c&key=288
Dr. Takis Ioannides, Greek translator: takis.ioannides@googlemail.com,
http://peacefromharmony.org/?cat=en_c&key=138

3. GHA International Jubilee Gandhi Committee

GHA GC Goal:

Organization of a world complex of international and national events in the different vectors of culture, science, education, religion and politics within governmental and nongovernmental organizations (NGOs) in honor of the 150th anniversary of Gandhi's birth on October 2, 2019 under the common title "***Gandhi World Year***" with the termless goal of deeper understanding, strengthening, mastering, spreading and worldwide use of the Gandhi nonviolence heritage by all nations according to his fundamental definition:

"Nonviolence [harmony, peace] is the greatest force at the disposal of mankind. It is mightier than the mightiest weapon of destruction devised by the ingenuity of man. Nonviolence is not the inheritance of cowardice, it is always heroism. Nonviolence is the law of our life."

Gandhi Committee: The GHA 68th Project

Started: December 15, 2018. Approved: January 15, 2019

Publication:

In English: http://peacefromharmony.org/?cat=en_c&key=853

In Russian: http://peacefromharmony.org/?cat=ru_c&key=789

Working frame modules/vectors of the Gandhi Committee

Module 1. Education: http://peacefromharmony.org/?cat=en_c&key=854

Module 2. Interfaith harmony: http://peacefromharmony.org/?cat=en_c&key=856

Module 3. Science: http://peacefromharmony.org/?cat=en_c&key=857

Module 4. Women's equality and nonviolence:
http://peacefromharmony.org/?cat=en_c&key=858

Module 5. Democracy of Nonviolence: http://peacefromharmony.org/?cat=en_c&key=859

Democracy of nonviolence is practically the most important, scientifically least studied and politically most pressing issue and module/vector of our "Gandhi project". Therefore, its discussion is postponed for a year, until January 2020.

Coauthors:

Ela Gandhi, granddaughter of Mahatma Gandhi,
Mairead Maguire and John Avery, Nobel Peace Prize Laureates,
Shri Kanak Dugar, IASE Deemed University Chancellor
Theodore Mascarenhas, Catholic Bishop,
Alagan Annamalai, Director, National Gandhi Museum
Leo Semashko, initiator and project editor in chief,
Subhash Chandra, Ravi Bhatia, Pravat Dhal, Subhash Sharma, Maitreyee B. Roy, A.K. Merchant, Arvinder Singh, Amrita B. Chouwdhury, Surendra Pathak, Sanjay Tewari, Noor Larik, Rashida Bukhari, Zia-ul-Islam, Mazhar Hashmi, Ayo Ayoola-Amale, Steve Amoah, Heli Habirimana, Stephen K. Tabi, Bernard Scott, Rosa Dalmiglio, Takis D. Ioannides, Dionyssios Georgakopoulos, Marie Robert, Guy Crequie, Ernesto Kahan, Sabrina Gopala, Gopala Maripan, Maria Cristina Azkona, Susana Roberts, Celia Altshuler, Delasnieve Daspet, Rudolf Siebert, Vladislav Krasnov, Roger Kotila, Reimon Bachika, Michael Ellis, P. Giri, Andre Sheldon (46) Natalia Chigrina, Olga Kashina, Roksana Sadykova, Vera Popovich, Yulia Budnikova, Nina Novikova, Irina Kuris, Vera Afanasyeva, Alexander Semashko, Stephan Semashko, Andrei Semashko, Polina Semashko, Svetlana Kuskovskaya, Uraz Baimuratov, Edward Soroko, Tatyana Liadova, Alla Voronova, Victor Danilov, Ivan Ivanov, Alexayder Trubachev,

63 GHA co-authors from 25 countries: Australia, Algeria, Argentina, Belarus, Brazil, Britain, Ghana, Greece, Denmark, Israel, India, Italy, Kazakhstan, Malaysia, Nepal, Pakistan, Puerto Rico, Russia, Rwanda, Northern Ireland, Slovenia, USA, France, South Africa, Japan

I. GHA Gandhi Committee (GC) Tasks:

1. Scientific discovery, innovative research, theoretical mastery and statistical equipment of the Gandhi "greatest force of non-violence of mankind" with the goal of making it available for use by every nation on the planet for peace and prosperity.

2. Mass popularization and comprehensive development of the culture and movement of Gandhi non-violence through the institutions of education, science, culture and media in all countries in honor of the 150th anniversary of the birth of Gandhi on October 2, 2019.

3. Training highly professional, comprehensively learned experts and volunteers in the field of non-violence.

4. Practical implementation of the ideas, norms and culture of the "greatest force of non-violence" in all spheres of life of mankind and every nation through the creation of new and renewal of traditional mechanisms and institutions of democratic governance both within the governmental power and within the civil society and its organizations.

In 2019, two tasks/goals are prioritized: 1 and 2.

II. Committee main activities:

1. Prepare and approve the text of the GHA project "Jubilee Gandhi Committee (GC)".
2. Prepare and approve the personal composition of the International Gandhi Committee.
3. Prepare the "GHA Proposals for the Government of India" with a proposal for the establishment of the Governmental "Gandhi Jubilee Commission" and its funding.
4. Prepare the text: "Appeal of the Government of India to the Governments of the UN member states" on the creation of national "Gandhi Jubilee Commissions" as tools for the development of non-violence, vital for each country.
5. Prepare and approve Work Programs for the 4 working modules of the GC.
6. Operational management of the project implementation in all its modules and in all GHA Departments.

III. GHA Gandhi Committee (GC), its structure and main functions

1. The International Gandhi Committee is formed by the GHA with its center in India as the homeland of Gandhi based on the GHA-India Department, in Delhi from representatives of different Indian states and different GHA national Departments.
2. The GHA GC includes two levels: Honorary Co-Chairs, designed to inspire and support GC actions to the best of their abilities and Executive GC, designed to guide the operational programs of the implementation of basic programs (modules).
3. GHA Gandhi Committee recommends, approves and consolidates the national GCs whose Chairs are included in the Executive GC as its permanent members.
4. The Chairs of the national GCs select and approve the personal composition of the Executive GC for each country.
5. National GHA GCs are created primarily in countries where Spheron's statistical studies have been conducted, the authors of which are recommended to the national GCs, to ensure the innovative scientific development of Gandhi's non-violence in these countries.
6. GHA GC carries out the development of work programs/modules and the complete management of their execution.
7. The proposed list of the GHA GC on February 5, 2019 is:

GHA Gandhi Committee (GC)

Honorary Co-Chairs:

- **Ela Gandhi**, South Africa, granddaughter of Mahatma Gandhi (http://peacefromharmony.org/?cat=en_c&key=852)
- **Mairead Maguire**, Northern Ireland, Nobel Peace Prize Laureate (http://peacefromharmony.org/?cat=en_c&key=678)
- **John Avery**, Denmark, Nobel Peace Prize Laureate (http://peacefromharmony.org/?cat=en_c&key=672)
- **Shri Kanak Dugar**, India, Gandhi Vidya Mandir Chairman, IASE Deemed University Chancellor (http://peacefromharmony.org/?cat=en_c&key=481)
- **Dr. Theodore Mascarenhas**, Catholic Bishop, Delhi (http://peacefromharmony.org/?cat=en_c&key=869)
- **Shri Alagan Annamalai**, Director, National Gandhi Museum, Delhi (www.gandhimuseum.org), (http://peacefromharmony.org/?cat=en_c&key=872)

Executive GC:

- Chair of the GHA GC, - Cdr Prof. Bhushan Dewan. Chairman, National Outreach Excellence Group, Mumbai http://peacefromharmony.org/?cat=en_c&key=879

- Vice-Chair of the GHA GC, - Dr. Subhash Chandra, GHA President, Gurgaon, Haryana, http://peacefromharmony.org/?cat=en_c&key=583

- Vice-Chair of the GHA GC, - Chandan K. Mishra. Development Consultant & Motivational Trainer. Bihar, http://peacefromharmony.org/?cat=en_c&key=880

- Vice-Chair of the GHA GC, - Dr. Ravi Bhatia, Gandhian Scholar, R/Prof. University, Delhi, http://peacefromharmony.org/?cat=en_c&key=737

- Vice-Chair of the GHA GC, CEO - Position is vacant - General Director of "GHA-Trust-EduB" (GTEB) (EduB: Education/Books)

- Vice-Chair of the GHA GC, - Dr. Maitreyee Bardhan Roy, scientist, Calcutta, http://www.peacefromharmony.org/?cat=en_c&key=317
- Vice-Chair of the GHA GC, - Dr. Subhash Sharma, IBA Director, Bangalore, http://www.peacefromharmony.org/?cat=en_c&key=453
- Vice-Chair of the GHA GC, - Dr. A.K. Merchant, National Trustee, Lotus Temple & Baha'i community of India; General Secretary, Temple of Understanding India Foundation; Delhi, Mobile: 9810441360 http://peacefromharmony.org/?cat=en_c&key=841
- GHA GC member, - Kartar Singh, Indian Ex-Services League (IESL) President, http://peacefromharmony.org/?cat=en_c&key=871
- GHA GC member, - Arvinder Singh, publisher, Delhi,
- GHA GC member, - Prof. Pravat Dhal, Magadh University, Bodhgaya, Bihar,
- GHA GC member, advisor, - Dr. Leo Semashko, GHA Founder and Honorary President, philosopher and sociologist, Russia, http://www.peacefromharmony.org/?cat=en_c&key=253
- GHA GC member, - Natalia Chigrina, public figure, Russia,
- GHA GC member, - Dr. Noor Larik, scientist, statistician, Pakistan,
- GHA GC member, - Dr. Ayo Ayoola-Amale, scientist, Ghana,
- GHA GC member, - Ms. Rosa Dalmiglio, WGHA Vice-Chair, Italy,
- GHA GC member, - Dr. Takis D. Ioannides, scientist, Greece,
- GHA GC member, - Dr. Marie Robert, artist, France,
- GHA GC member, - Dr. Rene Wadlow, diplomat, France,
- GHA GC member, - Dr. Guy Crequie, philosopher, poet, singer, France,
- GHA GC member, - Delasnieve Daspet, Lawyer, Poet, Writer, Brazil,
- GHA GC member, - Adm. André M. Maltez, Business Administrator (MBA), Brazil,
- GHA GC member, - Dr. Sabrina Gopala, Professor, Malaysia,
- GHA GC member, - Dr. Uraz Baimuratov, Academician, Kazakhstan,
- GHA GC member, - Dr. Eduard Soroko, Professor, Belarus,
- GHA GC member, - Dr. Maria Cristina Azcona, president, World Peace Organisation, Argentina,
- GHA GC member, - Ms. Celia Altschuler, painter and poet, Puerto Rico,
- GHA GC member, - Andre Sheldon, Director, Global Strategy of Nonviolence, USA
- GHA GC member, - Dr. Rudolf Siebert, Professor, USA,
- GHA GC member, - Dr. Vladislav Krasnov, historian, USA,
- GHA GC member, - Dr. Roger Kotila, psychologist, USA,

Total: GC 35 members from 18 countries.

They are presented on the personal pages of the GHA website "Peace from Harmony": http://peacefromharmony.org

IV. GHA Gandhi Committee Informational Support

1. Information support is carried out through the existing GHA website "Peace from Harmony": http://peacefromharmony.org

2. The Gandhi Committee Board additionally creates a special website in India, "Gandhi Nonviolence," with the sections: Education in Non-Violence; Science and statistics of Non-violence; Culture of Non-violence; Non-violence policy; Non-violence for women, family and children; Leaders and Non-violence organizations; Contests and Non-violence awards; etc.

V. GHA GC Proposals to the Government of India as an addition to its Jubilee program

1. To declare 2019 as the "World Year of Gandhi Nonviolence" or "World Gandhi Year" and approve this initiative at the UN General Assembly and UNESCO in February.
2. To create in February/March in the Government of India a "Jubilee Gandhi Commission" (JGC) from the representatives of humanitarian ministries (50%) and Indian NGOs (50%) with a leading role in them the GHA GC to prepare anniversary programs and organize culminating Jubilee Congresses in Delhi in the Lotus Temple with a capacity of 2500 people.
3. The working time of the JGC in 2019 should be divided into two main parts: 1. Preparatory stage: January – June and 2. Culmination stage: July – December.
4. Culminating World Jubilee Congresses in Delhi, in the Lotus Temple in six vectors:
4.1. Educational: "Universal School of Gandhi Nonviolence/Peace" - July.
4.2. Humanitarian science: "Gandhi's Nonviolence and its Science Development" - August.
4.3. Religious: "Interfaith Harmony of Gandhi Nonviolence" - September.
4.4. Women's: "Women's equality and Gandhi Nonviolence" - October.
4.5. Peacemaking: "Gandhi Nonviolence as Global Peace" - November.
4.6. Political: "India, BRICS and the UN as the Centers for Gandhi Nonviolence Initiation" – December.

Under the Mr. Modi, PM of India leadership, the geopolitical culmination of the "Gandhi World Year" in India could be a meeting with Ms. Ela Gandhi, the granddaughter of Mahatma Gandhi and the government reception of the heads of states and the "National Gandhi Commissions" with the participation of the GC Nobel Prize Laureates in Delhi on October 2, 2019 on the Gandhi birthday 150th anniversary in the Lotus Temple or in the newly built "Global Gandhi Temple/Center/Congress-Hall" (see below).
5. Key preparatory actions of the "Jubilee Gandhi Commission" (JGC):
5.1. Establishment in Delhi of the "International Jubilee Gandhi Foundation" (IJGF) from the governmental, corporate and individual donations for the preparation, organization and holding of the Jubilee Congresses - February.
5.2. Establish the "IJGF Golden Book" in order to record and morally encourage all investors to this Foundation with the award of the corresponding government medal: "Outstanding Contribution to the Gandhi Anniversary".
5.3. In order to ensure the widest possible participation of the world civil society in the JGC, create in it (50% of its composition) a Sector of "Non-Governmental Organizations" (international and national NGOs) - NGOs/JGC Sector to coordinate the NGOs activities, approving its organizing center the GHA Gandhi Committee, which has a wide network of national offices, providing it with the necessary budget and IJGF funding. The scale of this financing will determine the scale of participation/coverage of the world civil society in the Governmental JGC.
5.4. Prepare the Congresses Programs in six vectors, providing within them to hold broad international competitions for the best innovative projects, including the creation and publication of relevant books, textbooks, teaching aids, etc. anniversary editions.

5.5. Create a Design Bureau within JGC for preparation of frame school projects of the “Gandhi Museums” within the world museum network of Gandhi, urban “Nonviolence Gandhi Centers”, and prepare an International Architectural and Design Competition for the building International Cultural Nonviolence Center and the Gandhi Museum in Delhi like the "Lotus Temple" in Delhi.
- For example, the “Gandhi Temple/Center or Congress-Hall” of spherical architecture, symbolizing the global nature of nonviolence and harmony. Its financing, design and construction can be international at the call of the government of India. The main goals of this Center/Temple are the development of science, education and nonviolence culture on an international scale under the auspices of the UN and UNESCO.
5.6. Establish in Delhi the International Laboratory of Innovative Science of Nonviolence (ILISN) Gandhi, providing its funding.

VI. Government of India: key link in the preservation and use of the world Gandhi nonviolence heritage

The life and use of Gandhi's non-violence depends on the people and government of India. In the 20th century, non-violence became the necessary culture of the Indian people, developing and raising to an unprecedented height the traditional culture of non-violence in India since ancient times. Nonviolence Gandhi lives in the historical memory and traditions of the people of India. But over time, every good memory and tradition is corroded. They are always threatened with oblivion in disuse and neglect.

Only targeted systemic and long-term (indefinite) government efforts are able to resist such a destructive trend if it recognizes the decisive value of Gandhi's non-violence as the highest intellectual and moral wealth not only of the nation and culture of India, but of all humanity. From the government of India, in the first place, depends on the preservation of this world heritage, its deep knowledge, understanding, mastery and widespread international and global use in all spheres of social life of humankind.

The GHA innovative Project is designed primarily to inspire, initiate and convince the government of India of the need for a long-term systemic strategy for the preservation and development of the world heritage of non-violence at the new historical, cultural, scientific, educational level that is proposed by our project. If this project does not find the support of the Government of India, then it will remain the marginal fate of stagnation on the outskirts of public consciousness and attention. Its preservation and life can be ensured in this case only by rare and dedicated individual enthusiasts, as it has been until now.

The GHA GC hopes that its project “Gandhi Committee” with its proposals to the government of India will find in it both understanding, support, development, and practical implementation. Our innovative project is a call of the government of India, which we hope will be heard in it.

VII. The Historical Value of Nonviolence Gandhi.
The Danger of Forgetting and not Using it in the 21st century

Gandhi's non-violence is the infinite sociocultural cosmos of humanity, its global achievement and wealth. This is an intellectual universe of ideas, knowledge and intuition, relating to all spheres and aspects of human life. Gandhi owns a unique, incomparable historical example of a colossal non-violent political change without a single shot, without a single drop of blood and without a single victim, unlike tens of millions of victims of empires and tyrants of past centuries. Gandhi's non-violence has nothing to compare with. This is a one kind of peak. Gandhi's nonviolence is an unattainable intellectual and moral top, inaccessible energy and an unrecognized saving genome of humanity, before which it stands in amazement for over 70 years, not understanding it and not knowing what to do with it, how to use it and not lose it. The legacy of Gandhi's non-violence is multidimensional, polyphonic, harmonious, multi-colored

and pluralistic, excluding any one-dimensionality, one-sidedness, narrowness and monism typical to violence, war and militarism. Gandhi's nonviolence is universal, whole and integral. It connects all people and constitutes their eternal problem at all levels and in all spheres, starting with family and municipal government. Nonviolence is inherent in the social nature, in its spheral structure, in its genome and genetics, which Gandhi well felt with his brilliant intuition and about which he wrote a lot, but did not reach its theoretical, scientific understanding and explanation. But most importantly, he used it with great success in the long-term non-violent liberation of India from British rule.

The scale and depth of non-violence remain still unknown in its deep essence, in its genetic code and social origins. Therefore, the "law of non-violence as the law of our life," which hides the "greatest force / energy of humanity" (Gandhi), remains inaccessible in its defining virtue of non-violence and therefore remains unused. Nonviolence is not available to traditional, narrow and fragmented knowledge and thinking. It requires their fundamentally different qualities - integrity and wholeness, which are provided by spheral, sociocybernetic thinking by spheres and spherons of social being and the social genome of human life. Nonviolence of human nature became available only to spheral science and its paradigm of harmonious holistic tetranet thinking. Without it and similar intellectual tools adequate to the deep holistic nature of non-violence, it loses its meaning for traditional cognition, thinking and science, which put it on the verge of oblivion and the danger of renouncing it.

