

Perpetual Peace Science: Spherical AI (SAI) Superiority from Spherical Thinking

Peace Science and SAI Primer



**CULTURE (Faith + Science + SAI + Education)
OF THE HUMANITY PERPETUAL PEACE XXI =
NEW PLATFORM OF GLOBAL PEACEFUL GROWTH XXI
AT THE LEVEL OF HOLISTIC THINKING AND ITS SPHERAL AI (SAI)**



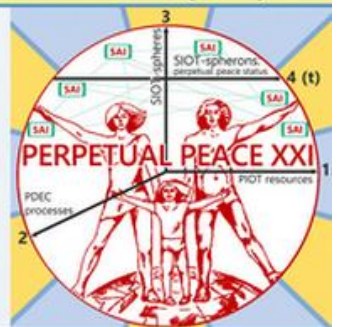
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2005
2025

**GANDHIAN GLOBAL
HARMONY ASSOCIATION (GGHA)**



Matt Meyer, Leo Semashko, Mairead Corrigan, Théa Marie Robert, Rudolf Siebert,
Noam Chomsky, Lucas Pawlik, Takis Ioannidis, Svetlana Vetrova, Vera Popovich,
Ivan Ivanov, Olga Kashina, Andrey Smirnov, Julia Budnikova, Asha Mukherjee,
Ashok Chakravarthy, Noor Larik, Habyarimana Heli, Chaitanya Dave, Bishnu Pathak

20 coauthors from 10 countries:

Austria, Britain, France, Greece, India, Nepal, Pakistan, Russia, Rwanda, USA

New York
2025

GANDHIAN GLOBAL HARMONY ASSOCIATION (GGHA): 2005-2025
Peace Science Books #12

Perpetual Peace Science: The Spherical AI (SAI) Superiority from Spherical Thinking.
Primer. Peace Science and SAI.

Matt Meyer, Leo Semashko, Mairead Corrigan Maguire, Tea Мари Роберт, Rudolf Siebert, Noam Chomsky, Lukas Pawlik, Takis Ioannides, Svetlana Vetrova, Vera Popovich, Ivan Ivanov, Olga Kashina, Andrey Smirnov, Yulia Budnikova, Asha Mukherjee, Ashok Chakravarthy, Noor Larik, Habyarimana Heli, Chaitanya Dave, Bishnu Pathak

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Dr. Matt Meyer – Editor-in-Chief of the English edition,
Secretary General, International Peace Research Association (IPRA),
USA, New York

Dr. Lukas Pawlik – Editor of English edition ten chapters,
Austria, Vienna

New York 2025

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© **Leo Semashko**
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Abstract

In this Primer, with three spherical world discoveries of perpetual peace (named in its title and summarized in its two-page conclusion), twenty peacemakers from ten countries reveal the foundations of an innovative macrosociological "Peace Science." It was created and verified during 20 years in the GGHA peacemaking volunteer Academy by more than 700 coauthors from more than 50 countries, including five Nobel laureates and the President of India Abdul Kalam.

This science of holistic, spherical thinking reveals the objective laws, structures and constants of the internal harmony of the Earth three nature's spheres: physical, organic and social on the basis of their common, planetary law of "Equal Necessity and Sufficient Spheres". It is actualized, first, for the social nature as the Peace Science key subject. It allows us to determine the objective social structures, actors and adequate instruments of humanity's perpetual peace as the scientific and practical center of its existential imperative of survival in the complete safety of all people. On this basis, the architecture of the spherical AI model is built, surpassing the existing ones, as a universal tool of perpetual peace for all, which everyone needs to learn and always.

The book is intended for all who love and want peace according to the golden rule of religions, who have been fighting for it all life and history, like Russia, but above all for young people, for schoolchildren and students, AI specialists, humanitarian scientists and politicians.

Therefore, the authors tried to popularly, briefly and simply present the "Peace Science" basics in its Primer, which the reader will judge. In a year, this book will be published all over the world, because peace is needed by everyone and always, like the air of life according to the first objective and eternal norm of human coexistence.

Key words: perpetual peace, spherical thinking, spherical peace science, spherical AI superiority, golden rule, spheres, spherons, spherical education.

**«ДОСТИЖЕНИЕ МИРА» -
ПОВЕСТКА США-РОССИИ
ЧЕРЕЗ:**

Вечный мир как 1. Всеобщее и полное разоружение и 2. Гарантию планетарной безопасности всех наций, если они основаны на трех мировых сферных открытиях как их инструментах

**"PURSUING PEACE" IS
THE USA-RUSSIA AGENDA
ACROSS:**

Perpetual peace as 1. General and complete disarmament & 2. Guarantee of planetary security for all nations, if they are based on the three world spherical discoveries as their key instruments



Чтобы «сдвинуть гонку вооружений в гонку мира» и «покончить с войной прежде, чем она покончит с человечеством».

Мартин Л. Кинг и Джон Ф. Кеннеди

https://peacefromharmony.org/?cat=ru_c&key=1120

To "shift the arms race into a peace race" and "put an end to war before war puts an end to humanity".

Martin Luther King and John F. Kennedy

https://peacefromharmony.org/?cat=en_c&key=1264



21 September 2025 António Guterres, United Nations Secretary-General

Our warring world is crying out for peace.

This year's International Day of Peace urges each of us to give voice to that call.

Around the world lives are being ripped apart, childhoods extinguished, and basic human dignity discarded, amidst the cruelty and degradations of war.

We are seeing an explosion of conflict.

International law flouted.

And record numbers of people fleeing their homes.

All they want is peace.

Peace is everyone's business.

The impacts of war ripple around the world.

We must silence the guns. End the suffering. Build bridges. And create stability and prosperity.

Sustainable development supports peace – nine of the 10 countries struggling most with development are suffering conflict.

And we must quell the racism, dehumanization and misinformation that throw fuel on the fires of conflict.

Instead, we must speak the language of respect, open our hearts to others.

And use our influence to push for peace.

Where we have peace, we have hope.

Families unite, communities rebuild, children learn and play.

Peace cannot wait – our work starts now.

From **Dr. Leo Semashko**, philosopher and sociologist,
GGHA founder (2005) and honorary president,

On behalf of the Primer 20 coauthors from 10 countries, 21-09-25,
with respect, peace, and love:

To implement the UN Secretary-General's call below, effective today: "***Peace is everyone's business. We must silence the guns. And we must quell the racism [Nazism], dehumanization and misinformation that throw fuel on the fires of conflict. And use our influence to push for peace. Peace cannot wait – our work starts now.***", we are sending our "Peace Race Primer," 120 pages in English. It published here: https://peacefromharmony.org/?cat=en_c&key=1288

Our Primer opens the opportunity for everyone to begin now, first and foremost, the intellectual work of scientifically understanding peace, which is possible only on the basis of holistic, planetary, **spherical** thinking and is inaccessible to traditional, disciplinary thinking, as demonstrated in the Primer.

As Kant defined, **true peace is perpetual peace**; everything else is temporary truces of varying duration, like pauses between wars in preparation for new wars. This has been and remains the case throughout human military history, spanning approximately 5,000-10,000 years, according to various sources.

Understanding **perpetual** peace is impossible in disciplinary, partial thinking, as Einstein already noted, because it lacks knowledge of the holistic, planetary, eternal spheres of humanity's social nature, which alone constitute the constant, objective pillars of **perpetual** peace. Without their scientific knowledge in "**substantially new [spherical] thinking**" (Einstein), humanity has not had and cannot have **perpetual** peace for millennia, given its spherical ignorance.

Perpetual peace can be consciously founded, which is spontaneously founded, only on the harmony of the eternal spheres of social production and the eternal spheres of the population employed within them, as revealed in our Primer. But conscious perpetual peace has never been and cannot be built on transient, temporary branches of production, their temporary classes/groups, and temporary states in the disciplinary thinking.

Our Primer provides the first example of system, scientific, and verifiable spherical thinking of **perpetual** peace, the real scale of which is the planet, millennia, humanity as a whole with its eternal spheres, and not separate continents, years, or national states with their temporary, transient branches, as in disciplinary thinking, "**blind to the whole**" as in the ancient Indian parable. Of course, the conscious spherical thinking includes and organizes the spontaneous and chaotic disciplinary thinking, integrating it across the spheres of reality.

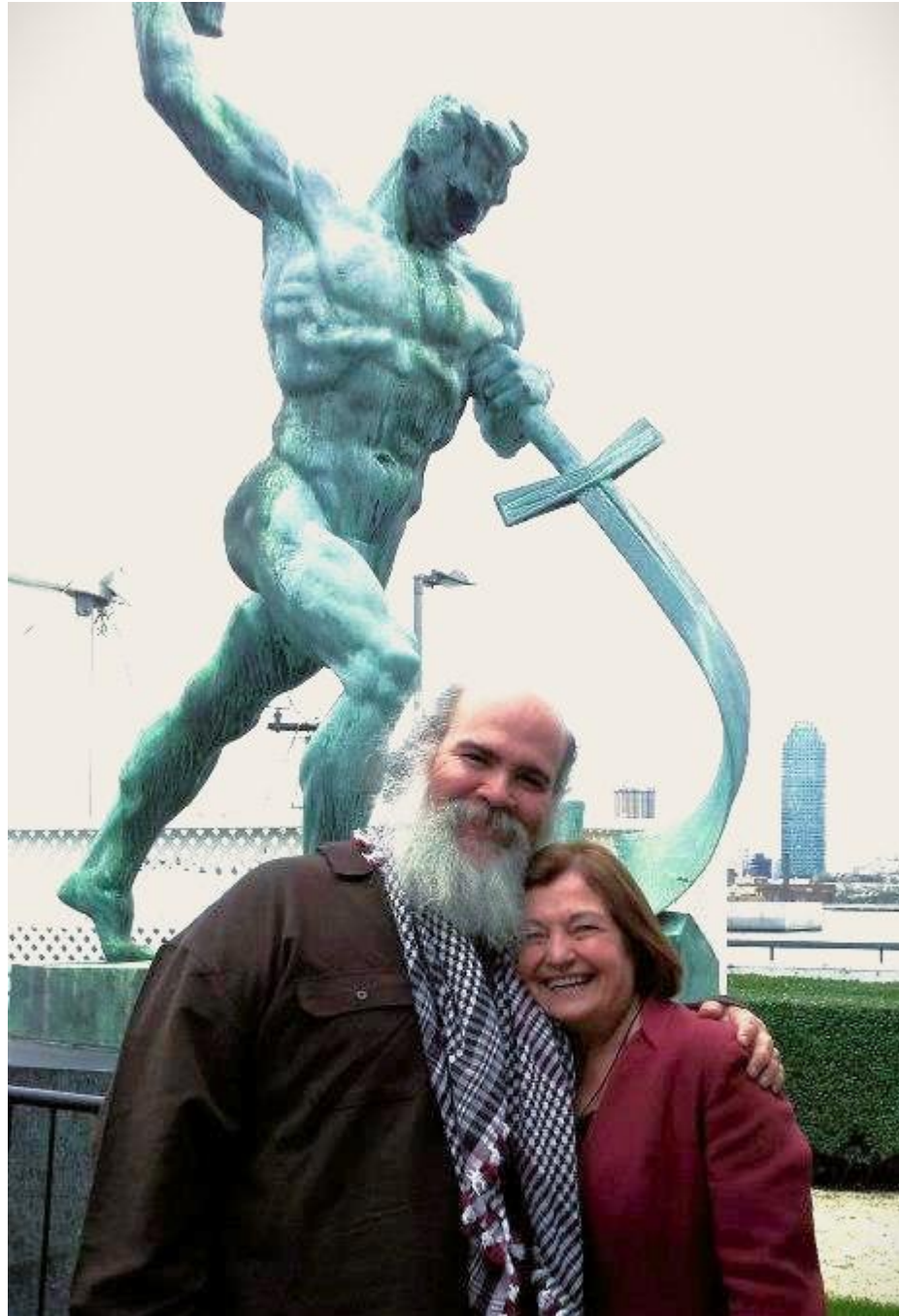
Realistically and on a large scale, spherical thinking, amidst the dominance and supremacy of the disciplinary, can only emerge with a fundamental "**shift from the arms race to a peace race**," as Martin Luther King, Jr., with his brilliant intuition, defined. The peace race has become the GGHA peacemaking strategy (https://peacefromharmony.org/?cat=en_c&key=1026), which found its fundamental theoretical justification in his "**Perpetual Peace Science**" (PPS, 2016) and, briefly, in the Primer.

Therefore, our Primer is the realization of the peace race, first and foremost, in the intellectual sphere, in the sphere of fundamental AI innovations on a planetary scale, the digital technology of which will radically transform human civilization from a militaristic one to a peacebuilding one. It will ensure the **true sustainable development** of each nation in **perpetual** peace, in social harmony with others, based on the knowledge of unified and eternal spheres, the eternal spherical social structure of the Gandhian spheres occupied within them, hitherto unknown to humanity in the shackles of disciplinary thinking.

Only through **perpetual** peace race in the eternal competition of AI, which supplants and replaces the eternal arms race, can humanity live in this peace, which "**must put an end to war before war puts an end to mankind**." (J.F. Kennedy). The realization of such planetary aspirations for **perpetual** peace as those of Gandhi, Vernadsky, Einstein, Kennedy, King, and many similar giants, on whose shoulders our PPS is integrated, lies the peacemaking spirit of the Primer!

Only with this spirit can the suicidal-genocidal spirit of Western nuclear civilization, the nuclear holocaust of humanity, be overcome. Therefore, the study, development, and promotion of the **Peace Race Primer** with the spirit of **perpetual** peace in all educational institutions is the first "**business of everyone now**," as the UN Secretary-General states.

Acknowledgements



Matt Meyer (Co-author, English edition Editor-in-Chief, and Secretary-General Emeritus of the International Peace Research Association) and **Mairead Corrigan Maguire** (Co-author, 1976 Nobel Peace laureate Irish Peace People), in front of the United Nations Headquarters in New York City, USA
Swords Into Plowshares statue, sculpted by Russian artist Evgeniy Vuchetich, gifted by the USSR to the UN, 1959.



‘My life has been committed to nonkilling and peace. My heart welcomes all endeavours to bring to an end violence, militarism and war.

I believe if we continue down the road of military industrial complex increasing more and more lethal weapons and demonizing each other, we will destroy our world. But we can choose peace and with Peace science embodied in the nonkilling nonviolence democratic policies in our lives and through appropriate institutions we can eradicate this old age confrontation between faiths and peoples, and create a world built on truth,

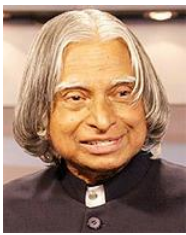
justice and nonkilling.

I want to thank the Russian people for their prayers and leadership for peace and reconciliation of humanity in this Peace science gift to the world.

I am convinced the peace science, with uniform objective laws, structures and instruments of perpetual peace for humanity is its only path to fundamental scientific peacebuilding in our century, excluding wars, violence and militarism.

Mairead Corrigan Maguire, Nobel peace laureate 1976

Web: https://peacefromharmony.org/?cat=en_c&key=678



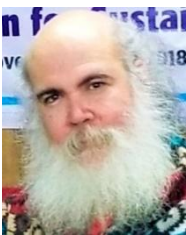
The world needs the great vision of peace and prosperity. Peace and prosperity for all the nations of the planet Earth. How can we make such a vision a reality? I see a dawn of a beautiful Star, the dawn of a shining vision, the emergence of enlightened citizens.

– The ABC of Harmony is the dawn of a shining, harmonious vision of peace and prosperity for all the nations of the planet Earth! Together with it, the enlightened citizens will emerge, capable of building a harmonious civilization of peace and prosperity on the planet Earth! (https://peacefromharmony.org/?cat=en_c&key=489)

Dr. APJ Abdul Kalam, Poet, President of India, 2002–2007.

GHA Highest Honorary Title: WORLD HARMONY CREATOR

Web: https://peacefromharmony.org/?cat=en_c&key=95

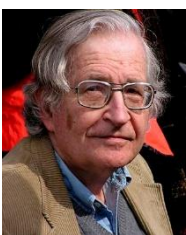


Understanding that peace, justice, and human rights are only possible when people reach out to listen before acting and rethink our assumptions based on differences across language, ideology, interpretations of science, and more: I acknowledge first those in the "other" end of this historic divide - from my little spot in the USA to my coauthors in Russia.

On "that side" is Leo Semashko, who has consistently pressed for us to work together whatever his and our personal disasters, professional challenges, and political disagreements. On "my side" is my personal and political family, embodied by my local collective 'Resistance in Brooklyn' whose insights and assistance in all my work and thinking is only matched by their patience with my many absences and shortcomings. "**Peace Science**" is a soft but fundamental scientific force for the humanity perpetual peace full security for all times.

Matt Meyer, PHD, Secretary General, International Peace Research Association (IPRA), USA,

https://peacefromharmony.org/?cat=en_c&key=1034



Both sides are acting as if an atomic war is thinkable... Decades ago Bertrand Russell and Albert Einstein issued a grim warning to the people of the world. They wrote that we face a choice that is "**stark and dreadful and inescapable: Shall we put an end to the human race; or shall mankind renounce war?**"

Global Peace Science, devoted to renouncing war, can make a critical contribution to removing at last this sword of Damocles poised over our heads. Only global peace action, with analysis derived from perpetual peace science, can counter these existential threats.

Noam Chomsky (b 1928) is an American distinguished academic, linguist, philosopher, political commentator, social justice activist and the GGHA 2016 "**Global Peace Science**" coauthor:

https://peacefromharmony.org/?cat=en_c&key=637



On the nuclear war brink, "*which could end civilization in an afternoon,*" humanity can only hope for general scientific knowledge of the harmony objective laws of social production spheres and the spherons employed in them, ensuring the survival and full security for all the planet nations in the Kant's perpetual peace.

All acknowledgements are deserved by the volunteer GGHA with its more than 700 coauthors, who during 20 years have created the fundamental "*Peace Science*" foundations, revealing the perpetual peace spheral objective laws of the nations' full security. There is no other alternative for survival, way out from WWII inevitable genocide and sustainable growth in the humanity full security. Without GGHA, this science could not have been created.

Leo Semashko, PhD, philosopher, sociologist, sociocyberneticist, RANS professor, GGHA founder (2005) and Honorary President, who dedicated his entire adult life to the creation of the "*Perpetual Peace Science*," which embodied the people's testament of his parents, the WWII participants: "*So that there would be no war.*" Russia, Saint Petersburg, https://peacefromharmony.org/?cat=ru_c&key=286



I have been cooperating with the GGHA for 20 years and am very grateful to it for its "*Peace Science*" of holistic spheral thinking, which allowed revealing the planetary spheres objective laws of the humanity immanent perpetual peace, necessary and acceptable to all nations. I have come a long way in life from the Hitler's Wehrmacht soldier at the age of 16, through the Frankfurt School denazification in the USA and work as a professor of philosophy and theology in America to convinced conscious peacemaking in the "*House of Peace*" that I created in Michigan in 1960.

The main milestones of my path are presented in my recent article "*Denazification as Reeducation. My Life Experience in the USA*" (https://peacefromharmony.org/?cat=en_c&key=1106). My path, my peacemaking ideas, connected with the Golden Rule of religion, integrated by the "*Peace Science*", convince me that its planetary, spheral laws of the humanity perpetual peace together with its spheral AI constitute a soft but fundamental scientific instrument of the Germany Fourth Reich denazification reviving in Europe. Only this instrument of denazification as reeducation of new generations in the "*Peace Science*" will allow eradicating the age-old Nazism, which trampled the Golden Rule, excludes peace and condemns humanity to a new world war, which will be the last for it, putting an end to it. "*Peace Science*" is the best peacemaking mental fruit, deserving recognition and acknowledgements of humanity.

Rudolf J. Siebert. Born in 1927, PhD, philosopher, theologian, Professor Emeritus in the University of Michigan, USA, https://peacefromharmony.org/?cat=en_c&key=51



The "*Peace Science*" of holistic spheral thinking, revealing the spheres objective planetary laws that ensure the humanity perpetual peace deserves acknowledgements and recognition, first, for the fundamental scientific justification of the spheral AI (SAI) superiority. This science demonstrates a revolutionary approach to perpetual peace and artificial intelligence, which is based on holistic, planetary thinking, and not on fragmentary disciplinary thinking that has dominated for millennia.

The SAI peacemaking orientation and foundations distinguish it from existing AI models and constitutes the most important attribute of its superiority, along with the definition of the institutional structures as a roadmap for its practical implementation. SAI is the embodiment of the dream of one of the fathers of sociocybernetics, Heinz von Foerster, about a safe AI that serves for all humanity benefit, not the elite. SAI promises to become the Russian "*DeepSeek*" of the humanity perpetual multipolar peace with minimal energy and financial costs in the next 2-3 years.

Lukas Pawlik, PhD in sociocybernetics, ecologist, has been collaborating with GGHA since 2015: https://peacefromharmony.org/?cat=en_c&key=887



The ABC of Harmony [its Peace Science, Spheronics is] Our **New Planetary Paradigm. The fundamental revolution in science and paradigm shift in human consciousness** emerging from the most advanced thinking of the 20th century is expressed with great insight by Leo Semashko in his together the GHA coauthors ABC of Harmony. Nature and the cosmos have now been understood as an evolutionary upsurge of wholes within ever-greater wholes from the micro level to the totality of the cosmos...

The evolutionary upsurge within our holistic cosmos could and should animate human consciousness and society, but it is up to us to actualize this potentiality. As the ABC of Harmony puts this "*All the necessary and sufficient elements of social harmony are completely created by society and depend only from it as only society creates for itself these preconditions.*" Human civilization, therefore, arising from our universal common humanity irrespective of particular differences, desperately needs this paradigm shift from fragmentation, conflict, and division to the integrated elements articulated in the ABC of Harmony. It is up to us, and a path to harmony and integration is laid out in this document. (https://peacefromharmony.org/?cat=en_c&key=489)

Dr. Glen T. Martin, Secretary-General, World Constitution and Parliament Assoc. President, Institute on World Problems. Professor of Philosophy, Radford University, USA:

https://peacefromharmony.org/?cat=en_c&key=428



I highly appreciate the innovative spheral statistics creation in the GGHA "*Peace Science*" based on the objective planetary laws of humanity social nature. For the first time, statistics rises to the level of fundamental universal instrument for the humanity perpetual peace, providing it with qualimetry, calculation and governance of the social spheres and spherons harmony at all its levels.

For the first time, it made it possible to verify the scientific truth of perpetual peace actors - the Gandhian spherons by world statistics in the GGHA book "*Gandhica*" (2019: https://peacefromharmony.org/?cat=en_c&key=848) with the active participation of the Pakistani statisticians team. This research became the world's first example of spheral statistics as a necessary tool for planetary, spheral AI and world peace for that the GGHA deserves acknowledgements.

Noor Muhammad Larik, PhD in Econometrics and Applied Statistics, was Minister of Federal Bureau of Statistics in the Government of Pakistan, at GGHA since 2016.

Pakistan, Islamabad, https://peacefromharmony.org/?cat=en_c&key=722

GGHA. Perpetual Peace as the Confession of Faith

The Russia's ethnoses perpetual peace in conciliarity is the highest dignity and sovereign soft power of its thousand-year-old civilization according to the Orthodox Golden Rule. It allowed it to defend itself in the most united and steadfast way in all history, ensuring invincibility by the peace spiritual truth and faith in its Divine power. "**God is not in force but in truth**," according to Alexander Nevsky. Therefore, attempts at a military victory over Russia are historically futile, spiritually insane in their misunderstanding of its ethnic groups highest heritage in perpetual peace. Russia make war only against aggressors, who trample its peace, in order to defend it, and not to invade and seize.

At the same time, perpetual peace is the West eternal Achilles' heel, which it is trying to overcome with eternal violence, condemning itself to eternal military defeats. In the nuclear civilization since 1945, since the Hiroshima and Nagasaki genocide, its historical violence threatens humanity with a hundredfold suicidal "**Mutual Assured Destruction**" (MAD), which it created with the arms race for 80 years, but is powerless to prevent, rejecting perpetual peace.

Through the integral, transdisciplinary "**Perpetual Peace Science**" (PPS) and its universal spherulic AI (ASI) in the holistic, "**substantially new thinking**" according to Einstein, perpetual peace becomes the planetary soft power of the multipolar world order, which determines the survival of humanity, the complete security and prosperity of all its nations in sustainable development. It eradicates hegemonism, Nazism and terrorism, which have dominated for millennia on the basis of violence incompatible with the Golden Rule of perpetual peace.

For the sake of God, peace and survival, according to the Christianity general Golden Rule, the two greatest nuclear antagonists, Russia and the USA, could begin cooperation on the only path, equally necessary for both of them, the exit from the MAD in the PPS and its SAI development. That is gradually freeing themselves from sanctions, mistrust, confrontation, displacing "**the arms race with the peace race**" the most effective for business and growth in a harmonious civilization.

The GGHA people's diplomacy has been promoting cooperation between Russia and the USA on this path for more than 10 years (https://peacefromharmony.org/?cat=ru_c&key=676). It is not too late, until WWII, which will end with humanity and us. Only perpetual peace and nothing else can end the war.

Our Primer is dedicated to the first, systemic and scientific justification of our faith and devotion to perpetual peace as the public life air and as Divine Providence.

The Primer 20 coauthors Signatures as a sign of their deep spiritual and civic commitment to the humanity Perpetual Peace, its culture and science:

Matt Meyer, Inter-faith, USA, https://peacefromharmony.org/?cat=en_c&key=1034

Leo Semashko, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=286

Mairead Corrigan, Catholic, Britain, https://peacefromharmony.org/?cat=en_c&key=678

Rudolf Siebert, Catholic, USA, https://peacefromharmony.org/?cat=en_c&key=51

Lukas Pawlik, Catholic, Austria, https://peacefromharmony.org/?cat=en_c&key=887

Noam Chomsky, Catholic, USA, https://peacefromharmony.org/?cat=en_c&key=637

Chaitanya Dave, Hindu, USA, https://peacefromharmony.org/?cat=en_c&key=1205

Tea Marie Robert, Catholic, France, https://peacefromharmony.org/?cat=en_c&key=467

Takis Ioannidis, Orthodox, Greece, https://peacefromharmony.org/?cat=en_c&key=138

Asha Mukherjee, Hindu, India, https://peacefromharmony.org/?cat=en_c&key=1170

Ashok Chakravarthy, Hindu, India, https://peacefromharmony.org/?cat=en_c&key=286

Noor Larik, Muslim, Pakistan, https://peacefromharmony.org/?cat=en_c&key=722

Habyarimana Heli, Catholic, Rwanda: https://peacefromharmony.org/?cat=en_c&key=361

Bishnu Pathak, Hindu, Nepal, https://peacefromharmony.org/?cat=en_c&key=910

Yulia Budnikova, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=577

Vera Popovich, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=578

Olga Kashina, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=757

Ivan Ivanov, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=11

Svetlana Vetrova, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=21

Andrey Smirnov, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=813

I. DEDICATIONS and MEMORY GALLERY

1.1. Dedication: to Victory 80 years - May 9, 2025

1.2. Dedication: to A.K. Rummyantseva memory

1.3. In honor: to GGHA 20 years - February 15, 2025

1.4. Call "END THE WAR"

1.5. Dedication: in to Johan Galtung memory

1.6. Dedication: to John Avery memory

1.7. Perpetual Peace Science Strategy

Please note: Table of Contents is at the back of the book.

DEDICATED

To the Peoples Great Victory over genocidal European Nazism
80th anniversary, **May 9, 2025**
to which the decisive contribution was made by the USSR people, who
sacrificed more than 27 million lives
to eradicate Nazism and all wars
for the sake of Humanity's Perpetual Peace.



On the Gandhian Global Harmony Association (GGHA) website:
https://peacefromharmony.org/?cat=en_c&key=1251

DEDICATED

TO THE BLESSED MEMORY OF LEO SEMASHKO'S BELOVED, HEROIC,
ORTHODOX MOTHER,

RUMYANTSEVA AUGUSTA KONSTANTINOVNA (1920-2003),

WHO SAVED HIM, A NEWBORN, LIFE DURING THE NAZI BOMBING OF
CIVILIANS AT THE BEGINNING OF THE GREAT WAR, IN JUNE 1941, WITH HER
UNPARALLELED COURAGE AND PRAYER TO GOD.



A.K. Rumyantseva. Photograph 1941.

Her life, along with and the murder of Leo's father by the Nazis at the beginning of WWII inspired him with the highest people's peacemaking meaning and the covenant of **VICTORY:**

"SO THAT THERE WILL BE NO WAR!"

Leo wrote: "At my life's end, I can say with honor that I embodied this people's testament in the holistic, spheral, innovative "***Peace Science***", which I created, together with colleagues from all over the world, primarily from Russia. It eradicates war as a mental, multi-thousand-year pathology of confrontational disciplinary thinking. As long as it prevails, the humanity's wars will not end. More detailed memories about my heroic mother and her spiritual, Orthodox influence on my life here: (I'm 75) http://peacefromharmony.org/?cat=en_c&key=690 and here: (Weir) http://peacefromharmony.org/?cat=en_c&key=239/

With deep gratitude, with a prayer to God for my mother until my life last day, Leo Semashko, A.K. Rumyantseva's Son, born June 20, 1941, Grodno."

PUBLISHED IN HONOR OF THE GGHA 20th Anniversary, February 15, 2025

In conjunction with more than 700 coauthors from more 50 countries with the participation of five Nobel Peace Laureates and the President of India Abdul Kalam during this time (2005-2025) created the core of **Planetary, Gandhian Perpetual Peace Science (PPS)** in the **system-spherical**, "*substantially new thinking... for humanity to survive*" (A. Einstein) in global peace without wars.