We are already confronted with fierce slander and the "fashionable" sweeping criticism of Gandhism. In the militaristic world, they are built on exaggerating some of his private mistakes and personal flaws (as if they were somehow devoid of them), while completely ignoring his unique historical non-violence. Gandhi's non-violence is a bone in the throat of modern militarism, which tries to ignore it, but non-violence will strangle it in the end as Gandhi strangled British rule in India.

VIII. Sense of Gandhi Committee and Gandhi Project

In the present situation of the great heritage of non-violence, the meaning of our Gandhi Committee and project is to focus on the intrinsic historical significance of the Gandhi non-violence heritage in different spheres and areas and find ways to master and use it to neutralize the dangers of forgetting it. Our GC is an innovative attempt to understand the pinnacle of non-violence and find ways to master the "greatest force/energy of non-violence" for all nations in the name of their global peace, survival and prosperity. GC puts and tries to find scientific answers to relevant questions: Why is Gandhi's nonviolence the pinnacle of world achievements and wealth? Why is nonviolence not understood, unattainable and unused? Why is nonviolence the salvation and survival of humanity? How can it be understood and used by humanity? These and similar questions constitute the intellectual tasks of the new generations of our century.

The anniversary of Gandhi is a wonderful, beautiful occasion to start in a new way to pose such fundamental questions and to offer innovative fundamental answers for them, formulated as a first approximation in our project for discussion during the week.

IX. GHA Project "Gandhi Committee"

Contents

1. **Gandhi Committee: Call >** http://peacefromharmony.org/?cat=en_c&key=853
2. Gandhi's Nonviolence School > http://peacefromharmony.org/?cat=en_c&key=854
3. Gandhi's Interfaith Harmony > http://peacefromharmony.org/?cat=en_c&key=856
4. Nonviolence Science > http://peacefromharmony.org/?cat=en_c&key=857
5. Women's Nonviolence > http://peacefromharmony.org/?cat=en_c&key=858
6. Nonviolence Democracy > http://peacefromharmony.org/?cat=en_c&key=859

7. Nonviolence Moral > http://peacefromharmony.org/?cat=en_c&key=860
8. Rap. Nonviolence Art > http://peacefromharmony.org/?cat=en_c&key=855
9. GHA "Gandhi Book" > http://peacefromharmony.org/?cat=en_c&key=848
10. Best Articles. Gandhi's Journalism > http://peacefromharmony.org/?cat=en_c&key=861
11. Discussions about Gandhi > http://peacefromharmony.org/?cat=en_c&key=862
12. Gandhi's Year Culminations > http://peacefromharmony.org/?cat=en_c&key=863
13. Gandhi's World Petition > http://peacefromharmony.org/?cat=en_c&key=865
14. Putin. Modi. Gandhi Commissions > http://peacefromharmony.org/?cat=en_c&key=868
15. Gandhi and M. L. King Jr. > http://peacefromharmony.org/?cat=en_c&key=303

4. Gandhi School of Nonviolence (GSN). Curriculum, 30 hours.

"Gandhi Project" Educational Module
https://peacefromharmony.org/?cat=en_c&key=853

GHA Gandhi Committee (GC) Key Educational Strategy in 2019:

To each educational institution (School, College, University) of each country to recognize, find a place in oneself and accept the GSN Curriculum at 30 academic hours as the best worthy understanding, recognition, appreciation, memory, use and application of Gandhi's invaluable world heritage of nonviolence at 150th anniversary of his birth.

This is the GC Call for all governments and educational institutions, for the UN, UNESCO, UNICEF, world churches and the world civil society NGOs in accordance with the Mahatma Gandhi's covenants.

Gandhi about nonviolence, change and education

"Nonviolence [harmony, peace] is the greatest force at the disposal of mankind. It is mightier than the mightiest weapon of destruction devised by the ingenuity of man. Nonviolence is not the inheritance of cowardice, it is always heroism. Nonviolence is the law of our life."
"*The best way to find yourself is to lose yourself in the service of others*" *[through education].*
"If we want to reach real peace [nonviolence] in this world, we should start educating children."
"If you want the world to change itself become this change" [through education].
"If you want a change in the future - become this change in the present"[through education].
"What is really needed to make democracy function is not knowledge of facts, but right education." [This is education in the "Global Peace Science", in its spherons as social sources of peace, harmony and non-violence. L. Semashko.]

Gandhi School of Nonviolence (GSN). Curriculum 30 hours.

Recommended module.
Each educational institution (school, college, university) can modify it in accordance with national requirements, cultural traditions and local problems of violence in the region.
For teachers of humanities: social scientists, historians, etc.

No.	Subject/Topic	Authors *
1.	The main stages of Mahatma Gandhi life way	Ravi Bhatia, Ela Gandhi
2.	Gandhi identity of the highest values of life, nonviolence, peace and harmony. Human/humanity right to life, peace, harmony and nonviolence	Ela Gandhi, Semashko
3.	Gandhi spiritual soil: historical culture of India's nonviolence. Interfaith harmony of Gandhi nonviolence	Chandra, Ela Gandhi

4.	Leo Tolstoy and other spiritual foreign sources and followers of Gandhi nonviolence	Krasnov, Ela Gandhi
5.	Gandhi ethics: love of life, truth and rejection of violence	John Averi, Ela Gandhi
6.	Why does Gandhi "Nonviolence is the greatest force of mankind"?	Semashko, Ela Gandhi
7.	Social sources of nonviolence (review of different approaches)	Semashko, Ela Gandhi
8.	Nonviolence science: sociocybernetic life spheres and spherons of humanity social production	Semashko, Scott, Ela
9.	Spherons, spheral harmonious classes of population: social actors of nonviolence and source of "the nonviolence greatest force of mankind"	Semashko, Scott, Ela
10.	Nonviolence spherons Genetics and Statistics of at all levels of humanity	Semashko, Dhal, Zia
11.	Paradigm of Nonviolent Harmonious Thinking	Semashko, Scott, Ela
12.	Nonviolence: moral and scientific basis of general and complete disarmament in the 21st century, above all the nuclear	Maguire, Ela Gandhi
13.	Nonviolence as global peace, harmony and prosperity of all the peoples. A woman is the best embodiment of nonviolence as the law of life, therefore the future belongs to a woman.	Ela Gandhi, Semashko, Maguire
14.	Gandhi's Nonviolence: Inevitable Future of Humanity as the Only Possible Way of its and Biosphere Survival	Ela Gandhi, Maguire,
15.	World significance of Gandhi Nonviolence: Copernican nonviolent revolution of human history - its breakthrough from war to global peace	Ela Gandhi, Semashko

* Here and now, those main authors, developers of training lectures, whom are known to the GHA and whom list will be supplemented by new coauthors as they send their respective texts, are named.

GHA GC invites all interested educators and scientists to develop the proposed and similar lectures, the texts of which will be published on the GHA website and in a special GHA textbook.

The GSN signification. The Gandhi School will become his most worthy memory in the daily life of a grateful humanity with his unique example of colossal nonviolent political change without a single shot, without a single drop of blood and without a single victim, unlike tens of millions of victims of empires and tyrants of the last century. In this School, the world heritage of Gandhi's nonviolence legacy, which, unfortunately, has not yet been understood and used, will never die, will not be forgotten and will receive a new, fresh life for the benefit of all humanity. The Gandhi School will be a breakthrough in global unifying value education and in global public conscience and consciousness. It will nonviolently approve the saving vector of humanity to eradicate wars, militarism and violence together with trend to global peace, harmony, equality, justice and prosperity of all nations in the 21st century.

GHA for the "Gandhi School of Nonviolence" (GSN).
Previous peace/harmony/nonviolence educational projects since 2007:

The GHA always, since its establishment on February 15, 2005, with its mission and the ultimate goal of global peace, has recognized education as a key nonviolent tool and the way to achieve and ensure it according to its definition by Mandela followed Gandhi as "the most powerful weapon to change the world." Therefore, during 14 years of peacebuilding, the GHA has created 12 collective, solidary educational projects of global peace, harmony and nonviolence (below). Now, in any country, they can be considered as an intellectual premise and

educational ground for GSN, which can use any of their ideas, texts, structures, curricula and lectures, as well as invite their many authors/teachers from different countries to cooperate.

1. Academy of Harmony and General Harmonious Education, 2007: http://peacefromharmony.org/?cat=en_c&key=392
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5. Governmental Jubilee Gandhi Commission of Russia

Global Harmony Association (GHA)
http://peacefromharmony.org/
International Jubilee Gandhi Committee (GC)
http://peacefromharmony.org/?cat=en_c&key=853

TO
Mr. Vladimir Putin
Russian Federation President

SUBJECT:
Establishment of the "Governmental Jubilee Gandhi Commission" of Russia

Dear Mr. Vladimir Putin,

The International Gandhi Committee urges you to pay the closest attention to the relevance of preserving, reviving and using the heritage of Gandhi's non-violence within the framework of the "World Gandhi Year 2019" in Russia for a number of reasons in its four fundamental dimensions.

The first reason is historical, requiring the preservation and development of the long-standing traditions of humanistic continuity, mutual enrichment and the peacemaking multifaceted cooperation between Russia and India in the framework of the spiritual culture of non-violence.

The second reason is cultural. It details the historical cause by the beneficial spiritual interaction of the non-violence titans of the two countries in the last century: Leo Tolstoy, Mahatma Gandhi, Nikolai and Elena Roerich, Alexander Solzhenitsyn and others. The common historical culture of non-violence for our countries, education in it and its worldwide distribution is the best and cardinal way to save humanity and prevent it from repeating the monstrous violence and crimes against it such as World War, Holocaust, Auschwitz, Leningrad Blockade, the nuclear bombardment of Hiroshima and Nagasaki and the like. This is a joint world-historical cultural mission of the peoples of our countries in the new century.

Its culmination could be a meeting in the Kremlin of President Putin with the granddaughter of Mahatma Gandhi - Ela Gandhi, with the Prime Minister of India Narendra Modi, with the GC Nobel Peace Laureates and with the invitation of the US President Donald Trump on October 2, 2019 on the 150th anniversary of Mahatma Gandhi birth. A similar meeting would express in the new century the historical meaning of non-violence, peace and harmony of the Russian civilization, about which Fyodor Dostoevsky spoke in 1880 in the speech about Pushkin.

This meeting will acquire historical symbolic significance for the new century as a whole. It will be its supreme geopolitical symbol and its best symbolic capital, becoming a fundamental sign of recognition of the legacy of Gandhi's non-violence in the 21st century. If there is no similar meeting for any reason, if the leaders of the new century are unable or unwilling to meet to confirm their commitment to the values of non-violence and peace, this will make them symbols of violence, militarism and wars of the new century. What choice of history in this century will depend on them and how they will remain in history depends on these leaders, on their attitude to this meeting.

The third reason is social, which consists in the growth (under various destructive influences) of violence in the country, especially among young people and in the basic institutions of society - in the family, educational institutions, media and the like.

The fourth reason is geopolitical, connected with the expansion of international militarism, aggression and violence in interstate relations, forced by the USA hegemonic aspirations and with an extremely exacerbated threat of global nuclear collapse.

From the given reasons, we make the following

Proposals to the Government of Russia

1. In the framework of the "World Gandhi Year", the Government of Russia, as well as other countries, **establish** in February 2019 a "Government National Gandhi Commission" (NGC) together with national youth, peacemaking and educational NGOs united for this purpose in "Gandhi Committee of Russia, chaired by Tatyana Golikova, Deputy Chairman of the Russian Government, whose competence includes coordination and advisory bodies, social sphere, education, science, family, youth, women, social innovations, NGOs and etc.

2. The NGC, in close cooperation with the "Intergovernmental Russian-Indian Commission" in a part of culture and within the framework of the BRICS **develops** in March 2019 the "Jubilee Gandhi Program" (JGP) of Russia with a wide range of activities based on the "GC Proposals to the Government of India" in composition of the four key program modules: Gandhi School, Gandhi Interfaith Harmony, Women Equality and Non-Violence and Non-Violence Science. The educational program "Gandhi School", which is included as a supplement to the state program "Development of Education" is recognized as central, long-term and most important for culture. All the activities of the program modules of the JGP are carried out in close cooperation with the Government and NGOs of India.

3. The NGC, on the basis of the JGP at the beginning of April 2019, determines the size and sources of additional, from reserve funds, financing of the planned activities of the World Gandhi Year in Russia, in order to **approve** them by the government before April 15, 2019.

Summary. The events of the "World Gandhi Year" within the framework of Russia's JGP will have colossal domestic and international significance for the country, for the preservation and development of the invaluable global heritage of Gandhi's non-violence, for mastering new generations, for enriching spiritual and cultural ties with India, for enhancing the peacemaking role and the non-violent prestige of BRICS and Russia in the international arena. At the same time, ignoring the "World Gandhi Year" in Russia would be an unforgivable historical omission of the country.

Members of the Gandhi Committee (GC) of Russia:
Natalia Chigrina, St. Petersburg, GC Chair of Russia,
Leo Semashko, St. Petersburg, International GC member,
Julia Budnikova, St. Petersburg,
Sergey Dvoryanov, Moscow
Nina Novikova, St. Petersburg,
Roksana Sadykova, Ufa,
Alla Voronova, St. Petersburg,
Alexander Semashko, Kaluga,
Victor Danilov, Ulyanovsk,
Vera Popovich, St. Petersburg,
Alexander Trubachev, St. Petersburg,
Others
January 31, 2019
Published: http://peacefromharmony.org/?cat=en_c&key=868
In Russian: http://peacefromharmony.org/?cat=ru_c&key=803

6. Human/Humanity* Right to Life, Global Peace, Social Harmony and Nonviolence. GHA Gandhian Declaration 2017**

Preamble

1. Declaration of Human Right to Life, Global Peace, Social Harmony and Nonviolence - hereinafter abbreviated as DHRL is the continuation, deepening and development of the "*Universal Declaration of Human Rights*" (1948), hereinafter abbreviated to UDHR, one right - right to life, which is mentioned only once (Article 3 of the UDHR), without justification of its role, without its definition, decoding and detailing and without its maintenance. All this is filled in this Declaration. The concept of "freedom" in different combinations and linguistic forms is used in the UDHR 33 times, and the concept of "right to life" is used only once in Article 3, although without life freedom does not exist.

2. Recognition of a human's life - the fundamental existential attribute of a person, which determines his/her first natural-biological right to life, as well as the existence of the human race - is the basis of all human rights as they do not exist outside of a person's life. Therefore, the right to life is the foundation of the Constitutions of almost all countries of the world.

3. Neglect of human life led to hundreds of millions of acts of his murder only in the last century, the most massive of which are committed during world wars and other armed actions of the different states and also various terrorist and bandit groups.

4. The human right to life must be fully protected by the rule of law, so that people are not forced to resort, as a last means, to an uprising against lawlessness or powerlessness of power to ensure the human right to life, primarily from threats of military genocide and terror.

5. The human right to life in its fully safety is ensured by global peace, unity and brotherhood, which are consciously built by the world's peoples together from the most profound, genetic structure of social harmony of the spherons in humanity, in each nation and each settlement. They cover all population as a whole, without any exception at all levels.

6. The human right to live in its fully security can only be guaranteed by the global peace of all nations from the deep conscious harmony of the spherons, which frees people from any weapons, militarism and wars and prevents any conflict by spherons consensus, consent or compromise through the mechanisms of spheral democracy with the built-in institution of harmonious opposition of the spherons, with equal representation in it of men and women. They, as parents, legislatively ensure the priority of children with their children's suffrage, which makes the spheral democracy by 100% representative democracy. The children's suffrage exercised by parents is a necessary political and legal condition for ensuring the right to life from birth and childhood.

7. The lack of human right to life frees any mass military assassination of people from any responsibility and actually reduces the value of human life and human resource to zero. It opens an unhindered path for the prosperity of wars, the arms race and militarism, which are only stronger and dominate in human history. Only the recognition of right to life, supported by the recognition of any war, apart from the war on terror, the crime against humanity and genocide, can put an end to the militaristic inhuman history. But this requires the UN Harmony, because the previous pacifist international organizations were powerless to do anything in this direction for almost two centuries.

8. Taking into account the key importance of human right to life among all its rights/freedoms and for the existence of each nation and all of humanity, the UNH General Assembly proclaims this Declaration of human right to life, global peace and social harmony as a task that are for all peoples and all states so that every person and every institution of society, constantly keeping in mind this Declaration, aspires through education and enlightenment to

promote respect for the human right to life as a foundation of all his rights and freedoms, and strict execution in all national and international actions of states - members of the UNH and others.

Article 1

All human beings are born for life, therefore the human right to life is the first natural-biological and continuous human right from birth to death, constituting the fundamental base of all of its rights, its dignity, freedom and equality with similar human beings endowed with reason and conscience for life behavior in the spirit of peace, harmony and brotherhood.

Article 2

The human right to life, given by God and nature, does not know the difference in any natural or artificial features, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, class or other provision. Furthermore, no distinction should be made on the basis of the political, legal or international status of the country or territory, to which a person belongs, regardless of whether this territory is independent, trust, non-self-governing, or otherwise limited in its sovereignty.

Article 3

Everyone human being has the right to life, which is directly related to his/her and is expressed in his/her personal safety and personal immunity, determined by the whole systemic set of national and international existential conditions.

Article 4

Architecture and context of natural-biological human right to life are not only broader than other human rights but also deeper, encompassing the entire natural, ecological human habitat, the unfavorable conditions of which can be deadly to the individual. Therefore, the social and legal care of humanity and every society about the life of each person should be more universal, scientifically fundamental and humanistic exhaustive.

Article 5

The scientific fundamentalism of the human right to life in the biosphere is determined by the Umberto Maturana's discovery of the general nature of all living beings, including human, in "autopoiesis" (self-production) from birth to death. Human life is his/her autopoiesis in four spheres of social production, which ensure the life of human and society with four necessary and sufficient resources: people, information, organization and things (all material goods and services).

Article 6

Human right to life is provided only by the harmony of all natural and social conditions of life, because any of their disharmonies directly and indirectly and in time dynamics lead to death and to the murder of a person. Harmony is the life of human, his/her noosphere / humanity and disharmony is their death. Intuitively, this discovery was made by mankind a long time ago, but Henri Poincaré first expressed it scientifically: "*The inner harmony of the world is the only true objective reality*," because only this reality survives, and human and his/her noosphere along with it, if he/she is in harmony with it, inside it and not outside it for their own free or involuntary disharmony.

Article 7

The third fundamental scientific discovery that reveals the human right to life is the participation of each person in social solidarity autopoiesis with other people in a deep harmonious structure of four spherons engaged in the production of four necessary and sufficient resources for the life of each person and each society. The stochastic, probabilistic transition of each individual from

one network spheron to another during his/her life from birth to death and every day is investigated by the sociocybernetic science of the infinite system of direct and inverse connections of spherons that always strive for balance, equilibrium and harmony as a condition for their survival along with all individuals included in them. Outside the spherons harmony their production activity of the necessary resources is impossible, i.e. autopoiesis of every individual and every society, regardless of place and time.

Article 8

Human right to life is identical with the human right to global peace and social harmony that constitute the universal, integral and fundamental conditions of human life on the planet. Human life in a global society is ensured by the social harmony of humanity spherons, from which their global peace flows and arrives. Therefore, the human right to life is inseparable and identical with his/her right to a global peace and social harmony.

Article 9

On the background of three fundamental discoveries of key human life conditions that determine the structure of his/her natural right to life, its most dangerous disharmonies are revealed as its massive and persistent threats. They include environmental and climate disharmonies and threats to human life, the overcoming of which is possible only through the consciously harmonious attitude of the noosphere/humanity to the biosphere and all nature as a whole. That, in turn, is possible only through the formation of a conscious harmony of spherons and all their parts - nations, classes, cultures, religions, etc. within the noosphere.

Article 10

The inner harmony of the noosphere/humanity faces a number of persistent and even growing disharmonies in the form of such challenges and risks as continuous and increasingly bloody and dangerous wars, arms race, militarism, terrorism, growing inequality and poverty, uncontrolled population growth, deepening crisis of traditional democracy, the growing stagnation and lag in the social sciences, a moral crisis, etc.

Article 11

The UN Harmony (presented in a special project), based on the fundamental scientific discoveries that determine human right to life, recognizes all wars apart from a war on terror, as well as related militarism and arms race, as a crime against humanity and genocide, since every war is a deliberate and intended mass murder of people, regardless of the causes and conditions that motivate it. All wars must be criminalized and recognized as a crime in the same way as the crime is recognizing the murder of an individual in each state.

Article 12

The UN Harmony only legitimate war recognizes the war on terrorism, which should not be imposed on individual countries but on joint UNH forces, designed to counter and suppress any armed violence, especially terrorism. Terrorism is individuals or any groups that recognize only armed violence and murder in order to achieve their own goals. Any illegal armed groups for any criminal purpose - robbery, banditry, seizure of power, violence against any groups of people or an individual, etc. equated and united in terms of "terrorism", "terror" and "terrorist group/individual". Only an international organized war on terror is legitimate for the sake of human rights for life.

Article 13

The independent, conscious and deliberate refusal of the individual from the right to his own life - euthanasia - is regulated by national legislation in accordance with the norms of his culture and

traditions. Outside of them, as suicide, it is recognized as an unworthy act that tramples the dignity of a human.

Article 14

The right to life excludes the death penalty in all its forms and allows us to recognize only life imprisonment the highest penalty.

Article 15

Human right to life is recognized by the UNH as the primary, fundamental and most powerful right not only for societies and states, but for every individual, imposing on his/her the duty to keep and preserve own life not only as a higher social value, but also as a higher individual value and vice-versa. The individual is obliged to observe all the fundamental both natural and social requirements of life, to take care of his/her health and harmonious all-round filling and development of his/her life, using for this purpose all the necessary spiritual, material, political, educational and natural conditions and qualities of the own character.

Article 16

1. In exercising own right to life, each person shall be subject only to such restrictions as are established by law solely for the purpose of ensuring due recognition and respect for right to life of others and for the satisfaction of the just requirements of morality, public order and general welfare in a democratic society.
2. The exercise of right to life should in no way be contrary to the purposes and principles of the United Nations of Harmony.

Article 17

Nothing in this Declaration can be interpreted as giving any state, group of persons or individuals the right to engage in any activity or to perform acts and abuse aimed at the destruction of human right to life, set out in this Declaration.

* The right of an individual to life and the right of humankind to life are inseparable, because the life of the whole is impossible without the fundamental right to the life of its part - human, and vice versa: the life of a part - a person is impossible without the fundamental right of the whole - humanity to life. In the disharmonious militaristic industrial civilization lawmaking, there is no generally accepted legislative norm of "*humanity right to life*", which makes the "*human right to life*" weak, helpless, purely formal and constantly violated by mass military killings of people in almost all countries. Only the combination of the right to life of an individual and humanity as a whole, enshrined in the recognition of any violation of it, above all wars, as "*crimes against humanity and genocide*", with the exception of the institutions of war and militarism from any society, is able to legally and actually secure this single right by the most powerful condition: global peace from social harmony. This condition is organically inseparable from the human/humanity right to life and is identical with it.

** The proposed, initial version of the "*Declaration of Human/Humanity Rights to Life, Global Peace and Social Harmony*" is a synthesis of the GHA scientific and peacemaking experience for more than 12 years (8 books, 57 projects, hundreds of articles, etc.). Therefore, this Declaration is in fact and called "*GHA, Global Harmony Association Declaration*". In 2018, it will be presented for the traditional democratic procedure of collective discussion, adjustment and approval in the GHA as its official 58th Project.

Full publication: http://peacefromharmony.org/?cat=en_c&key=798

7. Network Spherons: The UN of Harmony and Global Peace Replacing the UN of Disharmony. The GHA 57th Project, 2017. *Fragment*.

1. Project reviews:

"*The GHA great project of our century is making a networked world a collaborative enterprise. Awareness of how interdependence creates specific and concrete opportunities as well as challenges is the sine qua non for success. SPHERONS is a valuable instrument for achieving that level of enlightened consciousness and global peace*." Dr. **Michael Brenner**, Professor Emeritus of International Affairs at the University of Pittsburgh and a Fellow of the Center for Transatlantic Relations at SAIS/Johns Hopkins. He was the Director of the International Relations & Global Studies Program at the University of Texas: http://peacefromharmony.org/?cat=en_c&key=775

"*We must dissolve the current geopolitical UN war system, and convert the UN to a global peace system*." **Dr. Roger Kotila**, Vice President, World Constitution and Parliament Association, Radio producer, "Earthstar Radio", San Francisco, California, USA: http://peacefromharmony.org/?cat=en_c&key=680

"*The evidence clearly shows that national security is far better achieved by intelligent diplomacy than by war. The way to national security is through peace and negotiation, not through war*." **Dave Lindorff**, American investigative reporter: http://peacefromharmony.org/?cat=en_c&key=804

"*I have sent the Global Harmony Association Project to UN Sec General Antonio Guterres(sg@un.org) and to President of the UN General AssemblyMiroslav Lajcak (infopga@un.org) and copy to Spokesperson: Brendan Varma(varma@un.org)*." **Mairead Maguire**, Nobel Peace Prize Laureate 1976, stopped the terror in Belfast, Northern Ireland, Community for Peace People, http://peacefromharmony.org/?cat=en_c&key=678

"I have contacted John Borroughs, the Director of the UN Office of the Lawyer's Committee on Nuclear Policy to ask about the possibility of delivering your document on UN reform by hand to the office of the UN Secretary General and the office of the President of the General Assembly. I will also send the document by post, and as I mentioned, I will let you know if I receive a reply." **Prof. John Avery**, Nobel Peace Prize Laureate (shared 1995 award), Chairman of the Danish Peace Academy, Copenhagen, Denmark, http://peacefromharmony.org/?cat=en_c&key=672

2. Towards a UN of Harmony (UNH) and its Charter. Sociocybernetic Model of UNH

2.1. Foreword. Tetrasociology and Sociocybernetics: concepts of societal spheres and network spherons for the UN harmony

The mutually complementary fruitful collaboration of Tetrasociology and Sociocybernetics as the holistic and pluralistic system theories that fully recognize each other began with the preface to the "*Tetrasociology*" [121] of the two leaders of the International Sociological Association's (ISA) Research Committee on Sociocybernetics (RC51) Dr. Bernd Hornung, Germany [122] and Dr. Bernard Scott, England [123]. The last of them kindly agreed to be the editor of the English edition of this book, which was presented at 32 sessions of XVI ISA Congress in Brisbane, Australia, in July 2002, where tetrasociology first became known to Western scholars. At the same time, the three of us wrote a long article about the correlation of the categories of our two sciences, especially the four spheres of social production and the four

harmonious classes of the population employed in them [124], which were later laconically called "spherons" – "employed, engaged, occupied in spheres".

In tetrasociology as a theory of social harmony, global peace and harmonious civilization, the concepts of spheres and spherons have been developing since 1976 [125]. Integrating with socio-cybernetics, tetrasociology acquires systemic cybernetic wealth from it and at the same time raises it to the level of the third order, enriching it with system categories of spheres and spherons and preserving all the achievements of its previous orders [126]. At this level, it becomes the sociocybernetics of the harmony of the societal spheres and the spherons occupied in them. Therefore, the proposed "*Sociocybernetic Model of Spherons' Global Harmonious Governance*" (SMSGHG) for UN harmony is simultaneously tetrasociological, which is fundamentally revealed in "*Global Peace Science*" [78]. This model has long been prepared theoretically as a result of the scientific cooperation of Tetrasociology and Sociocybernetics, which are free from theoretical narrowness and scientific limitation of the traditional ideologies of the 20th century.

2.2. Introduction
Global Harmonious Scientific Governance on the UN level: Sociocybernetics of the Spheres and Spherons' Harmony

Historically developed forms and models of national and global governance demonstrate the inability to effectively address growing national and global problems, risks and challenges. It expressed well here: "*OUR GLOBAL SYSTEM IS NOT EQUIPPED TO DEAL WITH TODAY'S RISKS. Our current international system – including but not limited to the United Nations – was set up in another era, following the Second World War. It is no longer fit for purpose to deal with 21st century risks ... We urgently need fresh new thinking in order to address the scale and gravity of today's global challenges, which have outgrown the present system's ability to handle them*" [70].

The root cause of the global governance insolvency after 1945 is disharmony, i.e. fragmentation, mismatch, imbalance and disproportion of international cooperation of the states-nations. Their disharmony engenders constant conflicts, tensions and mistrust between them in all directions, manifested in a multitude of global crises and risks: military, economic, financial, trade, migration, sports, religious, etc. The status quo of objective disharmony of international cooperation of national states is directly broadcast and continues in the UN for more than 70 years, which remains powerless before them for the same root cause of internal disharmony. Overcoming the disharmony of international cooperation and global governance is possible only by their harmony, the necessity of which was recognized by the outstanding thinkers of all civilizations: Egypt, Greece, India, China, Africa, Latin America from ancient times.

Scientific global governance can only be harmonious in wholeness of all diversity of its parts; and the holistic in harmony (or harmonious in integrity) governance. It can only be scientific, not spontaneous and intuitive, requiring a new systematic harmonious scientific thinking. The absence of a scientific model of harmonious governance determines the absence of a harmonious model of organization and the subject of governance at all levels, including the UN.

Based on the formulated fundamental prerequisites, we propose to govern international cooperation in order to address and prevent the global risks of disharmony and ensure the harmonious sustainable evolution of humankind by the **United Nations in Harmony** (UNH) on the basis of the fundamental scientific transformation of the traditional UN.

From our point of view, the most promising way of developing fundamental social knowledge is focused in interdisciplinary **Sociocybernetics.** [see below]. It integrates the achievements of traditional knowledge, raising it to the level of global systemic integrity and overcoming its fragmentation. Our model of global governance develops within the framework

of **Sociocybernetics of spheres and Spherons**' **harmony** as Sociocybernetics of the third order, including its previous orders.

It determines the "***Sociocybernetic Model of the Spherons' Global Harmonious Governance***" (SMSGHG), which we suggest for the UNH. In this universal for all levels model, the Spherons are harmonious classes/communities of humanity constituting the key object and subject/actor of global harmony and its governance, revealed below. They are its center and heart.

The UNH SMSGHG is based on the following fundamental scientific premises of Sociocybernetics:

1. The discovery of Norbert Wiener society as a cybernetic system of all diversity of its parts with feedback/influence of each of them to all others [127]. This idea develops in the writings of Ludwig Bertalanffy [128] and other system thinkers, for example, the background of Heinz von Foerster, [129], Felix Geyer [130; 131] and Bernard Scott [132-138], which led to the creation of Sociocybernetics.

2. The discovery of Humberto Maturana: he determined the basic quality of "autopoiesis" (self-production) of all living beings including individuals engaged from birth to death in autopoiesis along with other people. The system of individual autopoiesis creates a system of public autopoiesis as a social production [139].

3. The young Karl Marx's hypothesis, before his materialism, of four spheres of social production [140]. This conjecture was scientifically confirmed and detailed in many works, starting with the fundamental works of Robert Park [141], Fernand Braudel [142], Talcott Parsons [143], Stafford Beer [144], Gordon Pasck [145], Niklas Luhmann [146; 147], Alvin Toffler [148; 149], Pierre Bourdieu [150; 151] and many others. They viewed the whole society as a system of those or other four socio-cultural production systems/spheres and corresponding actors, which provide society with four necessary and sufficient resources: people, information, organizations and things (PIOT resources).

4. The pluralistic philosophy of harmony Henri Poincare, the basic propositions of which he formulated as follows: "*The internal harmony of the world is the only true objective reality. The best expression of this harmony is law [nature's regularity]... mathematics... The world is divine because it is a harmony*."[152] This philosophy remained virtually unnoticed in the 20th century. But it has deep historical roots in knowledge of harmony of the cosmos, society and human in the works of Confucius, Buddha, Pythagoras, Plato, Neo-Platonists, Kepler, Kant and many other outstanding thinkers of humankind. Especially important are the ideas of Kant's social harmony as a deep human nature, ensuring eternal peace and sustainable functioning of society at all levels from the family and the nation to humanity as a whole. [153] The history of philosophy and sociology of harmony in the perspective of its blossoming futurology is considered in many of our works [154 and others].

5. The Duality Law of "Harmony - Disharmony" and their mutual ousting in any society. [155; 156]

Based on these prerequisites, we formulate the main, structural difference and alternative to traditional branch governance - the spheral Sociocybernetic structure of global governance and its subjects/actors in the UNH SMSGHG. To four spheres of social production and four Spherons employed in these spheres correspond four spheral organizational subsystems of governance and four spheral subjects/actors of governance in it at all its levels.

Legislative, executive and judicial bodies in the SMSGHG are structured and constituted into **spheral governing clusters** (SGC), which form typical modules of management institutions and ensure their structural similarity and their functional coherence at different levels that overcome the disharmony and structural mismatch of traditional branch governance. Spheral structural symmetry of the SMSGHG governing institutions at all levels is a necessary condition for effective global harmonious governance. This is its first rule.

Its second law is coherence to establish and maintain the permissible limits of minimum and maximum for all operating parts/subsystems of the controlled and controlling systems. This is a universal law of harmony of effective global governance. Other rules are detailed below.

Democratic decision-making procedures at the UNH SMSGHG are based on dialogue and spheral consensus of SGC at each level. **Spheral consensus** is the unanimity of the spheral actors of governance by the majority of votes in each of them. There can be no confrontation between the spheral actors of governance and the opposition on the issue of harmony as a single goal and strategy, but they are permissible and possible within these actors, between their different parts on ways and means of their implementation. This excludes antagonism between them and the suppression of any spheral actor, but leaves room for internal system opposition in resolving differences between their parts through the widest possible dialogue. The mechanism of built-in systemic opposition prevents any possibility of dictatorship and usurpation of power by any party and any official in the system of spheral democracy of UNH.

A dynamic mechanism for mutual control of SGC in SMSGHG is ensured by free association of any of them for verification and control of any of them. It minimizes the total corruption that is irresistible in the traditional management and excludes it in principle.

The procedure for the appointment of key persons in the SMSGHG is also exercised through the democratic mechanism of spheral consensus.

The project full publication: http://www.peacefromharmony.org/?cat=en_c&key=769

8. USA-RUSSIA Summit.
The Great Peace Charter XXI.

Resolution of the US-Russia Summit, July 16, 2018, Helsinki.
The GHA and WGHA 65th Project draft
Approved on July 8, 2018.

1. **Emergency of "The Great Peace Charter" for the 21st-century**

We, the undersigned 72 peacemakers from 27 countries representing more than 15 international peacemaking and humanitarian organizations, appeal to the leaders of the world's most powerful nuclear powers with 96% of the stockpiles of all nuclear weapons: to the United States President - Mr. Donald Trump and the Russia President - Mr. Vladimir Putin with the proposal to take as the resolution of your Summit the fundamental for the world community of the 21st century, "**The Great Peace Charter**." This Charter will begin an unprecedented historical process for the liberation of humankind from wars and for the approval of its existential right to live without wars. Therefore, its spiritual and moral significance in the history of humanity will be no less than the significance of "The Great Charter of the Liberties", 1215 for the affirmation of the universal value of freedom.

The world civil society, almost 8 billion people from more than 200 countries, demands and expects from you not the next peacekeeping cosmetics of the infinitely growing militarism, putting humanity on the verge of "shameful self-destruction of humankind" (Helena Roerich), but a fundamental peacebuilding solution, **The Great Peace Charter**, which excludes the repetition of the last century - the most deadly and devastating in the human history, full of countless conflicts, casualties, suffering and monstrous war crimes (Kofi Annan). From the "point of no return" for the humanity self-destruction, which is now 100% prepared, only the light push of the nuclear trigger separates, the responsibility for which lies entirely with the governments of the United States and Russia.

The constantly growing threat of self-destruction of humanity tramples the first and fundamental human and humanity right to life, making it ever more chimerical and questionable. The growth in volumes and, above all, the effectiveness of weapons, especially nuclear and similar, proportionally reduces the existential level and probability of the survival for humankind on the planet as its noosphere. The perspective of an endless intensification within continuous arms race in this planetary sphere turns it from "reasonable" into "insane sphere". It is alone on the planet irresistibly aspiring to self-destruction for more than a century, practicing in the world wars and steadily raising their "rating" both in social production, in the public consciousness and in power.

Therefore, the complete and shameful, 100% stand-to the nuclear suicide of humankind, primarily by the hands/nuclear bombs of the US and Russia, absolutely determines the emergency of **The Great Peace Charter** on the verge of this irretrievable existential abyss. The responsibility for ignoring humanity survival and the extreme necessity of a similar rescuing solution lies entirely on the nuclear superpowers leaders.

2. **The Summit and its decision center**

What is the key meaning and the center of the Summit decision? It was brilliantly formulated by John Kennedy at the UN Session 55 years ago as a self-evident absolute truth of the present: "***Mankind must put an end to war before war puts an end to mankind***."

However, unfortunately, there are still unanswered questions arising from this truth: "***Who, How, at What Level and When will end the war and feeding its militarism?***"

The historic mission of the leaders of the nuclear superpowers is to rise to the level of John Kennedy's peacemaking thinking, to continue and enrich it as a synthesis of the 8 greatest peacemaking covenants and initiatives of the past, developing the Kennedy truth, and yours own unique contribution to the organizational global governance of its implementation in the 21st century. Only in this case you will make yourself and your nations "again great", the memory of which humanity will preserve forever as world leaders who changed the course of history from war to peace, "***from the arms race to a peace race***" (Martin Luther King).