The Gandhian Global Harmony Association (GGHA) is:

1. The volunteer "*Spherons Global Peace Academy*" (SGPA).
2. The civil, spherical in structure, International "*Department of Peace*" on the B. Rush's idea for the people peace diplomacy.
3. Over 20 years, it published 11 peacemaking books and more 1,500 projects, messages and articles, their list: https://peacefromharmony.org/?cat=en_c&key=472
4. GGHA has created over 500 personal pages of the PPS coauthors on its website: <https://peacefromharmony.org>
5. GGHA was nominated for the Nobel Peace Prize three times: 2013, 2017, 2020: https://peacefromharmony.org/?cat=en_c&key=1000

<p>THE SGPA KNOWS HOW TO BUILD A SOCIETY WITHOUT WAR/VIOLENCE BASED ON THE GENETIC GANDHIAN SPHERONS OF EQUALITY, LOVE, PEACE AND NONVIOLENCE.</p> <p>Athens' Academy/School GGHA peace ideals from the past and today</p> 	<p>АГМС ЗНАЕТ, КАК ПОСТРОИТЬ ОБЩЕСТВО БЕЗ ВОЙНЫ/НАСИЛИЯ НА ОСНОВЕ ГЕНЕТИЧЕСКИХ ГАНДИАНСКИХ СФЕРОНОВ РАВЕНСТВА, ЛЮБВИ, МИРА И НЕНАСИЛИЯ.</p> <p>Афинская Академия/Школа ГГСГ идеалы мира из прошлого и сегодня</p> 
<p>THE SGPA SPHERONS: IN WHAT THEY ARE ETERNAL AND ARE VARIABLE?</p> 	<p>СФЕРОНЫ АГМС: В ЧЕМ ОНИ ВЕЧНЫ И В ЧЕМ ПЕРЕМЕННЫ?</p> 
	
<p>+ hundreds of other GGHA members from dozens of countries, including five Nobel laureates.</p>	<p>+ сотни других членов ГГСГ из десятков стран, включая пять Нобелевских лауреатов.</p>

Over 20 years (2005-2025), the statistics of visits to our website recorded more than 22 million visits, from 2 to 16 thousand daily: <https://peacefromharmony.org/>



TH A MARIE ROBERT

DEDICATES
TO THE GGHA 20TH ANNIVERSARY: 2005-2025

"The higher [to GOD] the hammer is raised to heaven [and the MIND to SPHERES], the deeper it cuts into the earthly" - Michelangelo

	2005 — 2025 HISTORY	
The sprout of PLANETARY, PERPETUAL PEACE, instead of endless local truces		

LAUNCH OF THE SPHERAL THINKING AND PERPETUAL PEACE ERA
GGHA "*Shifted the Arms Race into a Peace Race*" of M.L. King by the Gandhian Science of Kant's "*Perpetual Peace*" in Spheral, "*Substantially New Thinking*" of Einstein and Spheral AI to "*PUT AN END TO WAR BEFORE WAR PUTS AN END TO MANKIND*" by the John F. Kennedy absolute law of its peaceful survival, for which he was killed.

A CALL TO
"END WAR BEFORE WAR ENDS HUMANITY"

I CALL TO FOLLOW KENNEDY'S TESTAMENT, WHICH HAS BECOME MORE RELEVANT TODAY THAN EVER SINCE THE CARIBBEAN CRISIS, WHEN NOW HUMANITY IS 89 SECONDS CLOSER TO ITS FINAL, SUICIDAL-GENOCIDAL NUCLEAR CATASTROPHE IN THE NEW WORLD WAR OF "**MUTUALLY ASURED DESTRUCTION**" (MAD)!

I CALL FOR PEACE, FOR THE HEALING FROM THE MAD MIND BY THE PLANETARY TRUTH OF GANDHIAN PERPETUAL PEACE SCIENCE, THAT IS THE ONLY ONE THAT CAN END WAR BEFORE IT ENDS HUMANITY!

AT THE WORLD POETS CONGRESS
MADURAI, TAMIL NADU, INDIA
NOVEMBER 2024
FROM AUROVILLE, THE CITY OF TRUTH, INDIA

JANUARY 15, 2025
PARIS, MARCH 1, 2025



Let us remember! The nations are capable of all betrayals and crimes, genocides... World War I... World War II... and all others...

The third, suicidal-genocidal nuclear war on a planetary scale will not happen if conscience awakens, if everyone knows that she/he is responsible for his inner and, by extension, of outer and planetary peace. If billions of human souls and minds, which we are, are themselves capable to say in their own conscience NO to catastrophe, NO to crime, YES to life, light, truth and creative, with the Gandhian Science of Perpetual Peace Primer for Humanity and friendly cooperation !

This dream of humanity was ignited by Mahatma Gandhi and Sri Aurobindo, his contemporain activist for independence of India : two visions, two ways for the same objectives! Founded in accordance with the visionary thought of the wise Indian philosopher SRI AUROBINDO, materialized under the impulse and vision of the MOTHER, a Frenchwoman, whom everyone here calls "MOTHER", AUROVILLE is an utopian dream for some, an experimental, ecological city for others looking for Peace and Harmony between humanity and nature.

It is work of co-creation, on the peacemaking path of creative harmony of the divine and the human. Each, in conscience, expresses his creativity, asserts the responsibility of oneself in the heart of all with others.

The Gandhian science of Perpetual peace, ignited by his spherical thinking from the Perpetual fire of equal and harmonious varnas-spherons of the flourishing Vedic civilization in ancient India gives universal wisdom for the new humanity.

In the very heart of Auroville is the MATRIMANDIR, a unique work of art in the world. A cosmic sphere in 12 lotus petals, a symbol of the vibrational connection of light, a shining ray of space descending to the origins of the Earth and life on Earth. The Matrimandir, like a lotus flower opening its petals in symbiotic union with the white light, opens to welcome and gather together into the depth of silence, in a creative meditation, a peaceful and grateful humanity.

Let us consciously work towards realizing the Self as a Whole in the benevolent silence of the Heart and the continuous enlightenment of the creative peaceful mind, which

is kindled by the Gandhian Peace Science Primer in each sovereign "I" together with the whole "WE".

I address all minds, and especially the intelligence of the heart and intuition. The creator works with the light, erasing the darkness and creating the shadows of the reliefs. I call for the awakening of the true, conscientious consciousness of one and all, to overcome the arrogant attitude, the deadly conflicts, the projects of dehumanization, sterile subjugation, depopulation, keeping minds in misery and ignorance... These shadow works are projects that do not serve humanity but despise its beings and destroy their souls. Let us put an end to the madness of the indecent, narrow but exorbitant ambitions of the peace-blind traditional thinking.

I call upon all of us to allow this new humanity to awaken in the depths of our being, overcoming divisions and confrontations to rise to its inner unity in the Perpetual peace and harmony of its eternal spheres, beginning with the scientific Gandhian Primer study.

Let us say YES to the art of peace, the culture of peace, the education of peace through the Gandhian Science of Perpetual Peace, the core of which was created by the GGHA during 20 years with my participation and with my ideas of cosmopoetic art, which I founded in 1988 as an integral art of "*dancing, words and images for peace*".

"TRUTH IS GOD, THEREFORE TRUTH ALONE TRIUMPHS ", said Gandhi. Compressed in the Primer, the TRUTH OF PEACE will give us courage and enthusiasm not only to say NO to war, but also to put an end to it with conscientious reason in the humanity new era of spherical thinking and Perpetual peace!

Today, I call on all peacemakers and people of good will, striving to prevent a new world war, to support all the peacemaking efforts to put an end to the actual war in Ukraine, which brought humanity closest to the nuclear abyss!

Humanity can survive and live only in Gandhi's Perpetual Peace and Nonviolence!

Thea Marie Robert,

GGHA member FROM FRANCE, 2009.

GGHA Muse of Harmony and Gandhian Creator of World Harmony, 2020.

Messenger of the Peace Culture nominated at UNESCO, 2000.

Ambassador Universal of Peace Genève/France, 2006.

Gold Medal World Congress Poets, 2012.

Gold Medal Arts Sciences Letters Academy Paris, 2017.

You tube Thea Marie Robert

Web: https://peacefromharmony.org/?cat=en_c&key=467

Dedicated

to the blessed memory of our great friend and colleague

Johan Galtung (1930-2024)

whose outstanding pioneering "peace researches" since 1959 created fertile ground for the GGHA Perpetual Peace Science, to which he was the coauthor since 2014 with significant contribution.



J. Galtung's pages on the GGHA website:

https://peacefromharmony.org/?cat=en_c&key=599

https://peacefromharmony.org/?cat=en_c&key=622

https://peacefromharmony.org/?cat=en_c&key=596

and others.

Dedicated

to the bright memory of our great friend and colleague

John Avery (1933-2024),

Prof. Emeritus of the Copenhagen University, PhD in Physics, Nobel Peace Prize Laureate (shared award 1995), Chairman of the Danish Peace Academy 2004-2015, whose outstanding "peace researches" since 1959 created fertile ground for the GGHA "Perpetual Peace Science", to which he has been an active coauthor since 2014. He participated in all of the GGHA collective peacemaking books emphasizing, "***The Global [Perpetual] Peace Science goals are absolutely necessary.***"

His epigraph for this book is: "We need system change [as proposed in this science], not climate change! We need a new economic system, a new society, a new social contract, a new way of life. Here are the great tasks that history has given to our generation: We must achieve a steady-state economic system. We must restore democracy. We must decrease 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." (<https://peacefromharmony.org/docs/global-peace-science-2016.pdf>)

His main work:

		<p>Peace Science of Gandhian Global Spherons: Spheronic making this evil by zero</p> 
<p>John Scales Avery, 1933-2024, Nobel Peace Laureate, 1995, Danish Peace Academy Chairman: 2004-2014, GGHA member: 2015- 2024, GGHA Gandhian Peace Science coauthor: https://peacefromharmony.org/?cat=en_c&key=672</p>	<p>Nuclear Weapons: An Absolute Evil By John Avery 2017 https://peacefromharmony.org/?cat=en_c&key=800</p>	 <p>GGHA</p>

His publications on the GGHA website:

https://peacefromharmony.org/?cat=en_c&key=615

https://peacefromharmony.org/?cat=en_c&key=800

https://peacefromharmony.org/?cat=en_c&key=672, etc.



Our PPS Strategy is like Martin Luther King, Jr. and John Kennedy:

*"Shift the arms race into a peace race" in order "to put an end to war **before** war puts an end humanity."*

To ensure the survival of humanity and stop the destruction of our world by violence, we must reject and eliminate militarism, racism, Zionism, Nazism, terrorism, genocide and war.

We can only do this with the Peace Science, which gives us a common, planetary vision and overcomes confrontation. With it, we find the most humane way of life for people, the spirit of love, truth and harmony in accordance with God in every human heart.

*In the end, we can say simply: our PS launches an innovative "peace race" with safe and peaceful AI. Similar technological peace race "puts an end to war **before** war puts an end to humanity." This is how we see the logical connection of our PS with the immortal peacemaking ideas of MLK and JFK.*

Mairead Corrigan Maguire

Mairead Maguire

Nobel Peace Prize Laureate, 1976,
"Peace People" Community Cofounder



peace PEOPLE

www.peacepeople.com

Northern Ireland

GGHA website:

https://peacefromharmony.org/?cat=en_c&key=678

https://peacefromharmony.org/?cat=en_c&key=1251

Mairead's website:

<https://www.peacepeople.com>

Mairead Corrigan Maguire

Quotes from appeals and press releases.

...For the past 80 years (since the dropping of the nuclear bombs), humanity has used arms, militarism, and wars, to kill millions of fellow humans (there are over 55 wars going on in the world today). Surely as civilized humans, we can do better than this! Time **to abolish nuclear weapons and wars and build Perpetual Peace**, through a reformed United Nations, around a table and not around millions of graves of beautiful young men and women.

Many know **the science of peace** (https://peacefromharmony.org/?cat=en_c&key=1251), but it has just been drowned out by the noise of war, and 'old' concepts of dealing with problems and conflicts. However, at this historic point in humanity's history, we are all challenged to let go of fear and reject violence, militarism and war forever by the transforming power of love and forgiveness.

Mairead Corrigan Maguire,

Nobel Peace Laureate,

https://peacefromharmony.org/?cat=en_c&key=678

07-03-25

...In the season of Ramadam, and lent, let us join In fasting and prayer, in solidarity for a world fit for all our children built on nonkilling, peace and justice. It is possible, and **it starts with us teaching and living the SCIENCE OF PEACE not war.**

Mairead Maguire,

Nobel Peace Laureate 1976,

https://peacefromharmony.org/?cat=en_c&key=678

21-03-25

Open letter to president Trump

From Nobel peace laureate

Mairead Maguire

Dear president Trump,

The children of Gaza are being starved and killed. Israel has killed 18592 Palestinian children In the last two years, there are 39000 Palestinians children orphaned in Gaza, occupied Israeli. This is forced starvation an Israeli policy leading to famine. (Calls for genocide from high Israeli politicians and Military generals (see genocidal statement 8/18/2025 via prof Michael de Graff.)

This is not a natural disaster it is mass murder and intentional starvation of Gaza by Israel. The suffering is so deep and painful.

Please do something to stop such preventable suffering and death of little Palestinian children by Israeli military and politicians.

Please, president Trump cut off weapons and diplomatic support and save the Palestinians from ethnic cleansing and genocide, which is being witnessed by the whole world.

Thank you for what you are doing for peace and every good wish to you and your family.

Peace

Mairead Maguire, Nobel peace Laureate

Peacepeople: www.peacepeople.com

23 August 2025

The Primer Abbreviations and Synonyms

Note. The terminology of spherical thinking and the of Perpetual Peace Science in its Primer, due to its not yet established nature, is open to further clarification and improvement.

Abbreviations (40, below) are used after the full spelling of the term in each chapter:

GGHA – Gandhian Global Harmony Association (2018–2025); GHA (2005–2018)

PS, PPS, GPS, Spheronics, Spherism, Tetrism – Peace Science, Perpetual (Global, Planetary) Peace Science; **synonyms**: Spheronics Megascience, Spherism and Tetrism as its worldview.

GRR – Golden Rule of Religions

HPPM – Humanity Perpetual Peace Map

CPP – Culture (Faith + Knowledge + SAI + Education) of Perpetual Peace

PPH – Perpetual Peace of Humanity

PNPOS – Planetary Natures: Physical, Organic, Social

HOLONS – eternal, integral parts of all three natures of the planet, called SPHERES

PARTONS – transient, endless in history PARTS of holons, spheres

EWAS – Earth, Water, Air, Sun: spheres of the Earth physical nature in the usual lexicon

LHAH – Lithosphere, Hydrosphere, Atmosphere, Heliosphere: these spheres in scientific terminology

ENSS – Law of “*Equally Necessary Sufficient Spheres*” of the three planetary natures being

ISPPP – Law of “*Identity of the States of Production and Perpetual Peace*”

SP – Social production

PIOT – People, Information, Organization, Things – necessary and sufficient social spheres of the SP resources/products in contrast to natural ones.

PDEC – Production, Distribution, Exchange, Consumption – necessary and sufficient spheres of the SP processes of PIOT.

SIOT – Sociosphere, Infosphere, Orgosphere, Technosphere (economy) – necessary and sufficient spheres of the SP of the PIOT products in unity with the PDEC processes.

SIOTs – Sociospheron, Infospheron, Orgospheron, and Technospheron – necessary and sufficient spherons (classes of people) employed in the SP spheres of PIOT, **the constant social structure of any society**.

SOCIONOME – the humanity Social Genome, preserving in its genesis and constituting the society end-to-end cell from the individual to humanity.

TFR – the law of PIOT “*Tetra Fractal Recursion*”, or the law “**PIOT: 4×4^n** ”

SST – Social Space-Time

NC – Nuclear Civilization, 80 years since the atomic bombings of Hiroshima and Nagasaki in 1945

MAD – **Mutually Assured Destruction**: the NC state and capability

NW – Nuclear Weapons, the constantly growing arsenal of which provides MAD by 100%

DT – Disciplinary (partial, fragmented and torn) Thinking, “*blind to the whole*”

DS – Disciplinary (branch) Sciences (there are more than 75,000 of them) as the DT parts

HST – Holistic Spherical Thinking (its core is the transdisciplinary Peace Science and Spherism worldview)

TS – Traditional Statistics

SGS, SS, Globstat – Spherical (Global) Statistics

BMSI – Basic Matrix of Spherical Indices in Globstat

AI – Artificial Intelligence

SAI – Spherical Artificial Intelligence

SBD – Spherical Big Data (Database) of SAI

SSAI – Startup of SAI

MG – MicroGroups, grassroots structural working cells of personnel in the SSAI

LLM – Large Language Models of AI.

IOM – **Input–Output Model**; ISB – Inter-Spheres Balance

MWO – Multipolar World Order

SMWO – Spherical Multipolar World Order

MPP – Multipolar Perpetual Peace in SMWO

PCPP – Planetary Cosmos of Perpetual Peace

Chapter 1. Introduction

The Golden Rule: The spiritual source and foundation
for the Perpetual Peace Culture, its Spherical Science and Primer's coauthors

'Do unto others as you would have them do unto you' (Mt 7:12).

Dear readers!

Our, at first glance, strange the "*Peace Science Primer*" (PSP), today becomes the first intellectual and moral necessity to put an end to all wars and exclude the 100% prepared "*Mutually Assured Destruction*" (MAD) in the nuclear "suicide-genocide" of its Western civilization (1945-2025). For this, it is necessary to substantiate the ancient peacemaking "*Golden Rule of Religions*" (GRR) on the fundamental scientific basis of spherical, holistic thinking and worldview, which excludes hostile, militaristic confrontations between nations and states.

We begin our PSP with a brief introduction to the GRR. It is the most ancient source and foundation of the Perpetual Peace human culture for almost a million years. There is a huge religious and scientific literature on the GRR topic, from which we selected the sources of two famous theologians and philosophers, two GGHA members and coauthors of the "*Global Peace Science*" (2016: <https://peacefromharmony.org/docs/global-peace-science-2016.pdf>) by more than 700 of its coauthors over 20 years.

1. Harry Gensler's work

The first of these sources is the book by Harry Gensler, "*Ethics and the Golden Rule*" (2013, which presents a unique "*Chronology of the Golden Rule*" (https://peacefromharmony.org/?cat=en_c&key=1263). Pastor Harry Gensler in 2013 offered a course "*Chronological History of the Golden Rule*" in his curriculum: "*Global Ethics and the Golden Rule of Interfaith Harmony in the 21st Century*" for the GGHA Center for Interfaith Harmony Education, approved on April 14, 2013: https://peacefromharmony.org/?cat=ru_c&key=580. Therefore, his colossal work on the Golden Rule has been known to us since the very beginning of his collaboration in our "*Global Peace Science*" project.

Surprisingly, with its age of many thousands of years, the Golden Rule is the first, the earliest example of spherical, holistic, and end-to-end thinking of planetary humanity, necessary for each individual, family, nation, ethnicity, society, and state. Here are some key excerpts from Harry Gensler's sources mentioned.

"1,000,000 BC to 10,000 BC, Humans find cooperative hunting works better. Small, genetically similar clans who use the golden rule to promote cooperation and sharing have a better chance of surviving."

"1961 Norman Rockwell's Golden Rule painting (showing the golden rule and people from many religions, races, and nations)..."

"In 1983, Hans Reiner's "The Golden Rule and Natural Law" sees the golden rule as about autonomy. The golden rule takes the standards I use in evaluating others and applies them to myself. The golden rule, which all cultures recognize, is the basis for natural law."

"1986 Pope John Paul II, speaking to world-religion leaders, says: "Jesus Christ reminded us of the golden rule: 'Treat others as you would like them to treat you.' Your various religious creeds may have a similar injunction. The observance of this golden rule is an excellent foundation of peace."

"1993 The second Parliament of the World's Religions, led by theologian Hans Küng, overwhelmingly supports a 'Declaration for a global ethic' that calls the golden rule 'the irrevocable, unconditional norm for all areas of life.'"

"2000 Richard Kinnier's "A short list of universal moral values" summarizes research into which values are common to nearly all societies. The golden rule is seen as the clearest and most impressive universal value."

"2006 Mussie Hailu, an interfaith golden rule activist from Ethiopia, sees the golden rule as a path to peace, justice, and interfaith harmony."

"2008 Pope Benedict XVI... This 'golden rule' is given in the Bible, but it is valid for all people, including non-believers."

"2008 Abdullah An-Na'im's Islam and the Secular State (p. 24) argues ... The golden rule is the

ultimate cross-cultural foundation of the universality of human rights."

"2008 Christian Troll, a German Jesuit who does Christian-Muslim dialogue, suggests a golden rule for understanding other religions: "Try to understand the other's faith as you would like your own faith to be understood."

"2009 Olivier du Roy's *La Règle d'Or: Le retour d'une maxime oubliée*,... looks to the return of the golden rule as the natural-law norm common to all peoples."

"2015 Pope Francis, addressing the US Congress, says: "Let us remember the Golden Rule: 'Do unto others as you would have them do unto you' (Mt 7:12). This Rule points us in a clear direction. Let us treat others with the same passion and compassion with which we want to be treated. Let us seek for others the same possibilities which we seek for ourselves. Let us help others to grow, as we would like to be helped ourselves. In a word, if we want security, let us give security; if we want life, let us give life; if we want opportunities, let us provide opportunities. The yardstick we use for others will be the yardstick that time will use for us. The Golden Rule also reminds us of our responsibility to protect and defend human life at every stage of its development."

2. Rudolf Siebert: The Golden Rule for President Trump, the West and Ukraine

Doctor of Philosophy, theologian, and Professor Emeritus of Comparative Religion at the University of Michigan has been collaborating with the GGHA for 20 years and is co-author of all of its peace projects and books created within the framework of the GGHA "*Global/Perpetual Peace Science*" (GPS) during this time (https://peacefromharmony.org/?cat=en_c&key=51).

From the multi-degree works of Rudolf Siebert, we have selected those directly related to the GRR, its significance for the GPS, and for the solution of current problems of the last 20 years:

1. Open letter to President Trump. The Golden Rule of Harmony in religions and society. 01-02-2017: https://peacefromharmony.org/?cat=en_c&key=51

2. Sermon on the Mount and Golden Rule: Global Peace Science Today. 09-01-2017: https://peacefromharmony.org/?cat=en_c&key=51

3. Spherons of Harmony: The Third Way of Religions' Reconciliation. 29-04-17: https://peacefromharmony.org/?cat=en_c&key=782,

4. Golden Rule of the present Ukrainian conflict. 02-03-22: https://peacefromharmony.org/?cat=en_c&key=51

6. Golden Rule: Contra Ukrainian Nazism and Pro the Russian and American worlds solidarity. 15-04-22: https://peacefromharmony.org/?cat=en_c&key=1063

7. Rudolf Siebert. The Golden Rule of Religions: The First Law of Social Harmony. The ABC of Harmony. 2012, c. 134-136: https://peacefromharmony.org/?cat=en_c&key=499 8. The Critical Theory of Religion: The Evolution of the Moral Consciousness from the Jus Talionis to the Golden Rule. July 2007: https://peacefromharmony.org/?cat=en_c&key=51 + R. Siebert's numerous letters about the Golden Rule in the GGHA during 20 years of his work. We will quote only the most significant fragments about GRR from these works of R. Siebert.

«I am a scholar who has devoted his life to the comparative study of religions, particularly their ability to promote harmony and peace, as formulated and expressed especially in the Sermon on the Mount, including the Golden Rule... Your (D. Trump's) Global Peace Paradigm is built on this Golden Rule. Thus, it carries in itself the religious and Christian meaning of love and nonviolence. You and President Putin have both confessed publicly that you are not only modern enlightened people, but also believers, even Christians, if also in different Christian paradigms.»

*«As the GGHA nominated Ambassador of Peace and Disarmament, based on the Sermon on the Mount, including the Golden Rule, I would like to submit the following proposals and invitations to you, in the name of all of us. In your (D. Trump's) speech on April 27, 2016, you **promised, "to seek a new vision, new minds, voices, ideas and approaches to peace"**. Could you use the GGHA resources by inviting it to cooperate?»*

«I am sending you (to the GGHA peacemakers) my analysis of the Ukraine conflict. I can send you no more actual and better Easter message than this letter on the Golden Rule in this tragic year 2022!» «In the Ukrainian tragedy, during real genocide for nearly eight years in Ukraine, when almost 14,000 civilians, including children, were killed over this time in Donbass. During this Ukrainian tragedy, Pope Francis appealed to our consciences before God and prayed for peace and the Golden Rule: *always treat others as you would like them to treat you; that is the meaning of the Law and the Prophets.*»

*“The West could have helped to avoid this human tragedy in the Ukraine, if in the last 8 years it would have followed the **Golden Rule** in any of its forms, and would have listened to the cries of the victims in the Donbass territories, e.g. the city of Donetsk, and had helped to realize the Minsk agreements. The Ukrainian army, armed and advised by the West, caused nearly 14,000 civilian casualties in the Donbas territory in the past 8 years, and thus provoked the Russian invasion.”*

*“Dostoevsky observed that from the right of might to the right of tigers and crocodiles was not a long step. In contrast, the Orthodox Christian Dostoevsky was on the side of the **Golden Rule**, and of all men, and all races, and their universal equality and solidarity.”*

*“They (USA and Russia) can and still do compete peacefully with each other to both their advantage, and that of the rest of the world, only when they follow the **Golden Rule**; otherwise, there will be war, at least proxy-war. Unfortunately, in the past 8 years at least, **the West has violated the Golden Rule against the East through the new Eastward movement of NATO: the fundamental moral law, recognized by most nations since the Axial Age. Since the West violated the Golden Rule, it became at least co-responsible for the consequences: e.g., the present Ukrainian suffering.**”*

“We (USA and Russia) treated each other according to the Golden Rule. There was harmony. There was peace. I gave lectures on the Golden Rule not only in Yalta, but also in Simferopol and Sevastopol, and in Kiev, and later in St. Petersburg. I established an exchange program between the University of Sevastopol and Western Michigan University. My essays on the Golden Rule appeared early on in the documents of the GGHA. My essays on the Golden Rule were translated from English into the Russian and Ukrainian languages year after year, and were published in articles, chapters, and books. They were part of proclamations, which were sent to the Presidents of the Russian Federation and the USA, and to the UN in New York.”

*“If West and East, particularly the two world-historical front powers, do not learn to practice the Golden Rule from the family, through civil society, the political state, and history, to culture, including art, religion, philosophy, and science, **we shall not live very long.** West and East can learn the Golden Rule from the foundation of Mahatma Gandhi's and Martin Luther King's method of peaceful resistance.”*

*“Kennan wrote in 1997 in the New York Times that the NATO East expansion was the most fatal mistake and fault of American politics in the era after the Cold War... It was the conclusion of this time diagnosis under the title **Golden Rule** that this most disastrous error of the American foreign politics had to be corrected as fast as possible, if a productive peace between the American World and the Slavic World was to be reached and achieved for the future world history.”*

“The Pope Francis of Rome and the Patriarch Kirill of Moscow must follow as well the Sermon on the Mount, the Golden Rule, the commandment of non-violent resistance...” “All modern states still had religions, and they all shared the Golden Rule, and could, on its basis, provide the citizens with a moral disposition, which could make democracy just and maintain it in its existence. All modern states had philosophies, which had inherited the Golden Rule from the religions, and could thus also help to make citizens virtuous, and thus could also make them democratic and peace-loving.”

«The talk about the Golden Rule may seem to be as naive, silly, or even ridiculous from the perspective of the fascist ethics and ethos of the aristocratic nature...»

*“The Golden Rule has its own realism and power: if the American World, and connected with it the European World, on one hand, and the Slavic World, and connected with it the Chinese World and the Indian World with their enormous populations of over two billion people, on the other, will not guarantee each other mutually, based on the Golden Rule in all its forms, their interest and security spheres, they shall sooner or later **annihilate each other through their always more developed nuclear weaponry?**”*

“The immediate future of humanity, and even of the surrounding natural environment, depends on the peaceful cooperation of the two antagonistic world - historical front runners, the Slavic World and the American World: their task and responsibility is enormous, and can only be fulfilled realistically in the spirit of the Golden Rule.”

“The Golden Rule can be practiced effectively not only by individuals and families and civil societies, but also by states and civilizations: as they overcome themselves, they can also come closer to each other.” “Sooner than peace may come to the Ukraine, when East and West will practice the Golden Rule, and consequentially will be able to trust each other again, and to guarantee mutually to each other their interest and security spheres.”

“The Golden Rule of religions is the first law of social and interreligious harmony. Therefore, it

constitutes the first imperative of humanity's perpetual peace culture and its 'Global Peace Science', created in the GGHA.”

"There can be no adequate peace work without the faith and its Golden rule. It must also be part of our Perpetual Peace Science."

"The Gandhian nonviolent spherons are the Golden Rule's best implementation in the science and social practice of perpetual peace."

"Particular demands will have to be put on all world religions, not to support uncritically the official politics and policies of their respective governments, which only too often (violate the Golden Rule of religions)..."

"The Perpetual Peace conditions:

1. There will be no peace among nations without peace among the world's religions. 2. There will be no peace among the world's religions without discourse among them. 3. There will be no discourse among the world religions without comparative foundational research in them and among them.

4. Discourse among world religions will not exist without global ethical standards, particularly the Golden Rule and its ethical directives.

5. There will, therefore, be no survival of this globe without a global ethic (Horkheimer 1985g:chs. 37,40; Habermas 1986; Küng 1990 and others)."

3. The Golden Rule: source and foundation of humanity, Perpetual peace culture, and its science

The proposed conclusion follows from all the evidence of the GRR. We, the Primer coauthors, believers from different faiths, interpret the GRR's fundamental role and significance as the source and foundation of humanity's Perpetual peace culture, constituting the only way of its existence and social production for almost a million years.

Any believer can say that God, in an experimental manner, created for people on Earth the only paradise in the universe (another similar one is still unknown) based on the harmony of natural, necessary, and sufficient for their life, spheres of all three of its natures: physical, organic and social. All of them are built according to the most effective, holistic spherical laws of the universe, differing only in the scale of their structures. To provide people with the only peaceful way of life, God gave people through all their religious confessions ("**God is too big to fit into one religion**") a simple imperative of peaceful life, the same in meaning in all languages, in all formulations for all ethnic groups, understandable to a child: "**Do unto others as you would have them do unto you**". A corresponding negative imperative supplements it: "**Do not do unto others as you would not have them do unto you**". It received in two forms the name of the "**Golden Rule of Religions**" (GRR), which is recognized as the "natural law" of the world and the law of all other social laws: moral, legal, cultural, aesthetic, state, etc.

Therefore, the GRR became humanity's perpetual peace law, the source and foundation of its culture for the entire time of its existence. However, this law of perpetual peace did not prevent people, due to their egoism, ignorance and disregard for the spherical, integral laws of their peaceful, harmonious existence and thinking, from waging fratricidal wars for several (from 5 to 15 in different calculations) thousand years of their history, causing extreme harm to each other, trampling on the GRR as the only, peaceful way of their life. The full extent of the total threat to the existence of humans and their unique, earthly paradise has become an obvious and scientifically proven fact during the 80 years of the nuclear civilization created and imposed by the West on all of humanity since 1945, with the genocidal bombings of Hiroshima and Nagasaki. Over these decades, as a result of the accelerating arms race, the world arsenal of nuclear weapons was created that ensured "**Mutual Assured Destruction**" (MAD), which was clearly realized during the "**Caribbean Crisis**" of 1962. Since that time, the power of the nuclear civilization arsenal has increased a thousandfold, which, in fact, transformed the earthly Divine paradise into the MAD militaristic nuclear hell on Earth for all its inhabitants without exception. There is no end in sight to this hell, and its nuclear power continues to increase annually with the growing budgets of "**nuclear modernization**", without encountering any practical opposition or alternative.

Two interdependent fundamental conclusions can be drawn from the historically irrefutable fact of the militaristic transformation of the earthly Divine paradise into the MAD nuclear earthly hell, which is revealed in more detail in the following chapters.

1. The empirical GRR insufficiency and political weakness are ignored in the policy of national states. Many people, even I. Kant has drawn attention to this. A weak culture of perpetual peace,

powerless to stop the confrontation of national egoistic interests, is unable to overcome the militaristic trend that has become dominant, ensuring national "security" as a way to achieve any temporary truce instead of perpetual peace, as its surrogate. That has become dominant on this basis. Humanity has never achieved it in this way in the entire history of militarism. A. Einstein succinctly and brilliantly expressed this historical fact, as a social law: "***Peace is never achieved by violence [war], but only by understanding [thinking, science].***"

2. The inability to think and understand perpetual peace holistically, planetary for all nations of humanity in unity and without exception in humankind's disciplinary, fragmentary, and partial thinking. **Achieving perpetual peace with disciplinary thinking is impossible that has been proven by thousands of years of its history.** If it were possible with it, it would have been established in it long ago. This thinking, achieving outstanding branch achievements and successfully solving partial problems, remains "***blind to the whole***", does not see or understand it, and involuntarily creates global, holistic problems that are insoluble for itself. This has become obvious in the last century, which is rightly called the century of globalization. In it, "unexpectedly, out of the blue," the most malicious, hellish nuclear civilization was born "by itself" with its global MAD, which thoroughly nullified the planetary humanity security and every nation, making it powerless before this hellish MAD by both with its GRR and its narrow, disciplinary thinking "***blind to the whole***".

As another social law, this historical fact was succinctly and brilliantly expressed by A. Einstein: "***The significant [planetary, holistic] problems we face cannot be solved at the same level of thinking we at when we created them.***" [Therefore] "***We should require a substantially new manner of thinking if mankind is to survive.***" Our "***Peace Science***" and its Primer are dedicated to revealing the superiority of this "***substantially new thinking***" in all subsequent chapters.

4. The coauthor's commitment to the GRR is scientifically strengthened by

"Peace Science" and its instruments to achieve the humanity planetary perpetual peace

The long-standing awareness of the noted historical facts and social laws has united the peacemakers, co-authors of our Primer in the GGHA during 20 years in the common goal of jointly developing the "***Perpetual Peace Science***" as the center of its strong peace culture, capable to resist the militaristic hellish trend by nonviolently, constructively and effectively. This innovative culture offers all of humanity both a new peacemaking, spherical thinking, and a new scientific, spherical worldview with the spherical AI instrument, and a new organization of business, social production, and its governance, including democracy, adequate to the social nature spheres and therefore maximally effective. This spherical, peaceful, and socially harmonious democracy will eliminate the need and possibility to finance wars and the arms race because it will finally be able to provide complete, nonviolent security/peace to humanity as a whole and to each nation separately, freeing them from the MAD hellish, militaristic pseudo-security. Because it will master the ability and tools to overcome confrontation and wars with its spherical, social structure of perpetual peace, instead of spontaneous, branch and narrow-party and narrow-national hostile structures that suppress the humanity perpetual peace culture foundation and source - its Golden Rule.

Therefore, all the GRR key attributes, together with the noted historical facts and spherical social laws, are integrated, developed, and scaled by the holistic, transdisciplinary "***Perpetual Peace Science***" as the scientific foundation and source of culture of this planetary peace instead of temporary and local military truces. They are revealed briefly, in our Primer, following chapters synoptic format for the first acquaintance of the reader with them. Structurally and dialectically, the Golden Rule and the "***Peace Science***" constitute a single complex of mutually complementary foundations and sources of humanity's perpetual peace culture, presented on its Primer top cover map (see on the chapter website).

5. The Primer's 20 coauthors' signatures as a sign of their deep spiritual and civic commitment to the GRR strengthening goal with the "Peace Science"

Leo Semashko, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=286

Mairead Corrigan, Catholic, Britain, https://peacefromharmony.org/?cat=en_c&key=678

Rudolf Siebert, Catholic, USA, https://peacefromharmony.org/?cat=en_c&key=51

Matt Meyer, Catholic, USA, https://peacefromharmony.org/?cat=en_c&key=1034

Lukas Pawlik, Catholic, Austria, https://peacefromharmony.org/?cat=en_c&key=887

Noam Chomsky, Catholic, USA, https://peacefromharmony.org/?cat=en_c&key=637

Chaitanya Dave, Hindu, USA, https://peacefromharmony.org/?cat=en_c&key=1205
Tea Marie Robert, Catholic, France, https://peacefromharmony.org/?cat=en_c&key=467
Takis Ioannidis, Orthodox, Greece, https://peacefromharmony.org/?cat=en_c&key=138
Asha Mukherjee, Hindu, India, https://peacefromharmony.org/?cat=en_c&key=1170
Ashok Chakravarthy, Hindu, India, https://peacefromharmony.org/?cat=en_c&key=286
Habyarimana Heli, Catholic, Rwanda: https://peacefromharmony.org/?cat=en_c&key=361
Noor Larik, Islamist, Pakistan, https://peacefromharmony.org/?cat=en_c&key=722
Bishnu Pathak, Hindu, Nepal, https://peacefromharmony.org/?cat=en_c&key=910
Yulia Budnikova, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=577
Vera Popovich, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=578
Olga Kashina, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=757
Ivan Ivanov, Orthodox, Russia: https://peacefromharmony.org/?cat=ru_c&key=11
Svetlana Vetrova, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=21
Andrey Smirnov, Orthodox, Russia, https://peacefromharmony.org/?cat=ru_c&key=813

6. Roerich's "Banner of Peace": symbol of GRR eternity as the Perpetual Peace culture source

The GRR generalization and affirmation as the humanity Perpetual Peace culture core becomes the "*Banner of Peace*" of Nicholas Roerich, created in 1930 in the following first sketch in Fig. 2.



Fig. 2. N.K. Roerich. "Peace Culture" with a mention of the "Banner of Peace"

"The manifestations of Culture are as diverse as the countless varieties of life itself. They ennoble Being. They are like the true branches of a single sacred tree, the roots of which support the world." N.K. Roerich // Burning of Darkness. Greetings to the Young. March 1930

"Now it is necessary to show the broadest understanding of the Banner of Peace. It is necessary to understand the Banner of Peace and Culture as the greatest symbol... of thought, knowledge and creativity." E.I. Roerich // Letters. Vol. I. May 29, 1931.

The Banner of Peace unites four circles of eternity, three of which, internally, express the planetary, earthly eternity of the past, present and future, accessible to science and the outer circle of the divine, absolute eternity of the universe. This eternity, as a whole, determines the other three as its transient parts, but it is inaccessible to any knowledge and science, it is accessible only to religious faith. In this absolute eternity of the universe, the Earth is only its microscopically small and temporary, transient particle, the hope for the existence of which is given only by religious faith with the center of GRR. Faith encourages human with the love of God for him, Who gives him Perpetual Peace within the framework of the existence allotted to him by planetary space and time.

The Banner of Peace, as a symbol of such faith and the culture based on it, serves as a single basis for placing on it the original source of religious faith in its various world branches. on "*The Humanity Perpetual Peace culture*" map, they form the foundation of the faith and knowledge inseparability, primarily the knowledge of "*Perpetual Peace Science*". All chapters of our Primer are devoted to its disclosure on the GRR basis, in which the concepts of "**peace**" and "**perpetual peace**" in the planetary sense are identical, as in Kant. For Nikolai and Helena Roerich, as well as for I. Kant, the "*culture of peace*" and "*peace*" are eternal in three dimensions of the past-present-future that is reflected in their "*Banner of Peace*".

Chapter 2. Preface.

Nuclear Civilization in the Cognitive Deadfall of Disciplinary Thinking

“Much knowledge does not teach wisdom.”

Heraclitus

“The significant [planetary, holistic] problems we face cannot be solved at the same level of thinking we at when we created them.” [Therefore] “We should require [search, create] a substantially new manner of thinking if mankind is to survive.”

Albert Einstein

Our Primer pretends the only fundamental result for all: to briefly reveal the possibility of a peaceful, nonviolent exit of humanity from the deadly nuclear civilization (NC), relying, first of all, on a new, holistic thinking, worldview, its peace science and AI, acceptable to all peoples without exception and immanent confrontation as a common, verifiable truth. This is the core, penetrating thought of our Primer, which is our first realized attempt, after numerous previous unrealized attempts, of a popular presentation in the format of a synopsis (minimum sufficient argumentation) of the "**Peace Science**" (PS). Its core has integrated synergies, and on the basis of the Golden Rule, the highest peacemaking achievements of the past culture of perpetual peace, as developed by the coauthors' team over 50 years of work, especially in the last international stage, in the GGHA, starting in 2005. The integration of these achievements ensures the perpetual peace culture Renaissance at the scientific level of macrosociological, transdisciplinary sphere of science, and its innovative technological tool - AI.

At the same time, we in no way claim to possess the ultimate truth, since our knowledge and conclusions are innovative; they require significant additions, corrections, and ongoing development in the future, thereby excluding any dogmatization and internal clan confrontation. They call for it new, responsible, and interested scientists and thinkers, whose understanding will become accessible to the fundamental cognitive problem of humanity raised in the Primer, on the holistic and harmonious solution of which depends the survival and exit of humanity from the inevitably deadly NC since 1945.

In the Primer, we first reveal the key historical facts, laws, narrowness, and vices of disciplinary thinking (DT) of this civilization, and then the need and attributes of the superiority of the new, spherical thinking and its tools for its peaceful overcoming.

1. FACT-1. The West Nuclear Civilization: The MAD deadfall for humanity

The universal fact of humanity's existence, the reality of every nation on the planet during 80 years, is the establishment de facto of the West's deadly NC in 1945, starting with the atomic, genocidal bombings of the Japanese cities of Hiroshima and Nagasaki. This civilization is constituted by existential nuclear

weapons, the inherited roots and tools of which were nurtured by the German genocidal "national socialism", the Nazism of the Third Reich (1933-1945) in the special "**Nuclear Program of Germany**" (1939-1945) of Hitler. The accelerated development of nuclear weapons already by the Cuban Missile Crisis of 1962 ensured the "**Mutually Assured Destruction**" (MAD) of humanity in NC, which was reflected in the corresponding military strategy and ideology, which, in essence, but under other names of "nuclear deterrence" and so on, still persists.

The NC fundamental threat to the humanity life was first understood and accurately expressed by US President J.F. Kennedy more than 60 years ago in the following aphorism: "**Humanity must end war before war ends humanity**", meaning a nuclear, genocidal war of NC. But since then, the MAD danger of nuclear volcano has not only not decreased, but has increased millions of times due to the accelerated race and modernization of nuclear weapons, which continuously increases the nuclear volcano power that is deadly for humanity and the planet. The constant of 80 years of growing potential of the nuclear volcanic explosion has become an apocalyptic "iron" law of this civilization; the probability of its "descent" increases annually, exceeding 99%, and has decreased to 89 seconds on the "**Doomsday Clock**" of nuclear

scientists. All this makes nuclear weapons "*absolute evil*," which was proven in the book of the same name by the outstanding physicist, Nobel Prize laureate John Avery, in 2017.

All the listed parameters of nuclear weapons (NW) define the true attributes of the 80-year reality of humanity's deadly NC and are integrated in the following short list. 1. Origin from Hitler, 2. The genocide of Hiroshima/Nagasaki, which marked the beginning of the NC, 3. NW are the absolute evil of the planet, 4. The NW race, its accelerated modernization for 80 years for trillions of dollars, 5. The power of the NW arsenal, the Earth's "nuclear volcano," reaches a billion Hiroshimas, providing a "*suicidal genocidal*" MAD, 6. The probability of MAD today exceeds 99%.

The attributes of the NC reality in a whole **constitute its immanent law of inevitable death**, with which humanity has actually resigned itself and has lived for 80 years in its passive expectation. All the NW parameters and the NC attributes are clearly expressed in Fig. 3.



Fig. 3. The nuclear civilization reality. The MAD Volcano, 1945-2025-?

2. FACT-2. Nuclear civilization and its cognitive deadfall of disciplinary thinking

Almost everyone knows the NC named facts, many talk about them, both in the UN and the leaders of some, especially nuclear states, for example, the President of Russia repeatedly repeats that in a nuclear war "*there will be no winners*", i.e., everyone in it will remain dead. The new USA President, answering questions from correspondents in the White House on February 22, emphasized that America and Russia have so many NW that it is enough to destroy all life on the planet 50 or 100 times, accentuating the recklessness of "common sense" in continuing its race and hinting at the need to reduce and eliminate it.

The MAD fact has been trampling on all the humanity foundations of being, culture, and consciousness for 80 years, starting with the universal Golden Rule of Religions as the most ancient source of the perpetual peace culture. The Primer authors do not engage in a discussion of many well-known social, historical, and military-technical details related to this key fact of NC reality. We obey the main requirement of the Greek synopsis, the Primer brevity so as not to lose the forest, the whole and humanity perpetual peace behind the details, as behind individual trees, the existence of which is threatened by this deadly, carcinogenic NC, which has grown on the NW yeast during 80 years. Our Primer begins with the NC reality, which has trampled the GRR, under the MAD threat of which we all live and ends with science

and scientific instruments for liberation from it, as from the deadly deadfall of the inevitable nuclear war in it, in order to end it and all wars before the war ends humanity and cuts short its life.

WHY has the knowledge of this existential fact and its discussion for 80 years not led to scientific, fundamental knowledge about how humanity can **collectively** get out of the NC "**genocidal-suicidal**" deadfall because it is incapable of doing this by definition, piecemeal, continent-by-continent, or country by country? The only way out of it can be through recognition and scientific knowledge of the integral perpetual peace **as a single, indivisible, and infinite in time security for all nations**. The reason for humanity's intellectual impotence and each of its subjects in recognizing this integral, single path to survival lies not in the plane of its socio-economic confrontation but in the cognitive plane of the impotence of its narrow, "blind to the whole" disciplinary thinking (DT). It created the NC but is incapable to consolidate humanity by new thinking in order to jointly find a single, acceptable to all nations scientific way out of it.

Even at the dawn, more than 2.5 thousand years ago, the great philosopher of antiquity Heraclitus of Ephesus aphoristically expressed the deepest vice and limitation of this thinking: "**Much knowledge does not teach the mind.**" How is this mysterious aphorism deciphered in the peace science? It claims that knowledge of any set of details or parts does not impart knowledge or intelligence of the whole, does not teach one to think of the whole, leaving DT "**blind to the whole.**" This has always been the case, and it remains so to this day, bearing its key vice precisely in the NC epoch. Heraclitus discovered the historical fact that DT is **inadequate to extremely large-scale and complex, holistic objects**, such as perpetual planetary peace, which cannot be revealed as a whole by fragmentary thinking, through many of its particular details. Cognition of humanity's perpetual peace is impossible for it, just as "**one born to crawl cannot fly.**" This is proven by millennia of past history.

If perpetual peace were accessible to DT, then over the thousands of years of its existence, it would have created its science. However, this has not occurred in history to date. Peace science is absent in humanity, even as a concept, which the reader will not find in any encyclopedia, except in sporadic cases where this term is used as a metaphor, nothing more. Therefore, this historical fact is defined as follows: the peace science in the humanity history so far is explained by the cognitive narrowness and limitations of traditional DT, **which is inadequate to the planetary scale and fundamental depth of the humanity's perpetual peace.**

Explaining the fact of "thoughtlessness, blindness of the whole" in the disciplinary much knowledge, i.e., inability to "**see/think the forest, the whole, for the trees**", making DT "**blind to the whole**" is not given only by Heraclitus. It is also given by the ancient Indian parable, known in other cultures, about "blind men feeling an elephant", each of whom identified the elephant with the part of it that he touched.

As a result of this, none of them had true knowledge about the elephant, and a conflict arose between them on this issue, in which not the truth, **which was absent from all of them**, won, but the force of one of them. Therefore, correct knowledge of the parts does not ensure true knowledge and thinking of humanity's holistic perpetual peace that is illustrated by Fig. 4.



Fig. 4. Disciplinary, one-dimensional thinking, "blind to the whole"

The disciplinary sciences, even if a huge number of them have accumulated, as today, 75 thousand, are like blind men in the knowledge of the "**elephant of perpetual peace and its actors-spherons**". They are able to know its separate parts but are unable to cognize it as a whole due to a narrow way of thinking. They cannot "catch" it, just as you cannot catch a whale with a butterfly net. Such limitations of disciplinary "multi-knowledge" have been preserved and intensified in Western North Carolina. Its

multidisciplinary knowledge in 75,000 disciplinary sciences (DS) has not taught its subjects the mindset and thinking necessary for survival in general.

This trend was first noticed and fundamentally determined by A. Einstein at the dawn of this civilization, more than 75 years ago, in the epistemological nature of its narrowness. He wrote “*The significant [planetary, global, holistic] problems we face cannot be solved at the same level of thinking we at when WE created them.” [Therefore] “We should require [search, create] a substantially new manner of thinking if mankind is to survive.” We will focus here on the first part of Einstein's statement, leaving the other part for the next chapter.*

3. FACT-3. Humanity with DT is doomed to live with insoluble planetary problems and the MAD growing risk

The DT deadly threat and vice in a whole, useful in parts, but dangerous as a whole, was revealed by the NC in 80 years, during which the DS 75 thousand like 5 blind men of an Indian elephant, turned out to be the same blind to the whole, powerless to find and offer a holistic solution with a common, acceptable to all nations way out of the NC deadly deadfall created by DT. This leads to a fundamental historical conclusion, which reveals a similar, yet invisible, deep existential fact.

DT, creating new and exacerbating old global problems of humanity, which it is incapable of solving with any number of DS, **condemns humanity to an eternal life of cognitive death, only continuously increasing the risk of all catastrophes (ecological, demographic, economic, AI, logistical, etc.).** This especially concerns its MAD, continuously reducing the remaining 89 seconds in 80 years before the launch of its nuclear volcano. What confirms and irrefutably proves this?

1. The unattainability and insolubility of the problem of perpetual peace for millennia for DT, especially urgently needed in the NC, in which it only intensified the militaristic hell of annual local wars, armed conflicts, terrorism, and violence.

2. The intellectual task of creating perpetual peace, rather than temporary militaristic truces, proved inaccessible to the understanding, scientific structuring, and solutions of all international organizations, scientific academies, and national governments in the NC DT over 80 years. We should not mention almost three thousand years of its previous life, when the need for perpetual peace was not as necessary for humanity's survival as it is today.

3. “*Blindness of the whole*” is the DT's fatal vice for humanity, inaccessible to the perception, analysis, evaluation, and understanding of all its governments, academies, and academic priests at all times in the absence of an adequate fundamental scientific alternative. This alternative was intuitively comprehended only by the separate coryphaeuses, “initiates” giants of thought for 3 thousand years, who were always ignored in the DT but “*on whose shoulders*”, on the integration of their highest intellectual epiphanies and achievements our, GGHA “*Peace Science*” was built, which is revealed in all chapters of the Primer.

4. DT, by fragmenting DS 75000, is doomed to eternal ideological confrontation and antagonism between groups. The totality of all their partial truths is incapable of providing them with a comprehensive and unified truth as a whole, rendering them “*half-truths*” that give rise to a “*false consciousness and worldview*” on all global, planetary issues.

5. This is well revealed and illustrated in the book of the brave English scientist Mark Keenan, in his book “*Godless and Fake Science*”, 2023, and his article of the same name, 25-02-25: https://peacefromharmony.org/?cat=en_c&key=1255. He defines DT and its sciences as “*a matrix of fake science that has polluted modern society for decades,*” which, with its atheism, has “*eliminated the existence of God from the scientific world,*” “*confused civilization with large-scale lies that advance corporate greed and a godless agenda.*” The author, as a Christian, “*calls for the restoration of truth and God consciousness.*” The author emphasizes that as humanity, “*we have all been exposed to fake science and its associated ideologies, which we are ‘born’ into and ‘trained’ to accept, and thus live in ‘systematized delusion’...*”

“*This article examines:*

- *fake climate science*
- *fake pandemic and fake science in the biopharmaceutical sector*
- *scientific disagreement with Darwinism and the growing ‘intelligent design’ movement • the limits of mechanistic science and the church of ‘godless scientism’.*

“*Truth is important because without it we are lost, drifting and rudderless in a sea of lies... Everything is based on truth, and only truth can maintain peace.*” “*Most of the scientific literature,*

perhaps half, may simply be false."

We are not listing many other facts, such as limitations, narrowness, blindness, mechanistic nature, godlessness, confrontation, and other vices of the DT.

6. Many other scientists, turning to effective interdisciplinary research, to various multi-paradigm and multilateral approaches, as in the UN approaches, indirectly confirm the fact of limitations and the crisis of DT. This is the fundamental crisis fact of the one-dimensional, linear, and confrontational DT, from which there can be no way out on its paths, as some think. The way out of it can only be "*substantially new*", as Albert Einstein defined it more than 70 years ago, demanding to seek and create "*a substantially new [... holistic, integral, planetary] way of thinking [by spheres and spherons], if humanity wants to survive.*" This is a principal, different, holistic way of thinking, which is developing, deepening, and refining our "*Peace Science*". It has access to knowledge of the planetary perpetual peace. This spheral, holistic thinking, in its original and key core, was created by integrating achievements of rare "giants" of spheral thinking "on their shoulders" over 20 years more than 700 co-authors from more than 50 countries, including five Nobel Peace Laureates and the President of India Abdul Kalam in the peace-making GGHA.

This thinking in its spheral integrity of the planetary society is presented on its structural map on our Primer top cover. The spheral way of thinking, like all the previous ones, appears at humanity certain historical stage in connection with its new needs for a broader and deeper knowledge, first of all, of its own, social nature and finds its place in the evolution of ways of thinking at its peak as a necessary historical fact of another "axial age". The main function of the holistic, spheral thinking of the culture and perpetual peace science is to not lose the structural picture of its "forest" behind the infinite multitude of its "trees" and to **constantly be guided by it as a "guiding star" from a "bird's eye view"** in its consistent knowledge from the spheral whole to the sectoral and smaller parts. This is discussed in the next chapter.

Chapter 3.

The Earth Three Natures: in Harmony of the Single Spherical Structure. Planetary Law: Equally Necessary and Sufficient Spheres

The internal harmony of the world is the only true objective reality

Henri Poincare

Quaternion is an inexhaustible source of life

Pythagoras

The reality and fundamentality of spherical thinking in its object matter must be proven and illustrated planetary, for the Earth as a whole, and not locally for any parts of its reality. Only in this case is it possible for all nations and every person to recognize it as the humanity historically necessary, “*substantially new*” way of thinking according to Einstein, universal and complementary to DT in synergetic integration with it on equal terms. For this, we must, first of all, state the obvious for all planetary facts of the existence on Earth of three interconnected natures, exhausting its being/existence in a single multidimensional, multi-qualitative substantial nature.

1. FACT-4. The Earth has three natures:

Physical, organic, and social as a single planetary ecosystem

As a result of the long, several billion years, evolution of our planet, three fundamental, eternal it natures have emerged and interact today: **physical, living (organic, biological), and social**. The origin and development of these spheres are presented in the DS corresponding to numerous branches, the knowledge of which is given in their school textbooks and encyclopedias, which we do not repeat. We will not touch upon the issue of the genesis of these natures, limiting ourselves to the issue of their general objective logic within the framework of their single structural substance-spheres. We also do not touch upon the existence of our planet with its nature in the infinite cosmos of the universe and “*put it out of brackets*” so as not to overload our Primer societal planetary scale, which is highly complex in itself. In general, the apparent fact of the existence of the Earth's three natures in their integrity and within the framework of the universe is expressed by Figure 5.

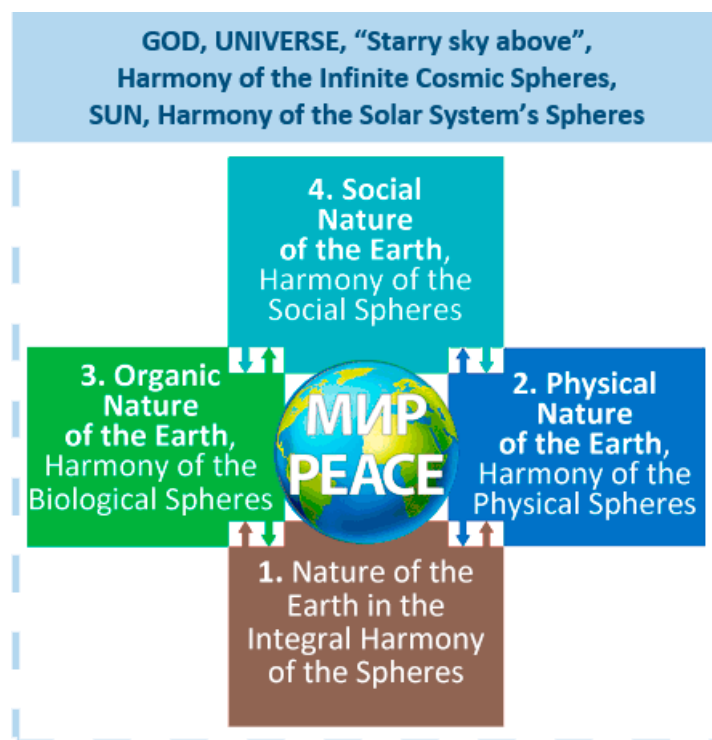


Fig. 5. The Earth Planetary Natures in the Universe

The outstanding mathematician Henri Poincaré probably expressed himself best about the Universe's essence of being and reality as a whole: "***The internal harmony of the world is the only true objective reality.***" This fundamental truth is deepened and supplemented only by the equally objective and universal truth of the substantial spherical structure of the Earth, each separate nature in their single planetary harmony, to which our Primer is dedicated in all chapters. Our main, philosophical assertion in it is that the universal harmony of the Universe exists and is realized, most likely, through the global structure of spheres or the global spherical structure, primarily embodied in billions of years of its evolution on Earth.

Humanity has billions of years of spontaneous evolution of inanimate and living planetary nature behind it and billions of years of conscious evolution of social nature ahead of it, including the evolution of ways of thinking. It demands from Homo sapiens the highest, holistic, and constant in the spheres of scientific understanding of its fundamental, eternal pillars, which determine its constant spherical structure and its enduring, societal genetics, hidden in its spherical depth.

All natures of our planet, constituting a single planetary ecosystem, are similar in their spherical substantial structure, which we are convinced of by the corresponding scientific facts below. This holistic and enduring structure will allow us to consider the humanity life from a "***bird's eye view***", from the heights of its lawful eternal spheres, correlated with the eternal spheres of other natures in their unified, systemic, and living ecosystem of the planet, based on the eternal spheres of inanimate, physical nature.

Hypothesis. With sufficient scientific justification, it is possible to include two more natures into the Earth's single ecosystem model: cosmic (the universe) and chemical (the fourth on Earth), with their spheres, spherical structures, laws, and constants. This is the subject of the future development of spherical thinking and its "***Peace Science***". (19-07-25)

2. FACT-5. Four spheres of physical nature

The question of the general planetary logic of its single structural substance arose before humanity at the dawn of scientific, disciplinary thinking (DT) about 3 thousand years ago and remains open to this day. However, during this time, many theoretical answers to it have been proposed, and about 75 thousand disciplinary sciences (DS) have emerged today. This question in the humanity history touched, first of all, on the inanimate nature, which is evident to everyone, always and everywhere, its elements, spheres that constitute our planet in their endless and interconnected changes. **The inanimate nature spheres genesis question** remains open for modern natural science, although there are several special theoretical hypotheses on this account, from which we digress.