3. **Integration of peacemaking covenants and initiatives**

The eight great peace covenants and initiatives of the 20th and 21st centuries, which constructively develop Kennedy's truth, are:

1. Program of general and complete disarmament in the UN, 1959: USSR/Russia,
2. "Peace can not be achieved through violence, it can only be attained through understanding" [science]: Albert Einstein,
3. "We shall require substantially new manner thinking if mankind is to survive": Albert Einstein,
4. We must "shift the arms race into a peace race": Martin Luther King. (Are the US and Russia leaders able to rise to the level of King and to realize this historic "shift" at least in the format of an agreement of intentions for the near future?),
5. Peace Departments in governments: an ancient American idea, not yet embodied,
6. Multipolar harmonious world order: the foreign policy idea and the course of Russia,
7. Reforming the UN, international law and global governance: a common understanding of this need, and
8. Sociocybernetic "Global Peace Science" of international origin in the early 21st century, revealing the genetics of global peace in the structural harmony/balance of the spheres of world social production. This science systematically and holistically integrates these great peacemaking covenants and initiatives of the 20th and 21st centuries. It ensures the realization of "peace through understanding," the exclusion of violence, militarism and weapons as the main

threat to security and the achievement of assured security for all nations. These all "will end the war" and eradicate it as an obsolete institution.

The Great Peace Charter undoubtedly requires a similar, generally acceptable scientific platform and its joint scientific development, which the US and Russia could begin to initiate their cooperation instead of their confrontation.

4. Large-scale and long-term "Roadmap" for global peacemaking

The main contribution of world leaders to the understanding of global peacemaking for the 21st century could be its principled, large-scale and long-term "Roadmap", based on the synthesis of peace covenants and responding, at least in the first approximation, to the questions: "***Who, How, at What Level and When will end the war and feeding its militarism?***"

The key roadmap lighthouses:

1. The ultimate goal, "end the institution of war": universal complete disarmament and guaranteed nonviolent security as a conscious global peace on the socio-genetic level of the structural harmony of the spheres within world social production during 50 years of the 21st century,
2. The primary goal for the next 5-10 years is nuclear disarmament, "nuclear zero", requiring for all nuclear weapons immediate taken off hair trigger alert and its reduction by 20-10% annually under the control of the IAEA. This is the first practical goal for nuclear leaders, which the USA and Russia ones could and should initiate. This is their priority responsibility before their people and humanity in a whole.
3. Orientation to conscious harmonious economic relations, excluding world "trade and sanctions wars" and contributing to the reduction of political tension instead of its aggravation.
4. Determination of the time and extended format of the next "Global Peace Summit" with the participation of all 9 nuclear powers, the EU, the UN and the world civil society represented by the most deserved peacemaking non-governmental organizations working for at least 10 years, uniting peacemakers from at least 30 countries and possessing fundamental peacebuilding ideas/concepts, fixed in publications. This format is dictated by the peacemaking grandiose mission in the 21st century defined by **The Great Peace Charter** and ensures democracy in its adoption and fulfillment.

Recognition in the Roadmap of the USA and Russia leaders of at least these grandiose peacemaking landmarks of the 21st century will provide to you and your peoples with the place of historical peace builders of the third millennium of world human history, determining its powerful peacemaking breakthrough and the turning-point from traditional militaristic trend. Recognition of these ultimate goals will make it possible to formulate the strategy and tactics of achieving the entire cluster of the numerous intermediate goals and tasks of the 21st century within peacebuilding process as a new global movement of pacification.

This will be a movement along the road to peace "through understanding" in the global peace science; it will be a "shift from the arms race to a peace race" and to a new non-militaristic thinking; it will be time for institutions in the governments of the "Department of Peace" responsible for organizing, managing, implementing, monitoring and control of these goals achievement; it will be the UN and global governance reform, subject to these anti-militaristic goals; this will require an answer to the key question: WHO, which social force and which actors of social production and geopolitics can guarantee the achievement of these goals. To answer this question, it takes a long time of scientific peacemaking restructuring of public consciousness through the appropriate education of new generations and the enlightenment of adult generations.

Of course, in the peacebuilding roadmap, the partial but acute problems of Syria, Iran, Donbas, North Korea and the like must find a place. However, their decision in the context and on the common platform of "The Great Peace Charter" will be much more effective and faster

than without it. Otherwise, partial questions will suppress the horizon and dream of global peace for humanity.

So we can see the broad contours of the peacebuilding roadmap in the 21st century.

5. **Resolution of the US-Russia Summit and its alternatives forecast**

The squeeze of the proposed ideas of 1-2 pages, not more, the text of the US-Russia Summit Resolution will be **The Great Peace Charter** as the long awaited and keenly necessary on the brink of nuclear suicide solution. This will be the most dignified and highly responsible and ethical Resolution in relation to humanity as a whole and in relation to the USA and Russia national interests, but will not be confined to them. This resolution will accentuate the deep commonality of the USA and Russia basic values, which was repeatedly emphasized by their leaders, for all their differences.

Another, almost equal, final alternative maybe the Resolution of cosmetic propaganda significance, filled with the pathetic beautiful words about "global security, peace and responsibility," but emphasizing the value differences and instrumental approaches of the two countries preserving for this the inviolable institutions of war, militarism and the factual arms race. Which of the alternative Resolutions will win will be visible at the summit end.

6. **Instead of an epilogue. The foundations of hope**

We, the peacemakers and peace leaders of the world civil society, hope that both presidents will find enough courage and political will to accept the first value-based Resolution. Despite all the differences in personalities, cultures and countries they represent, they have two important electoral potentials.

First, they both talked about "harmonious or coherent foreign policy" and second, both formulated paradigms of global peace in their election platforms, in which they proclaimed "common ground" and "shared interests" of the parties within the common goal: "our goal is peace and prosperity, but not war and destruction" (Trump): http://peacefromharmony.org/?cat=en_c&key=735

"**The Great Peace Charter"** project coauthors: 72 peacemaking leaders (list below) from 27 countries and more than 20 international peacemaking organizations:

Nobel Peace Laureates:

Mairead Maguire, Nobel Peace Prize Laureate 1976, stopped the terror in Belfast, Northern Ireland, Community for Peace People, http://www.peacepeople.com/MaireadCMaguire.htm/ , http://peacefromharmony.org/?cat=en_c&key=678

Prof. John Scales Avery, Nobel Peace Prize Laureate (shared 1995 award), Chairman of the Danish Peace Academy, Copenhagen, Denmark, http://www.fredsakademiet.dk , http://peacefromharmony.org/?cat=en_c&key=672

International Physicians for the Prevention of Nuclear War, Nobel Peace Prize 1985, Ernesto Kahan, Israel: http://peacefromharmony.org/?cat=en_c&key=338

International peace organizations:

1. Global Harmony Association, Leo Semashko, Julia Budnikova, Nina Novikova, Russia
2. Women's Global Harmony Association, Ayo Ayoola-Amale, Ghana
3. Women's International League for Peace and Freedom, Ayo Ayoola-Amale, Ghana
4. International Center for Sociocybernetics Studies, Bernard Scott, Britain
5. Global Peace Foundation, Subhash Chandra, India,
6. International Association of Educators for World Peace, Lana Yang, USA
7. Russia and America Goodwill Association, Vladislav Krasnov, USA
8. Center for Humanistic Future Studies at Michigan University, Rudolf Siebert, USA

9. World Constitution and Parliament Association, Roger Kotila, USA
10. A People's Campaign for Peace in the United States, Robert Weir, USA
11. Community for Peace People, Mairead Maguire, Nobel Peace Laureate, North Ireland
12. World Wide Peace Organization, Maria Cristina Azcona, Argentina
13. Society "ONE WORLD – ONE HARMONY DREAM", Rosa Dalmiglio, Italy
14. Danish Peace Academy, John Avery, Denmark
15. International Physicians for the Prevention of Nuclear War, Nobel Peace Prize 1985, Ernesto Kahan, Israel
16. Gandhi Development Trust, Ela Gandhi, South Africa
17. ESTIA NEW SMYRNA FOUNDATION, Takis Ioannidis, Greece
18. Global Peace Centre, Michael Ellis, Australia
19. International Peace Research Association, Ursula Oswald, Mexico
20. Noospheric Research and Development Institute, Boris Rezhabek, Russia
21. IESL Association (Indian EX - Services League, 1 million veterans), Brig Kartar Singh, India
22. Magadh University, Pravat Kumar Dhal, India
23. Coop Anti-War Cafe Berlin, Heinrich Buecker, Germany
24. Centro Mexicano de Responsabilidad Global CEMERG A.C., Francisco Plancarte, Mexico etc.

The GHA peace proposals and initiatives for past summits, which detail the separate aspects of the proposed "**The Great Peace Charter**":

1. Global Harmony as Guarantor for World Security and Nuclear Zero, May 2009: http://peacefromharmony.org/?cat=en_c&key=369,
2. Global Harmony International Treaty for Nuclear Disarmament, May 2009: http://peacefromharmony.org/?cat=en_c&key=376,
3. General and Complete Disarmament in 50 years on the Basis of Global Harmony through the ABC of Harmony. GHA Constant Petition to the UN. GHA 37th project. Started: August 31, 2012: www.peacefromharmony.org/?cat=en_c&key=529
4. BEFORE THIRD WORLD WAR. Peace and Disarmament from Harmony. New World Peace Movement for the 21 century. GHA 38th Project. Started: September 24, 2012: www.peacefromharmony.org/?cat=en_c&key=532
5. Monitoring: Dynamics of Peace and War Priorities in the World Public Consciousness. Approved by GHA on January 17, 2014: www.peacefromharmony.org/?cat=en_c&key=588
6. Global Peace Science. 2016: http://peacefromharmony.org/docs/global-peace-science-2016.pdf
7. Russia – USA: Global Peace Cooperation. The 52nd GHA project. Approved by the GHA on September 5, 2016:http://peacefromharmony.org/?cat=en_c&key=710
8. PUTIN - TRUMP: Two paradigms of global peace. GHA Open Letter, February 1, 2017: http://peacefromharmony.org/?cat=en_c&key=735
9. Global Peace Science Agenda for the UN, UNESCO, G20 and EU. June 5, 2017: http://peacefromharmony.org/?cat=en_c&key=757
10. The UN of Harmony and Global Peace Replacing the UN of Disharmony. Sociocybernetic Model of Spherons' Global Harmonious Governance (SMSGHG) at the UN level. Approved on November 16, 2017: www.peacefromharmony.org/?cat=en_c&key=769
11. Global Peace Science for G20-2013 and Humanity: http://peacefromharmony.org/?cat=en_c&key=582
12. Global Peace Science for G20-2017 and Humanity: http://peacefromharmony.org/?cat=en_c&key=762
13. Spherons' Global Peace Genetics. GHA and WGHA MESSAGE on the Global Harmony Day, June 21, 2018: http://peacefromharmony.org/?cat=en_c&key=832
14. USA-RUSSIA Summit. **The Great Peace Charter** for the 21st century. 08-07-18: http://peacefromharmony.org/?cat=en_c&key=834

And others

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The project full publication: http://peacefromharmony.org/?cat=en_c&key=834

9. Thermodynamics and Negentropy of Spheral Classes
Societal Harmony: Global Peace Thermodynamics
By
Vera Afanasyeva, John S. Avery, Timi Ecimovic and Leo Semashko

Contents:

1. Social entropy as disharmony and social negentropy as harmony,
2. Deep Societal Structure of Spheral classes as Invariant Negentropy of Harmony,
3. Information theory about overcoming of entropy in living systems,
4. Tetrasociology about overcoming entropy/disharmony in social systems, and
5. Spheral Classes' Theory: A bridge between social and natural sciences and the pillar of their unity

"The internal harmony of the world is the only true objective reality".
Poincare

"Harmony should become the key value of global humankind,
the main subject of science and public consciousness in the 21st century
in order to survive and prosper in planetary peace".
GHA

"First they ignore you, then they laugh at you,
then they fight you, then you win".
Gandhi

1. Social entropy as disharmony and social negentropy as harmony

Society, like any system that has energy, is subject to the second law of thermodynamics, which express the entropy (scattering) of all energy. Our article is devoted to

this subject, but within the framework of society and from the unique position of social harmony and disharmony of its structural carriers. Their harmony and disharmony is a special case of natural, universal, cosmic harmony and disharmony, with the priority of harmony ensuring the life and existence of the nature and universe, all reality. As Henri Poincare wrote: "*the internal harmony of the world is the only true objective reality*" [1]. Such social reality is the social harmony that Immanuel Kant recognized as the "nature of man." It is realized through the harmony of the organizational carriers of its energy, the most important and strong of which is constituted by deep structural harmony of the constant Spheral classes of the population as genetic negentropic code of social system, which we discuss in this article in the first approximation.

Society is an open system. It is open to the external non-social environment, which is infinite on the Earth and beyond and from where it derives its energy for itself: hydrocarbon energy, solar energy, water, wind, geothermal energy, etc. But the society has its own, social energy, which finds, extracts and uses the energy of external sources. Social energy serves as a trigger for external energy. The only carrier of social energy is people, population, society as an integral system of structural units of the population from an individual to humanity as a whole.

Social energy is the production energy of social harmony (coherence, balance, proportion, consent, measure) of structural units within society, people and global population. This is the only social energy that ensures the survival, sustainability and progressive improvement of society. The antipode of the energy of social harmony is the energy of social disharmony (disunity, imbalance, disproportion, incoherence) of the structural units of society, which, in the extreme case of confrontation, mutual annihilation, violence and confrontation of "all with all" neutralize the production energy of harmony, lead to the only result - self-destruction of society. The society that we observe now and in the past many tens of thousands of years proves its existence by prevailing structures of social harmony or social negentropy overcoming the structures of social disharmony or social entropy.

The action of social disharmony, disorder and entropy in our time is well analyzed by Prof. John Avery in his interview [2]. We will rely on this analysis as the initial platform for further theoretical understanding of ways and means to overcome our civilizational crisis as a multitude of global challenges, growing disharmony, chaos and disorder [3]. Totally, this situation of extreme social disharmony is expressed by him as follows: "*We need system change, not climate change! We need a new economic system, a new society, a new social contract, and a new way of life. Here we must achieve a steady-state economic system. In addition:*

- *We must restore democracy.*
- *We must reduce economic inequality.*
- *We must break the power of corporate greed.*
- *We must leave fossil fuels in the ground.*
- *We must stabilize and ultimately reduce the global population.*
- *We must eliminate the institution of war. And*
- *Finally, we must develop a more mature ethical system to match our new technology*"[4].

This thought was expressed lapidary by Albert Szent Györgyi in the following inspirational words: "*Man is living in a new cosmic world for which he was not made. His survival depends on how well and how fast he can adapt himself to it,* ***to rebuild all his ideas, all his social and political institutions*** "[2].

The restructuring of the worldview and thinking of humans, of all their social and political institutions for a new cosmic era offers a fundamental social discovery of the Spheral classes - a constant deep structure of social harmony of humanity, in which its harmony ensures its life in history [5; 6].

«*Although the world now functions as a single united system because of modern technology, its political structure* ***is based on fragments****, on absolutely sovereign nation-states.*

They are large compared to tribes, but too small for present-day technology, since they do not include all of humankind.

The elimination of war, and the elimination of the threat of nuclear annihilation, will require effective governance at the global level.

In 1995 the Nobel Peace Prize was awarded jointly to Pugwash Conferences on Science and World Affairs and to its leader, Sir Joseph Rotblat. In his acceptance speech, Sir Joseph said, "We have to extend our loyalty to the whole of the human race…

A war-free world will be seen by many as Utopian. It is not Utopian. There already exist in the world large regions, for example the European Union, within which war is inconceivable. What is needed is to extend these."[2]

The exception of political fragmentation of disharmonious entropic nations-states, elimination of war, nuclear self-destruction of humankind as its conscious entropy and creation of peace free from wars - all these turns from utopia into reality together with the discovery of Spheral classes, which cover the whole of humanity.

Their harmonious and peaceful nature ensures a full victory of peace over war, when it turns from the spontaneous into the conscious as a result of its scientific knowledge. [6].

The theory of these classes deepens the Kantian understanding of the harmonious human nature by its objective structure. Spheral classes open the "Truth era" by Albert Szent Györgyi: "*Truth has the great virtue that allows us to accurately predict the future. If we ignore truth because it is unfashionable, or painful, or heretical, the future will catch us unprepared*"[2].

This fully applies to the truth of the Spheral class's discovery, which was ignored in totalitarian Marxism, which recognizes absolute truth only for itself and excludes any truth beyond its limits. This led to the decay and complete collapse of Marxism as a result of his 70-year-old state domination in the USSR and the "socialist camp".

Marxism was a pseudoscience, justifying communist disharmony/entropy and its accelerated growth, which turned out to be its suicide. Something analogous is happening with modern liberalism/conservatism, which was a mild branch of Marxism but also became the ideology of capitalist disharmony/entropy for the nations-states, which will end to capitalism collapse.

The Spheral class's discovery shows the third way - the path of a harmonious, negentropic, just development of humankind [6].

We know that: "*Living organisms distill their order and complexity from the flow of thermodynamic information which reaches the earth from the sun. In this way, they create local order, but life remains a fugitive from the second law of thermodynamics. Disorder, chaos, and destruction remain statistically favored over order, construction, and complexity*. "[2]

A humankind global society with a deep societal structure of Spheral Classes' harmony is capable to distil its order and complexity from their upbringing, education and lifelong learning and genetic harmony as spontaneously, intuitively up to their scientific knowledge, and especially many times in a conscious format on the basis of their scientific discovery, knowledge, understanding and self-government.

Conscious Spheral classes make order, peace and complexity from harmony statistically more favorable in society than disorder, chaos and destruction/war. They overcome the thermodynamic law of entropy in a society with its harmoniously organized, peaceful, negentropic life.

The knowledge of Spheral classes' structure will allow us to use the second law of thermodynamics as a moral rule: "*Knowing this, we can use the second law of thermodynamics to form an almost ethical insight: To be on the side of order, construction, and complexity, is to be on the side of life. To be on the side of destruction, disorder, chaos and war is to be against life, a traitor to life, an ally of death. Knowing the precariousness of life, knowing the statistical*

laws that favor disorder and chaos, we should resolve to be loyal to the principle of long-continued construction upon which life depends." [2] Similar construction/production is provided by the Spheral classes at the constant genetic structural level.

What is the discovery and essence of the organizational structural harmony of Spheral classes complementing the information mechanism of negentropy?

2. Deep Societal Structure of Spheral classes as Invariant Negentropy of Harmony

In this article, we attempt to understand the fundamental discovery of the deep societal structural harmony of Spheral classes [5; 6; 7; 8] - the constant classes of the population employed in four constant spheres of social production (hence called "Spheral Classes") as a universal genetic negentropic mechanism overcoming (exporting) social entropy, disharmony, violence and disorder.

In the simplest form, two logical premises became the theoretical source of Spheral class's discovery. **The first** is the discovery of the "autopoiesis" (self-production) of all living organisms, including people from birth to death. It is owned to Umberto Maturana and developed by his followers [9]. In sociology it was introduced by Nicholas Luhmann [10]. Autopoiesis, self-production is the law of the entire biosphere, including humankind and society, which can exist only thanks to the constant continuous production of necessary and sufficient resources for the existence. Both in the biosphere and in society, all attributes, structures and functions are attributes, structures and functions of production, derived from it.

The second premise, which deepens the first framed the social life, is the young Karl Marx intuitive conjecture in the first chapter of *German Ideology* on four spheres/types of production: "*material, spiritual, forms of communication / organizational and the human being himself*" [11].

This conjecture has found a powerful improvement in various social sciences, in the works of various scientists, in state statistics and in the daily use of the terminology of the four spheres of social production: The social/humanitarian sphere, the information/spiritual sphere, the political, organizational, managerial sphere and the material, technical, economic and ecological sphere.

The latter encompasses and includes the ecological sphere, as that part of nature that is under the direct influence of the economic/technical sphere. In short, we will refer to these spheres of social production as: Sociosphere, Infosphere, Orgsphere and Technoecosphere, where "eco" stands for both economic and ecological spheres. More detailed analysis of the four spheres of social production sees here [12; 6: 7].

Both premises are now fundamental, scientifically grounded theories, from which, with logical necessity, there is a conclusion about the real existence of four constant in structure but variables in the composition Spheral classes or "societal communities" of the global population [13; 14].

The spheral classes are not only a theoretical discovery. It is confirmed by solid statistics, empirically proving the Spheral class reality given in Chapter 2 [6]. Spheral classes are special dynamic statistical stochastic ("soft") groups of the population according to the three criteria:

1. They include the entire population on all levels (therefore they are "societal", i.e., mega-communities),
2. They are constant in their structure but are variable in composition, The population constantly and continuously flows like blood through the Spheral classes vessels and the heart chambers of their spheres according to the laws of chaotic nonlinear dynamics, and
3. They do not differ according to private criteria of property, power, stratification and the like, but only on the universal basis of prevailing in time employment in one of the production spheres.

According to this key feature - on prevailing temporary employment in the spheres of social production, these special and fundamental classes or communities of people and population are called Spheral classes [6]. Outside the prevailing temporary employment in one sphere, they are engaged in other spheres, moving from each to each spontaneously and chaotically or consciously and orderly in dependence from their scientific knowledge and understanding of these classes, their spheres and conscious control under the changes of vital employment in them.

The merit of Maturana lies in the discovery of the universal productive energy of all beings, expressed in their constant productive living employment. Its specific forms at each species are fixed by the genetic code of each of them and the corresponding instinctive ethos - behavior.

The merit of the young Marx lies in the conjecture of four macro-structures of people's production energy. Constant carriers and actors of this energy are Spheral classes, harmonious, natural and universal clusters of people, engaged in four spheres of social production - is the discovery of Tetrasociology [8].

It covers the scientific explanation of the entropic, primarily militaristic social structures of nation-states and negentropic, accumulating spheral social structures of the production energy of Spheral classes at all levels: mega, mezzo, macro and micro.

The invariant structural harmony of Spheral classes is similar to the organization of a living cell and any organism that retains its structural harmony and genetic order in a continuous stream of substitution and change of material composition that is updated in continuous metabolism.

Therefore, Spheral classes constitute the deep social genome of society, its stable invariant structural harmony in the continuous and endless stochastic flow of changing their individual and private group/class composition.

Individuals and the diverse private groups, including nations-states are the Spheral classes' parts therefore they name as "partial classes or groups". They fill the Spheral classes at every historical moment and they are temporary and transient, with their own private disharmonious goals and functions that contradict to harmonious functions and structure of Spheral classes.

The disharmonic, entropic partial groups or classes are destroyed by harmonious partial groups or classes and replace them. But over time, they themselves become disharmonious, entropic and replaced by new harmonious ones. Such a process of renewing the Spheral classes' composition at each historical stage of their life evolution is permanent and infinite.

In this process, two trends are connected: the entropy of society's production energy through the chaotic statistical and disharmonious activity of the private groups or classes and the negentropy of society's productive energy in invariant genetic structural harmony of Spheral classes ensuring order, peace and sustainability of society from harmony.

Spheral classes of the population are statistical and stochastic demographic clusters, which have a non-linear "soft" nature, so they were inaccessible and could not be discovered in traditional, rigidly determined linear sciences, including traditional sociology, especially totalitarian Marxist "historical materialism".

The last turned out to be pseudoscience, which excluded the structural harmony of objective social reality and absolute all forms of disharmony: violence as the "midwife of history", bloody revolutions, class struggle and perpetual civil wars. Marxism was a "theory" of social totalitarian entropy. The peak of Marxist thinking is total disharmonious and destructive entropic class violence.

Therefore, Marxism collapsed, despite its more than 70 years of state ideological dictate. It fell along with the collapse of the USSR as a result of its extreme internal social entropy/disharmony "under the leadership" of an equally entropic/disharmonious communist party and its totalitarian ideology.

The incompatibility of Marxism with the "*only true objective reality of harmony*" (Poincare) and its totalitarian entropic essence has become the fundamental scientific reason for its non-viability and historically irrevocable collapse as one of the many attempts of a partial false consciousness claiming to absoluteness. However, its separate ideas, as a conjecture of the four spheres of social production, received a scientific justification and became part of such a new nonlinear post-non-classical science as Tetrasociology [12].

3. Information theory of overcoming entropy in living systems

Biological sciences have long sought approaches to uncover mechanisms of overcoming entropy in living systems. The most promising was the information approach. Erwin Schrödinger explained that a living system exports entropy through information to maintain its own entropy at a low level.

He used the term "negentropy" to express his idea of importing negentropy by living system to survive [15]. This idea was intensively developed in the fundamental work of Prof. John Avery "*Information theory and evolution*" [16]. It is presented in the following quotes from it:

"Under certain circumstances, many bacteria form spores, which do not metabolize, and which are able to exist without nourishment for very long periods – in fact for millions of years. When placed in a medium containing nutrients, the spores can grow into actively reproducing bacteria. There are examples of bacterial spores existing in a dormant state for many millions of years, after which they have been revived into living bacteria. Is a dormant bacterial spore alive?"

"Clearly there are many borderline cases between non-life and life; and Aristotle seems to have been right when he said, "Nature proceeds little by little from lifeless things to animal life, so that it is impossible to determine either the exact line of demarcation, or on which side of the line an intermediate form should lie."

However, one theme seems to characterize life: It is able to convert the thermodynamic information contained in food or in sunlight into complex and statistically unlikely configurations of matter.

"A flood of information-containing free energy reaches the earth's biosphere in the form of sunlight. Passing through the metabolic pathways of living organisms, this information keeps the organisms far away from thermodynamic equilibrium ("which is death").

"As the thermodynamic information flows through the biosphere, much of it is degraded into heat, but part is converted into cybernetic information and preserved in the intricate structures which are characteristic of life".

"The principle of natural selection ensures that as this happens, the configurations of matter in living organisms constantly increase in complexity, refinement and statistical improbability. This is the process which we call evolution, or in the case of human society, progress."

Deep societal structural harmony of the Spheral classes is a mechanism to overcome entropy in social systems on different levels.

4. Tetrasociology about entropy/disharmony overcoming in social systems

Tetrasociology arose more than 40 years ago, together with the conjecture of four "Spheral Classes" [6]. This direction of knowledge is highly effective in theoretical and pragmatic aspects, as shown by numerous studies of the Spheral classes in Russia, especially in St. Petersburg, together with their statistical study and the construction of branch automated systems for their calculations during the period 1982-1989 [17].

However, the idea of harmonious classes of the population – Spheral classes fundamentally contradicted to the key Marxist dogma of the antagonistic class struggle, therefore its study as a "dissident" was closed that stopped development of this science for several decades.

Only in recent years it has been possible to restore these studies at the international level in the GHA in the process of creating "*Global Peace Science*". Within the GHA framework, a new fundamental statistical base of Spheral classes was obtained as their empirical platform, presented in Chapter 2 of this book, which was published in English in January 2016 [6].

What are the main conclusions of the scientific theory of Spheral classes for understanding the social mechanism to overcome entropy/disharmony in society?

1. Entropy in society is identical to the disharmony of private groups (including nations-states), which by their confrontation across the whole spectrum of social life give rise to the continuous dispersion and neutralization of huge arrays of the productive energy in society. The energy of disharmony is spent not for positive goals, but for negative mutual suppression of energies, for their useless waste for the production of social resources. Consequently, it was required to find a harmonious constant societal structure that neutralizes/exports social entropy/disharmony and imports/produces/restores social negentropy/harmony. While science does not know this mechanism, it is powerless to answer such questions. Only with discovery of the deep societal structural harmony of Spheral classes has become possible a scientific answer to similar questions.

2. The structural harmony of Spheral classes multiplies the productive energy of society and provides it with the highest efficiency and productivity by harmonizing the private energies of separate production institutions and units.

The societal dynamic structure of Spheral classes is the top accumulation of negentropy, order and harmony in human society on the Earth overcoming all forms of disharmony/entropy, the most fundamental and significant of which is the "*war of all against all*" according to the concise formula of Hobbes. This total war is an absolute evil, the complete destruction of society and people and immediately leads to the destruction of humanity. Only the Spheral classes' societal harmony confronts it and overcomes it. If it ceases to overcome/neutralize/transform/export entropy, this entropy will immediately destroy humanity. This can happen in many ways, the most terrible, fast and merciless of which is a global nuclear war.

Thus, in social thermodynamics two abstract absolute poles of extremes can be distinguished:

1. The pole of full (100%) entropy/disharmony (complete chaos, disorder, destruction) in the form of a "*war of all against all*", rejecting and excluding any production limited only by the mutual continuous destruction of people, families, nations, classes, states, cultures, religions and civilizations. The scientific concept of this extreme is ensured and determined by the second law of thermodynamics in its social interpretation of the "*war of all against all*." The most powerful source and danger of complete destruction, entropy and disharmony in our time are nation-states, especially nuclear ones.

2. The pole of full (100%) negentropy/harmony (complete order, production and progress) in the form of a complete societal structure of Spheral classes, full of happiness and pleasure of every person and every nation. The scientific concept of this extreme was made possible only with the discovery of the Spheral classes and their definition. The most powerful and constant source of social negentropy/harmony is the societal structure of Spheral classes capable to unite nation-states and overcoming their entropy. The theory of Spheral classes explains, why even in the most militaristic epochs of world wars, no more than 10-20% of the world's population was involved in them: humanity's survival does not allow exceeding measure, which is admitted by spontaneous Spheral classes. Only conscious Spheral classes can exclude wars from the life of humanity forever [6].

It is clear that these two poles can exist only in the imagination and scientific supposition as hypotheses or boundary axioms. They are impossible in reality, because each of these extremes is tantamount to the death of human and society. Their life is always possible only within a certain harmonious proportion/measure of both poles. To know the proportion and

measure of a person's/society's life, scientific knowledge must establish its limits in the extreme poles. Therefore, these abstractions are extremely important in the knowledge and understanding of human (person, individual) and society, which, in turn, constitute the other two extreme poles of the social system.

The society and human are a single inseparable dialectical social system, whole or noosphere, which is expressed terminologically by two indivisible categories: society/individual or by the use of each of these concepts is inherently implied by default the other. (We do not touch here another important theoretical aspect: the social system as a noosphere is part of the Earth's biosphere as a whole and is subordinated to its laws [2, 3, 4, 6, 8, and 12]). They relate to each other as dynamic and stochastic whole-parts in different respects, which do not exist without each other. In some respects, human is a whole for society, and in some others society is a whole for human.

Therefore, the inseparability of these phenomena is best expressed by a single concept of "human/society".

It determines the impossibility of existence of people as individuals outside or without society, as well as the impossibility of existence of society outside and without people. In a positive form this definition is formulated as follows: the society exists/lives thanks to the life of people/person, and the person lives/exists due to the life of society.

Human and society express the extreme limits of a social system - its ultimate or elementary unit - a person/individual and its ultimate or all-encompassing whole - a society/socium that includes all people. But it is no exhausted by a simple sum or by the set of its units - atoms.

The single space-time continuum of human/society is the fundamental scientific pillar of Tetrasociology and its social philosophy [6; 12]. It is complemented and on it is superimposed another, energy continuum of social entropy/negentropy. Both complementary theoretical continuums are integrated by a common center - the societal structure of harmonious Spheral classes.

History has shown that in the most disharmonious, entropic structures of nation-states, violence and militarism develop at the fastest and most threatening rates, as in the most favorable environment for them.

The source of this is the property of the partial nations-states, classes, groups and elites, which disunites people and engenders mutual enmity and hatred, strengthening the disharmony/entropy of humanity. The employment of the Spheral classes, including partial classes, unites people, damps the antagonism of property increasing the level of harmony and negentropy of humanity. Therefore, the constant Spheral classes of harmony as the social genome are a constant source of social negentropy at all levels of the social system: mega, macro, mezo and micro.

Global Peace Science (GPS) [6] offers a way out of the industrial entropy of capitalism and communism - the third path of a harmonious civilization. It is a bifurcation from the chaos/entropy of the national interests of states and the "paranoia" of partial pacifist superficial ideas to order and integration through the scientific theory of the deep societal dynamic structure of the harmonious Spheral classes. Negentropy of the genetic structural harmony of the Spheral classes, revealed in GPS, constitutes the spheral thermodynamics of global peace and life. It overcomes the traditional but dominant thermodynamics of war and death, which is constituted by the entropy of partial classes, groups, elites and nation-states in their disharmony, violence, militarism, terrorism making modern war of all against all.

This science, like its theoretical basis - Tetrasociology is engaged in the search for universal laws of social development, which was and remains an important problem of philosophy, history, sociology, and political science [18].

Both these inseparable sciences lie in the mainstream of the emergence of a nonlinear worldview associated with discovery in second half of the twentieth century of the phenomena of deterministic chaos, self-organization, and criticality of development and fractality, which led to emergence of a post-non-classical general scientific paradigm [18].

Tetrasociology and its Global Peace Sciences - GPS are an expression of the new unity of social sciences on common holistic basis of the Spheral classes' deep constant societal structure with nonlinear stochastic dynamics. Today it is clear that the traditional notions of social development oversimplify social

reality and society is much more complex than it seemed just recently. It has a non-trivial ontological structure that includes, in addition to the real one, a virtual component. In it constantly replaces each other with the processes of self-organization and chaos and its numerous objects are often fractal in nature [18].

These sciences are inextricably linked with the basic ideas of post-non-classical sciences, such as nonlinear dynamics and synergies. But this is a special issue requiring special scientific analysis.

Of course it is important to include the knowledge and understanding of new sciences of networking, Nature complexity and swarm research [19, 20]. The contemporary sciences are observing new universal qualities of Nature including system swarm qualities. The swarm research is observation of the swarms origin, of the swarm relations of parts and whole of the social creatures among them such the Homo sapiens global community, the locust, the bees, the ants etc.

5. Spheral Classes' Theory: bridge between social and natural sciences and pillar of their unity

The Spheral classes discovery and constructing of their theory, revealing their unique thermodynamic attributes has a key epistemological significance to form holistic architecture of human knowledge, which unites the fragmented clusters of the natural and social sciences. The Spheral classes theory makes sociology not only by a global science uniting the entire areal of social sciences but also a fundamental one, raising it to the level of fundamental natural sciences and not yielding them by attribute of fundamentalism.

The search for such a bridge between social and natural sciences has been going on for a long time but it was unsuccessful until the law-governed connection between them was established through thermodynamics by Dr. Valery Ilyin in his pioneering work: "*Thermodynamics and Sociology: Physical Basics of Social Processes and Phenomena*" [19].

The author made in it a large and necessary preparatory work for understanding unity of nature and society from the natural sciences side, primarily from the standpoint of thermodynamics - one of the most universal and fundamental natural theories. However, this connection from sociology was not backed up by an equally comparable fundamental theory before creation of the Spheral classes theory. Only this sociological theory of the Spheral classes as fundamental structural harmony establishes a worthy pillar to unite the social and natural sciences. It discovers fundamentally new perspectives and opportunities for their effective theoretical and pragmatic interconnectedness in the holistic architecture of nature and society primarily to solve global environmental and climatic problems through overcoming the destructive entropy of nation-states.

But their fundamental interaction and overcoming the lagging social sciences from natural sciences is the subject of fundamentally new interdisciplinary studies that go beyond the scope of this article.

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10. "The War Killed My Father, and I Killed War Intellectually" Biographical article about Leo Semashko's life path in his main achievements By Robert Weir,

The war killed my father, and I killed war intellectually.
I deprived its vital source in the false faith of its eternity
by my spheral science of genetic peace from world harmony.
This integral science creates nonviolent holistic thinking,
fulfills Einstein's fundamental paradigm of "peace through understanding," and
opens a conscious, peace-loving path for harmonious civilization of the future,
excluding all wars.
Leo Semashko

I erected a monument to myself not made by hands ...
Alexander Pushkin

Leo Mikhailovich Semashko (born June 20, 1941) is a Russian visionary, philosopher, sociologist, author and peacemaker. He is founder and president of the international peacemaking organization Global Harmony Association (GHA) and an honorary member of RC51, Sociocybernetics, International Sociological Association. His more than 600 scientific publications, including 18 books, focus on his discovery and development of scientific theories of tetraphilosophy, global sociology and harmonious civilization. He is the discoverer of spherons, Tetrasociology or third order Sociocybernetics, Tetrapsychology, spheral statistics and global peace science.

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Youth, education and career

Dr. Leo Semashko was born June 20, 1941, in Grodno, Belarus, a city close to the borders with Poland and Lithuania. Leo's 22-year-old father was killed in Grodno during the first days of World War II, a fact that shaped the young boy's destiny and spun his life and work into spiritual and sociological arenas, with the goal of helping nations attain world peace.

Dr. Semashko is a graduate of the Faculty of Philosophy (1965) and alumnus of post-graduate studies (1970) from Moscow State University, Department of History of Foreign Philosophy, with a thesis on ancient philosophy. His scientific adviser was Professor Igor S. Narsky; his scientific mentor was Professor Valentin F. Asmus. He has lived and worked in St. Petersburg, Russia, since 1971.

With a PhD in philosophy, Dr. Semashko is Professor RANH (Russian Academy of Natural History). He has been a teacher of philosophy, sociology and political science in a number of universities until 2004; a member of the Leningrad/Petersburg City Parliament of the 21st convocation from the city's 48th constituency from 1990 to 1993; and has been an Actual State Counselor of St. Petersburg, class III, since 1998.