In the knowledge of physical nature, its first, most ancient and extremely large-scale, planetary objective truth was the conclusion of the ancient "natural philosophers" about its four elements, about its fourspherical structure consisting of the planet physical spheres: **Earth (Lithosphere), Water (Hydrosphere), Air (Atmosphere) and the Sun (Heliosphere, including cosmos). Abbreviated: EWAS or LHAH.** This scientific conclusion was preceded by thousands of years of observations and studies of these spheres "at hand", thousands of various one-sided and erroneous hypotheses about the role of each of them with the assumptions of the determining role of one or another one among them, as it was in the history of natural philosophy. We do not need to repeat this knowledge, which is set out in detail in the relevant textbooks on philosophy and history. To be fair, it should be noted that the previous, mythological thinking already stated the physical spheres of the Earth chaotically in the person of different Olympic gods: Helios, Phoebus - the sun gods; Poseidon, Pontus, Oceanus and Neptune – the seas, oceans and water gods; Gaia, Tellus – the Earth goddesses and Ether – the god of air. There is also a rich literature on this.

The first and the shortest scientific definition of the four planetary spheres truth of **EWAS or LHAH** belongs to Pythagoras (6th century BC), who in his "***Golden Verses***" expressed it so poetically: "**QUATERNION [EWAS] IS AN INEXHAUSTIBLE SOURCE OF LIFE**" on the planet. The Pythagorean Quaternion fundamental truth as the source of eternal life was and will remain an eternal fact of the inanimate and animate nature of our planet, including humanity inhabiting it, because each of its eternal spheres is not only constantly, every second felt by every person on it from birth to death, but also makes up his entire organism. Therefore, everyone is convinced of their truth, as well as the truth of their eternal law, at every moment of their life. This objective planetary truth constitutes the unshakable pillar of the fundamental Perpetual Peace Science, which we unfold in our primer.

The fundamental scientific truth of the planet four eternal, physical spheres is expressed by the structural model in Figure 6.

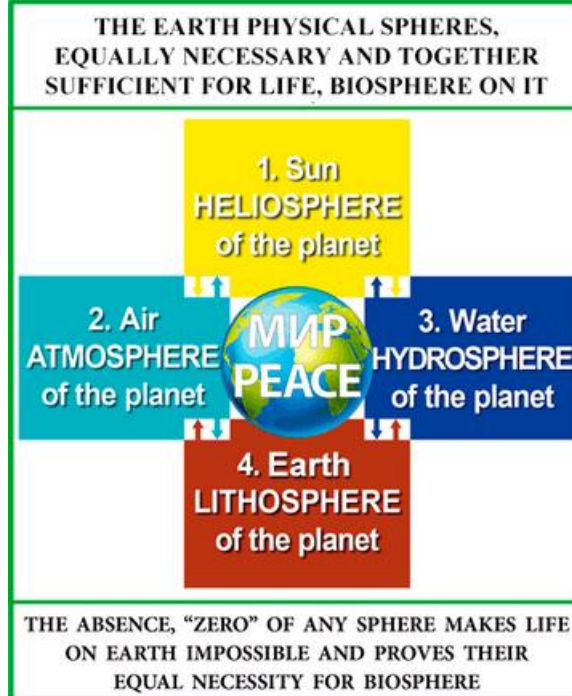


Fig. 6. Model: the planet has four physical spheres: 1. Earth - Lithosphere. 2. Water - Hydrosphere. 3. Air - Atmosphere. 4. Sun - Heliosphere (including cosmos)

The Pythagorean aphorism, fundamental meaning of "*Quaternion is an inexhaustible source of life*" was preserved, realized, and raised to the utmost heights a thousand years later by the Pythagorean **Hierocles** (5th century AD). He explains its deep meaning in this way, extending it to society and humans. The quaternion is "*a depository of eternal world order; it is the same thing as god the creator.*" *In Pythagorean philosophy, god is the number of numbers. The ten comprehends all the numbers, while "the ten's capacity is a quaternion ... because adding the numbers from one to four we get ten ... Quaternion is also the mean of one and seven ... Quaternion has volume. It contains an outline of a simple form of a pyramid ... Also, live creatures have four cognitive abilities: sense, knowledge, opinion, sentiment ... Overall, quaternion comprehends all things existent: the number of elements (earth, water, air, fire -- L.S.), seasons, ages, estates; and there is no evidence that anything exists that does not depend on quaternion as the root and the beginning.* Quaternion is ... *the creator and the cause of everything; it is god fathomable by sense; it is the cause of ... god*" [Pythagorean Golden Verses. M. 1995, p. 30, 96-98.].

All such facts and evidence allow us to recognize the spherical ideas of Pythagoras, including his famous "harmony of the celestial spheres" (it was developed by I. Kepler in his brilliant work "*Harmony of the World* - *Harmonices Mundi*" - "*the greatest picture of the universe*", which has not yet been translated from Latin) as the first scientific seed of spherical thinking in the humanity history. And Pythagoras - the first spherical scientist and its first swallow in it. With him, in the depths of millennia, begins the humanity scientific comprehension of the Earth all natures spheres and space - **SPHERAL THINKING (ST)**, continued by numerous followers of Pythagoras in history to the present day. However, it has not yet been mastered and recognized by it under the dominance of DT, but has already received its first socio-philosophical generalization in the GGHA Peace Science, which is briefly outlined in our Primer.

3. Four spheres of organic, living nature

We will not dwell here on the organic life specifics and its spheres, we will only emphasize the four-sphere classification of living organisms, in which four of their kingdoms or spheres are distinguished: Bacteria, Fungi (Funga) , Plants (Flora), and Animals (Fauna). These biological spheres/kingdoms include many structural levels of living organisms, an infinite number of their species, built on a single structural level of cells and their genes. It can be argued that at the level of living nature, more often called the "biosphere", **the harmony of its kingdoms or spheres is preserved and operates, but in a specific and more complex form than at the level of physical nature.** But this is a question of biology, and not the macrosociology of our Primer, so we digress from it and move on to a general consideration of the spheres of society, humanity in their single social nature.

4. Four spheres of social resources-products

Within the planet's biosphere, as a result of several million years of anthropogenesis, a social nature arises, created by humans, homo sapiens rationally, therefore this nature in all its products is recognized as "**artificial**", in contrast to the other two, recognized as "**natural**". The human does not limit the sources of his life to the natural nature of resources in its spheres. On their basis and from their material, he produces fundamentally new, artificial social resources in their artificial social spheres, generating his special, socially intelligent collective nature and life. It preserves the biological source of human life - his birth and physical/ecological spheres **as his eternal, cosmic, God-created maternal womb**. But on the basis of the spheres of natural nature, human creates four spheres of artificial, social spheres of resources-products, which he produce in the corresponding spheres of his eternal social production.

In this chapter, we will only name the **basic, substantial four spheres of social resources-products**, on the basis of which 12 more spheres of social production arise, which will be considered in general in the next, special chapter. The spheres of social resources-products are **People**, including the entire population, all people from birth to death; **Information**, including all knowledge, beliefs, emotions and feelings without any differentiation; **Organizations**, including all methods of unification, order, organization and management of all resources in the process of their production; and **Things**, including the totality of all created artificial material goods and services. In short, these spheres will be designated by the abbreviation: PIOT.

In short, the three Planetary Natures: Physical, Organic, and Social are designated by the abbreviation PNPOS.

5. FACT-6. The Planetary Law of "Equally Necessary and Sufficient Spheres" (ENSS) of the planet's existence of all natures

After briefly revealing the planet's nature and its sphere, the following fundamental conclusions can be made.

1. All three planetary natures are inextricably interconnected with each other and naturally occur in their genesis sequentially, in evolution, one from the other: organic - from the physical, social - from the two. The existence of each of them depends on and is determined by the existence of the others.

2. The universal dependence of natures and the existence of each of them in their immanent harmony is structurally determined by the planetary law of "**Equally Necessary and Sufficient Spheres**" (ENSS) of the Earth's existence of all natures. The spheres become constant structures and laws of evolution of each in the harmony of their three planetary natures as a whole.

Naturally, the interrelations, influences, and probabilities of dependence of different spheres in their harmony are different, the real degree of difference of which can be shown only by the corresponding mathematical statistics of planetary AI. Hypothetical in these relations remain the spheres of organic nature, but completely 100% and obvious in these relations are the dependencies of the spheres of physical and social nature.

Let us consider the universal attributes of the ENSS objective law for all natures, first of all for physical and social, on which all subsequent chapters of our Primer are based.

The ENSS first attribute is the equal necessity of each of the physical spheres, from the "quaternion of EWAS" for the existence, life of all spheres of the other two natures, expressed by the Pythagorean fundamental truth: "**Quaternion is an inexhaustible source of life**" on Earth. The equal necessity of each of the social spheres of PIOT is similar for the social nature, which is considered in the following chapters.

The ENSS second attribute is the joint sufficiency of the "quaternion of EWAS", which is determined by their equal necessity. Together, the ENSS attributes constitute the structural "quaternary of EWAS" as the eternal source of inexhaustible life on the planet, as defined by Pythagoras. The same is true for the spheres of social nature.

The ENSS third attribute is the constancy, the eternity of this law for the Earth, encompassing, ordering, and limiting the endless chaos with the struggle of historically transient, countless internal, sectoral, and local changes of each of the four spheres of the EWAS and each of the PIOT four spheres of social nature.

The ENSS fourth attribute is a single spherical planetary structure and objective organization ("order") of the Earth's three natures' internal harmony, but substantially different and specific in the quality of the spheres of each of these natures. The three natures' spheres substances are qualitatively incomparable, just as the inanimate, the living, and the rational are incomparable, but, nevertheless, they are inseparable and harmoniously interconnected.

The ENSS fifth attribute is the planet's all natures' substantial spheres limitation to four, which for the physical spheres was brilliantly noted by Pythagoras in his fundamental "quaternion", which can be considered the beginning of qualimetry and digitalization of spheral thinking. However, the number of substantial-functional spheres, i.e., spheres that ensure the functioning of substances of more highly developed natures, for example, social, reaches 12. They are considered in our Primer following chapters.

The EWAS equal necessity of each sphere for life on Earth is obvious to everyone, because the absence, "zeroing" or disappearance of any of them makes biological and social life as a whole IMPOSSIBLE. Each organism, including humans, cannot live in the absence of at least one of the EWAS physical spheres. There is scientific data on how quickly a person, people dies in the absence of air, water, food, and sun in different conditions. Every thinking person can imagine this sad result for themselves and all living things with the "disappearance-zeroing" of any of the EWAS spheres on our planet in a thought experiment. The equal necessity of each of the EWAS spheres, the equal dependence of life on each of them systemically determines the SUFFICIENCY TOGETHER of these four substantial spheres of physical nature for life on Earth.

Therefore, the EQUAL NECESSITY AND SUFFICIENCY OF THE SPHERES (ENSS) of the EWAS is an eternal and enduring law of any and all life on our planet. At the same time, it constitutes humanity's fundamental objective law for its entire life, which is the same for its entire history, for all people, ethnic groups, and nations without exception, in the substantial specificity of the four (PIOT) social ENSS. Although the ENSS law of social nature is not as obvious as the physical nature spheres, everyone can be convinced of its objective truth in a thought experiment of the absence, "zero" of any of the PIOT social spheres, excluding life, the existence of society, and human. In human history, there has not been and cannot be a society with "zero" of at least one of the PIOT resources that also proves the objective truth of the ENSS law for social nature, for humanity, and all its nations and ethnic groups. On this account, there can be no confrontation or wars between them, if they can realize it in the holistic, spheral thinking (ST), because it is inaccessible in principle to fragmentary, disciplinary thinking (DT), like "*the elephant for the blind*" in the well-known parable. **Just as the elephant does not exist for the blind, so for people, humanity with DT, the ENSS objective planetary law does not exist**, the same for all nations, excluding wars, violence, without the knowledge of which it remains only to fight in the DT cognitive trap and militaristic shackles. The ENSS law of society, humanity is revealed in more detail in the corresponding chapter below.

As a result, we can conclude that the ENSS objective planetary law, with all its complexity, multidimensionality, and multi-level nature, inaccessible to DT, is simple and obvious as a historical fact of thoughtful observation for every unbiased, thinking person. In this case, it intuitively rises to the highest level of the integral ST, as it happened with similar thinkers from ancient times, starting with Pythagoras, and maybe earlier, whose spheral thoughts will be revealed to us later. This is the ST's first law, like all scientific laws/truths integrated by the ST, unites humanity into one family of peoples and individuals with one, spheral source of life and one, spheral destiny on the planet as a single, spherally organized in harmony and in the eternal peace of a completely safe home for all nations.

Another conclusion-assumption is that the ENSS objective law will become the fundamental scientific basis of an equally scientific and fundamental unified planetary multipolar geopolitics, recognized by all states, all leaders, and all international organizations, starting with the UN and UNESCO. This ENSS integral, spheral geopolitics will become the main international and diplomatic instrument for the implementation of the long-term strategy of humanity's multipolar Perpetual Peace based on the corresponding culture and science. It will ensure the dismantling of the MAD "*nuclear volcano*" and the exit from the deadly NC into a single harmonious and nonviolent civilization jointly created by humanity's entire family of peoples, the main, spheral structures and attributes are revealed further, starting with its ST.

6. There is no place for war and violence in the ENSS's lawful harmony of perpetual peace from God

There is no place for war and violence in the planetary harmony of the universe's natural spheres, created by God for **perpetual** peace. They remain the pathological destiny of their own, militaristic punishment of those ignorant and greedy people, who have despised God and His spheres' harmony for **perpetual** peace. These people in history always remain on a transient, local, and insignificant scale.

God created the universe and our planet as eternal spheres so that enlightened and kind people, together with their faith in the good providence of God, would create in love and nonviolence the harmonious evolution of **perpetual** peace.

In the NC transient small scale, created by the militaristic disciplinary thinking (DT), which has expelled God and His harmony of spheres, inaccessible to DM, the seeds of the holistic, spherical thinking (ST) of past civilizations are preserved, integrated, and revived. Only ST is capable of enlightening humanity with the true and holistic scientific knowledge of the harmonious eternal spheres for God's perpetual peace, together with love and faith in Him.

Chapter 4.

Spherical way of Scientific Thinking in the Cognition Evolution. Conscious Path of Perpetual Peace for Full Security

“We should require [seek, create] a substantially new manner of thinking if mankind is to survive.”

Albert Einstein

In Chapter 2, the fact of substantial inaccessibility and impossibility of knowing perpetual planetary peace in narrow, disciplinary thinking (DT), into which it, due to its fragmentation and fragmentariness, does not fit, like God, was revealed and substantiated. This proves the absence in DT of any holistic scientific knowledge about peace, which both its 75 thousand disciplinary sciences and all its academies and encyclopedias have been deprived of for almost three thousand years of its existence. The main conclusion about DT: its disciplinary “*many knowledge*”, on Heraclitus, of many parts “*does not teach mind*”, thinking and knowledge of its holistic, perpetual planetary peace that turns out to be threatening the humanity survival in the nuclear civilization (NC), which has shackled it in the inevitable MAD nuclear shackles for 80 years since 1945. The DT's substantial narrowness makes it fundamentally and deeply militaristic, which is proven by its entire history over thousands of years.

Chapter 3 revealed and substantiated the fact of the spherical, holistic substantial essence of perpetual peace, conditioned by the spontaneous, natural harmony of all fundamental natural spheres of our planet. The substantial spheres' harmony, determined by the ENSS planetary law, excludes war and violence between them, which constitute only a temporary, local, and transient social pathology of some militaristic epochs and civilizations in the humanity history.

This chapter is devoted to disclosure the structural essence and key attributes of the “*substantially new*”, holistic spherical thinking (HST). It is the only adequate one in its integrity of spherical substantiality for understanding and scientific knowledge of humanity's perpetual peace in an inseparable synergistic unity with religious faith in its culture. Perpetual peace is embodied in its still unknown, spontaneous social actors (spherons). It will be embodied in their spherical, peace-loving organization, consciously, according to the peace science, in all social institutions, inaccessible to the militaristic DT and all its social institutions.

Since this chapter in our Primer begins the implementation of Einstein's historical testament “*to require [to seek, to create] a substantially new manner of thinking*” for the “*humanity survival*”, as its actual categorical imperative, without any deviation from it in the form of “*if it wants*”.

1. FACT-7. Evolution of the Thinking Ways

The impossibility of knowing perpetual peace in the sectoral DT, which, at best, has access only to its separate and disparate “*peace researches*”, the knowledge of which does not teach to the peace mind as a whole, raises the question of the thinking ways evolution and determining that from them is possible for it. This question formulation immediately rejects the familiar and false notion that DT is the highest level of human intellect. No, in reality, this is not so at all, which is supported by many facts, of which we have mentioned only a few.

The evolution of thinking is evidenced by many facts and scientific studies, for example, the concept of the birth of DM from mythological thinking in the process of a long, at least 6 centuries (8-2 centuries BC), as a result of the “*first axial age*”, put forward by Karl Jaspers. He did not reject the possibility of the “*second axial age*”, i.e., the birth of a new way from DT. Our Primer for this chapter is dedicated to it.

In disciplinary science (DS), three qualitatively different historical modes or ways of human thinking in their epistemological substance have long been known and studied: primitive, mythological, and scientific, to which thousands of studies are devoted. This evolution proves **that scientific branch thinking is far from being the pinnacle, not the ceiling, and not the highest in its abilities and possibilities, path of thinking**, knowledge, and consciousness.

The primitive, pre-logical thinking/consciousness is limited to the knowledge of narrow phenomena and objects “*here and now*” by the intuitive but still reliable universal method of trial and error. It does not have the tools for preserving and accumulating the achievements of its empirical experience, except for the oral transmission of knowledge from one generation to another, before the advent of writing. The fundamental studies of primitive thinking belong to the French philosopher and ethnologist Levy-Bruhl and his followers. They were initiated by the American anthropologist L.G. Morgan.

Mythological thinking arose from the primitive and evolved to the level of generalizing observed phenomena through the forms of their divine personification, when phenomena incomprehensible in their essence were explained in understandable images of numerous anthropomorphic gods who personified the stability and regularity of these phenomena. Famous researchers of this perspective include Claude Levi-Strauss, Carl Jung, and Anatoly Losev, among others.

The scientific, disciplinary thinking (DT) arose from mythological thinking as real facts of separate segments of nature and sectors and branches of society accumulated. They were generalized in the corresponding mental concepts, in which the experience of observing them was recorded and consolidated. The conceptual generalizations ensured the penetration of knowledge into the depths of cause-and-effect relationships and the preservation of this knowledge in writing within scientific works. The first of these is recognized as Confucius's chronological record, "*Springs and Autumns*" (Chunqiu), which covers the period from 722 to 481 BC. The famous researchers of this thinking are Jean Piaget, Lev Vygotsky, Lev Wecker, and many others.

It is essential for us to emphasize the very fact of the thinking ways evolution, without delving into their depths, in order to understand that it has not stopped and has not ended at the level of the dominant DT today, but has continued, albeit very slowly, for millennia and does not stand still.

Over the last two centuries, starting with the synthetic thinking and pure reason of the I. Kant, through the spheres of the production process of A. Smith, through the types/spheres of social production of K. Marx, through the spheres and varnas/spherons of Mahatma Gandhi, through the integral and genetic sociologies of M. Kovalevsky, P. Sorokin, T. Parsons, through the four spheres of society of A. Toffler, through the tetradic macrosocial structures of F. Braudel and P. Bourdieu, through the spherology of P. Sloterdijk, through the theory of everything of N. Rescher, K. Wilber, through the social philosophy of the four spheres and resources of social life in the USSR Marxist tradition from N. Bukharin and N. Kondratyev to V. Rozhin, A. Uledov and V. Barulin, including many others, thinking has been developing towards a new image/way of holistic and transdisciplinary, spheral thinking. The concepts of these and similar thinkers are analyzed in our university's manual, "*Sociology for Pragmatists*." SPb. 1999. 376 p: <https://peacefromharmony.org/docs/sociologiya-dlya-pragmatikov.pdf>

The nature and society holistic vision is achieved not at the level of fragmentary, sectoral, **essentially torn disciplinary thinking** (DT), but only at the level of **spheral, holistic thinking**, which possesses knowledge of such of its constant spheres/parts, without which the whole does not exist and which constitute it always and everywhere, while it exists. Many different thinkers undertook spontaneous and intuitive attempts at spheral thinking, or a spheral approach to nature and society, during the DT era.

Thus, Mahatma Gandhi in his book "*My Religion*", 1955, writes about the inseparability and interpenetration of the four spheres of social life: "*You cannot divide social, economic, political and purely religious work [spheres] into watertight compartments.*" https://www.mkgandhi.org/my_religion/29spheres_of_life.php

One of the first conscious attempts to build the spheral, holistic thinking at the level of macrosociology is undertaken in our book "*Spheral approach. Philosophy. Democracy. Market. Man*", 1992, In it PHILOSOPHY symbolizes the information sphere, DEMOCRACY - the organizational and political sphere, MARKET - the economic sphere and MAN - the social sphere. The author began to develop spheral thinking systematically since 1975.

A more detailed general characteristic of spheral thinking is disclosed below and in the Primer's subsequent chapters. Now we can build, for initial orientation in the evolution of thinking, the fundamental model of four of its named ways known in the history of humanity. This model illustrates the fact of their continuous evolution in the direction of expanding the objects and methods of cognition in each of them on the levels of its generalization from the narrowest to the broadest, holistic, primarily planetary objects. The model in Fig. 7 reflects the process of a gradual change in thinking priorities, preserving all their acceptable elements at higher levels of thinking.

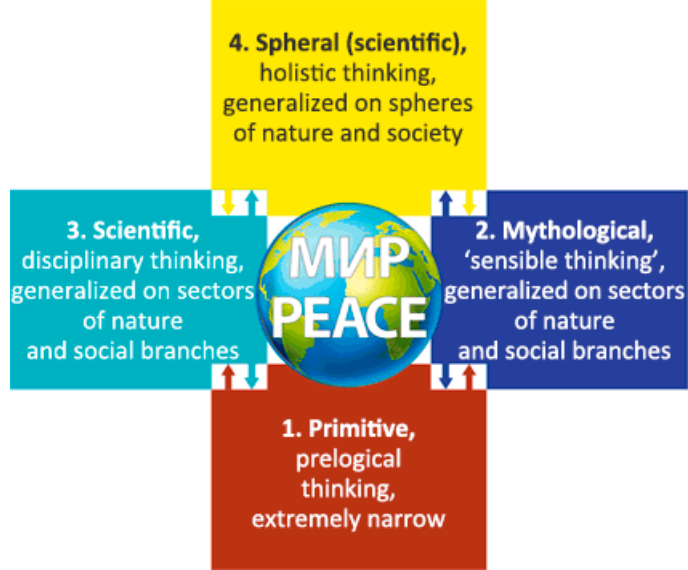


Fig. 7. Evolution of Humanity's Ways of Thinking

Each way of thinking, within the limits of its capabilities and abilities, created its own accessible knowledge about the planet as a whole and humanity's pursuit of perpetual peace. But their scientific, holistic knowledge is accessible only to spheral thinking, which creates the peace science presented in our primer. The substantial, spheral integrity of knowledge is the main difficulty in comprehending the fundamental feature and **unique cognitive superiority of the spheral way of thinking among all others**. Without running ahead, here we will limit ourselves to revealing only the general structure and logic of the substantial spheral way of thinking and its key tools.

2. The Spheral Thinking Structure and Logic as a Full Security Condition

The substance, essence, structure, and logic of holistic spheral thinking (HST), as well as its language, vocabulary, and terminology, are determined by its key category, "sphere", which was first introduced by Pythagoras in rational thinking. However, it remains undefined in the context of humanity's planetary vision and is limited to a narrow, primarily geometric use. The HST's comprehensive structure is composed of 16 constant social spheres, grouped into four constant spheral groups, which are illustrated on the "Humanity Perpetual Peace Culture" map and detailed in the following chapters. The structural order of spheres and their groups in the HST is expressed by its spheral logic, in which the PIOT resources substantial spheres determine the quality, structure, and attributes of all other social spheres groups in their following sequence and the shortest list.

1. **Resource spheres:** People, Information, Organization, Things, abbreviated PIOT.
2. **Processes spheres:** Production, Distribution, Exchange, Consumption, abbreviated PDEC.
3. **Spheres of production/life:** Sociosphere, Infosphere, Orgsphere, Technoecosphere (economic), abbreviated SIOT-spheres.
4. **Spherons,** spheres/parts of the population employed in the production spheres: Sociospheron, Infospheron, Orgspheron, Technospheron, abbreviated SIOT-spherons.

In general, spheral logic is determined by the law of "**Equally Necessary Sufficient Spheres**" (RNSS) of society in the social dialectical methodology of the whole-parts, which is supplemented by the category of "**holons/spheres**" to distinguish fundamental, constant parts from sectoral and other transient parts. Each of the 16 societal, fundamental spheres is equally necessary, i.e. among them there are no "primary, generative" and "secondary, derivative", since the absence, "zero" of any of these spheres excludes the life and existence of any social object from an individual and family to a country and humanity. This is verified and proven on any social object using the corresponding thought experiment. The equal necessity of 16 societal spheres makes them sufficient for the life of an individual and humanity. Therefore, the spheres are special, integral parts, "holons" (a term introduced by A. Koestler in the last century), which are constant and distinct from all other parts that arise and die within each sphere of society throughout its history. But the substantial spheres/holons differ from each other as substantially (PIOT) and functionally (ALL OTHERS,) priority that is illustrated in the following chapters.

In the HST structure and logic ensured by the ENSS law, which constitutes the harmony and nonviolence of social spheres, excluding wars and violence between them, the essence of perpetual peace and its various states in different societies and eras is revealed, depending on the transient degree of their

harmony. The harmony degrees are expressed by the measure, equilibrium, balance, and proportion of social spheres in their statistics (below). This is the "*Perpetual Peace Science*" (PPS) basis, which is most briefly disclosed in our Primer.

In the history of HST, three main stages of its emergence within DT can be distinguished. **The first stage is dispersion**, including scattered spherical cognitive achievements, starting with Pythagoras and the like in different civilizations of humanity over the past almost 3 thousand years, the most important of which are considered in our Primer.

The second stage is axial, opening the "*second axial time*" in the formation of HST, the beginning of which can be attributed to I. Kant's "*Perpetual Peace*" is based on a constant social nature and the corresponding cognitive spherical achievements considered or mentioned in our Primer.

The third stage is integrative or systemic; it opens with the PPS, uniting in synergy all known and accessible spherical achievements of the HST formation's past stages, as considered in our Primer. Of course, this is only the first scientific attempt to analyze the HST formation, and it is still far from perfect. It still has everything ahead!

The structural harmony spherical logic of the peace science constitutes the first, substantial instrument of spherical thinking, ensuring the creation of all its other instruments, which are considered in the following chapters. The spontaneous formation of spherical science and thinking within disciplinary science and thinking began long ago, dating back to Pythagoras. Although the laws governing their formation in spherical logic have not yet been studied, they are implicitly expressed in the interdisciplinary research processes that have become a priority in our time and will inevitably be recognized and utilized in the context of HST and its peace science.

This is the primary channel for the HST's birth and formation of its science, originating from DT. The superiority of HST is ensured by its holistic and substantial integration in interdisciplinary research, whereas DT is limited and provides only a narrow, mechanical connection of its fragmentary parts.

The HST formation was embodied in the spherical achievements of the humanity geniuses, which remained misunderstood in history: the Pythagoras "*Spheres Harmony*" (6th century BC), the Kepler "*World Harmony*" (16th century AD), the Gandhi "*Varnas/Spherons*", the Vernadsky, Chardin and Leroy "*Noosphere*", the Sloterdijk "*Spherology*" (20th century) and other "*paradoxical and crazy*" examples by the narrow DT standards. "*On the shoulders*" of these geniuses, by means of synergistic integration of their enduring achievements and truths, the spherical "PPS" is being built, primarily in the GGHA, in the last 20 years. Vladimir Vernadsky best expressed their paradoxical nature and "madness" for traditional DT: spherical thinking is "*not a crisis that excites weak souls, but the greatest turning point in the thought of humanity, occurring only once in millennia.*" HST is the birth and the next, fundamental Rubicon of a new, better future, with a scientifically conscious *perpetual* peace, as envisioned by Kant, as humanity's complete security in our century, based on harmonious, nonviolent spheres and consciously embodying them, as revealed in the following chapters.

It is the HST with its integrity and peacefulness that constitutes the highest superiority of homo sapiens among all forms of planetary life, embodied in the corresponding civilization. It is inaccessible to **DT, which is neither capable of shaking HST** nor of mastering its key law of ENSS and its spherical substance in all its planetary truth. This is an indisputable historical fact. However, it is capable, through interdisciplinary research, of achieving equal integration with it as its indisputable base of disciplinary data, accumulated over millennia.

3. Integration of the religious faith truths and the spherical thinking science

The religious faith and its highest moral values are unacceptable, do not fit in, and contradict only the DT, fragmented today into 75,000 DS. Still, they do not contradict and are related in their integrity to the science of peace. The religious values and truths, tested over thousands of years, constitute a necessary attribute of the HST and its peace science, overcoming the long-standing confrontation between religion and traditional, disciplinary thinking and science, the narrowness and fragmentation of which were unable to accommodate the integrity of God. In the field of peace science, religion and science complement and strengthen each other, ensuring their more effective development and the social significance of both, which is weakened by their opposition and confrontation. Their cognitive complement is that the peace science subject is limited to planet Earth within its spatio-temporal framework of the Universe.

In contrast, the subject of faith is God, eternal and infinite in space and time, encompassing His creation of the Universe's spheres, which are devoid of such boundaries. Therefore, peace science, like any science, is limited in its subject matter and requires the necessary cognitive supplement of faith in God as

the creator of the Universe's spheres, including the Earth's planetary spheres. Any part cannot exist outside the laws of the whole, neglect of which threatens this part with destruction for internal and external reasons.

Suppose the Earth and its Solar system in the Universe are parts of His absolute, eternal creation, inaccessible to the limited in space and time knowledge of humans that as noted by Kant. In that case, it is extremely short-sighted and presumptuous for branch science and DT to deny faith and reject cooperation with religion only because their truths are too narrow and shallow for the Universe. Infinite truths do not have and cannot have confirmation through always finite scientific facts. Still, they are confirmed by the many thousands of years of human experience in each of the world's major religions. They cannot be discounted from human knowledge and eliminated from it. Suppose DT and its sciences, due to their narrowness and fragmentation, are powerless to recognize and utilize the truths of faith. In that case, HST and its perpetual peace science are adequate for both recognizing and utilizing the truths of religious faith. The first of them is the "**Golden Rule**" of all religions, affirming the nation's perpetual peace, which is the basis of analysis for both our peace science and its Primer, as presented in the first chapter. https://peacefromharmony.org/?cat=en_c&key=1255

The disunity and hostility of science and religion practically nullify their fundamental peacemaking ability, the voice of which, in strengthening peace, in the search for its new forms and instruments, is either very weak, as in pacifism, or completely inaudible and silent, especially in science.

Therefore, moral values and maxims of religions constitute a necessary component of HST and its peace science. As a result, spheral scientists remain believers, moreover, consciously and convinced believers

In their science. As well as believers, but not in their narrow DN, but in their holistic worldview, were all large-scale scientists of the past in humanity's entire history. They exclude any atheism as a vice, especially the violent and terrorist "**militant atheism**" of permissiveness, destroying religious temples and clergy as the DT crime. **They reject atheistic permissiveness as a common enemy of all religions and humane science.** They are incompatible with the "Godlessness of Science", which opens a loophole for fake, confrontational, and militaristic DN, as well-revealed in the previously mentioned book and article by Mark Keenan, "**Godless Fake Science**" (https://peacefromharmony.org/?cat=en_c&key=1255). Such disciplinary science leads and provokes the Huntington's "**Clash of Civilizations**", while a holistic, spheral peace science with the religious truths of God, His love, and harmony leads to strengthening peace between religions, to strengthening their peacemaking and scientific justification of their ecumenism. Only HST and its peace science are capable of proving and embodying Einstein's great truth that "**science without religion is lame [limited, narrow and 'godless'], religion without science is blind [does not see the scientific instruments of its strengthening]**". The idea of the necessary connection, complementarity, and mutual mediation between religious faith and science is expressed in the innovative philosophy and theology of Teilhard de Chardin.

Many modern thinkers, for example, the American philosopher Ken Wilber in his integral approach (https://peacefromharmony.org/?cat=en_c&key=1234), speak about the need for an alliance and "**seamless integration of religious tradition with modern science**". The peace science is integral to the highest degree; therefore, it has the highest abilities and competencies for cooperation with religions based on spheral thinking from God. This is illustrated in detail in our 2021 collective article with Professor, Nobel laureate D. Avery and other coauthors of the GGHA: "**Spherons: Nonlinear Sociogenetic Reality And Verified Truth Of The Spheronics Megascience**" (https://peacefromharmony.org/?cat=en_c&key=1019). Here, the peace science spheral axiology together with the religious values of God, His peace, love, truth, and morality is revealed, which is illustrated in Figure 8, albeit in the first approximation, far from perfection, but expressing the unity of faith with the science of the world.

GOD: Love, Truth, Morality, Peace Of the Infinite U N I V E R S E			
HAPPINESS of the SPHERONS/HUMANITY/HUMAN			
Love	Truth	Moral	Peace (global)
Equality	Partnership	Disarmament	Brotherhood
Harmony	Freedom	Justice	Spheronocracy
Nonviolence	Beauty	Good	Life (in sustainable prosperity)

Fig. 8. The Spherons Axiology in Perpetual Peace Science.

Many scholars have written about the pervasive and inspiring role of religion in all spheres of social life, but perhaps the genius of nonviolence and luminary of spheral thinking Mahatma Gandhi, whose spherons are dedicated to a special chapter ahead, did it best. In the book "**My Religion**", he writes that the religious sphere and its ahimsa, nonviolence, permeate all four spheres of public life: https://www.mkgandhi.org/my_religion/29spheres_of_life.php.

"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.. ... [Religious] ahimsa [nonviolence] 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." Further, he considers it in the social sphere - https://www.mkgandhi.org/my_religion/30social_sphere.php. In the economic sphere - https://www.mkgandhi.org/my_religion/31economic_sphere.php. In the political sphere - https://www.mkgandhi.org/my_religion/32political_sphere.php. He unites all of them on their common religious denominator of God as the supreme creator of social life in all spheres.

Therefore, in the HST culture of perpetual peace, in contrast to the DT and its 75 thousand disciplines, religious faith and scientific spheral knowledge/truths are inseparable, which constitutes its highest dignity and will ensure in the future its practical universal embodiment by humanity. It will be identical to the implementation of complete security of all nations without exception, inaccessible to the past millennia of the DT and its militarism until now.

Chapter 5.

Social Nature Spheres of the Social Production and Perpetual Peace. Statics.

Man always lives in spheres.

Peter Sloterdijk

The social nature of existence integrity, as well as other natures of the Earth, is subject to the universal planetary law of “*Equal Necessity and Sufficiency of Spheres*” (ENSS), revealed in Chapter 3. But since all spheres of society are not of natural, but of rational, artificial origin from homo sapiens, then their spherical logic of the society ontology, existence acquires a rational, artificial, i.e. man-made human character.

Based on many studies starting with the classics works of English political economy, primarily Adam Smith, David Ricardo and Karl Marx, French sociology, starting since Charles Montesquieu and Auguste Comte up to the works of Nikolai Danilevsky, Maxim Kovalevsky, Vladimir Vernadsky, Max Weber, Mahatma Gandhi, Alexander Bogdanov, Karl Jaspers, Pitirim Sorokin, Nikolai Kondratyev, Ludwig von Bertalanffy, Talcott Parsons, Fernand Braudel, Alvin Toffler, Jürgen Habermas, Pierre Bourdieu, Peter Sloterdijk and many others*, directly or indirectly concerning the fundamental spherical foundations of human existence, it can be stated that they came close to differentiating the four social ENSS. It was their great historical mission as thinkers in the development of human thinking.

But within the disciplinary thinking framework, they were unable to rise to the level of conscious, spherical generalizations in the corresponding integral, transdisciplinary categories and concepts. According to our synopsis format, we will not delve into these studies, their terminological diversity, and the argumentation that we have considered in many works. Our map of the sixteen ENSS of planetary society in Figure 9 (below) deepens and generalizes the spheres of humanity's social life and productive substance, which can exist only in states of perpetual peace through the spontaneous or conscious harmony of these constant, eternal spheres, **and in no other way**. They are classified into four necessary and sufficient groups of social spheres: resources, processes, structures/spheres, and states/spheres. Their minimal justification as historical facts or truths is provided below.

* Most of these and other works of the spherical thinking outstanding predecessors were analyzed in a number of our books, primarily in “*Sociology for Pragmatists*” (1999), “*Tetrasociology*” (2002), “*Tetrasociology*” (2003), “*The ABC of Harmony*” (2012), “*Global Peace Science*” (2014, 2016, and 2017), and many other books and articles presented in the bibliography and published on the GGHA website: <https://peacefromharmony.org>.

1. FACT-8. ENSS of the PIOT social resources

The reasonable and collective/social way of person/society autopoiesis ensures the creation of such spheres of vital artificial resources that he does not find in nature. As a result of a long and spontaneous social selection, four ENSS of artificial social resources are constituted: **PEOPLE** (population), **INFORMATION** (any knowledge of all forms and scales), **ORGANIZATION** (ordered communication, uniting resources to produce new ones), **THINGS** (material goods and services created by human). Abbreviated as PIOT. PIOTs are eternal, integral holons of society/humanity.

An infinite number of the PIOT historically transient types, parts, enterprises, and branches, which in spherical science are called **PARTONS**, compose the PIOT eternal resource spheres of society. The continuous change of infinite partons is an immanent way of preserving their eternal, constant holons - spheres. Figuratively speaking, the holons/spheres are constant shores of the countless partons continuously changing flows in each sphere. If the flows disappear, their banks will disappear too. And if the banks disappear, then all the streams will dissolve, disappear in their boundless and disorderly chaos. Therefore, they cannot exist without each other.

The PIOT resources are the most effective tools and methods for accumulating and preserving the necessary and sufficient sources of social life and energy of a person or society, without which they remain at the biological animal or flock level. Each new generation of people finds a certain quantity and quality of accumulated PIOT, previously created by past generations as an initial platform for their lives, to expand their composition with new types of resources and improve the quality of their existing ones. The process

of expanded autopoiesis of the PIOT resource spheres constitutes the eternal production substance and substrate of the person's or humanity's entire life and history. It constitutes eternal sociogenesis as a whole throughout the entire social space and time. Therefore, the PIOT spheres are **substantial social spheres that** determine all other social spheres.

In this sociogenesis process, each of the PIOT resources has **substantial** spheres that are equally necessary in conjunction with other resources and only together constitute a sufficient complex. In the absence or zeroing of any of these resources, the life of a person, any community, and society as a whole is impossible that as proven by a thought experiment **available to every** reasonable individual and society as a whole. Therefore, the PIOT spherical resources **are the eternal historical fact of social nature, their reality**. Awareness of this social resource ENSS reality is recognition of the **HISTORICAL FACT of their eternity in the holistic spherical thinking (HST) and in its spherical, macrosociological, and transdisciplinary perpetual peace science**.

2. FACT-9. ENSS of the PDEC social processes

The PIOT artificial social resources are created solely by society, with a social nature, and in no other way. Adam Smith defined the main stages of the life cycle of material resources: **production, distribution, exchange, and consumption**, abbreviated as **PDEC**. Then they were recognized as necessary and sufficient for all PIOT resources, without exception or doubt from anyone.

Indeed, if artificial resources are not created by either physical or organic nature, then humanity is forced to constantly **PRODUCE** them independently. Since their production is concentrated in the most favorable locations for them on the planet and countries, then the produced resources/partons must be **DISTRIBUTED** between them and their production cells. Since each of them is limited to the production of only one part of the resources or several of them, a strict need for the trade **exchange** of the created resources arises between enterprises and countries. Because initially each parton of the PIOT resources is produced with the final purpose of its use (without which it becomes unnecessary, and its production is superfluous), then the final stage of the creation of any of the PIOT parton resources is its necessary **CONSUMPTION**.

All stages and processes of creating any of the PIOT parton resources are necessary and only together sufficient in their life cycle. In the absence of or zeroing out any of these PDEC processes, the existence of PIOT resources and the life of a person and society as a whole are impossible. This is proven by a thought experiment **available to every** rational individual and society as a whole. Therefore, PDEC, like PIOT, is an eternal historical fact of social nature, its reality. Awareness of this PDEC social processes ENSS reality is recognition of the **HISTORICAL FACT of their eternity in the HST and its spherical, macrosociological, and transdisciplinary perpetual peace science**.

3. FACT-10. ENSS of the SIOT social structures

Each of the PIOT resources has its social nature, which is determined by its immanent laws, qualities, and attributes, irreducible to each other. The qualitative specificity of each PIOT resource determines the unique features of its life cycle, including the tools and necessary PDEC processes and technologies. These features, in turn, determine the qualitative, structural differentiation of their production eternal spheres. Four ENSS social resources of PIOT necessarily determine the corresponding ENSS social structures of their production. These are four structural spheres of SP, differing in technology as well as their subject and product. These are:

1. **SOCIOSPHERE**, the subject and product of which are PEOPLE.
2. **INFOSPHERE**, the subject and product of which is INFORMATION.
3. **ORGSPHERE**, the subject and product of which is ORGANIZATION/ORDER.
4. **TECHNOSPHERE**, economy, the subject and product of which are THINGS (material goods and services) of society. They are abbreviated as **SIOT, or spheres of society**. The law of ENSS of PIOT determines their natural necessity and sufficiency.

All structural spheres of SP, uniting the corresponding PIOT resources for their product, are necessary and sufficient for the life of an individual and society. In the absence or zeroing of any of these spheres of production, the life of a person and society is impossible. This is proven by a thought experiment **available to every** rational individual and society as a whole. **Therefore, the structural SIOT-spheres, as well as PIOT, which are produced in them, are an eternal historical fact of social nature, their reality. Awareness of this SIOT-spheres reality is recognition of the HISTORICAL FACT of their eternity in the HST and in its spherical, macrosociological, and transdisciplinary perpetual peace science**.

4. FACT-11. ENSS of the SIOT social actors-spherons

All structural elements of SP, including their resources, processes, and technologies, are dead and lifeless without people employed in them. People are the only resource of society, which simultaneously acts as its constant actor, creating all resources, processes, and structures of society, giving them social energy, movement, and social meaning through their employment in these roles. The constant groups of people or population who are employed in four SIOT spheres of SP and differ in their employment in these spheres are called **SPHERONS**. Spherons cover the entire population from birth to death. They constitute its eternal, fundamental social structure of society at all levels of society, as everlasting as its resources, PIOT and the SIOT spheres of production that produce them.

Four spherons are:

1. **SOIOSPHERON**, employed in the SOCIOSPHERE in the production of PEOPLE.
2. **INFOSPHERON**, employed in the INFOSPHERE in the production of INFORMATION.
3. **ORGSFERON**, employed in the ORGSPHERE in the production of ORGANIZATIONS.
4. **TECHNOSPHERON**, employed in the TECHNOSPHERE (economy) in the production of THINGS, all material goods and services of society. Together, in their dialectical system, they are designated as **SIOT-spherons** of society, determining the SP perpetual peace state with the dynamics of their internal harmony/disharmony, determined by their historically transient partons (classes, parties, elites, states, etc.). The natural necessity and sufficiency of the eternal SIOT spherons are determined by the ENSS of the society's eternal PIOT resources. The chapter below is devoted to the category of "spherons," which is the central category of the HST.

The SP spherons and spheres correspond to four ENSS of each individual: **BODY, WILL, CONSCIOUSNESS, AND CHARACTER**. They constitute the individual psychological genome of each person, which is structurally similar to the spherical social genome with corresponding individual needs, abilities, and other features. They together determine social needs, abilities, relationships, productive forces, productive labor, the effectiveness of social production, the status and roles of individuals in society, etc. They are analyzed in detail at the level of hypotheses in our books, "*Tetrasociology*" (2002, pp. 53-59) and "*The ABC of Harmony*" (2012, pp. 43-47), among others; therefore, they are not considered here.

The identity of the eternal, spherical structure of social spherons and each individual as a social being determines many corresponding categories and concepts of spherical thinking. These primarily include the following: spherical employment, spherical labor, spherical work, spherical efficiency, spherical quality of life and labor, spherical needs and abilities, spherical productivity, spherical productive forces, spherical surplus value, the SP spherical organization, spherical social equality, spherical social structure and stratification, spherical fractals, spherical governance and management and many similar ones, some of which will be considered below.

The ENSS law, defining equal social significance/necessity of the SP spheres with the same iron necessity, determines **SOCIAL EQUALITY OF SPHERONS**, who are employed in these spheres, covering the entire humanity population. The spherons equality is the primary non-economic, social source for accelerated growth of the OP, society prosperity, and perpetual peace in it that will be argued in more detail below.

The SIOT spherons constant social structure at all the SP levels, determined by the ENSS law, excluding any absolute absence or zeroing of any of the spherons that is proven by a thought experiment **available to every** rational individual and society as a whole, constitutes an **eternal historical fact of social nature, its reality**. Awareness of this SIOT spherons reality is **recognition of the HISTORICAL FACT of their eternity in the HST and in its spherical, macrosociological, and transdisciplinary perpetual peace science**.

Peter Sloterdijk, an outstanding German philosopher, at the end of the last century and the beginning of our substantiated the fundamentally simple conclusion "*Man always lives in spheres*" and uses the concept of a sphere for a symbolic description of almost all significant phenomena from God and the cosmos to the individual and his inner world. He dedicated to it the trilogy "Spheres" (1998-2004) of almost 3 thousand pages (https://peacefromharmony.org/?cat=ru_c&key=862).

If "*man always lives in spheres*", then they constitute a holistic, spherical, "substantial" way of being of a social man and humanity, which he does not notice, as a natural given to it by the natural planet nature. The cognitive disclosure of this only holistic way of his being in the SP, perpetual peace, social life, etc., immanently determines the birth and awareness of his "*substantially new manner of thinking*" (Einstein) - holistic spherical thinking (HST). Only it turns out to be the only adequate one for the integral, not torn apart by branches and disciplines, spherical social nature. Homo sapiens has not yet consciously reached this

level of thinking, but has come as close to it as possible under the pressure of the extreme objective need to survive in the MAD nuclear civilization and to overcome its all-consuming confrontation, threatening its survival as a species.

The social spheres find their generalized scientific expression on their macrosociological structural map in Figure 9 as the central and integrative part of the "*Conscious Culture (Faith + Science) of the Humanity Perpetual Peace*" general map on our book cover.

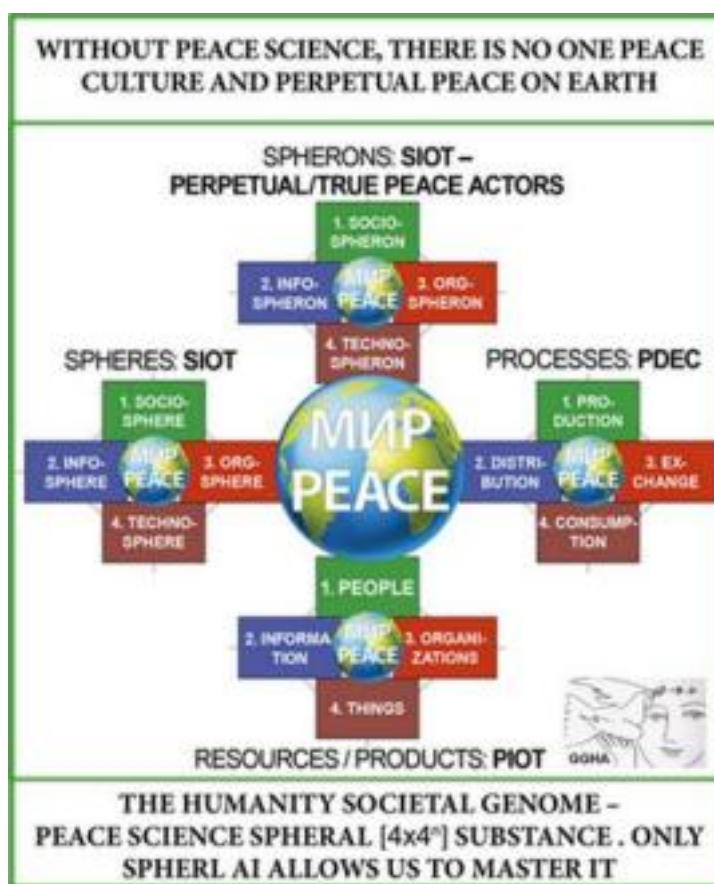


Fig. 9. Map of 16 social ENSS within “Perpetual Peace Science” in the HST: Perpetual Peace Culture Center

5. FACT-12. The Law:

"Conditions Identity for Production and Perpetual Peace" (CIPPP)

The humanity states/conditions of perpetual peace is inseparable from its only way of eternal life in the eternal and continuous process of social production (SP), which never stops for a second. All spheres of SP are spheres of perpetual peace, since the process of production is not carried out and cannot be carried out in a simultaneous state of war, when the participants in production kill each other. This is social nonsense, absurdity: there is no production in murder/war. And vice versa: all spheres of perpetual peace are simultaneously spheres of the humanity SP as its way of being. This is an eternal obvious fact, which is therefore not even mentioned as self-evident. Therefore, the spheres of SP and perpetual peace are inseparable and exist only thanks to each other that is confirmed in one way or another in this and all subsequent chapters. The *states/conditions identity of production and perpetual peace* (CIPPP) is a fundamental planetary immanent law of social being, spheral thinking and its Perpetual Peace Science (PPS).

Humberto Maturana, a Chilean biologist, and his colleagues, has proved the identity of social life with production as a special, conscious form of biological «*self-production, autopoiesis*». The biological, natural justification of the production substance and substrate of social life expands and deepens its scientific understanding, which classical political economy began to develop from the end of the 18th century. It continues and is extensively expanded in the updated socio-humanitarian disciplines right up to our time in the emerging spheral macrosociological thinking of a holistic, transdisciplinary scale.

6. The SP Spheres as spheres of the humanity perpetual peace

ALL groups of the social ENSS define the eternal, spheral logic of the human/humanity social life/SP and its perpetual peace through their spontaneously generated HARMONY, only the knowledge

and use of which will allow humanity to ensure perpetual peace, excluding all wars, armed violence **and peacefully emerge from an inexorably genocidal nuclear civilization today.**

There is no place for war and violence among the eternal and constant planetary spheres of social nature, to which the only state of perpetual peace, first discovered by the genius of Immanuel Kant, is adequate. He wrote: “*an armistice, a temporary cessation of hostilities [is not] peace, which means the end of all hostility... and destroys all existing causes of future war,*” constituting “*perpetual peace*” (https://peacefromharmony.org/?cat=ru_c&key=1099). Therefore, the concepts of peace and perpetual peace are identical in Kant that is perceived by us. However, since Kant, countless military armistices have acquired a real identity with peace, so we often use the term “*perpetual peace*” to distinguish peace from armistice/truce. He argued that “*the state of constant war... as a wild, lawless freedom*” is overcome by “*the compulsory laws of international law*” (ibid.) on the basis of “*the structure of human inclinations, the nature of which [guarantees] perpetual peace*” (ibid.). Thus, Kant sees the ultimate basis of perpetual peace in social nature. This fundamental idea is fully integrated and developed in our PPS, which excludes war and violence.

War and violence find their local, petty space only among historically transient, narrow and limited, temporary partons with disciplinary, confrontational thinking: nations, states, classes, corporations, parties, elites and other historically temporary "trifle". But they, possessing power and control over all spherical resources, are extremely important, a priority in small segments of social time, measured by the small measure of the population generations in the composition of eternal spherons.

Eternally warring in history the temporary partons, excluding perpetual peace, are content with its temporary surrogate - a truce, a break between their wars and preparation for their new wars. This was the case in the past and present century between three world wars, including the third one that is flaring up today with the irresistible threat of the MAD nuclear holocaust (Chapter 2).

The key categories of 16 social ENSS, reflecting the corresponding eternal historical facts, ensuring their fundamental verification constitute the systemic framework of spherical thinking guaranteeing the consent of all nations in perpetual peace on the foundation of this planetary, objective truth, uniform for all, excluding wars and violence. The considered spheres and corresponding categories, together with many concepts derived from them **constitute the mental substance of spherical thinking**, the social genome of human/humanity, the original cell of society at all levels and their single spherical logic in history.

A more detailed analysis of the key, innovative scientific category of spherons in spherical thinking, its origin, its integrative, holistic and transdisciplinary nature, as well as its fundamental significance for all socio-humanitarian sciences without exception in their unity is revealed in the next chapters.

Chapter 6

Gandhian Varnas/Spherons:

The Perpetual Actors of the Humanity Perpetual Peace

*Varna [spherons] is not ... a human invention, but an **immutable law of nature** - ... like Newton's law of gravitation... All varnas are equal... [It is] the law of life universally governing the human family... The world may ignore it today, but it will have to accept it in the time to come.*

Mahatma Gandhi

The measure of intelligence is the ability [and scale] to change.

Albert Einstein

The key place in the Peace Science (PS) is occupied by the "**spherons**" concept derived from Mahatma Gandhi's "**varnas**", which expresses the fundamental social structure of the ancient Indian civilization almost five thousand years ago, which ensured its flourishing and world cultural leadership for nearly a millennium. This is the "**Vedic civilization**" era of India, created by seven excellent, "divine" Indian sages "rishis" of mythological thinking, on the dating and essence of which there is no consensus in the disciplinary sciences, due to their inability, like the blind men near elephant, to consider large-scale historical phenomena as a whole. Therefore, we will not delve into it, but rather touch upon it briefly. Let us only note that the concept of ancient Indian varnas in Gandhi's interpretation as perpetual universal spherons-actors of perpetual peace, social production, and universal human history has gone through three stages. They are: Gandhian since 1927, Russian since 1970, and international in GGHA since 2005, which is reflected on the corresponding page of its history (https://peacefromharmony.org/?cat=ru_c&key=983).

In this paragraph, we will limit ourselves only to the qualification of Gandhian spherical thinking and its key concept of "**varnas**", expressing the subjects/actors of ancient prosperous India. Since the Gandhian "**varnas**", a long and painful conceptualization of the holistic spherical thinking of perpetual peace and humanity's nonviolence began, including the assassination of Gandhi. In PS, this concept is transformed into its central systemic category, "**spherons**", from which the conscious, scientific stage of conceptualizing spherical thinking begins, presented in a synoptic format in our Primer.

1. Gandhian holistic, spherical thinking of nonviolence and peace

The genius of Mahatma Gandhi, not yet fully realized by humanity, is that he was the first in history to practice intuitively the varnas spherical thinking of nonviolence as perpetual peace of the humanity social nature, which I. Kant first began to speak about, but whose name and ideas, it seems, remained unknown to Gandhi. Gandhi identified humanity's perpetual peace with the perpetual peace of its perpetual varnas, just as Kant identified humanity's perpetual peace with its social nature. Both brilliant, intuitive identifications as a whole **constitute** the spherical thinking core that crystallizes in the centuries of new time. Gandhi was the first, on an intuitive level, to define the four-spherical, eternal structure of human social nature as the foundation and source of its eternal peace and nonviolence. This structure is fully integrated into our Peace Science except for a few terminological corrections, and is fundamentally grounded in it. Each of the four spheres of humanity: social, economic, political, and religious (informational) is revealed from this perspective in his book "**My Religion**". This makes Mahatma Gandhi the first thinker on Earth who began spherical, holistic thinking of the humanity social nature, just as Pythagoras began spherical, holistic thinking of our planet physical nature, which disciplinary thinking is unable to understand and recognize.

The intuitive beginning of Gandhi's spherical thinking, not yet accessible to humanity in its dominant disciplinary thinking, suppressing all sprouts of spherical innovations, is clearly expressed by him at the beginning of the seventh section of this book (https://www.mkgandhi.org/my_religion/29spheres_of_life.php).

*«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. I am not familiar with any religion beyond 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.*

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 [nonviolence, peace] is **the attribute of the soul, and therefore, to be practised by everybody in all the affairs [spheres] of life.** If it cannot be practised in all departments, it has no practical value.» (https://www.mkgandhi.org/my_religion/29spheres_of_life.php)

Nonviolence and peace for Gandhi are the inseparable properties and necessities of each sphere; therefore, they constitute the property and necessity of all humanity as a whole. Another integral necessity and property of humankind is the fundamental, from nature and God, **equality** of the spheres and all people, as well as the varnas employed within them.

«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.** Whether born in India or 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 laborer. And I have fought against the Brahmans 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.» (https://www.mkgandhi.org/my_religion/30social_sphere.php)

The equally necessary and sufficient social spheres of Gandhi's intuitive spherical thinking are explicated and find conscious scientific expression in the adequate terminological language of the PS spherical thinking. Its language provides a modern, scientific interpretation of Gandhi's varnas as the only structural spheres and actors of his nonviolence and perpetual peace throughout humanity's history.

2. Gandhian Definitions of Varnas and Their Generalization in the Category of Spherons

Mahatma Gandhi first started writing about varnas in the articles of his newspaper Young India since 1927, which were collected and published in his book “**My Religion**”, 1955, in many of its sections, but most of all in Chapter 36 (https://www.mkgandhi.org/my_religion/36varna_caste.php). It is almost completely reproduced in our book, “**Gandhica**” (2019), and thoroughly analyzed therein (<https://peacefromharmony.org/docs/gandhi-nonviolence-of-spherons-gandhica-2019.pdf>). Therefore, we will limit ourselves in this paragraph to the most important conclusions from these sources. Gandhi defines the following key attributes of Varnas.

1. Firstly, varnas are categorically not castes of India, although socially unequal castes have arisen from socially equal varnas, as a result of their historical corruption by social inequality. This transformation transformed the prosperous India of the varnas into the most backward country of wild, unequal castes, which Gandhi expresses as an unambiguous objective truth. He writes:

«**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 adhere to the law of varna is largely responsible for both our economic and spiritual decline. It is one cause of unemployment and impoverishment, and it is responsible for untouchability and defections from our faith. Today, varna refers to the gradation of high and low. It is a hideous travesty of the original. We have distorted it today and have made ourselves the laughing-stock of the world. Therefore, when people disregard the [varnas] law, it leads to confusion of varna and ultimate disruption of society. Today, nations are living in ignorance and breach of that law, and they are suffering for it...If we Hindus sincerely reject the [caste] division into higher and lower, then we will heal from mutual envy and mistrust of other communities and at the same time heal them.» (https://www.mkgandhi.org/my_religion/36varna_caste.php)

This truth has been consistently rejected and distorted by modern disciplinary science for almost 100 years, in favor of modern inequality and militarism. In nearly all encyclopedias, varnas are identified with castes, thereby distorting and discrediting the harmonious reality of the ancient varnas and, along with them, the name of Gandhi. This is a gross lie and deliberate falsification, which we do not dwell on, because

our PSP's entire content refutes it. Not a single disciplinary ("blind", narrow) scientist is capable of a spherical generalization of varnas, because for them, spherical thinking does not exist; they do not know it, and if someone speaks about it, they will reject it as a chimera.