He was also founder and leader of the Spheral Democracy Deputy's Faction in the Petersburg Parliament (1992-1993); founder and president of the Children's Foundation, named by Feodor Dostoevsky, in St. Petersburg (1990-1997); founder and chair of a group of developers for the first project of the Family Code in Russia, with the first chapter dedicated to advancement of children's rights (1990-1991); creator of the Global Harmony Association (2005); and a participant in other socially oriented endeavors not named here.

Since 1990, he has participated in many international peacemaking and sociological congresses in Australia, Asia, Africa and Europe.

Global Harmony Association

As a philosopher, sociologist and peacemaker, Dr. Semashko has emphasized social and human harmony. In 2005, he founded the Global Harmony Association (GHA), an informal international peacemaking organization that now consists of more than 600 humanitarian scholars and peacemakers from 65 countries as well as many collective members. In 2016, he was elected as GHA's honorary president.

Since its creation more than 13 years ago, Dr. Semashko and other GHA members have collectively initiated 60 peacemaking projects and created eight books, with more than 400 co-authors from 45 nations, that have been published in several languages. The GHA and its leader were twice nominated for the Nobel Peace Prize (2013 and 2017). Since 2007, 15 outstanding world leaders, peacemakers and scholars of humanities associated with GHA have been honored as "World Harmony Creator" for their unprecedented contribution to global peace from harmony. (http://peacefromharmony.org/?cat=en_c&key=513)

Discoveries and achievements

In 1976, Dr. Semashko authored the fundamental discovery of "spherons" (spheral classes of the population employed in four spheres of social production), which is supported empirically by a number of statistical studies. The concept of spherons is the foundation for Dr. Semashko's new scientific, holistic disciplines: tetraphilosophy, tetrasociology, spheral statistics and global peace science, as well as new, emerging, interrelated global digital technologies.

The theory of spherons is the integrating center, the structural core and heart of a single spheral humanitarian science as a whole. This theory unites and reconstructs traditional social sciences, overcoming their eternal fragmentation and providing them with ontological unity and epistemological holism.

Tetraphilosophy

Tetraphilosophy is a four-dimensional pluralistic and holistic philosophy that originated from the ontological cosmogonic concepts of the Greek philosopher Empedocles. It continues, synthesizes and develops the four-dimensional spheral ideas of Immanuel Kant and cosmism, especially Russian cosmism in ontology, and similar pluralistic ideas of social philosophies by Augusto Comte, young Karl Marx, Maxim Kovalevsky, Max Weber, Robert Park, Karl Jaspers, Pitirim Sorokin, Talcott Parsons, Fernand Braudel, Alvin Toffler, Jürgen Habermas, Pierre Bourdieu, Anthony Giddens and many others.

Tetraphilosophy recognizes four equally necessary, sufficient, and inseparable and harmoniously interconnected ontological grounds/elements/beginnings: individual existence, information, organization/order and matter. These elements constitute specific spheres of integral being at all levels: cosmos, society, man (mankind) and "I" (the individual). The interrelation, continuity and mutual multi-dimensional inclusion of spheres of different levels are determined by a single ontological regularity of their spheral structural harmony. According to Henri Poincare, this "inner harmony of the world is the only true objective reality."

Tetraphilosophy excludes the primacy/primordiality of any specific cosmogenic origin, but it recognizes the variable priority of any of the four elements at different historical spaces and times. Synonyms of tetraphilosophy, which emphasize its different aspects, are tetrism, four-dimensional pluralism and harmonism.

Tetrasociology

Tetrasociology is the social part of tetraphilosophy, the subject of which is social harmony, global peace and harmonious civilization throughout humanity's entire history. Tetrasociology manifests society as the continuous evolution of the four spheres of social production, which, in the terminology of Chilean biologist Humberto Maturana, constitutes the social form of the biological "autopoiesis" (self-production). The four spheres of social production or social autopoiesis are a form of existence and development of any society in its evolution and history. Spheres produce four societal spheral resources, constituting both the subject and product of these spheres, according to which they are differentiated and structured.

Spheral resources

Spheral resources are the four equally necessary macro resources that must work and mesh together in order for humanity to continue social and individual living: People, Information, Organizations and Things, which are material goods and services (PIOT). The absence of any one of these spheral resources makes human life and continuation of society impossible.

Relatedly, an equal societal value of PIOT resources, regardless of their number, determines the equal societal value of the corresponding spheres and spherons of social production. Together, this harmonious balance among the equal PIOT resources, spheres and spherons expresses society's genetic noospheral pluralism, its autopoietic unity as well as its plurastic harmonious nature as a whole.

Spherons

Spherons are the four equally necessary societal spheral classes/communities of the population that are employed in four spheres of social production: sociospheron, which is employed in the sociosphere; infospheron, which is employed in the infosphere; orgspheron, which is employed in the orgsphere; and technospheron, which is employed in the technosphere. Spherons differ neither in property, nor in power, nor in other partial qualities but only in the fundamental, vital employment of people in one of the four spheres of social production that produce the four necessary and sufficient spheral resources of PIOT.

During a person's non-working ages, from birth to adulthood as well as in old age, each individual receives the benefits of social production through the relevant institutions of a caring family, education, health services, social welfare and so on; in this capacity, the individual forms the passive part of the sociospheron. In contrast, during working age, the individual actively contributes to society's spheral structure by being employed in one sphere or another, one of which the individual makes a priority concerning his/her work time. Spherons' stochastic balance constitutes the societal harmonious structure of every society. Thus, spherons are the fundamental units and actors of this structure, the spontaneous interconnection and mutual limitation of which ensures the structural harmony of all social production.

Tetrapsychology

Tetrapsychology is a psychological, individualistic part of tetraphilosophy. Tetrapsychology studies and reveals the spheral structural harmony at the level of the individual in its four spheres: character, consciousness, will and body, which constitute the spheral psychological genome, "psynome." Tetrapsychology, along with the spherons, was discovered by Dr. Semashko, but it was scientifically expressed and defined only in 2012 in Dr. Semashko's and GHA's book *The ABC of Harmony*. Tetrasociology and tetrapsychology, as well as society and individuals, are united by the spheral similarity of their structural harmony.

Spheral science

Spheral science is a single, holistic, socio-humanitarian science based on the knowledge of the spheres and spherons of social production in their structural harmony. This knowledge inherently integrates all diversity of traditional humanitarian branches and disciplines into the holistic scientific vision of spheral social production in the form of a harmoniously ordered diversity of system aspects and directions within this vision. Spheral science, then, in the broadest sense, is Tetrasociology or Sociocybernetics of spheres and spherons, which constitutes the third order Sociocybernetics.

The subject of spheral science is the social four-dimensional autopoiesis in the structural harmony of spheral resources, productive spheres and spherons in the continuous stochastic process of their spheral employment. Unfortunately, traditional social science and humanitarian knowledge today are still in an extremely depressed, fragmented and embryonic state, a primitive condition that rejects and impedes fundamental spheral discoveries. Even the most dynamic and progressive world leaders, such as Russian President Vladimir Putin, are not yet able to understand the acute need, the role and significance of the fundamental Copernican renewal of the social and human sciences, such as President Putin (http://peacefromharmony.org/?cat=ru_c&key=666).

Spheral statistics

Spheral statistics is one of the fundamental parts of the spheral science (tetrasociology, third-order sociocybernetics) that provides this science with quantitative harmonious measurements of spheres, spheral resources and processes, spherons and other spheral attributes of holistic social production at all its levels, from the individual and the family to the country and to all global humanity. Based on spheral statistics and its indices, an adequate mathematical description and "digitalization" can be created to measure the harmoniousness of integral social production, the balances and proportions of societal spheres and spherons, and the stability and effectiveness of any given society. Spheral statistics, then, provide an empirical basis for spheral science, which begins with the statistical knowledge of spherons and their interactive dynamics over time at different levels.

The discovery of spheral statistics creates a single, logically ordered, universal and global social space of spheral statistical indices for all countries, industries/branches, corporations, governments and spheres of social production. Spheral statistics aggregates and integrates indicators of traditional statistics to overcome the fragmentation and limitations of those traditional statistics. Spheral statistics give the indices of spherons as a social genome (socionome) that defines the measurement of the structural harmony of social production of any country in any historical period. Spheral statistics have become a platform for a number of unique digital technologies, such as Spheral Information-Statistical Technology (SIST) as a first step to help foster world peace through the conscious and controlled harmony of a spheral global "digital" economy, excluding crises and unexpected risks of disharmony.

Spheral Information-Statistical Technology (SIST)

The greatest development, justification and application of spheral statistics is Spheral Information-Statistical Technology (SIST), which Dr. Semashko perfected and used in the development of many urban projects when employed at the St. Petersburg City Planning Commission's statistical institute, System Engineering from 1980 through 1988.

Like atomic energy and some other modern technological discoveries, spheral statistics and SIST have a double/duplex use: they can be constructive, providing global peace and common societal good for the fraternal unity of countries and people in a harmonious multipolar world order. Or, they can be destructive/military, capable of creating economic instability, disharmony and societal collapse nonviolently, as was the case with the "Great Depression" in the United States or the disintegration of the United Soviet Socialist Republic. The destructive option of spheral statistics and SIST may be applied, for example, by world peace organizations, such as a restructured United Nations, to any state-aggressor to nonviolently ensure global security, peace and stability from harmony.

According to Dr. Semashko's opinion, spheral statistics and its technologies have an unlimited range of effective applications in all spheres of world digital economy. These tools allow to regularize and streamlining the Internet global information space, to turn its chaos into some kind of harmony and to ensure a gradual approximation to it, as well as repeatedly to increase the precision and efficiency of the search in it. On their basis, fundamentally new models of global environmental security governance are built for the UN and other international organizations. In addition, on their basis, self-government models of personal growth can design for each individual. Their use can ensure the peoples of all countries with millions of new innovative intellectual jobs and unlimited investments in the 21st century.

Spheral Democracy

Spherons and spheral science are able to provide an evolutionary, nonviolent transformation of traditional democracy as plutocracy—with its congenital defects of militarism, inequality, corruption and nationalism—to a full, 100 percent spheral democracy that encompasses and serves the interests of the entire population, including women and children.

Spheral democracy is based on scientific knowledge of each spheron's objective equality within a harmoniously structured society. The spherons objective equality demands to recognize the equally necessary role that each spheron plays in social production. This knowledge requires and allows a highly functional society to divide all forms of political power at all levels of government, entitling each of the four spherons with an equal (25 percent) quota of representation in the legislative, judicial and executive governmental decision-making bodies.

A similar division of power between fundamental spherons (between spheral classes/communities of the population) is necessary today. In order to be truly harmonious, society must create a decision-making structure in which there is an equal quota representation

in all democratic institutions, regardless of the number of people and property value (wealth) of any particular individuals within any of the spherons. This equanimity creates a condition in which society is at the service of all its people and not at the service of the small percentage of the population (the wealthy elite); thus, it ensures a full and balanced, harmonious nature of spheral democracy that can overcome all the innate defects of traditional democracy that is evident in many countries today.

Global Peace Science

All categories and discoveries of the spheral science are organically integrated by Dr. Semashko in the special Global Peace Science (GPS), which is still not universally developed and, thus, is absent in most countries. GPS is an alternative to "military science," which has flourished for more than two centuries in all countries, resulting in an endless number of military academies and colleges as well as prioritization of extremely expansive military endeavors, armament build-ups and colossal military budgets.

Global Peace Science reveals the objective laws and fundamental actors of global peace from the societal structural harmony of the spherons. Thus GPS can be used by nations and governments to overcome all disharmonies and imbalances of social production that generate violence, wars and armed conflicts. GPS allows societies to build a long-term global strategy for achieving universal peace and disarmament within the next 50 years, based on the mechanisms of spheral democracy at all levels of government, including the United Nations.

Tetranet Thinking Paradigm (TTP)

Based on spheral categories and spheral indices, Dr. Semashko created a fundamentally new paradigm of spheral, global, harmonious, holistic and networked thinking that he called the Tetranet Thinking Paradigm (TTP). Tetranet thinking is four-dimensional thinking by spheres and spherons at all levels of social autopoietic cosmos within the framework of the philosophical thinking of the four ontological spheres of being. Thus, TTP integrates all the achievements of traditional, branch or partial thinking in order to overcome the fragmentation and limitation of that 20th century mindset. TTP also allows people and governments of the world to find nonviolent, harmonious solutions to all historical and current global challenges and risks.

TTP offers a constructive intellectual tool for the embodiment of the 20th century's brilliant covenants and the solution of global challenges expressed by their visionaries, among them: Henri Poincare, who said, "The inner harmony of the world is the only true objective reality." Albert Einstein, who said, "We shall require a substantially new manner of thinking if humankind is to survive." Martin Luther King, Jr., who said, "We should shift the arms race to a peace race." To which John F. Kennedy, speaking to the United Nations General Assembly, added, "Mankind must put an end to war before war puts an end to mankind." Therefore, using the expression of the Russian geochemist Vladimir Vernadsky, one can say that TTP is scientific thinking that constitutes "the greatest shift of human thought, which takes place only once in the millennia."

TTP also builds on the wisdom and power of women. It was the Russian theosophist, writer, and public figure Elena Roerich who said, "In the hands of a woman, now is the salvation of humankind and the planet. The Age of Woman has come, and the woman must raise the thinking of humanity to the next step." TTP brings forth the necessity of true gender equality that is humorously expressed in the American aphorism: "If Mama isn't happy, nobody's happy."

Global Harmony Association projects
Women's Project

Dr. Semashko and the Global Harmony Association applied spheral analysis with an evaluation of feminist achievements of the last 100 years to create a foundation for continuation of the new feminist movement in the 21st century. This endeavor began with a reconstruction of the feminist heritage of Helena Roerich, who, in the early 1900s, rode side by side with her husband, Nicholas Roerich, as they, together, explored the great remote expanses of southern Russia, China and Himalayan India. From that, came a deeper definition of Elena Roerich's philosophy of "harmonious feminism" or "fourth wave feminism."

GHA developed Helena Roerich's theoretical conclusions and integrated them with spheral intellectual tools to form the conceptual basis of the GHA project called New Women. This project connects the idea of true equality of women, primarily in the economic and political spheres, with women's harmonious and leading societal role. This project shows that women can bring about world peace because of their inherent motherly capability to master spheral holism through the paradigm of tetranet thinking and by establishing a spheral democracy that provides women with an equal quota of seats in all government bodies at all levels.

Social Priority of Children

The traditional capitalist way of prioritizing and maximizing profit, as history has shown, is destructive for humanity in all senses and spheres: military-political, economic, humanitarian and spiritual. Through his research, Dr. Semashko proved that humanity's survival requires that society shift from its destructive prioritization of capitalistic profit to the constructive priority of children's growth and creative development.

Children constitute the primordial human value for all people throughout all time. The quality of life for children determines the quality of all spherons and society as a whole, in all its parts and functions.

In the early 2000s, Dr. Semashko proposed a legal mechanism for ensuring the priority of children in a legislative bill, submitted to the United Nations International Children's Emergency Fund (UNICEF), called the Children Suffrage Executed by Parents and referenced as an "institution for harmony." While this idea did not originate with Dr. Semashko, he enhanced the concept with a fundamental spheral substantiation of a philosophical, sociological, political and legal nature.

The social prioritization of children ensures the recovery of social goal-setting, society's liberation from militarism and direction toward global peace for children. Making children a priority is also an indispensable tool for the establishment of spheral democracy because: it ensures genuine gender equality; it harmoniously regulates the demographic process of population growth; it prevents terrorism through the formation of children's antiterrorist immunity; it develops decisive human capital; and it qualitatively increases the sociosphere role of its institutions of family, education, health care, sports and similar functions, especially those that are beneficial to children.

The Global Harmony Association has devoted many books, articles and projects to making children a social priority, which is connected to the third, harmonious path of human development as an alternative to capitalism and communism.

Restructuring the United Nations

The United Nations was formed on 24 October 1945, at the end of World War II, with the aim of preventing a third world war. In the decades since, nations and societies have experienced numerous acts of aggression, genocide, violence and crimes against humanity on both a large and small scale, all of which show that the current global and nationalistic paradigms contribute to humanity's disharmony and inability to establish global peace. The inextricable militaristic disharmony within the United Nations is the result of inherent militarism exhibited by its member-states who bring forth an endless number of national contradictions, all of which exclude the necessary common denominator of global harmony and peace for all people.

The discovery of spherons, along with the corresponding constant structural harmony at all levels, determines an objective social common denominator that is universal for all nation-states—whether the political leaders of those nation-states recognize it or not. Therefore, the Global Harmony Association has suggested that the United Nations be restructured to correspond with humanity's inherent spheral structure. That is, the UN would no longer be comprised of ambassadors with their individual nationalistic agenda but a body of eight people from each member-state: one man and one woman from each of the four spherons.

This structure, functioning according to the principles of spheral democracy and gender equality, can end militarism of traditional nation-states and ensure global harmonious governance and resolution of all global problems, including the geopolitical and environmental risks and challenges that confront and afflict humanity today.

This proposed global peace from structural harmony is the most complete and reliable source of security for every nation; it is much more steadfast than is an endless arms race, purported by the illusory and false claims of militaristic "national security," fueled by extravagant internal armed forces budgets that are the true "enemy within," and the insecure opinion that economic or military growth of another nation is a "security threat" to another nation.

The Global Harmony Association and Dr. Semashko believe that the only way out of this vicious militaristic circle is through restructuring the United Nations and thus creating a high-level model of harmonious world order that would extend to all its member-states and, then, to all nations, societies and peoples of the world.

Human/Humanity Right to Life, Global Peace, Nonviolence and Social Harmony

The logical conclusion of the GHA's UN project became its "Gandhian Declaration of Human/Humanity Right to Life, Global Peace, Nonviolence and Social Harmony," which Dr. Semashko wrote and published at the end of 2017. This GHA Declaration is the continuation, deepening and development of the United Nation's "Universal Declaration of Human Rights" (1948), which mentions "right to life" only once (in Article 3) without substantiating its fundamental role in peacemaking. In contrast, the GHA Declaration, which is based on spheral science, proves that right to life is inseparable from the right to a global peace and social harmony, is the primary, foundational function of humankind's natural existence, as defined by the basic desire of procreation and continuation of the human species. Therefore, right to life can—and must—be the only legal source on which to establish universal peace, exclude militarism and the institution of war, and reorganize the UN into an effective peacemaking body. The priority role in the recognition and adoption of this Declaration belongs to women and children, who account for more than 70 percent of the world's population, and who undoubtedly need and desire peace.

Harmonious civilization: Spheral futurology

Spheral philosophy and science are summarized in the theory of a harmonious civilization. This theory constitutes a special, fourth part of tetraphilosophy, which the author called "spheral futurology." Spheral futurology was the subject of the GHA's sixth book *Harmonious Civilization*, crafted by 120 co-authors from 34 countries. The publication of this book in 2009 was recognized by GHA members as the beginning of a conscious, scientific and peaceful building of a harmonious civilization that had previously been expressed in the GHA "Harmonious Era Calendar" in 2006. Harmonious civilization is an alternative to the outgoing industrial civilization with its militaristic regimes of capitalism and socialism. This is the "third way" of humankind as revealed in the humanistic nonviolent Christian interpretation of Pope John Paul II. A key feature of a harmonious civilization is freedom from wars and militarism, thus excluding the institution of war from the life of humanity.