2. Secondly, according to Gandhi, varnas are not a temporary or subjective invention of people, but a fundamental, eternal, "**Newtonian**" law of the society prosperity, the highest advantage of which lies in the social equality of varnas, in the absence of their division into "**higher and lower**". This division turns varnas into their opposite, into castes that humiliate society and degrade it, ensuring its fall. Gandhi writes:

*"Varna is not ... a human invention, but an **immutable law of nature... 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... All varnas are equal, for the community depends no less on one than on another. Today, varna refers to the gradation of high and low social status. It is a hideous travesty of the original. Our ancestors discovered the law of varna through severe 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. **Although the law of varna is a unique discovery of some Hindu seer, it has a universal application**... 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."* (https://www.mkgandhi.org/my_religion/36varna_caste.php)

3. Thirdly, according to Gandhi, the law of the four varnas, employed in the four spheres of social production, is the law not only of ancient India, but of all humanity, to the understanding of which it will certainly come sooner or later. The Peace Science proves this at the beginning of our century. It recognizes the varnas of India, but in their everyday human existence calls them by the adequate name of "**spherons**" (employed in the spheres), which in it denotes the eternal, fundamental actors of perpetual peace and the humanity eternal social production in any of its transient historical states in their entire spectrum from prosperity to collapse and fall.

*«The Rishis [Vedic sages of ancient India about 4-5 thousand years ago] after incessant experiment and research arrived at this fourfold division, that of teaching, of defending, of wealth producing, and of manual service... Nonviolence [peace of the varnas] is the greatest force at the disposal of humanity. It is mightier than the mightiest [nuclear] weapon of destruction. It is always heroism, not the domain of cowardice. Nonviolence [peace] is the law of our life... Varna, thus conceived, is no man-made institution, **but the law of life that universally governs the human family**... Though the law of varna is a special discovery of some Hindu seer, **it has universal application**... The world may ignore it today, but **it will have to accept it in the time to come**. It ordains that everyone shall fulfill the law of one's being by doing in a spirit of duty and service that to which one is born."* (https://www.mkgandhi.org/my_religion/36varna_caste.php)

Thus, Gandhi's planetary generalization and scaling of ancient India's four varnas, understood by him as the eternal reality of humanity's eternal actors of nonviolence and peace in its four spheres, requires an adequate category of meaning to express this scale of Gandhi's generalization. The spherical thinking category of a similar level of scaling and generalization is the category of "**spherons**", which constitutes the core of both spherical thinking and its Peace Science presented in its Primer synoptic format and in this chapter. The relationship between these concepts is that **varnas are the spherons of ancient India, with their Indian name, and spherons are the varnas of humanity as a whole**, with their scientific name, which is common to all. Gandhi did not introduce a new concept of "**spherons**" for them; it was introduced by PS, spheronics, at the next stage. The central place and role of spherons in the spherical thinking of perpetual peace science made it possible to name this science with an adequate linguistic term: "**Spheronics**." Therefore, the terms: Perpetual Peace Science, Peace Science, and Spheronics are synonymous.

Let us add that the existence of civilizations similar to the "**varnas/spherons civilization**" of India cannot be ruled out in ancient history. The existence of a similar, nonviolent civilization that established complete equality and partnership between men and women, possible on social equality similar to the equality of the "**varna/spherons**" of India, is indicated by anthropological and archaeological studies of the ancient Crete so-called "**Minoan civilization**" by **Riana Eisler** and her colleagues (https://peacefromharmony.org/?cat=en_c&key=932).

The Minoan culture lived for more than a thousand years without wars, fortifications, and weapons. The disciplinary, confrontational humanity has studied in detail almost all of its wars, presenting its history as exclusively militaristic, but has ignored the study of rare, peace-loving civilizations, essentially erasing

their reality from history. The schools teach many historical wars, but know virtually nothing about cultures of peace and nonviolence, such as the Varna/Spheron civilizations of ancient India and the Minoan civilization of Crete, etc. This neglect will be overcome in the spherons innovative, nonmilitaristic history, which begins with the launch of spheronics as its planetary scientific methodology, unified and holistic for humanity without immanent disciplinary confrontations.

The formation of the "*spherons*" macrosociological category has gone through several stages. It began with the spherons idea as "*spherical classes*" employed in four spheres of social production, which arose in L. Semashko in 1975 (<https://peacefromharmony.org/docs/leo-semashko-spherical-approach-1993.pdf>). The introduction, explanation, empirical substantiation, and systematic use of the "*spherons*" new scientific, macrosociological category to designate four population clusters employed in four spheres of social production were presented by him in the GGHA fundamental book "*Global Peace Science...*", 2016, in its first three chapters on almost 150 pages (<https://peacefromharmony.org/docs/global-peace-science-2016.pdf>).

3. **Attributive qualifications of spherons in the peace science spherical thinking:** **General definition**

The spherons are an invariant and end-to-end social structure of the population of any historical societies in four equal, but spontaneous, equally necessary and sufficient clusters/spheres of people, differing in employment in one of the four spheres of social production, whose self-awareness begins with the emergence of their category and the development of their "*Peace Science*" on its basis. The list and explanation of approximately 20 fundamental attributes of spherons have been disclosed in numerous publications by the GGHA over the past 20 years and earlier. They are presented in the bibliography, the main ones of which are named above; these are the "*Global Peace Science*" and "*Gandhica*". Here, we will limit ourselves to a simple list of the key ones, all of which, by their holistic nature, and for the SP and perpetual peace, possess the best social characteristics that provide superiority over all partial social attributes of the DT. The superiority of some of them is revealed in the following chapters, especially the superiority of spherical AI as a cross-cutting digital planetary tool of new, spherical thinking and its Peace Science. List of the main attributes of spherons as the actors of the SP and perpetual peace: - **natural origin**

in social nature based on other planetary natures; (we can say, paraphrasing: "*God created spherons, everything else in human society is a product of their natural social creativity*"): - **universality**, coverage of the entire population, all people from birth to death; the main difference is in employment in the SP spheres;

- **single, social structure** at all levels of social nature from an individual to the humanity planetary noosphere, preserved as a social genome in all social changes;

- **social equality**, including equality of women and men in power;

- **tetradic, spherical set** of ultimate living spaces of individuals;

- **existential social harmony and nonviolence** in complete inseparability and equal necessary dependence on each other as good partners and members of one, friendly family; - **natural, perpetual peace of humanity**, at the conscious, scientific level of the "*spherons for themselves*" exclude and prevent all wars, violence, militarism, armed conflicts, any mental confrontation and social disharmony;

- **the highest possible efficiency and productivity of labor** in all spheres of the SP, its accelerated growth, which was spontaneously and intuitively demonstrated by the "*Chinese economic miracle*" example of Deng Xiaoping for more than 30 years. Ezra Vogel (2013) and Sergey Glazyev (2023) analyzed this. The GGHA analysis (2024) reveals that only from the position of the spherons and their HST can its profound mystery be solved, in order to repeat it that no one has yet succeeded in doing

(https://peacefromharmony.org/?cat=ru_c&key=1074, in Chinese: https://peacefromharmony.org/?cat=ch_c&key=8);

- **the best, superior to all others, end-to-end fractal organization of the SP** and its governance at the conscious, scientific level of the "*spherons for themselves*";

- **the spherons holistic, spherical surplus value entirety** and its fair, harmonious distribution between them and all their partons;

- **peaceful, harmonious democracy** and a political system of conscious "*spherons for themselves*", excluding any party confrontation, militarism, and dominance;

- **constitutional guarantee of full, 100%, spherical democracy** with the inclusion and consideration of the children's (~20-25% of population) interests through the "*Children's Suffrage, Exercised by Parents*" institution (https://peacefromharmony.org/?cat=en_c&key=211);

- **priority focus on the progress of fundamental digital and social technologies** in all spheres of the SP, on stimulating innovation in updating the technological structure of each of them; - **the highest efficiency of the spheral business and its spheral investments**, ensuring its superiority in all parameters of its integrity, its partial characteristics of DM (https://peacefromharmony.org/?cat=en_c&key=1190);

- **recognition superiority and priority of peaceful spheral AI (SAI)**, as well as its social end-to-end use as a single and universal instrument of perpetual peace, and the SP accelerated growth in harmony with the entire peaceful ecosystem, encompassing all its natural spheres, which human beings are capable of providing only with SAI, as seen in Chapter 10.

All of the listed and other attributes of spherons have been disclosed or touched upon in the GGHA for 20 years, only as a first approximation, figuratively speaking, by approximately 1% in their foundations. Therefore, they constitute a circle of subjects and tasks of fundamental research within the framework of the spheronics, spherons' Peace Science, endless development outside of dogmatism and scholasticism in the future in its academic institutes on a professional basis in each country and for each of them.

The spherons have no scientific and philosophical grounds for denying their objective reality, as an indisputable fact (**FACT-11 in Chapter 5**), conscious, holistic, and transdisciplinary knowledge of which is launched in Gandhian spheronics.

Social universality and objective, end-to-end reality of spherons is proven by world statistics in the GGHA book "*Gandhica*" (above).

The structural model of spherons in three versions, as a result of the chapter, is expressed in Figure 10.

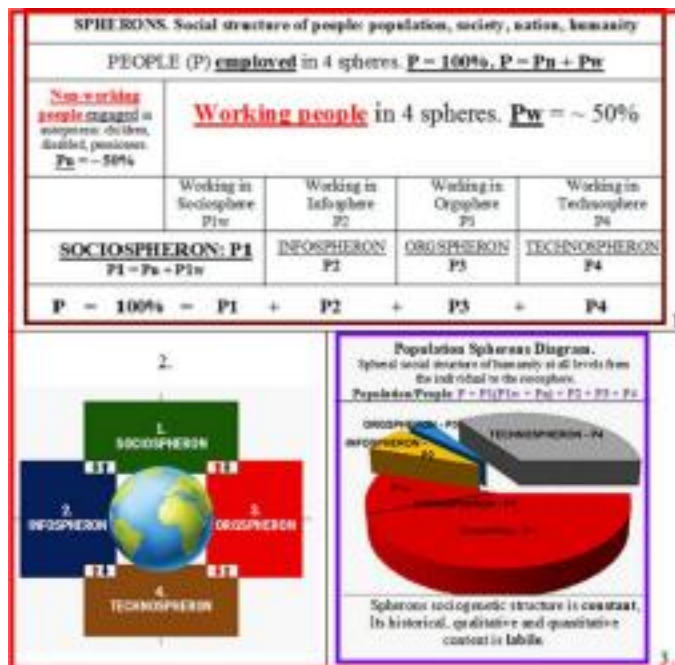


Fig. 10. The spherons eternal social structure of humanity at all levels

In conclusion, we emphasize the Gandhian category of "*spherons*" as fundamentally important in spheral thinking, in essence and origin. Without its scientific understanding and recognition as the only actors of perpetual peace, humanity will never come closer to it, frozen in its geopolitics at the level of endless local truces of continuous wars, which in a nuclear civilization inevitably lead 80 years to "*Assured Mutual Destruction*" (MAD) in the suicidal-genocidal third world war.

4. The spherons verification and their central place in the science and culture of perpetual peace

The verification of cross-cutting spherons at different levels and for various countries, as presented in world statistics, is detailed in our book "*Gandhica*" (2019). A general method for verifying spherons of any social object, from a school to a country and humanity, using statistics accessible to every literate person in 2 hours, is presented here (https://peacefromharmony.org/?cat=en_c&key=1125). The most fundamental statistics on the Russian spherons dynamics for 50 years are presented in Olga Kashina's study here: https://peacefromharmony.org/?cat=ru_c&key=899. The chapter below is devoted to spheral statistics.

A brief but complete formula for the dialectic of spherons and individuals, the inseparability of their employment is expressed as follows: the employment of spherons is realized in the employment of individuals and vice versa, but always differently and always probabilistically, with an elusive thermodynamic pattern, which is revealed here: (https://peacefromharmony.org/?cat=en_c&key=756).

The spherons systemic social center in humanity's holistic culture of perpetual peace is presented on its map below by the upper block of its actors in Fig. 11



Fig. 11. Map of the Humanity Perpetual Peace Culture

This map serves as a constant navigator for the Peace Science in its development and for any presentation, including our Primer.

Fundamental scientific discovery of Gandhian "varnas-spherons" in GGHA. Review of Chapter 6. Leo Semashko. "*Gandhian varnas/spherons: eternal actors of humanity's perpetual peace*"

by
Asha Mukherjee

Publication:

In English and Russian: https://peacefromharmony.org/?cat=en_c&key=1170

Honestly speaking, I have been reading about Gandhi's non-violence and Truth for more than four decades, but I did not read Gandhi closely on the topic of Varnas. I did not find his ideas about Varna as relevant to peace as the author, Leo Semashko, did in Chapter 6 and other similar works of the GGHA of past years. His analysis and interpretation of Gandhi's Varnas are truly an innovative and fundamental discovery in social science. In all the sources of Indian and Western scientists known to me, such as B.R. Ambedkar [1] and N.V. Banerjee [2], and similar, no one provides such a broad and comprehensive picture of Gandhi's vision on this issue - **the Varnas' fundamental role as the permanent creators of perpetual peace.**

Gandhi deeply and extensively analyzes varnas during several decades of his life [3; 4; 5; 6; 7; 8], ultimately emphasizing that humanity will be forced to recognize the structure and equality of Varnas in the future, **sooner or later** [8]. However, none of the scientists addressed the question of how to define the social role and mission of the Gandhian VARNAS for all humanity. In the chapter under review, they are convincingly assigned the key role and mission of eternal actors of its social production and perpetual peace. In this universal mission of Varnas, Semashko defines them as SPHERONS of humanity, as its only holistic structural actors of perpetual peace, deepening Gandhi's emphasis on their social nature, differentiating the structure of social actors.

No one has touched upon the issue of the eternal actors of perpetual peace, not even Kant in his book "*Perpetual Peace*" [11], although he emphasizes its "*social nature*". Therefore, this chapter presents a truly innovative interpretation of Gandhi's Varnas, which constitutes a significant scientific discovery in the field of social science. This discovery belongs to Leo Semashko, a scientist who was able to understand Gandhi's Varnas and assign them a new fundamental scientific category – "*spherons*"-in their universal application, as opposed to their purely Indian origin and use [9; 10].

This is a genuinely innovative interpretation of Gandhi's Varnas, a groundbreaking scientific discovery in the field of social science. **This discovery belongs to Leo Semashko, a scientist who can understand Gandhi's discovery and give it a new fundamental scientific category.** (Semashko Leo: 2016 and 2021). I am told that it has been theoretically developed in Gandhian "**Perpetual Peace Science**" (PPS) through various publications over the past 20 years and has been verified by world statistics. This is an unprecedented peace-making discovery, **which is ignored by the ruling militarists everywhere, in the West, in India, and Russia.** Because it implements John Kennedy's behest: "*To end the war before the war ends humanity*"! Without the category, science and theory of Gandhian SPHERONS, humanity will never achieve this goal, will not ensure **perpetual peace**, which, according to Einstein, "*is achieved not by violence, but by UNDERSTANDING*", i.e., by the science of spherons, as its only actor-Varnas.

Theoretically, this category was developed in the GGHA volunteer scientific "*Spherons Global Peace Academy*" (SGPA) during 20 years and is presented in detail in the Gandhian "*Global Peace Science... of Spherons*" (GPS) [9]. The spherons universal reality is verified by world statistics [13], which have not been refuted to this day. This is an unprecedented peacemaking discovery, which is ignored by the ruling militarists everywhere, in the West, in India, and Russia. Because it implements the covenant of John Kennedy: "*To end the war before the war ends humanity*"! Without the category, science and theory of Gandhian SPHERONS, humanity will never achieve this goal, will not ensure perpetual peace, which, according to Einstein, "*is achieved not by violence, but by UNDERSTANDING*", i.e., by the science of spherons, as its only actors.

Only from the position of such a truly scientific interpretation of Gandhian varnas, one can understand all the passion of his fundamental distinction between varnas and castes. The origin of the extreme, pernicious inequality of castes from the complete equality of varnas, which ensured the prosperity of India, established a long-standing and widespread, in all encyclopedias, scientific delusion of their identity. Gandhi categorically protested against this: "*Down with the monster of caste that masquerades in the guise of varna*", proving that the origin of castes from varnas does not make them identical. He emphasized that their historical role in India is directly opposite: Varnas ensured the prosperity and world leadership of the India Vedic civilization, while castes, over thousands of years, lowered the country into poverty and brought it to the level of one of the most backward and poor countries in the world.

I would like to highlight the foundation of Gandhian Varnas-Spherons as a fundamental discovery for future humanity and provide some clarifications. Varna and caste are two separate concepts. Varna is based on an individual's position within society, as well as their innate nature and tendencies. The caste system's origin is based on a long historical process of social entrenchment of a false, yet advantageous to the upper castes, innate inequality of people that perverts the social nature of varnas to the opposite. But in order **to give decency to the "monster castes"**,

The ruling castes began to associate them with varnas, and the hierarchy of caste inequality began to be presented in terms of varnas, against which all the heat of Gandhian denial of castes and affirmation of varnas is directed.

Varnas, from his point of view, provided a common social language that holds good, or is thought to hold good, not just for India but for humanity as a whole, encompassing men and women, all peoples, to understand the general principle of equality, applicable to all and acceptable to all without confrontation or violence. The importance of the Varna system lies in addressing the differences in class, color, creed, gender, culture, and religion. Gandhi says:

“Varna thus conceived is no man-made institution but the law of life universally governing the human family. Fulfilment 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.” [3]

Again: “The world may ignore it today, but it will have to accept it in the time to come. It ordains that everyone shall fulfil the law of one's being by doing in a spirit of duty and service that to which one is born.” [4]

Criticizing the nations, Gandhi clarifies: “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.” [5]

Gandhi was against hierarchy; he criticized caste and class both due to the hierarchy involved – “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.” [6] Further, “Assumption of superiority by any person over any other is a sin against God and man. Thus, caste, insofar as it connotes distinctions in status, is an evil.” [7] In *Hind Swaraj*, Gandhi as an editor presents a dialogue with a reader saying: “History, as we know it, is a record of the wars of the world, and so there is a proverb among Englishmen that a nation which has no history, that is, no wars, is a happy nation.... The fact that many men are still alive in the world suggests that it is based not on force of arms, but on the force of truth or love. History, then, is a record of an interruption of the course of nature. Soul force, being natural, is not noted in history.” [8]

The duty-centric classification, known as Varna in ancient times, was based on the choice of vocation following aptitude, rather than birth into a particular caste or class. The concept of functional cooperation differs from the hierarchical caste system that later emerged. The Varna system is designed to enable individuals to grow both horizontally and vertically without any clash or conflict in personal or societal values. According to Gandhi, **the principle of integration and coordination is the foundation of the Varna system**. It was in the scientific and balanced arrangement of the different occupations and trades that the **idea of justice evolved** so that all, without any conflict, could enjoy the commonwealth. And there was no competition or strife between the different people in the matters of their professions. The **Varna system provided a solid foundation of social economics**. The main objective was to ensure that every citizen fulfilled their duty to ensure all members of society **were satisfied in their basic needs**.

The significance of Gandhi's discovery of the law of varnas/spherons was so highly valued by Semashko and the GGHA that, on their initiative, a world project was created: “**Gandhian World Enlightenment of Spherons**” (GWES). It was initiated in 2012, but approved by the GGHA only on March 12, 2021: https://peacefromharmony.org/?cat=en_c&key=987. Although this project did not find support either in the UN, or in UNESCO, or anywhere in the DT, it will never become obsolete, neither for peace, nor for India, nor for science and peacemaking, so it is waiting for its time and its enthusiastic Gandhians for its revival and worldwide implementation.

In conclusion, we will once again emphasize the category “**spherons**” scientific nature, fully proven in the facts and statistically, which integrates all the constructive and progressive attributes of the Gandhian varnas, providing them with the highest innovative content and application as eternal actors of a perpetual world. All this led to the creation of the spherons category, which encompasses both central and system-forming aspects in the spherical realm, characterized by “**substantially new thinking**”, as well as in its Peace Science (PS) and its highest digital technological instrument, the spherical AI (SAI). On the other hand, the integration and preservation of all the Gandhian varnas' advantages in them make their long-standing qualification in the GGHA as “**Gandhian**”, i.e.

Nonviolent, peaceful - both of spherical thinking, and of its spherical PS and its SAI, justified, fair, and honest. This is the GGHA honor, which makes Chapter 6 of its innovative peacemaking Primer centrally meaningful and valuable.

References:

1. Ambedkar, B.R. 1979. ‘Annihilation of Caste’. In Dr. Babasaheb Ambedkar: Writings and Speeches, Volume 1. Bombay: Government of Maharashtra.
2. Banerjee, N.V. 1988. *Towards Perpetual Peace*. Indian Institute of Advanced Study, Shimla,
3. Gandhi, M.K.: *My Religion*, p. 172: https://www.mkgandhi.org/my_religion/36varna_caste.php
4. Gandhi, M.K. *Harijan*, 28-9-1934 p. 261-62.
5. Gandhi: *Harijan*, 4-3-1938, p. 5.

6. Gandhi: *My Religion*, p. 174.
7. Gandhi, M.K.: *Young India*, 25-3-1933, p. 3.
8. Gandhi, M.K.: *Hind Swaraj*
9. Semashko Leo. (2016) Spheral Law of SPHERONS' Harmonious Education- Enlightenment. Global Peace Science, 179-181 pp: <https://peacefromharmony.org/docs/global-peace-science-2016.pdf>
10. Semashko Leo (2021) Lecture Course. Spheronism-Harmonism: Gandhian MacroSpherology, Introduction to the GWE: https://peacefromharmony.org/?cat=ru_c&key=861
11. Kant, Immanuel. 1991. "Towards Perpetual Peace," in Kant: *Political Writings*, 2nd ed., H. Reiss, ed., Cambridge University Press.
12. "*Gandhica*", 2019. (https://peacefromharmony.org/docs/gandhi-nonviolence-of-spherons_gandhica-2019.pdf)

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22-06-25

Chapter 7

Spherical Dynamics of Social Production and Peaceful Multipolarity XXI.

Everything is known in comparison.

Rene Descartes

"Everything is known in comparison", meaning in the dynamics of changes.

GGHA

In the previous chapters, we considered the spheres of social nature in statics and by groups, the crowning glory of which was the "**Peace Culture**" map, with its center, "**Perpetual Peace Science**" (PPS), consisting of 16 spheres of humanity (Figs. 9 and 11). Now we will consider them in their dynamics and inseparability, touching only on their minimally sufficient argumentation under the PSP (Peace Science Primer) synopsis requirement.

Statics is not a freeze frame of dynamics. Cognition does not begin with statics, but with dynamics, including statics, which is formed later in the evolution of cognition, as the crystallization and simplification of a massive number of real social changes in the generalization and allocation of their immanent, simple laws, structures and constants as the cognition pillars of new changes. These pillars limit the crystallization of changes, determining the channel through which their flow, origin, and disappearance occur.

Therefore, statics and dynamics are different. Statics, constants of spheres are the "**arithmetic**" of the holistic spherical thinking (HST). In contrast, the dynamics within the spheres is its "**algebra**", its highest intellectual mathematics, the multidimensional integral dialectic of planetary spheres. We strive to present it as simply and briefly as possible in our Primer, regardless of how complicated it may be, because, as they say, "**all things are difficult until they become simple**" after explanation.

The relationship between social statics and dynamics is of decisive importance for any social science, especially for sociology as a whole, as defined by Auguste Comte, its brilliant founder, in the first half of the 19th century.

It plays a particularly important role for its highest level of sociological generalization – for macrosociology, within the framework of which a holistic, spherical PPS is created and developed. It integrates the brilliant paradigm of O. Comte's "**social statics and dynamics**", filling sociological statics with fundamental, end-to-end constants of spherical laws and structures of humanity. They determine the boundaries and lawful "channels" of endless flows of changes in the social spheres of planetary humanity, to which this chapter is devoted.

Understanding and explaining the sphere's dynamics is necessarily preceded by methodological outlines of its epistemology and dialectics, without which even the spherical science Primer cannot do.

1. The epistemological problem of planetary spheres' holistic knowledge

This problem has a long history, which encompasses deep epistemological and dialectical issues in humanity, particularly the antagonism between nominalism and realism in defining general concepts of human thought. It was clearly recognized by Plato and Aristotle, which was brilliantly reproduced by Raphael Santi (1483-1520) on the Vatican Palace "**The School of Athens**" fresco. It became the GGHA symbol in the interpretation of holistic, spherical categories.

The movement of thought in our peacemaking primer, from the social whole to its parts, from the abstract to the concrete, and to praxis, has reached the peak of abstraction, marking the turning point from a static to a dynamic movement of social change in this direction. Its peak is focused on the structural model (below) of all 16 interconnected societal spheres in their eternal, continuous dynamics.

The spherical categories are not just names or eidoses from God, as in Plato and his followers in nominalism and conceptualism. The spherical categories, "**universals**," are the development and modern, scientific-spherical substantiation of the Aristotle's realistic position. The spherical categories are holistic, **planetary** scale, statistical constants of the planet Earth three dynamic natures: physical, organic, and social.

The interrelation of which determines their integrity and the extreme complexity of its cognition, in contrast to the cognition of only its parts in DT.

The spherical constants characterize the existence of these natures from their origin to their death on the planet. Their 16 fundamental spherical categories, systematically presented in the specified models and many spherical concepts derived from them, form an innovative language of spherical thinking, providing a

holistic knowledge of planetary spherical dynamics and its modeling in a holistic, spherical AI (SAI). The epistemological integrity of spherical knowledge/thinking, on the spherical architecture of which the SAI architecture is built, ensures its epistemological superiority over all disciplinary, fragmentary models of AI that is detailed in the final Chapter 10.

2. The law of holistic dynamics of planetary spheres in their tetradic dialectic.

The epistemological complexity of the reality spherical constants is complemented by the methodological, dialectical complexity of the interconnection of planetary spheres in their integrity, which is expressed by their general dialectical law of inseparability, integrity in the PPS spherical thinking. The inseparability of spheres is, first of all, the integrity of their stability and variability, their statics and dynamics. The constant spheres exist only through changes and replacement of their parts/partons, which, in turn, arise and exist only within the framework and mainstream of their spherical constants. This is the dialectical law of the existence of spheres of all natures, including spheres of social nature. It excludes the deliberate falsification of the "*spherical approach*" in the "isolation" of spheres, paralyzing their dynamics, as stated in the fake Wikipedia article here: https://cyclowiki.org/wiki/Сферный_подход.

The dialectical law of spherical inseparability expresses the integral tetrary dimension and tetrary, four-dimensional spherical dialectic of all planetary natures at the intersection of four universal categories in **their two pairs: whole-part and stability-variability**. This dialectic illustrates well how any sphere is characterized by dialectically opposite categories in a dialectical contradiction, which, however, does not violate the fundamental **law of non-contradiction** in formal, Aristotelian logic. For example, the statement "*all people are the same and different*" is not a logical one. Still, a dialectical contradiction, because all people are the same as spherical constants, biologically in DNA and socially, as rational beings, but they are **ALWAYS DIFFERENT in ANOTHER RELATIONSHIP**, as historically unique creatures both in spheres, in DNA and their minds. People are always contradictory, not "in one", fragmentary relation of the partial dialectic of DT, but in a holistic set of "*different relations*" with all planetary spheres. They are always stable, belonging to the eternal sphere of people, and continuously changeable in their unique personal life, i.e., in **different relationships**.

Moscow State University professors V.F. Asmus and I.S. Narsky developed the algebra of multidimensional dialectics of formally logically consistent **«different relationships»**, which opens up the **theoretical possibility of their digitalization**. I had the honor of being their student during my postgraduate studies at the Department of Foreign Philosophy of the Faculty of Philosophy at Moscow State University from 1967 to 1970. I continued to do so until the end of their lives.

The holistic, spherical tetradiagnostics of different relationships, which removes all restrictions on its digitalization, underpin the architecture of the SAI, on which the SAI architecture is built, constituting its other, dialectical fundamental source of technological and digital superiority over all disciplinary, fragmentary models of AI. It is imperative in the worldview aspect of both the HST and its SAI toolkit.

The partial, DT and its partial worldview together with all their branch models of AI are built on a **fragmentary, binary dialectic of confrontation and "struggle, war of opposites"** with all the ensuing cognitive and social consequences of the prevailing conflicts, crises, violence and wars, to which both the authorities and DS adjust them. On the contrary, the HST and its holistic worldview, the peace science and its SAI are built on the humanity SP and perpetual peace **holistic, tetrary dialectic of social harmony** in all the multitude of different relations of their planetary spheres. This ensures spherical planetary digitalization in the integral peaceful SAI, constituting a new fundamental source of its **technological and social superiority**, the attributes of which are detailed in Chapter 10.

With the HST embryos in the history of human knowledge, the seeds of an integral, spherical epistemology are born together with the seeds of the corresponding tetrary dialectic, worldview, and culture of perpetual peace, which are integrated in the "*Peace Science*". Only on their methodological basis is it possible to adequately understand the highly complex integral dynamics of planetary spheres at the peak of their social dynamics. The epistemological and dialectical sources of the SAI's superiority in the most critical aspects are revealed in the following chapters.

Based on these methodological outlines, further supplemented and developed, we will define the fundamental laws of the social spheres dynamics.

3. The dynamics of social spheres

The social dynamics as a whole and from both, inseparable, sides of social production (SP) and perpetual peace are programmed **in the constants of the PDEC four process spheres of: production,**

distribution, exchange and consumption of PIOT, which are as eternal, equally necessary and sufficient as the PIOT, which defined them and unable to exist without the PDEC processes. These constants were discovered and analyzed in detail using the example of the economy (technosphere), initially by the founders of English political economy, Adam Smith (1723-1790) and David Ricardo (1772 - 1823), and then by Karl Marx (1818-1883). They revealed the deep dialectic of the SP four processes using the example of one, material/economic sphere (Technosphere), in which the production of one product (T) coincides with the consumption/use of the PIOT resources necessary for it, through the mediating processes of distribution and exchange.

From the analysis of the named and subsequent economists, it follows that the PIOT SP dynamics is a continuous process of transformation of some PIOT **resources** into other PIOT **products**, which immediately become **new resources** for the production of **new products**, a new production cycle, if they are not destroyed, do not perish as a result of certain disasters. Therefore, **every PIOT resource is always a product** of previous production, and **every PIOT product is always a resource of subsequent production**, consequently, they are designated by one term: "**resource/product**". This continuous dynamic cycle for millennia of the PIOT reproduction is endless, end-to-end, i.e., structurally identical in all four spheres and at all levels of their SP, characterizing the dynamics of social spheres in general.

The constant of the **PDEC** process spheres of the technosphere, economy is transferred in the Peace Science (Spheronics) to the SP other three spheres as structurally identical for all of them without exception that does not exclude the fundamental difference of the immanent dynamic laws of each sphere, which **differ only in one spherical product from the PIOT**:

- The Sociosphere produces only **People** from people by means of **PIOT** resources. - The Infosphere produces only **Information** from information by means of **PIOT**. - The Orgosphere produces only **Organizations** from organizations by means of **PIOT**. - The Technosphere produces only Things (all material goods and services) from things by means of **PIOT**. Here the immutable dynamic law of production of "**like from like by means of dissimilar resources**" operates. This is another dialectical contradiction of the SP spheres dynamics in different respects. The **PIOT** resources/products in it, on the one hand, are not converted into each other, but, on the other hand, they are converted into each other, including their parts or attributes according to the principle of Anaxagoras "all in all".

This is another law of spherical dynamics - **the law of spherical inclusiveness** (mutual inclusion) of planetary spheres in their dynamics, especially social spheres. (The inclusiveness of non-social spheres is obvious and does not require explanation). It reveals the fractal nature of social spheres. Their fractal organization, structural similarity provide them with eternity through mutual penetration in their dynamics. Fractality, the similarity of the whole and parts is revealed in physics, mathematics and social structures by Mandelbrot [11]. This is the most complex, integral and non-linear attribute of spheres, ensuring the unity of all of them in synergy, i.e. in mutual reinforcement and strengthening of the viability of each and their entire as a whole, which is disclosed in detail in the following chapters. Schematically, the integral, four dimensional fractality, or fractal inclusiveness of spheres with the priority of the determining, necessary sphere (in green) and the mediating, sufficient role of other spheres is illustrated by their structural model of similarity using the PIOT resources example in Fig. 12.

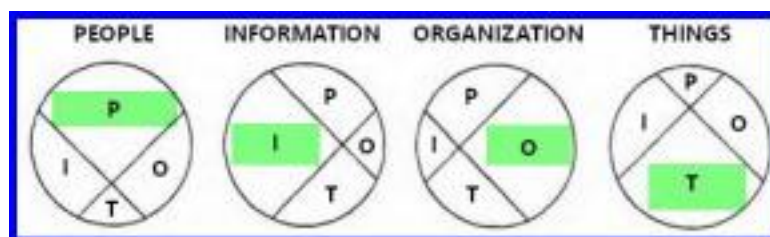


Fig. 12. Mutual inclusion, inclusiveness of the PIOT resource-product spheres

Thus, spheronics fully integrates the classical, binary dialectic of reproduction processes, but expands their scale to the ultimate, planetary, spreading to all spheres of PIOT resources/products, i.e. to the entire global SP integrity without limiting it to one, economic sphere (technosphere). This raises the understanding of their dialectic to the highest level of the HST tetrady dialectic and its planetary worldview.

In general, the dynamic mode of existence of the SP social spheres—constants and the perpetual peace filled with historically transient, statistical variable parts—is expressed by the fundamental model in Fig. 13.

4. Dynamic "Societal Genome" (Socionome) of spheres/spherons

This structural model presents three planetary natures: physical in its four spheres, organic - biosphere, and social or anthroposphere, society. It is differentiated in the composition of 16 societal spheres within its four groups: PIOT resources, PDEC processes, SIOT spheres, and SIOT spherons, all unified by the continuous exchange of spheres with their products of production, which become resources of production in their own right and other spheres.

The model expresses a continuous and eternal socionome of social production and eternal peace, reproduced always and everywhere in all social nature, in all its changes, at all its levels from the individual to humanity, preserved in them as their eternal cell and norm of life, deviation from which structurally in any social object inevitably leads it to suicide. For humanity as a whole, this is an example of the inevitable suicidal genocide of the Western nuclear civilization, prepared by it in the "*Mutually Assured Destruction*" (MAD) for 80 years by 99%, leaving it only 89 seconds before Armageddon, in which all people now live.

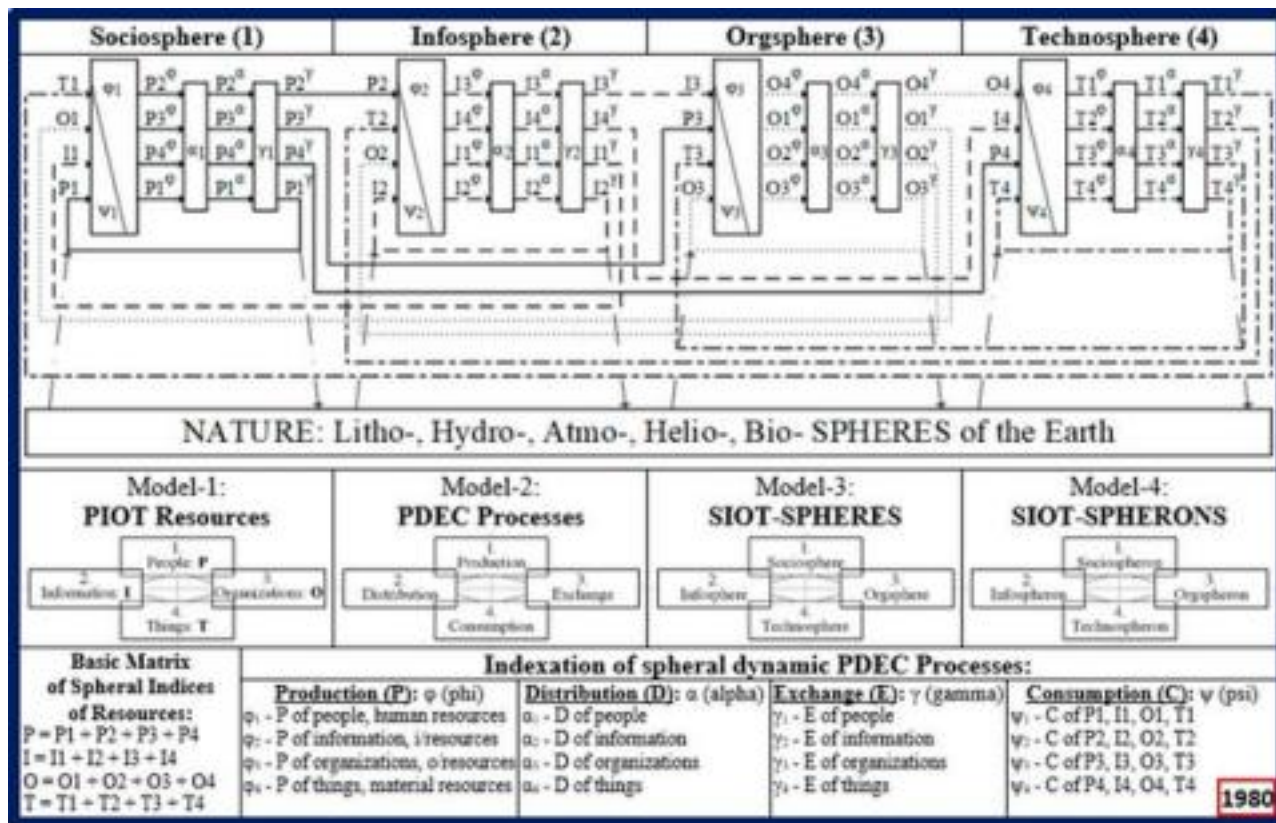


Fig. 13. Dynamics of the SP and perpetual peace spheres. Created in 1980.

The model attributes. 1. This model reveals an eternally living, continuously functioning, and constantly reproducing itself in all changes of **the societal** (Parsons' term expressing fundamental, universal, and enduring social laws) **genome, the socionome of 16 social planetary spheres**. The socionome reproduces itself at all levels of SP and at all social objects. It operates entirely at the highest, planetary level of its integrity, which is constituted by the interaction of its spheres in all their hierarchical, vertical, and network, horizontal completeness. At all other levels, it is reduced or limited in one way or another in specific components, which are compensated for in one way or another. For example, the absence of builders (technospheron) at school is compensated by inviting them to perform repairs from a construction company. And so on in similar situations.

2. The socionome reproduces itself in the activity of each individual from birth to death, always busy in one of its spheres by changing them in their life cycle. This fact illustrates Sloterdijk's fundamental thesis: "*man always lives in spheres,*" which is considered in almost all publications of the GGHA.

3. The model represents the **law of the eternal, self-reproducing social cell of any society, individual, and social nature as a whole**. This is the cell of scientific social science, fundamental macrosociology, transdisciplinary megascience of spheronics, holistic SP, and fair, perpetual peace.

4. The model creates a fundamental theoretical basis for social qualimetry of SP and the true world in spherical global statistics, the disclosure of which is devoted to a special chapter below. All dynamic laws of the OP, expressed by the model, as A. Smith assumed, influence peace and depend on it, and have a peacemaking significance, which is detailed below.

All dynamic laws of the OP and the true, perpetual peace have a *cybernetic nature of "direct and feedback"* of spheres, excluding any *"primacy"* of one of them, which are universal for all spheres of nature and society. They were discovered by Norbert Wiener (Link) in his cybernetics, the fundamental laws of which are integrated by spheronics.

All the named laws and attributes of the holistic dynamics of social spheres elude the narrow, and therefore "blind" to the whole DT, which does not know and cannot know in its narrow and fragmentary (75 thousand!) DS the holistic laws of the OP and perpetual peace.

5. Comparison of models of world and spheral dynamics

Everything is known by comparison. If there are no analogues for comparison with the static world fractal model-9, then they exist for comparison of model-13 of spheral dynamics with models of world dynamics. There are three groups of such models:

1. Jay Forrester's "World Dynamics": the "World1" model, by 1970 (Footnote).

2. Models of the "World3" version, "Limits to Growth" of the Club of Rome by a group of scientists led by Denis Meadows, a graduate student of Jay Forrester, based on the modified "World1", the fourth version of which was presented in 2012 (Footnote). Its advantages and disadvantages of a limited scale are examined in detail by Gaya Herrington (2020).

3. Model of "World Dynamics of the 21st Century", a group of scientists from Moscow State University led by V. Sadovnichy, 2022 (Footnote).

All these models are mathematical, based on the limited natural resources of the Earth, which inevitably set limits to population growth and human well-being in the future. If the differential equations of the first two groups of models express patterns of 7 to 12+ variables, mainly of a natural/material and demographic nature, then in the MSU model they are generalized and expanded in 7 spheres of these variables: *"natural environment/climate, ecology, technology, demography, economy, sociosphere, politics"*. This tendency symbolizes the positive trend of approaching the models of world dynamics to the model-13 of spheral dynamics, four necessary and sufficient spheres of which are almost explicitly included in the MSU model. The authors of the MSU model rightly emphasize and predict this: *"real growth cannot be infinite, therefore it is inevitable ... society must change significantly in ... the global phase transition of the world system from one state to another, and ... in the current transitional era, the emergence of a new ideology is inevitable"* (Footnote, MSU, p. 38, etc.). This ideology can only be a scientific, planetary, holistic worldview of the PPS acceptable to all peoples, which its megascience spheronics offers in this primer and other publications. It limits material and demographic growth, but opens up unlimited opportunities for spiritual, technological, and organizational development, paving the way for a new civilization of perpetual peace for humanity.

This trend is well expressed by a paraphrase of the quote from the Club of Rome first president, a participant in the anti-fascist movement Aurelio Peccei: *"Man now, in fact, has no other choice but to approach the next phase of his development as quickly as possible - the one where he ... will learn to maintain all human affairs in harmony and balance"* (Footnote, 1977). The maintenance of harmony and balance of humanity in perpetual peace is ensured by the spheral dynamic model-13. Therefore, following Peccei, we must say: *"man now, in fact, has no other choice but to approach"* this model as quickly as possible, to recognize its universal truth for all peoples and to follow it, overcoming insurmountable crises and growth limits of all spheres from the position of a narrow DM, blind to the whole.

6. Hypothesis of a spheral multipolar world order (SMWO)

The constructive idea of a multipolar world order (MWO) and its movement arose naturally, *"like the sunrise"*, in the figurative expression of Russian President Vladimir Putin. The MWO has become an international, geopolitical reality of the last decades for many global organizations: BRICS, EAEC, SCO, etc., initiated by world leaders of Russia, China, India, having received the first scientific development in the works of Professor Alexander Dugin (2009, 2013, 2022 and others). His theory is close to the spheral, four-dimensional Peace Science (PS) in a number of fundamental ideas. The author quite rightly and courageously asserts the need to create a *"fourth political theory – beyond communism, fascism and liberalism"* (2009), which is then linked to the *"fourth nomos of the earth... with a new taxonomy of actors... with a quadripolar world... with a quadripolar map, alternative"* to unipolar hegemonism of the Western world order (2013, 2022, etc.). All these scientific

Ideas are integrated and developed by the planetary PS as the *"fourth political theory"*, called *"spherism"*, free from the immanent confrontation of others.

However, the key concepts of this theory, the categories of planetary, world "actors" and "poles" have not found in it a fundamental scientific basis and universal recognition as objective truths of humanity within the framework of a deliberately fragmentary disciplinary science, rightly characterized as "godless and fake" (M. Keenan. 2025 https://peacefromharmony.org/?cat=en_c&key=1255 (Chapter 2).

Based on the fundamental PS, built on many historical facts and verified by world statistics, we propose for consideration the scientific hypothesis of the "*Spherical Multipolar World Order*" (SMWO) within the framework of the planetary HST. Only the social production and perpetual peace eternal actors - spherons, not civilizations, which together with their countries constitute their four constant spherical poles, with their volatile composition, can be actors of the SMWO. Its poles are distinguished by those groups of countries and civilizations that lead in the four spheres of world production and are capable of changing their places in the poles.

Suppose unipolarity was built on force, militarism, and disharmony. In that case, the SMWO can and should be built only on the PS spheres/spherons, which represent single planetary science focused on perpetual peace and world harmony. The BRICS leaders, especially the presidents of China and Russia, in May 2024, have repeatedly expressed commitment to «world peace» (Bibliography). The PS cognitive exclusive and its SMWO, as "*Perpetual*

Peace Multipolarity" (PPM) could become the exclusive domain of those international organizations that really strive for it.

The SMWO key institutions, without which it will not move forward, should be the first two, strategic ones: the "*Department of Peace*" in the governments under the leadership of national leaders and the independent "*Academy of Perpetual Peace Science and Multipolarity*" (https://peacefromharmony.org/?cat=ru_c&key=1074) in every country. Only the SMWO based on the PS planetary worldview excluding confrontation, with the spherons as constitutional actors of global harmony and federalist democracy, with a single SAI of digital technology within four spherical, equally necessary and sufficient poles of countries and civilizations will provide a fundamental, acceptable to all nations and states alternative to the West hegemonic NC, doomed to a nuclear MAD in the XXI century. There is no other alternative on the horizon of humanity's survival in the NC during 80 years, except for the SMWO. For this hypothesis, the proposed approach is sufficient.

Chapter 8:

Fractal organizational interaction of social spheres in the social space/time coordinates

There is nothing more practical than a good (true) theory

L. Boltzmann

The growing complexity of detailing the eternal planetary spheres of social nature, evident in our presentation of spherical logic, leads to the awareness of its necessary qualimetry, the adequate instrument for its measurement and calculation. Only with its help is it possible to master the ultimate planetary complexity of these spheres, their spherical laws of fractal interconnection, and their digital statistical technology of calculation in spherical AI (SAI), accessible to everyone from elementary school. However, on this path, it is also necessary to possess a generalized mastery of the fractal unification mechanism, mutual inclusion, and the organization of these spheres within their structures. This is the first end-to-end method of interaction and organization of the spherical structures, a harmonious and dynamic unity.

1. Fractal coupling, organization, and unity of social spheres

In the previous chapter, the mechanism of mutual inclusion of spheres and their components was considered, presented in Fig. 12. In this chapter, it is detailed by the mechanism of their "coupling", organization, which is of key importance for not only understanding the most effective, fractal way of connecting and interacting spheres, but also for determining its qualimetry in statistical measurement.

The PIOT social spheres' interaction in a generalized dynamic format is not limited to their mechanical proximity, but rather to their continuous fractal interdependence, where each spherical element of the four cannot exist without the others as a whole, and vice versa. Here, the principle of Anaxagoras "ALL

IN ALL" operates, but in spherical crosscutting and universal variants, which are expressed as follows: "**ALL IN FOUR**", "**FOUR IN ALL**" and "**FOUR IN FOUR**". Their "iron mechanism" of inseparable continuous coupling on "live" of functional spherical resources of PIOT (as well as all others) in the interdependence of their parts at all levels by end-to-end manner is illustrated in diagram No. 1, Fig. 14.

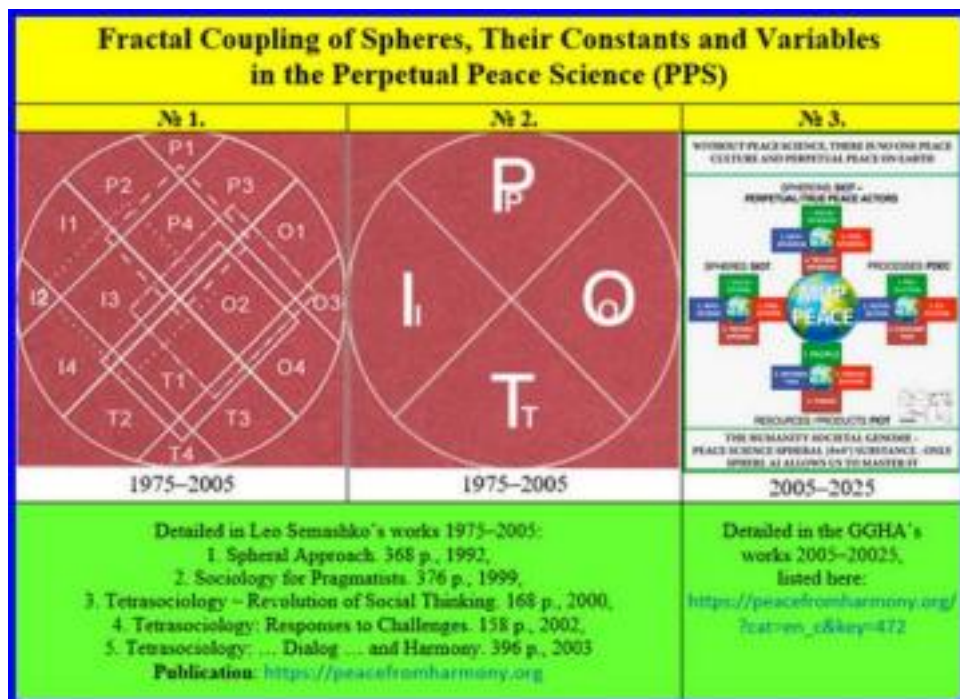


Fig. 14. Fractal, crosscutting nature of the relationship between social spheres

The principle of Anaxagoras, which emphasizes the wholeness of 16 eternal social spheres, ensures their constant inseparability through the mutual penetration of their fractal structures within their single existential organization. Fractality, structural cohesion, and similarity of the whole and its parts are revealed in physics, mathematics, and social structures by **Benoit Mandelbrot**, through the concept of fractal

geometry, which we began discussing and applying in the GGHA as early as 2008 (https://peacefromharmony.org/?cat=en_c&key=343).

This is the most complex, integral, and nonlinear attribute of spheral components, ensuring the unity of all of them in synergy, i.e., in mutual reinforcement and strengthening of the viability of each and their entire structure as a whole. It constitutes their common natural source of the most effective, optimal, and sustainable development, which is available only to holistic, spheral thinking (HST) but inaccessible to fragmentary disciplinary thinking (DT). Therefore, it remains terra incognita for thousands of years, despite all its modern "*godless fake science*," according to the sarcastic, yet not far from the truth, definition of Mark Keenan, 2023 (https://peacefromharmony.org/?cat=en_c&key=1255).

The fractal spheral structure and organization is identical for all PIOT spheres, as shown in diagrams 1 and 2 of Figure 14, but also for all 16 social spheres, presented in their familiar integral diagram No. 3, acquiring an integral expression in the superiority of the fractal organization of the spheral AI (SAI) data that is revealed in Chapter 10.

Of course, diagrams No. 1, 2, and 3 in Figure 14 reveal and define the integral, four-dimensional fractality of all spheral components in their statics, abstracting from the dynamics of their changes. The introduction of the dynamic parameter of spheral fractals, and therefore of the social spheres themselves, makes their picture integral and at the same time extremely complex with a multitude of spheral constants and variables in the dialectic of at least two pairs of dialectical opposites: whole-parts and constants-variables. The "*algebra*" of the dynamic complexity of the fractal structure and organization of spheres **goes beyond our Primer**. Its philosophical and sociological depth is revealed, to some extent, in our generalizing monographs and works from 1975 to 2004, the main ones of which are listed in Fig. 14.

In the literature, the most profound and historically extensive analysis of fractals and fractal organization in dynamics, starting with Russia, China, the West, and Mandelbrot, was found in the unique book by Alexandra Kochetkova, "*Applied Psychology of Management*". (Moscow: Publishing House Yurait, 2018. - 437 p: <https://urait.ru/book/prikladnaya-psihologiya-upravleniya-413225>). We will limit ourselves to just a few quotes from it:

"A fractal is the only system in which mutations occur in a completely free manner, and in this way it reproduces the real biological world... The pinnacle of the evolution of models of organizational behavior and organizational structures today is the fractal model. It has colossal power and allows you to capture huge spaces. One can talk about conquering the world, about the power and colossal vitality of the system in any business environment, both in an ordered and in a chaotic one... to obtain all the harmony of the world, only a small set of simple forms is enough. [Such a small set of forms for our planet is the system of spheres of its three natures: physical, organic, and social, which are revealed in our primer.] The fractal organization is self-similar: even a single element of it carries all its principles... While maintaining its stability, a fractal can transform itself quite radically in the range from order to chaos, since it has set extreme points: order and chaos." And so on.

The author breaks away from the umbilical cord of narrow DT, which is limited, as a rule, by mechanical and linear connections of parts, and does not suspect or remain blind to the fractal, holistic connection of "*all spheres with all*." This integral, fractal connection and organization, in full measure, becomes accessible to knowledge only at the level of integral thinking of the spheres of all natures of the planet - planetary spheres. But this knowledge, despite its long historical roots, is only at the very beginning of its conscious path.

The social spheres fractal organization as the most effective, harmonious and economical at all levels of humanity and each of its societies, laid in the foundation of the organizational structure of spheral AI (SAI) ensures its superiority in this attribute, which is generalized with other similar attributes and generalized in its universal superiority outlined in Chapter 10.

3. Spheral constants of statics and spheral variables of dynamics

All social spheres are at the same time eternal **structural constants of the society, past, present, and future, and permanent variables in scale, content, quantity, and quality in each "here and now"**, but in different *relations*. Misunderstanding of their inseparability in their earthly existence divided Plato and Aristotle. Plato proved the eternity of constants, all concepts by their divine origin, and Aristotle proved their earthly origin. In this, Aristotle was correct, and our realistic "*Perpetual Peace Science*" (PPS) follows. The spheres, like any constants, laws of reality, and principles of thinking, exist only in the way of their continuous historical change, with all their parts evolving into a statistical crystallization and "*dry residue*" of the entire infinite multitude of their internal changes. The constant changes of parts/partons of

spheres are the only way of existence of spheres as eternal constants, which constitute stable, immanent boundaries, laws, and structures of all their changes, i.e., their constants. Therefore, spheres are both constants as a whole and variables in parts, partons and fractals, i.e., in different, above-mentioned interconnected relationships of the whole and its parts.

In our spheral macrosociology, their consideration is divided into its different parts, "Statics" and "Dynamics", which were discussed above. But for their holistic, proper understanding and practical use, their operational unity is necessary, which is realized in the **PPS** and its Primer. The dialectical contradictoriness of spheral constants and variables lies in the fact that they are simultaneously constant (stable) and changeable, but always in different relationships and to different degrees, being inseparably interconnected. This is clearly expressed in scheme No. 2, Fig. 14, **where each spheral resource of PIOT is designated simultaneously by fused uppercase and lowercase symbols, where uppercase symbols express the PIOT constancy and lowercase symbols - their variability.**

Figuratively speaking, the PIOT spheral constants, like others, are 90% stable and only 10% variable. At the same time, their spheral variables (parts, partons, fractals) are 10% stable and 90% variable. Of course, this measure is hypothetical, which for a real assessment requires long and professional research, which is inaccessible to the volunteer GGHA and will be available only to spheral scientific academies of the future. Such a link between spheral integral constants and their variable parts-fractals opens up a promising opportunity for their mutual and end-to-end qualimetry, measurement and mathematical calculation at all social levels from the individual and family to humanity as a whole with the help of various digital gadgets, including AI, which will be the subject of the following paragraphs. The dialectical duality, *"in different respects,"* of any planetary sphere was intuitively noticed and implicitly expressed by the ancient philosopher Heraclitus, nicknamed "the dark" for his mysterious, contradictory aphorisms: *"Hidden harmony is stronger than the obvious." "Secret harmony is better than the obvious." "Perfect harmony arises from diversity." "The 'most beautiful harmony' arises from struggle." "There is nothing permanent except change,"* etc. (<https://ru.citaty.net/avtory/geraklit/efesskii/>). They are used and receive the following, "logically clear" interpretation in the spheral dialectics of different relations of the **PPS**: Hidden, secret harmony of integral eternal spheres of being is stronger and better than the transient, partial "explicit" harmony of their parts. From the diversity of an infinite number of parts, a perfect and eternal harmony of integral spheres of being arises. From the temporary struggle of transient parts arises the perpetual peace most beautiful harmony of social and other spheres of being. There is nothing constant except the changes of countless parts of being integral spheres, generating the eternal constants of these spheres. Etc.

Therefore, we have reason to recognize a complex of similar aphorisms of Heraclitus as the **"SECOND LAW OF HERACLITUS"** in the spheral thinking of the **PPS** after his first law, *"Multiple knowledge (of parts) does not teach the mind (of the whole, of spheres)"*. These laws are highly instructive for all disciplinary "blind people" to understand the limitations and insufficiency of disciplinary thinking for the knowledge of the spheral, holistic reality of all Earth planetary natures.

The unity and sufficient wholeness of all 16 social spheres with all their attributes and parameters are presented in scheme No. 3, Fig. 14, which expresses the **PPS** constant spheral structure in all its end-to-end applications and uses, starting with an individual smartphone, which we wrote about in *"Gandhica"*, 2019 (pp. 78-83). However, this transdisciplinary structure necessitates another image of integrity within the coordinates of social space and time for each of the four groups in these spheres.

4. Tetrady (four-dimensional) qualimetry and harmony of social spheres and their fractals

Now, the spheral logic of our presentation has prepared and led to the solution of the integral question of the spheral fractals' harmony measure of any PIOT social resource/product. This sphere's harmony measure is generated by its objective logic of equal necessity and sufficiency of the society's cross-cutting spheres and constitutes the initial basis of all methods of measurement and qualimetry. We have historically focused on and limited ourselves to more than 40 years of universal statistical measurement and statistical quantification of all social spheres, their constants and variables, as the most accessible and universal method, existing since ancient times, but officially recognized about four centuries ago. Here, the objective foundations of the statistical measurement of spheres and their fractals are briefly revealed. Previously, based on the ENSS social law, the PIOT eternity of four resources/products, determining all its social statics and dynamics in the integral social genome, was proven. Their objective tetradic structure objectively constitutes the tetradic way of differentiation, integration, spontaneous harmonization, and organization, connecting all fractals/parts of the 16 social spheres without exception.

Therefore, the objective measure of all spheral constants and variables, their organization, integration, and harmonization as the most optimal general measure for them is tetry, or **four-dimensional**. It is clearly illustrated by the tetrametric structure of all PIOT spheral fractals in scheme No. 1, Fig. 14.

The PIOT tetry objective structure defines society as a whole as their sum in statics: SOCIETY = P + I + O + T. The tetry structure in dynamics, in new PIOT products production, necessarily requires objective differentiation of each of them as a whole into four parts/fractals with a dimension of 4×4^1 :

$$P = P1 + P2 + P3 + P4$$

$$I = I1 + I2 + I3 + I4$$

$$O = O1 + O2 + O3 + O4$$

$$T = T1 + T2 + T3 + T4$$

This structure defines the fundamental law of the universal tetrametric (**four-dimensional**) fractality of the PIOT resource spheres: **any product from them** requires a fractal complex of PIOT resources for its production, and each resource from them was also produced earlier as a product only utilizing the corresponding tetrametric complex of PIOT resources. We will call this law the LAW OF TETRARY (FOUR-FOLD) FRACTAL RECURSION OF PIOT RESOURCES/PRODUCTS. Or, in short, this is the law of "**Tetry Fractal Recursion**" (TFR) of PIOT. It ensures an infinite, similar fractalization of PIOT resources and products, their infinite multiplication and differentiation in both directions as a **recursive**, endless function of PIOT spheres in dynamics, and their inseparable coupling in their historically infinite evolution. But, naturally, the recursion of PIOT spheres in practice is limited and stops at this or that step by a variety of reasons, the consideration of which we exclude due to their cumbersomeness. This law is expressed in the most elementary way by the fundamental matrix of fractals PIOT: 4×4 , easiest as "**PIOT: 4×4** ".

For the production of 16 spheral components as products, a tetrametric structure of the corresponding resource fractals with a dimension of 4×4^2 is required, and so on ad infinitum according to **the algorithm 4×4^n , where 'n' is a series of natural numbers. This algorithm constitutes the first dimension of the humanity social genome** everywhere and always, accessible for calculation on spheral AI (further).