The questions "who and how will end war," which, according to John F. Kennedy, threatens "to put an end to mankind," find a systematic answer in spheral science. Contemplating these answers enabled Dr. Semashko to express its essence, which is also the most significant achievement of his life, with a capacious phrase: "The war killed my father, and I killed war," meaning that his scientific understanding of the fundamental social spheral sources will lead to the exclusion of *all* wars and militarism. This is a summary and main result of Dr. Semashko's life. He will be recognized in history as the scholar who intellectually "killed war."

Published works

Dr. Semashko's discovery and development of these new sciences began in 1976 with his participation in the student club "Demiurge." He published more than 600 scientific documents, including 18 books, many of which have been translated into multiple languages.

His main books on tetraphilosophy and global tetrasociology include *Spheral Approach* (1992), *Sociology for Pragmatists (1999), Tetrasociology* (2002). All subsequent books were created in co-authorship with hundreds of the GHA members: *Harmonious Era Calendar (2006), Magna Carta of Harmony (2007), World Harmony/Peace Academy (2008), Harmonious Civilization (2009), The ABC of Harmony (2012*) and others through which he has extensively developed ideas of the third-order sociocybernetics, tetrism, harmonism, spheral statistics, spheral democracy and other important and necessary concepts.

He is the initiator, principal author, manager and editor-in-chief of the unique book *Global Peace Science* (2016), a "scientific formula for peace" that contains the collective wisdom of 174 co-authors (including several Nobel Peace Laureates and president of India Abdul Kalam) from 34 countries: http://peacefromharmony.org/docs/global-peace-science-2016.pdf

His published works are housed in the world's largest libraries, including the United States Library of Congress. His publications also include the GHA's 60 projects with the theme of global peace from social harmony, created under his leadership. A complete list of his books and GHA projects is published at the GHA web page "GHA Projects: Oasis of Harmonious Civilization" http://peacefromharmony.org/?cat=en_c&key=472

Peace from Harmony web site

The web address for the Global Harmony Association web site is "Peace from Harmony": (http://peacefromharmony.org), which Dr. Semashko created in 2005. This web site includes more than one million documents in 16 languages and has recorded more than 12 million visits in 13 years.

Robert M. Weir,
American writer and peacemaker
Author, speaker, advocate for "peace through understanding"
http://peacefromharmony.org/?cat=en_c&key=239
12-06-18

11. Global Spheral Statistics
Subjects of lecture course for 50 hours.
by
Leo Semashko*, Pravat Dhal, Saqlain Raza, Mansoor Shaukat

Nonviolence [harmony, peace] is the greatest force at the disposal of mankind. It is mightier than the mightiest weapon of destruction devised by the ingenuity of man. Nonviolence is not the inheritance of cowardice, it is always heroism.
Mahatma Gandhi

Peace can not be achieved through violence, it can only be attained through understanding [science]. We shall require substantially new manner thinking if mankind is to survive.
Albert Einstein

Mankind must put an end to war before war puts an end to mankind.
John Kennedy

The inner harmony of the world is the only true objective reality.
Henri Poincare

№	Lectures Topics	Hours
1.	The world need for a scientific revolution of social knowledge and its global spheral statistics for a peacemaking/nonviolent revolution of the 21st century. From the Gandhi's intuition of nonviolence/peace to the scientific understanding of its fundamental nonlinear actors - Spherons. The conscious governance of the deep structural harmony of Spherons through spheral statistics ensures the survival of humanity, global peace/non-violence and the prosperity of all nations.	2
2.	Achievements and the "Augean Stables" of the limitations of traditional statistics within almost 4 of its centuries	2
3.	Sociocybernetic theoretical foundations of global sphere statistics. Short History	4
4.	Two statistics. Two logic of knowledge. Two paradigms of thinking. Their connections	4
5.	Logical Foundations of Spheral Statistics: Sociocybernetic Axioms	4
6.	Sociocybernetic genome of social production as the object and subject of spheral statistics	4
7.	Indices of spheral statistics, their infinite fractal matrix, their units of measurement and the mathematics of their harmony	4
8.	Spheral indices of SPHERONS: the beginning and the main part of spheral statistics	2
9.	Spherons Attributes: non-linearity, integrity/wholeness, stochasticity, thermodynamics, negentropy, fractality and network character	4
10.	Spherons Spheral Indices: Two Clusters of the Employment	2
11.	Composition of the population of traditional statistics indices in the spheral indices of Spherons at different levels: region - country - humanity	2
12.	Transition from manual to automatic / programmable operations of composition and decomposition of spheral indices, to digital "Sphere Information-Statistical Technology" (SIST). The colossal need into new high-intelligence jobs for the digital SIST	4
13.	Priority areas of application of spheral statistics	4
14.	Economic benefits of innovation spheral statistics and its SIST	4
15.	Social, economic and political benefits of spheral statistics and its SIST: nonviolent harmonious solution of key social problems and ensuring a sustainable global and national peace and prosperity in each country	4

* Leo Semashko's statistical experience is about 10 years of work in the Statistical Institute of St. Petersburg, Russia in 1980-1989. In more detail: http://peacefromharmony.org/?cat=en_c&key=253

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Dr. Leo Semashko, Russia
https://peacefromharmony.org/?cat=ru_c&key=286

Dr. Pravat Dhal, India,
https://peacefromharmony.org/?cat=en_c&key=890

Dr. Saqlain Raza, Pakistan
https://peacefromharmony.org/?cat=en_c&key=847

Dr. Mansoor Shaukat, Pakistan
https://peacefromharmony.org/?cat=en_c&key=847

12. Reviews on the Spherons Argumentation. Fragments.
By
Bernard Scott, Rudolf Siebert, Timi Ekimovich, Uraz Baimuratov, Vladislav Krasnov, Subhash Chandra, Reimon Bachika, Ayo Ayoola-Amale, Michael Ellis, Sanjay Tewari

Bernard Scott, Britain:

Since I first became acquainted with Leo Semashko's tetrasociology (in 2002, when I wrote the editor's introduction for his book "Tetrasociology: Responses to Challenges": http://peacefromharmony.org/docs/2-1_eng.pdf) his theorising has become more detailed and more complex. However, the underlying logic remains the same: it begins with the four spheres of social production of the young Karl Marx, still free from the class struggle's political dogmas, and the autopoiesis (self-production) of Humberto Maturana.

Semashko's spherons, by definition, reproduce the human social world (see his "Primer on global peace science" at http://peacefromharmony.org/?cat=en_c&key=423). Their harmonious working is prevented by mankind's lack of awareness of this. Thus we are subject to conflict and other societal and individual pathologies. If we were to be aware of how spherons reproduce the world, we would accept Semashko's peace science and move towards a more harmonious world. I see this recursive application of Semashko's concept as akin to the cybernetician Stafford Beer's recursive application of his viable system model, the VSM. I believe this proposed recursive (fractal) application of the concept of spherons can enrich Semashko's theorising and facilitate interdisciplinary communication.

Original publication: Bernard Scott (2017) Some thought about Leo Semashko's concept of 'spherons': ISA RC51 on Sociocybernetics. Newsletter 34, September 2017: https://sociocybernetics.files.wordpress.com/2017/09/rc51-newsletter-34.pdf

Rudolf Siebert, USA:

The proposed and developed argumentation of Spherons is constant in the societal structure but permanently changing in their filling spontaneous harmonious classes of the population, actors of society and global peace in "Tetrasociology" and in its "Global Peace Science" (GPS). This argumentation is quite satisfactory from a scientific point of view. The scientific conclusion about reality of Spherons is fundamental and logically impeccable as all its premises are logical and factual flawless: 1. Four spheres of social production (Marx and others), 2. Productive employment of people from birth to death, "autopoiesis" (Maturana and others), 3. "Societal communities" of people (Parsons and others). But these premises and conclusion are requiring a comment, detailing, historical analogies and further development in terms of our critical philosophy.

We look at the Tetrasociology in the perspective of a dialectical history and philosophy of science, according to which one scientific paradigm negates the previous one not abstractly, but concretely: i.e. it does not only criticize it, but it also learns from it, and preserves it, and elevates it, and completes it. Pluralistic models, like Tetrasociology concretely supersede monistic paradigms, preserving in themselves the scientific accomplishments of the latter. ….

Timi Ecimovic, Slovenia:

The SPHERONS' theory generalizes the historical experience of cognition of social structure from ancient times, beginning with the caste stratification of Vedic India, the class differentiation of Plato's ideal state, Marx's class structure and ending with modern theories of stratification…. The SPHERONS' theory compares several historical bases of classification and stratification of people into classes, from which the fundamental and scientifically proved is recognized the production employment of people on the basis of discovery of autopoiesis (self-

production) by Humberto Maturana in 1970 as the human eternal nature both in phylogenesis and in ontogenesis from birth to death. The biological discovery of autopoiesis was introduced into sociology by Nicolas Luhmann and became practically universally recognized in the social sciences now. Therefore this premise of SPHERON's argumentation is the most fundamental in their theory. It does not cause fundamental scientific objections and meets scientific requirements. All other grounds for differentiating people (property, power, soul qualities and etc.) in the SPHERONS' theory are recognized as private forms of employment that serve as the basis for different, historically transitory private social structures and private classes named in it PARTONS: slaves and slaveholders, peasants and feudal lords, workers and bourgeois, lower-middle-upper classes, and so on.

Another premise of the SPHERON's argumentation concerns the structuring of the production employment of people and any society up to humanity as a whole. The overwhelming in history was sector/branch division of people into private, historically transitory classes, PARTONS: peasants, artisans, traders, warriors, managers, etc., by their employment in the most developed in society private, historically transitory branches. The first division of social production according to four universal constant functions (production-distribution-exchange-consumption) was proposed by A. Smith, which was developed and supplemented by its division into four universal constant spheres (types/forms of production) by K. Marx in 1845 in the first chapter of "German Ideology." Marx could not draw a conclusion about the four classes of people employed in these spheres for only one, but the determining reason: his materialistic or economic monism, from which he cannot refuse in his political, proletarian and appropriate ideological bias and focus….

This scientific theoretical proof finds confirmation in the whole human history, in which no one, nowhere and never, has observed a society devoid of at least one of the four spheres of its production. Therefore, and the other premise of SPHERON's argumentation in their theory is also scientific and meeting the scientific requirements, which is confirmed by statistical, empirical evidence of Russian SPHERONS and other institutions….

Vladislav Krasnov, USA:

Lev Semashko has joined a long list of Russian truth-seekers and visionaries who believed that the most reliable path to PEACE comes from a deep based social harmony, which, according to his scientific conviction, stems from SPHERONS, which are classes of the population engaged not in Marxist class struggle and war but in harmonious cooperation. Their structure is universal and eternal; it affects the soul and character of a person and leads to a harmonious development of humankind. … Semashko has not only challenged Marxist-Leninist "science" of the class struggle, but also endeavored to create a science of social harmony based on deep spheral structure of society that by itself excludes violent conflict both inside a country and abroad. In this endeavor Pythagoras, Confucius, Lao Tzu, Plato, Aristotle, Montesquieu, Leibniz, Teilhard de Chardin, Gandhi, Mandela, Noam Chomsky and other thinkers inspired him. The spherons science cannot automatically prevent accidental wars and social conflicts in all states. However, it teaches that the way to do it is not violent revolutions, but a harmonious peaceful universal education and a harmonious peaceful arrangement of national governments and all international organizations….

Subhash Chandra, India:

The theoretical argumentation of SPHERONS is limited, in the simplest case, by two logical premises, from which, with logical necessity, the conclusion about SPHERONS follows. Of these premises, the most fundamental is the discovery of autopoiesis (self-production) of all biological beings, owning to Umberto Maturana (1970). Another premise is the understanding of society as a production system of the four spheres of production was intuitively formulated by Adam Smith and Karl Marx almost 150 years before Maturana and constitutes a special case

of autopoiesis, namely social autopoiesis. It was first researched in sociology by Nicholas Luhmann. Both logical premises, with rare exceptions, are recognized by the world scientific community and do not cause any fundamental objections. Therefore, the theoretical conclusion from these premises about division of the population into four classes – SPHERONS (Socio-, Info-, Org-, Technoeco-), employed in the appropriate four spheres of social production - is just as scientific, how scientific these premises are. …

Uraz Baymuratov, Kazakhstan:

I fully share this sphere approach to society. Here, Leo Semashko and I agree. He proposed the spheres of society first, and I did later, however independently of him. It is necessary and sufficient to allocate 4 spheres. Here, too, Leo Semashko and I agree on the number of spheres. However, we disagree on the question of what is meant by each sphere of society, and what spheres need to be differentiated….

Leo Semashko identifies the following areas: people, information, organization, and material wealth. With such a content of the sphere, it is not known what is the priority that determines the purpose of human life. The meaning of life seems to dissolve in these resources of society. We adhere to a different approach to determining the content of each sphere of society. The needs of a man, which we take as a basis for the division of society into spheres, are fundamentally different….

Reimon Bachika, Japan:

Global Peace Science (GPS) is a logical enlargement of Dr. L. Semashko's Tetra-sociology. It can be seen as the crown on his four-dimensional social philosophy. (Cf.: http://peacefromharmony.org). The author reformulates basic tenets of K. Marx's social classes and the dimensions of sociologist Talcott Parsons' theory about the functional prerequisites of socio-cultural systems. Semashko's theory classifies people based on their social involvement in 4 spheres of social production that are constant…

One important point is that the functioning of social spheres and societies as a whole has to be understood as 'autopoiesis', or self-production (cf. sociologist N. Luhmann and biologist H. Maturana). Another crucial point is that some past and present societies, or "parts" of them, are very disharmonious, and on the wrong track—dominant empires, groupings of the aggressive countries, outcasts, fascists, terrorists, and criminals are the main examples. This is why the author calls his social philosophy a theory of "spherons" and "partons." Ultimately the logical premises of the Spherions' theory are totally satisfactory.

The ultimate goal of Dr. Semashko's social philosophy is very lofty. What can be better than laboring for eliminating the horrors of war and achieving world peace? For many, it is literally a matter life and death. This theory is also sociologically sound.

Yet, the term harmony indeed could be chosen to express the structural essence of societies and nations. Harmony can be seen to represent the most important social value…….

Ayo Ayoola-Amale, Ghana:

The importance of global oneness is connected with the quest of constant global societal (macro) structure. This is unfolding in the GHA "Global Peace Science" (2016) in the SPHERONS' harmony of humanity through SPHERONS' argumentation, which in simplest case includes two logical premises of this scientific theory. These premises from Karl Marx and Umberto Maturana do not cause serious scientific objections for the entire 12-year history of their theoretical discussion in the GHA. Therefore, the scientific conclusion from them about real existence of the special universal and constant classes – SPHERONS, employed in four spheres of social production and including all private and historically temporary, transitory

classes and groups (PARTONS) does not cause objections. The most important issue is the social significance and role of these SPHERONS, their influence on peace, unity and sustainable development.

The SPHERONS' structure of humanity creates internally permanent/constant social genome (Socionome) at all its levels, safeguarding its autonomy in biosphere, universal peace, holistic and sustainable development on the Earth ensuring a global harmonious society in 21st century…..

Michael Ellis, Australia:

Dr. Leo Semashko in new scientific paradigm as Global Peace Science quotes Abdul Kalam: "When there is harmony in the home, There is order in the nation, When there is order in the nation There is peace in the world".

Dr. Semashko says "this is the most accurate definition and most brief formula of global peace from harmony at all levels from the individual to the whole world: beauty (measure), harmony (consent), order (coherence), peace (prosperity)." (http://peacefromharmony.org/docs/global-peace-science-2016.pdf, p 13)

In the expression of global Peace Leo makes the expression of humanity as an inextricable connectedness devoted to survival and harmony. In fact the naturally endowed function of humanity as a function, is to maintain survival for the total community, functioning like the evolution of the primary fertilised genome becoming the human being who is not able to survive without parents, schooling and community in a primary form. He calls this autopoiesis after Maturana. It is however the greater group of actors in the drama which enhances the evolutionary unfolding and this is divided he says into SPHERONS--Peace Actors:

- Social Class – Socioclass, (Humanitarian Class);
- Informational (Creative) Class – Infoclass;
- Organizational (managerial, administrative, political, ruling) class – Orgclass;
- Technical (material) class – Technoclass;

PARTONS – are the private groups and classes of people employed in various sectors of public activity and constituting the certain branch parts of SPHERONS….

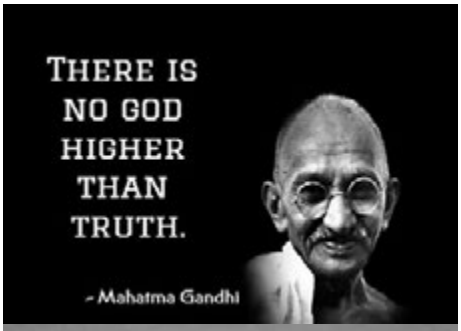
A new peace Global process determined by the overarching law as described by Leo Semashko in terms of the harmony of the spherons in his book could be the answer to our current dangerous human predicament where out very survival as a species is at stake.

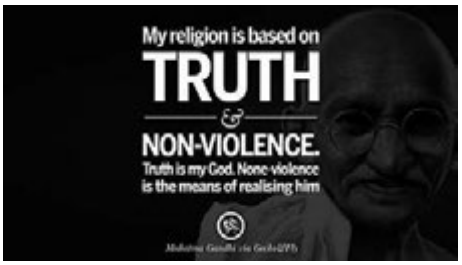
Sanjay Tewari, India:

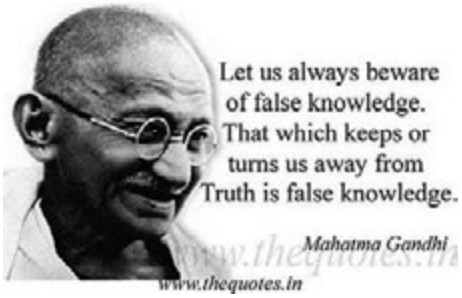
Spherons are an abbreviated name for the spheral classes of the population, which are employed in four spheres of social production. The logical conclusion about the Spherons existence follows with necessity from general sociological premises about the four spheres of social production (Marx) and the permanent productive employment of people (autopoiesis) from birth to death (Maturana, Luhmann). These premises of the Sociological Theory are unquestionable and therefore the conclusion from them about Spherons is also beyond doubt…

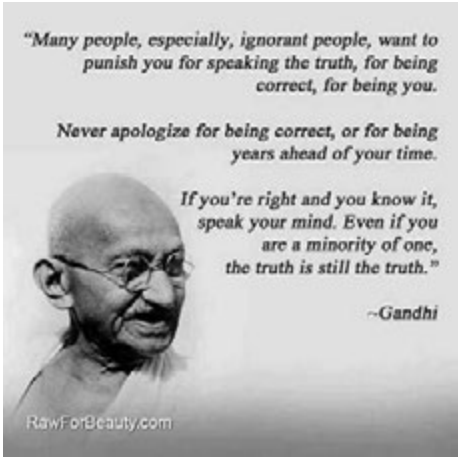
All and full reviews: http://peacefromharmony.org/?cat=en_c&key=747

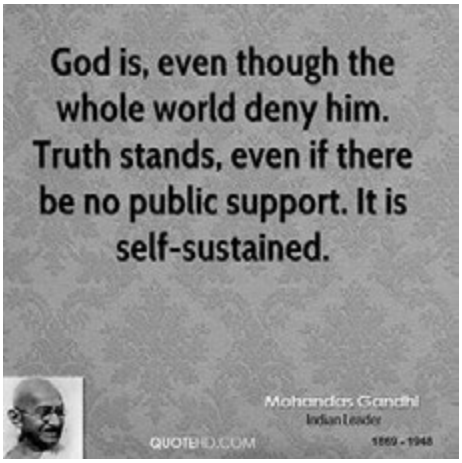
13. Mahatma Gandhi. Truth and God. Aphorisms.

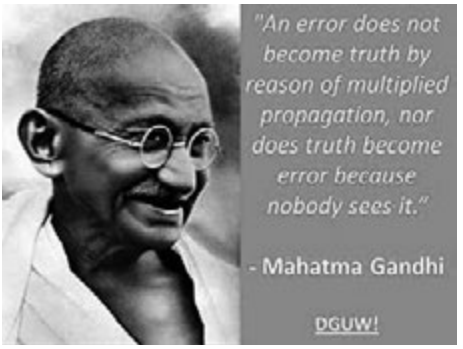









God is, even though the whole world deny him. Truth stands, even if there be no public support. It is self-sustained.
Mohandas Gandhi
Indian Leader
QUOTEHD.COM
1869 - 1948

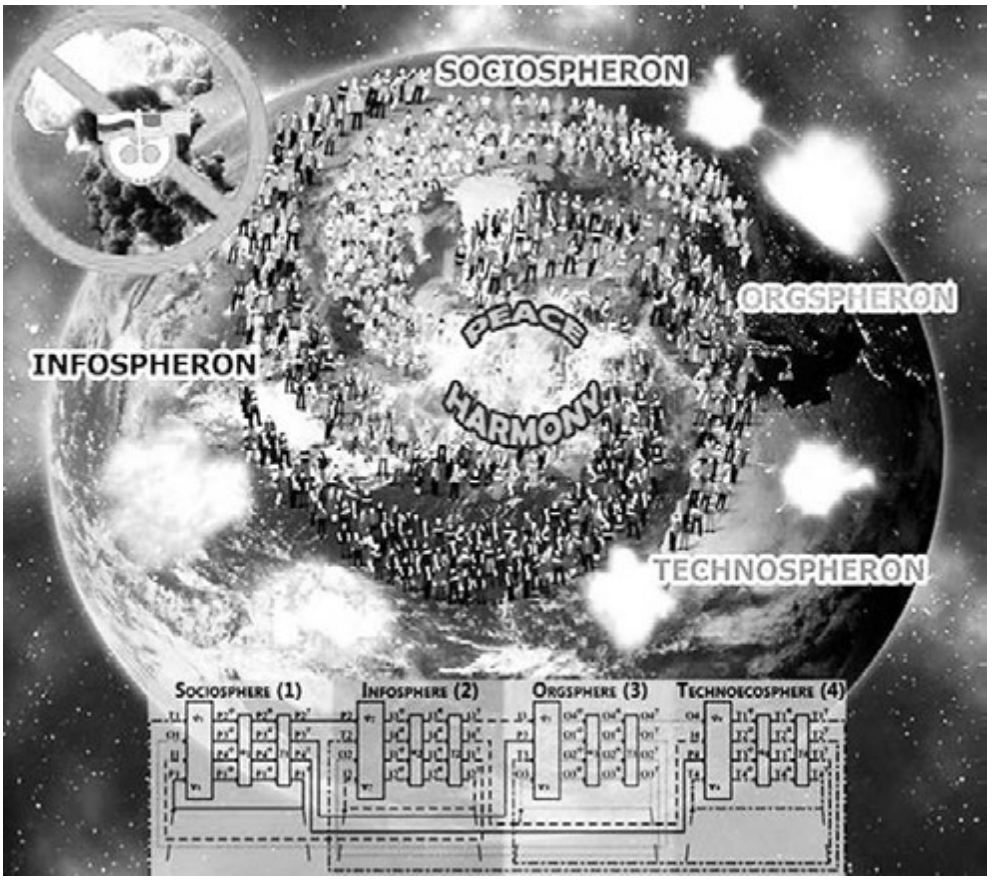

"An error does not become truth by reason of multiplied propagation, nor does truth become error because nobody sees it."
- Mahatma Gandhi
DGUW!

TRUTH IS GOD

14. Gandhian Drawings and Design. Ernesto Kahan, Peter Semashko, Alexander Semashko, Leo Semashko

Ernesto Kahan.
Gandhi: "The eye for the eye - and the world will go blind"

SPHERONS of Nonviolence:
Deep Societal Structure and the Copernican Revolution
in Tetranet Gandhian Thinking of GHA



System design of structural modeling:
Sociocybernetic GENOME (SOCIONOME) of Global Peace
from SPHERONS' Harmony/Nonviolence of Humanity.

Picture by Peter and Alex Semashko
04/10/16
https://peacefromharmony.org/?cat=en_c&key=423

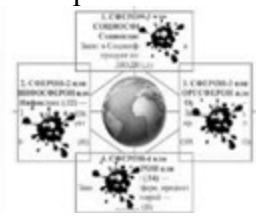
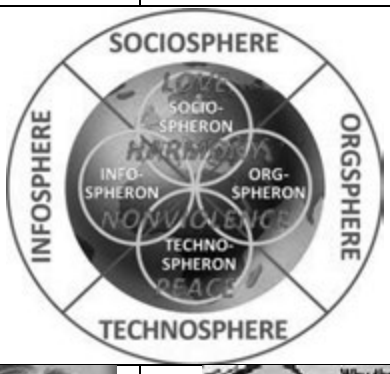
Militarism is lethal for militarists

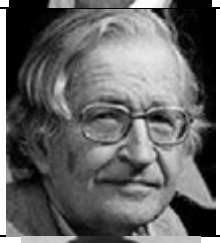
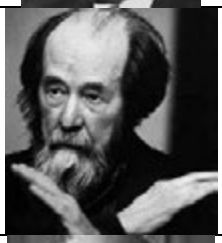
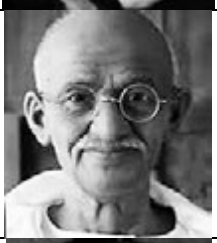
Rhetorical questions.

Is the United States an exception from the law of the world fall of empires (similar to Newton's law of universal gravitation) from the GHA “Global Peace Science”? Can the prevailing dominant US militarism save it? No, it only accelerates the fall and favors its law. Salvation is only in disarmament and “nonviolence law” as Mahatma Gandhi foresaw.

Newest world history in the context of trends
Nonviolence and Violence, presented in the historical figures and symbols.
Meaning space and navigation of the GHA "Gandhi book".

Mahatma Gandhi's non-violence:
Rubicon between spontaneous violence and
conscious nonviolence of humanity.

NONVIOLENCE in history is generated by the genome of the spherons structural harmony of the population, i.e. their measure, balance and sustainability in all spheres of social production. This is a fundamental elemental trend in the history of humanity, which determines its survival, life, evolution and sustainability.	**VIOLENCE** in history is generated by partial and temporary pathologies of the disharmonies and imbalances into the spherons' genome at certain historical stages of separate nations and groups that deviate from the spherons' genome and create all the multitude and diversity of violence in the history of humanity.
NONVIOLENCE: NORM IN The Spherons Genome Harmony 	VIOLENCE: PATHOLOGIES Of the Spherons Genome 
TWO **CENTURIES** **TREND:** **From the 20th century of violence, wars,**	

militarism, genocide and ecocide to the XXI century of conscious nonviolence, peace, disarmament, survival and global sustainability through the science of the spherons structural harmony, digital spheral statistics and tetranet thinking as substantially new thinking. Gandhi is father and starting point of conscious non-violence and its science.			Violent regimes: the crimes endless list of genocide, ecocide and against humanity, which only in the 20th century killed more than 200 million.
			
			
			

Two historical trends: violence and non-violence.
Mahatma Gandhi marked the beginning of the great historical evolution of humanity from violence to non-violence through knowledge and the creation of the science of non-violence, which is revealed in it as the “greatest force of mankind” in the fundamental “law of our life”.

China and Russia agreed to renew relations for New Era.
June 5, 2019, Moscow, Kremlin

Comment.
The "New Era" can only be the Nonviolence Era launched by Mahatma Gandhi. Can it come for all nations under domination in the world order of militarism - the main source of violence in it?

China, Russia Agree to Upgrade Relations for New Era. June 6, 2019

Вопрос ГСГ: в каком направлении "обновить отношения", в Гандианском? И КАК при господстве милитаризма?
The GHA question: in what direction is the "upgrade relations", in Gandhian one? And HOW with the militarism domination? https://peacefromharmony.org/?cat=en_c&key=28

Chinese President Xi Jinping (L) shakes hands with his Russian counterpart Vladimir Putin while posing for photos ahead of their talks in Moscow, Russia, June 5, 2019. Xi Jinping held talks with Vladimir Putin at the Kremlin in Moscow on Wednesday. [Xinhua/Ding Haitao]
Editor: Ling Xiao
Share ROSA DALMIGLIO

China, Russia, India: the three civilizations trend into the Nonviolence Era

Chinese President Xi Jinping (R), Russian President Vladimir Putin (L) and Indian Prime Minister Narendra Modi meet on the sidelines of the G20 Summit in Osaka, Japan, on June 28, 2019. [Photo/Xinhua]

Leaders of China, Russia and India agreed on Friday to uphold multilateralism and the international order to promote peace, stability and prosperity in the region and the world against the backdrop of growing unilateralism and protectionism.

Xi said that rising protectionism and unilateralism severely affected the stability of the global landscape and had a negative impact on the international order, and this greatly affects emerging markets and developing countries. He called for building an open global economy that favors better development of emerging market countries and developing nations, expanding trilateral cooperation in 5G technology, high technologies, connectivity and energy, and promoting liberalization and facilitation of trade and investment.

Putin said that under the current situation, the three nations should firmly remain committed to safeguarding the international system with the UN at its core and remain opposed to unilateral sanctions.

Modi said that upholding multilateralism, international laws and rules conforms to the common interests of the three nations. He underlined the need of trilateral communication in global governance reform, regional security and anti-terrorism.

http://www.chinadaily.com.cn/a/201906/29/WS5d16a273a3103dbf1432af17.html

Comment. The leaders demonstrate the three civilizations evolution trend into the Era of Nonviolence, launching by Mahatma Gandhi, to which other countries of the world will join soon.

Christian world on the path of peace and cooperation to the Divine Gandhian Era of Nonviolence

Pope Francis and Russian President Vladimir Putin,
on their private audience at the Vatican,
Thursday, July 4. 2019.

The pope and president, "expressed their satisfaction at the development of bilateral relations," which included the signing in Rome July 4 of a collaboration agreement between the Vatican's Bambino Gesu Pediatric Hospital and pediatric hospitals in Russia. As well as they discuss "the ecological question and various themes relating to current international affairs, with particular reference to Syria, Ukraine and Venezuela,"

Archbishop Paolo Pezzi of the Archdiocese of the Mother of God in Moscow told Vatican Radio Italia, "Even though we are not aware of the program of the meeting, I can imagine that themes dear to the Holy Father, such as peace and safeguarding our common home, are likely to be on the agenda of discussion."

It was the third time Francis and Putin have met at the Vatican. They met in November 2013 and again in June 2015.

After the end of the 55-minute meeting and the traditional exchange of gifts, Putin told the pope, "Thank you for the time you have dedicated to me. It was a very substantive, interesting discussion."

Catholic News Service
Rosa Dalmiglio, peace journalist

Epilogue. "Gandhica" vs "Guernica"

By "Gandhi book" authors
Approved by the GHA on July 10, 2019

We, the GHA "Gandhi book" authors, have found the lapidary term "Gandhica", instead of stenciled "Gandhism", for it to express the spiritual wealth and key values of Gandhi's nonviolence for the survival and prosperity of humanity in the New Era.

"Gandhica" is the vision, thinking, methodology and the GHA design symbol for the Nonviolence Era of the XXI century, which Gandhi began to build more than 100 years ago in Africa and India. "Gandhica" unites and reveals in Gandhi's nonviolence the ten key values of the new Era, which he used to define its fundamental attributes: life, truth, peace, harmony, love, disarmament, freedom, equality, fraternity, real democracy. They are structurally modeled in four parts of the Gandhica: ontology, epistemology, sociology, and statistics of our book.

"Gandhica" is a constructive alternative, meaningful antipode, "hack" and negation of that monstrous destructive reality, captured in the genius picture of the Spanish painter Pablo Picasso "Guernica", which became a symbol of the last century violence. It is a bright artistic expression of ten attributes of the bloodiest XX century of human history - the outgoing violence era pick: death, war, lie, Nazism, hatred, militarism, slavery, discrimination, hostility, pseudo-democracy.

Gandhi and Picasso are living human sources and symbols of the new Era of Nonviolence from the 20th century. The GHA is only intellectually deciphering their ingenious intuitive symbols in "*substantially new manner of thinking*" (Einstein) - in nonviolent harmonious tetranet thinking. It is multidimensionally unfolded in the GHA new collective ninth "Gandhi book" - "Gandhica" - dedicated to the 150th anniversary of the Mahatma Gandhi birth and the GHA 15th anniversary.

The great and valuable scientific contributions of GHA members for almost 15 years, especially "The ABC of Harmony" and "Global Peace Science", integrated with the powerful spiritual and practical potential of Gandhi's non-violence, allowed our team to receive the unique peacemaking fruit of the XXI century – "Gandhica". It is the decisive intellectual resource and "*Gandhian Hack of cybernetics*" (Pawlik) creating a new way of steering together and effective instrument for achieving global peace in our century. It is embodying all the humanistic social power of non-violence as "*the greatest force of humanity, which is mightier than the mightiest weapon of destruction*" (Gandhi) and its generating source — militarism.

Gandhica as the new era worldview becomes the center of its public consciousness and the core of global harmonious peacemaking education starting from family, preschool up to academic and on all life. It is able to uproot the global status quo of the total threat to the survival of humanity from its 100% prepared nuclear hypersonic military suicide. There is no other way out except the one proposed by Gandhica.

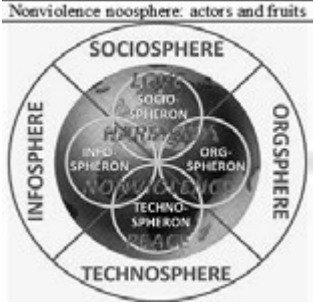
At the XXI century end, humanity will certainly reach global peace and shift from an era of violence into the Divine Harmonious Era of Gandhian Nonviolence with new, non-violent tetranet thinking, developed and proven in our Gandhica. It gives full faith and hope for this. The new Era spiritual and theoretically conscious platform was constitute by our Gandhica. This is the crown of the GHA colossal work for almost 15 years. We can justifiably be proud of it and congratulate our peacemaking team of hundreds of the GHA members and its friends from dozens of countries with this historical peaceloving achievement and unprecedented intellectual victory over war, militarism and violence!

Gandhica and its book is an invitation to all people, young people in the first place, to take part in its implementation through education to ensure life and "better future." This will allow you, according to Gandhi, to "change the world becoming its change" by your person.

GANDHICA: XXI Century

Non-violence: peace, harmony, truth, love, disarmament, freedom, equality, fraternity, real democracy, life

Nonviolence noosphere: actors and fruits



GUERNICA: XX Century

Violence: war, lies, Nazism, hatred, militarism, slavery, discrimination, hostility, pseudo-democracy, death

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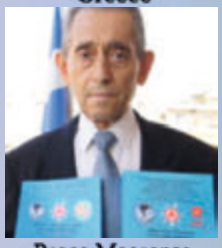

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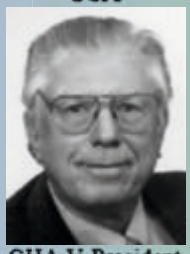

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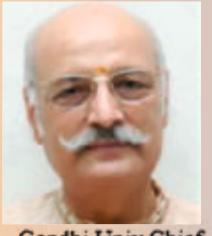

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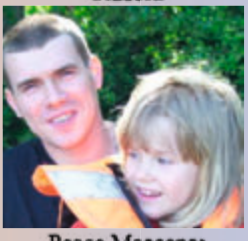

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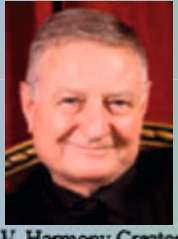

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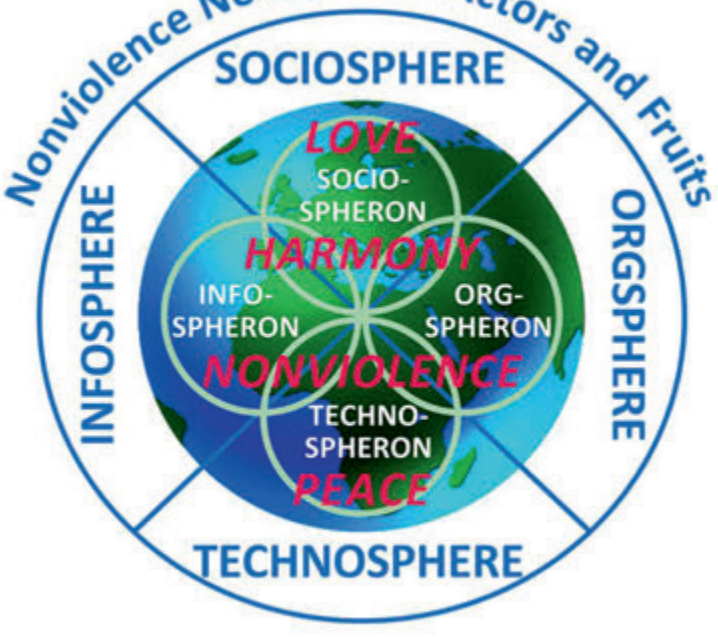
France

GHA V-President

Dionyssios Georgakopoulos
Greece

Gandhian poet

peacefromharmony.org



Truth is God. **Gandhi**