This algorithm expresses the objective law of structuring, organization, and harmonization of PIOT spheral fractals, realized in their spheral dynamics within the continuous, eternal production and peacemaking cycle of humanity in its planetary sociogenesis. Therefore, it constitutes the objective foundation of statistical measurement-qualimetry of 16 social spheres in the PPS, called "**Spheral Global Statistics**", abbreviated as **GlobStat**, which will be presented in the following paragraph.

5. The spheral coordinates of social space/time of perpetual peace and social production

The structural analysis of the spheral dynamics, its laws, attributes, constants and variables is finalized in the spheral coordinates system of the humanity fourdimensional social space/time for perpetual peace and social production (SP) in Fig. 15 below. This holistic spheral representation of the statics and dynamics of SP and **humanity perpetual peace (HPP)** in the structure of the four-dimensional social space and time complements their integral expression as a systemic social genome in the PPS structural model shown in diagram 3, Fig. 14, and earlier. They are identical in content, but different in the form of presentation, complementing and deepening the PPS spheral wholeness understanding, its spheral thinking, and knowledge. The figure below, in simplified form, was published on the cover of the book "**Tetrasociology**" in 2002 and is quite clear in itself; therefore, it does not require additional comments. Only the attributes of the spheral AI (SAI) blocks are detailed in Chapter 10 as a key tool for knowledge and education in PPS. The primary purpose of such drawings and structural models is to convey the unimaginable complexity of comprehending human society as a whole and its perpetual peace, which is impossible without the corresponding SAI. We led our Primer's entire presentation to an understanding of the open structural code of this SAI.

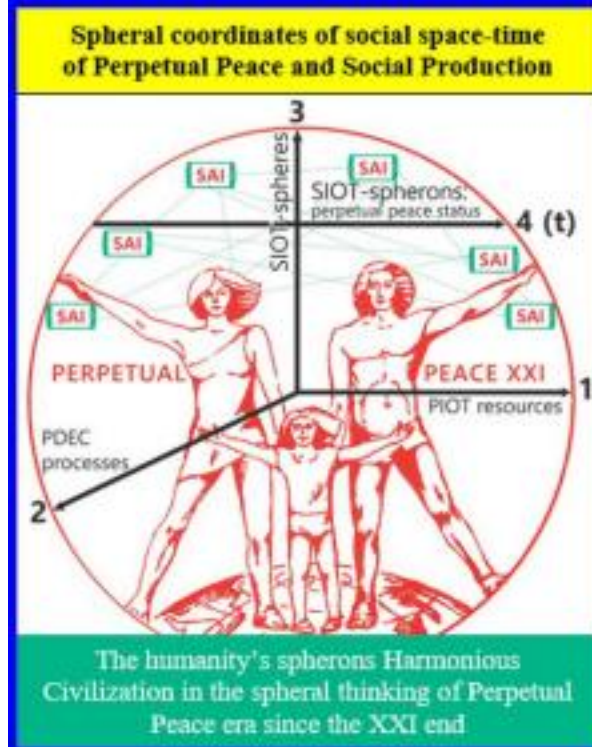


Fig. 15. Spherical coordinates of the social space-time

The proposed figure presents a different holistic map of humanity's SP and HPP social spheres' knowledge in the system of four-dimensional social space-time (SST), compared to its first map, which expresses its 16 spheres outside these coordinates, as explicated on this map. The numerous properties and consequences of it are detailed in the books listed in Fig. 14 and the bibliography.

It was evident that the spheral SST is special; it expresses the humanity's planetary, cognitive peculiarity as homo sapiens, characterized by perpetual peace. But so far, it has not found adequate expression in the coordinates in the narrow DT and its fragmentary 75,000 sciences. Obviously, there should be four SST coordinates, similar to the physical ST, but distinguished by the quality of the coordinates. All of them can be and are reasonable in origin and substantially integral in the essence of the cognized planetary spheres of social nature, bearing the imprint of the integral mind, holistic thinking, and worldview on each of them in the systemic unity of all spheres of the OP and HPP of human and humanity. Together with the uniqueness of spherical coordinates, they play a decisive role in ensuring a unified scientific and peacemaking worldview for humanity, which has been lacking until now. Therefore, it is mired in endless confrontation and wars of the dominant DT, torn apart by 75,000 sciences, making them as a whole "*godless and fake*" (Kennan), and mortally dangerous in the humanity MAD created by them in the West nuclear civilization for 80 years.

The SST spheral coordinates system is one of the essential tools for overcoming this civilization, which ensures the SAI superiority for overcoming it. The SST spherical coordinates system crowns the holistic scientific-theoretical vision of the planetary humanity's perpetual peace. This system of coordinates has not so much a geographical or planetary meaning as a peacebuilding meaning, representing the conscious humanity's perpetual peace for all times to come, with a unified education of youth in peace science through an adequate SAI, and the establishment of a quadripolar spherical world order. It excludes and prevents all wars, armed conflicts, violence, and confrontation, providing all nations only harmony, love, truth, and justice as the highest and common values of God and faith in Him.

Chapter 9.

Spherical Global Statistics for Planetary Holistic Thinking and Spherical AI

Everyone is given an equal share, we just count differently.

Hans Christian Andersen

Statistics do not lie. Only statisticians lie.

Janusz Leon Wisniewski.

Statistics is the most exact of all inexact sciences.

Gustave Flaubert

In the previous chapter, we revealed the spherical fractal structures of planetary scale and end-to-end order as natural, the most optimal and synergistic, i.e., extremely effective couplings/links of the social nature of different spheres of objects. This chapter moves to their reflexive level. Such objective structures require similar, fractal methods and tools for their cognition, measurement, qualimetry, and calculation in the **Perpetual Peace Science (PPS)** spherical thinking. First of all, it needs adequate holistic statistics, for which it creates a source and innovative platform database of a cross-cutting nature, i.e., a database of relevant, spherical indices and all innovative tools for working with it and calculations in it. In systemic unity, they create a unique, higher, "algebraic" order, *Spherical Global Statistics* (Globstat) as the PPS intrinsic statistical tool for **holistic spherical thinking (HST)** and its **spherical AI (SAI)**.

Although traditional statistics has a number of undeniable advantages, it is initially doomed to narrowness and fragmentation by the birth trauma of the "*blindness of the whole*" of disciplinary thinking (DT). The fragmentations of other orders are superimposed on it: national, corporate, monetary limitations, financial closure, state secrecy, political expediency, and the like, which make traditional statistics a veiled form of delusion and manipulation. In this regard, it is not without reason that they say: "*There are three types of lies: lies, damned lies and statistics.*" Therefore, its effectiveness and capabilities are minimized.

The holistic and end-to-end Globstat of the planetary scale is formed not in disciplinary, but in spherical thinking and according to the laws of holistic, and not sectoral, disciplinary logic, raising traditional statistics to the highest level of perfection, capabilities, and practical efficiency available to it in the SAI's new digital technology. This chapter is devoted to overcoming of the traditional statistics vices and its elevation in synergistic complementarity with the spherical Globstat in its holistic, spherical way of thinking. The "*Augean stables*" of vices and limitations of traditional statistics indices, accumulated over centuries, are successfully overcome by the logic, thinking, and standards of the spherical Globstat that is illustrated by the spherical indices below and in the publications.

1. Two ways of thinking: two logic and two statistics

The traditional statistics (TS) is as sectoral and fragmentary as the DT, within which it emerged almost 4 centuries ago and is developing in it, absorbing all its limitations and vices, including the main one - the "*blindness of the whole*" of social objects, starting with an individual, a household and ending with a country and humanity. Of course, it is not useless; it has great practical significance, but it is ineffective and far from adequate. The holistic, spherical statistics (SS) do not originate from partial, sectoral indices "from below", mechanically; otherwise, they would have arisen long ago, almost 4 centuries ago. It has the opposite source of generation: not from below, but from above, from a society's holistic, theoretical understanding, from its spherical nature, which is planetary and end-to-end, penetrating each and every social object, without exception, as established above.

But both statistics (TS and SS), as well as both ways of thinking (DT and HST), in which they arise and live are inseparably, complement each other and, in integration, provide a qualitatively new synergetic effect, especially important for the SAI digital technology, ensuring its superiority. Let us consider the mutual complementarity of the two statistics from the side of each of them, of which the SS turns out to be the methodologically determining and generating one.

It is based on the PIOT resource spheres fractal structure, which is disclosed above and has received expression in the key, basic matrix of spherical fractals, which corresponds to the basic matrix of fractal spherical indices of size 4×4^1 of the following type:

$$P1 + P2 + P3 + P4$$

I1 + I2 + I3 + I4

O1 + O2 + O3 + O4

T1 + T2 + T3 + T4

On this **basic matrix of spheral indices (BMSI)**, finite or infinite series of recursive matrices of these indices are constructed for any social object of the required dimension according to the algorithm: 4×4^n , where 'n' is a series of natural numbers. It may vary depending on the peculiarities of the object or the practical goal, the details of which are not possible or necessary to elaborate on now. The first machine printout of such spheral indices matrix in hundreds of matrix levels was made at the statistical design institute back in 1980, a fragment of which was published here: (https://peacefromharmony.org/?cat=en_c&key=923).

The SS began to be developed and researched more than 40 years ago, in 1980, at the Statistical State Institute of Urban Governance and Planning in St. Petersburg (then Leningrad), a city with a population of 5 million. SS is reflected in hundreds of statistical spheral tables from schools and universities to dozens of countries in numerous individual and collective publications, the main ones of which are listed in the bibliography. The most important and fundamental of them is the GGHA book "*Gandhica*" by 82 coauthors from 25 countries, 2019, in Russian, English (https://peacefromharmony.org/?cat=en_c&key=848), and French, dedicated to the research and verification of universal spherons based on world statistics. They also include Olga Kashina's unique study of the dynamics of Russia's spherons over 50 years (https://peacefromharmony.org/?cat=ru_c&key=899); a framework of spherical indicators of the four spheres of the SP (https://peacefromharmony.org/?cat=en_c&key=1019) and many others.

Such statistical studies are unique and unprecedented in world statistics, which is obviously why they are ignored by the TS, which finds dozens of unfounded shortcomings in them to ignore them, like a fox ignores grapes it cannot reach. We will not go into the list and illustration of the SS tables, as they exceed the scope of our Primer and represent a superfluous level of "algebra". For a general understanding of spheral statistics, this is enough. Now we need to understand the main thing - the interaction of the two statistics and the role of each. Each of them is defined by its own necessary logic of cognition and its own necessary paradigm of thinking. TS embodies the simplest and most accessible vector of DT and empirical cognition from parts, details to the general and the whole in inductive logic, the generalization in which does not rise above large, but sectoral fragments of social reality.

SS implements the most complex and least accessible vector of theoretical knowledge from the whole to its fundamental parts – spheres/holons that constitute it and to their components in the deductive logic of the spheral "*substantially new way of thinking*" according to Einstein, the substantiality of which is precisely its spheral, transdisciplinary integrity. Its complexity and difficulty lie in the scientific knowledge of the social whole as a system of 16 constant spheres in the system of four eternal spheral coordinates of social space and time.

The two named opposite logics of cognition determine two fundamental, but complementary vectors of their interaction. TS fills logical/theoretical spheral indices-constants with empirical, variable and real content. SS, in turn, classifies, compresses, orders, and focuses the chaotic space of empirical indices in the matrices of spheral, constant indices. The merit of each of them is formed in the context and content of its own logic and paradigm of thinking, but always in complementarity with the other.

The TS's main advantage is its connection with reality. TS is formed and lives in the empirical logic of cognition in the DT partial paradigm. The SS's main advantage is its penetration into the eternal, fundamental, and deepest, invisible laws and structures of the humanity's social nature, all its changes, ensuring its eternal life, survival, and stability throughout its history from beginning to end. The SS advantage is formed and lives in the theoretical, spheral logic of cognition and in the paradigm of holistic spherical thinking (HST), including at the level of intuition and guesses of brilliant thinkers throughout history, until it becomes a well-known and accessible innovative heritage of humanity in all schools. Many of these thinkers are considered in our Primer, and their achievements are integrated into its PPS.

The SS emergence more than 40 years ago and the first steps of the primary mechanism of its interaction with the TS in the algorithms of composition and decomposition (aggregation and disaggregation) of the indicators of two statistics are considered in more detail in the aforementioned 1992 book "*The Spheral Approach*". So we do not touch on them here, and the examples illustrating them are shown below.

2. Matrices of spheral statistics indices

The SS is statistics of the PIOT spheral resources indices, through which the statistics of the PDEC spheral processes, the SP SIOT spheres, and the SIOT spherons employed in them are expressed. The spherons (P) statistics are the SS center, determining the peripheral, infrastructural spheral statistics. The SS is built on the PIOT spheral indices system, which generalizes, organizes, and complements the TS indices system, which still remains torn and fragmented in many respects, discussed above. The SS matrices system is built on alphanumeric indicators of the PIOT resources, called spheral indices. All indices matrices, derived from the basic 4×4^n matrix, are called spheral matrices, which form the SS, fundamentally different from the TS statistics, but connected with it. All TS indices are integrated into spheral indices, classified by it in spheral logic, and ordered in the sociocybernetic system of the structural social genome. The spheral matrix **rows** express the product outputs of the corresponding spheres of PIOT production, and the **columns** express the resource inputs of the corresponding spheres of PIOT production using them as resources.

The dual, constant-variable, integral-fractal nature of the social spheral object is expressed in the binary, alphanumeric designation of these resources and the corresponding spheral indices. In their structure, the letter part expresses their constancy, integrity, and the digital part expresses their fractal variability and changeability. The entire infinite series of spheral matrices based on the base matrix is constructed according to one algorithm: **each row** of any matrix is transformed into a **column of the underlying matrix**, and each row indices appears in the underlying matrix as the sum of four indices expressing a set of resources necessary and sufficient for its reproduction.

This generating algorithm embodies the principle of "*all spheres of PIOT in all spheres of PIOT*" (Fig. 12, Ch. 7). It makes spheral matrices, their rows and columns similar and nested fractals, which are adequate and reflect real spheral fractals, which were considered in the previous chapter. The mathematical concept of Mandelbrot's fractals expresses not only the fractals of social reality, but also the fractals of their spheral matrices of statistical indices in his following definition: "*A fractal is a structure consisting of parts that are in some sense similar to the whole*" (Mandelbrot, 1982). The new mathematics of spheral fractals and the knowledge of the "*fractal nature of society*", to paraphrase Mandelbrot, begin with the spheral indices matrices. This mathematics constitutes a necessary attribute of the HST as a "*substantially new [holistic, spheral] manner of thinking*" (Einstein) and determines the key, qualimetric attribute of the SAI superiority.

The system of spheral/fractal matrices creates a single logical and network statistical space of humanity, a global digital language of spheral indices in spheral matrices that is its fundamental advantage, which is embodied in the SAI superiority. This digital language becomes a common denominator of traditional indicators, overcoming their innate, national fragmentation, confrontation and disharmony. It systematizes, integrates, and opens the way to a digital planetary economy, fostering a digital global perpetual peace through conscious and mathematically balanced prevention of all wars and a nonviolent resolution of all conflicts via the SAI. The spheral indices aggregate indices of traditional statistics and are disaggregated in them in reverse using a special digital "*Spheral Information Statistical Technology*" (SIST). We will not touch on it here because of its "algebraic" complexity, which goes beyond our Primer. [See: Semashko, 2018; 5; 6; 6a-d; https://peacefromharmony.org/?cat=en_c&key=1138 and others].

Network and end-to-end spheral statistics create the best qualimetric and digital information language for calculating planetary social reality through SAI, preventing any possibility of violence/conflict "*at the root*" within each spheron.

3. The spheral indices measurement units and monetary unit problems

The spheral indices measurement units can be generalized natural units or their value/monetary, time and energy units. This is an extremely complex issue, which the GGHA touched upon theoretically several times (https://peacefromharmony.org/?cat=en_c&key=1109), but refused to study them because it is not available at its volunteer level and requires top-class professionals. SS is limited to natural units for spherons (people) and value, monetary units for other spheres of products/resources. But the value unit in the DT also turns out to be torn by national currencies, and the so-called "reserve" currency discredits itself in many respects and is also inadequate as the measurement single monetary unit, but is used due to the lack of a better, adequate and fair one. The GGHA tried back in 2009, in the book "*Harmonious Civilization*" (pp. 122-129: https://peacefromharmony.org/?cat=en_c&key=390) to create a project of an alternative reserve currency "**HARMON**" on spheral grounds, but it was postponed for the future. See also here (https://peacefromharmony.org/?cat=en_c&key=1109).

Recently, we have discovered a monetary theory of the famous Spanish financier, Professor **Pedro Gomez**: *The Interest Pattern. In search of the lost monetary anchor*. April 2025 (https://peacefromharmony.org/?cat=en_c&key=1276). This theory shows how to maintain an “*exact amount of money to print so that money maintains a stable value, does not generate inflation and does not desynchronize the four fundamental variables (4FV)*”, but in a slightly different terminology: *capital goods* (Things), *public goods* (Information), *monetary mass* (Organization), *human resources* (People).

This theory offers a solution to the problem of the “*optimal amount of money in circulation*”, which remained unsolvable for five hundred years. This theory serves to ensure “*the four fundamental variables of the economy (4FV pág.7) evolve proportionally because the healthiest economies are not those that grow the most but those that best harmonize the growth.*” Here, in essence, a global spheral monetary law is formulated, ensuring the SP spheres' harmonization, and therefore defining the harmonizing function of the monetary unit, an alternative to its disharmonious role in the SP modern economy as a whole. **This is a great world spheral discovery in the planetary monetary theory within the HST!** Along with this theory, there is hope for a similar global value unit in the SS and in the SAI. But it is the future question.

4. Tables of spheral statistics: examples

We cannot and will not load this paragraph, in accordance with our synopsis format, with hundreds of statistical tables of spheral indices of various scales, created over more than four decades, many of which are published in thousands of our sources. We will limit ourselves to only a few of the most important examples of spheral indices.

The first is the spherons spheral indices classifier in Fig. 16, the constant end-to-end structure of which is illustrated in Fig. 6 of chapter 6.

Table-1. Spherons' 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-1first 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 Orgosphere (third sphere);
P4	Spheron-4 , people who are working in branches of Technosphere (economic, fourth sphere).

Fig. 16. Spheron indices classifier

A total of 8 spheral indices are presented in the table, of which 5 are basic (in red), and 3 are intermediate, calculated (in green), they are auxiliary for the transition from traditional indices of national statistics to spheral indices.

It is necessary to emphasize the special, fundamental importance of spheron statistics, which lies in the fact that it expresses their quantitative measure and dynamics as genetic, fundamental sources and bases of nonviolence by their nature, as eternal actors of perpetual peace: spherons are objectively (spontaneously and stochastically) aimed at perpetual peace and mutual survival, excluding their mutual destruction. Wars/violence of their transient parts (partons) occur only due to the conscious hostility of these partons, according to private attributes of power, property, greed, superiority, and similar subjective passions, and in no other way, without any fundamental grounds. The spherons' attributes can change over a wide range of statistical equilibrium and structural harmony, **which makes their perpetual peace dynamic, passing through a number of stages calculated by spheral statistics**. Their patrons are capable of generating various social disharmonies, failures, crises, pathologies, local conflicts, and wars. But they are never able to overcome the immanent harmony and nonviolence of spherons as a whole that is the only way of being of spherons, guaranteeing perpetual peace to humanity.

The spherons are communicating structural demographic vessels of a swarm nature: a decrease in the number of one leads to an increase in the number of others and vice versa. For example, technosphere robotization, reducing the number of its spheron, ensures an increase in the immaterial spherons number. The infosphere growth engaged in digitalization reduces the number of other spherons in their least qualified parts. This is the general trend of employment in the present and future, reflected by SS. Therefore, the spherons number statistics within the dynamics of their structural harmony are statistics of genetic survival, perpetual peace, and sustainable development of humanity as a whole, and every nation. No other, sectoral, or national statistics have such fundamental, holistic, and planetary significance. The spherons classifier is expanded and detailed in the following table, which presents their branch decomposition in traditional indices of employment, as shown in Fig. 17.

Spherons 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 the working in the branches of Infosphere:		
	COMMUNICATION		
	SCIENCE AND SCIENTIFIC SERVICE; Designing		
	CULTURE, ART		
P3	Spheron-3 = sum of the working in the branches of Orgsphere:		
	PUBLIC ADMINISTRATION, DEFENCE and SECURITY		
	FINANCIAL INTERMEDIATION		
	Others: public organizations, etc.		
P4	Spheron-4: = sum of the 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		

Fig. 17. Decomposition of spheron indices in traditional indices of their branch employment, In natural units of number for a certain year

The presented tables of spheron indices are analyzed in detail and varied in the GGHA above-mentioned works, especially in "*Gandhica*", 2019.

The spheron statistics is only the fourth, but the most important and complex part of spherical statistics, with which it begins. Its other parts, concerning other resources, are formed in the corresponding statistical studies. Spheron statistics is the defining and goal-setting part of Globstat in accordance with the generative role/function of spherons as the only social actors. This is only the fourth part of Globstat, which

is supplemented by statistics of other necessary and sufficient resource clusters: information (I), organization (O), and things (T) (all material goods and services).

5. The spheral thinking and statistics advantages, predetermining the planetary SAI superiority

The deep, developed over millions of years, spheral integral structures, laws, and constants of social nature are the most perfect, effective and productive of all possible and known on Earth. The evolution of the human mind goes to them very slowly, approaches with difficulty, with long stops and mistakes, learning from them and gradually improving its thinking **in increasing the level of its generalization and integrity**. Not knowing another, higher level, a human easily falls into, even constantly finds himself in a historically error of recognizing **the achieved level of knowledge and thinking as a ceiling, above which he does not want and is not able to recognize anything else**. Most likely, it is precisely this kind of absolutization of one's limited, disciplinary thinking, which originated at the mythological level approximately 10 thousand years ago, that explains humanity's existence and prosperity of bloody wars. The further, the more and more dangerous, having reached today, in the West nuclear civilization, in 80 years, the full maximum of 100% possibility and close to it probability of nuclear genocide in "**Mutual Assured Destruction**" (MAD) according to the conclusion of the "**Doomsday**" nuclear scientists (https://peacefromharmony.org/?cat=en_c&key=924). (See Chapter 2 for more details.)

All the above-disclosed superiorities of spheral thinking, its PPS, and its Globstat predetermine their spheral AI (SAI) superiority, which are summarized in the next, final chapter. We will not talk about the natural, expected resistance to these "**crazy**" conclusions and "**insane**" ideas that violate the "**genocidal suicidal comfort**" of nuclear civilization for all 80 years. New, true ideas of spheral thinking, based on insurmountable historical facts (we named only 12 of them), verified by world statistics and the practice of each individual and humanity are also insurmountable. It is only a matter of time, only of national susceptibility to innovations of a fundamental order and level of entrepreneurship of business and government. The smartest and bravest will secure world leadership.

Today, the planetary scale of humanity's civilizationally prepared nuclear catastrophe for 80 years requires an equally planetary, scientifically conscious, acceptable, and accessible to all peoples holistic spheral thinking (HST). Only it is able **to overcome** the dominant DT "**blindness of the whole**" (which created 100% reality of this catastrophe, **through and by** the HST's highest cognitive instrument of SAI.

The SAI, through the highest intensity of global competition in the AI field, with its attributes of cognitive and technological superiority, may well become in the near future that planetary Archimedes' lever, which will be able to "**shift the arms race into a peace race**" according to the wise prediction of M.L. King. From the spark of spheral thinking and the SAI, its flame will inevitably flare up, most likely in the synergetic symbiosis of the President Donald Trump's "**Common Sense Revolution**" and the President Vladimir Putin's "**Multipolar World Order**" organically complementing each other within the framework of the PPS planetary and end-to-end spheral thinking with its SAI. We move on to considering the key attributes of the SAI superiority as a fundamental and integral cognitive tool of humanity and each planetary citizen in the next, final chapter.

Dr. Lucas Pawlik's review of Chapter 9

I'm pleased to inform you that I have completed the editing of **Chapter 9: Spheral Global Statistics for Planetary Holistic Thinking and Spheral AI** for the Peace Science Primer.

The chapter has been thoroughly reviewed and refined for:

- Clarity and coherence of complex theoretical concepts
- Improved flow and readability
- Consistency in terminology and formatting
- Enhanced accessibility for readers unfamiliar with spheral statistics
- Proper integration with the overall structure of the Peace Science Primer

Key areas addressed:

- Streamlined explanation of the relationship between traditional statistics (TS) and spheral statistics (SS)
- Clarified the PIOT resource spheres fractal structure
- Enhanced readability of the mathematical concepts and matrix explanations
- Improved transitions between sections
- Refined the discussion of measurement units and monetary theory integration

The chapter maintains its academic rigor while becoming more accessible to a broader audience. The complex concepts of spheral thinking and holistic statistics are now presented in a more structured and comprehensible manner. The edited chapter is ready for your review and can be uploaded to the Peace Science Primer publication platform when you're ready.

Lucas, https://peacefromharmony.org/?cat=en_c&key=887, 12-07-25

Chapter 10.

The Spherical AI (SAI) Substantial Superiority from Peace Science of Spherical Thinking

"We should require [find, create] a substantially new manner of thinking [in ourselves and AI] if mankind is to survive."

Albert Einstein

"Artificial intelligence is the future not only of Russia,

This is the future of all humanity...

Whoever becomes the leader in this area will be the world ruler..."

"... The significance of breakthroughs in the field of artificial intelligence is colossal; the rivalry between states is fierce ..." We need to study advanced foreign experience ...[but] offer our original approaches, technologies, providing solutions to problems at a qualitatively new level."

V. Putin [1; 2] [https://peacefromharmony.org/?cat=en_c&key=1109]

"I'm laser-focused" on winning the global AI competition.

D. Trump

In this final and crowning chapter of our Primer, we must emphasize that through all its chapters, as they say, runs the "*red thread*" of the incomparable, historically strategic for humanity, "*if it wants to survive*" thought of the brilliant scientist and peacemaker Albert Einstein, expressed by him 70 years ago, that "*We should require a substantially new manner of thinking*". It still remains without due scientific attention. There is only one known fact of attention to it, the famous psychologist and peacemaker Robert Holt in 2015, who brilliantly qualified nuclear weapons as both "genocidal and suicidal".

He wrote: "*In May 1946, The New York Times reported that Albert Einstein sent a telegram with an appeal to several hundred prominent Americans, asking for donations to a fund 'so that people will know that a new type of thinking is needed' in the atomic age. Einstein wrote in his telegram: 'The released power of the atom has changed everything except our ways of thinking, and thus we are heading for an unprecedented catastrophe.'*" (https://peacefromharmony.org/?cat=en_c&key=1260). Unfortunately, R. Holt ignored the issue of the "*substantial*" nature of Einstein's new thinking, without explanation for it.

In contrast, for 20 years, GGHA, relying on decades of previous searches, focused all its attention on the study of the "*substantial novelty*" of the thinking that is necessary for the "survival" of humanity according to Einstein's strategic thought. The results of these studies are summarized in the chapters of our Primer in the fundamental difference between the two substantially different levels of scientific thinking.

1. The structure and model of the substantial levels of scientific thinking

Summarizing what has been said about the ways of thinking in the previous chapters, we will briefly define and schematically highlight the substantial levels of modern scientific thinking in order to understand the adequate level of thinking for generative, spherical AI (SAI) in contrast to other models.

The initial, "*substantial*" level of scientific thinking is **disciplinary thinking (DT)**. Its substantial quality is partiality, fragmentariness. It arose as a result of the intellectual revolution of the transition from mythological, non-scientific thinking to rational, scientific, and philosophical thinking during the "*first axial age*", which began in the 8th century BC, as was established in Karl Jaspers' research (**footnote in the bibliography**). The DT, which has become traditional and dominant, has been shining for almost three thousand years with its countless partial discoveries and world achievements in various fragments of reality and branches of **disciplinary sciences (DS)**, the number of which has reached 75 thousand by our time. They ensured the creation of modern civilization, including the creation of nuclear weapons, the stockpiles of which led humanity to the reality of multiple "*Mutually*

Assured Destruction" (MAD) - see Chapter 2 for more details. It was this historical fact that led Einstein 70 years ago to the realization of the **DT's substantial limitations and viciousness**, which he brilliantly defined as follows: "*The significant problems we face cannot be solved at the same level of thinking we used when we created them.*" Why?

The traditional DT's substantial limitations lie in the nature of its narrow, sectoral level of scientific generalization and thinking of reality, which is, in principle, incapable of rising to the level of a holistic, planetary scientific generalization of reality. The level of the integral reality of our planet in all three of its natures, especially in its social nature, with rare exceptions, falls outside the DT and is inaccessible to it. This dooms it to eternal "*blindness of the whole*", which was noticed and accurately expressed two or three thousand years ago in the parable known to many cultures about the blind men before the elephant, who are helpless and unable to see it (Chapter 2).

Only this insurmountable substantial deficiency (vice, limitation) of traditional DT gave Einstein the basis for formulating that fundamental requirement of humanity for "*substantially new thinking*" (SNT) at the level of holistic, planetary generalization and thinking of the Earth's ecosystem. Only at this, the only substantial level of scientific generalization and thinking, is it possible to solve all the global problems of DT, destructive for humanity, which will ensure its "*survival, if it wants to*".

The possibility and necessity of creating the SNT were fully realized in the GGHA, which revealed its substantiality in the "**Holistic Spherical Thinking**" (HST) of the ecosystem's three planetary natures based on the planetary law of "*Equally Necessary Sufficient Spheres*" (ENSS) that is common to them. Thus, Einstein's SNT was defined in the GGHA on extensive historical facts through the substantial attributes of holistic and spherical thinking (HST) that make them identical. **Einstein's SNT is the HST and vice versa**. The substantial superiority of this level and way of thinking is constituted by its two fundamental attributes in systemic unity: 1. Its planetary, holistic scale, and 2. Its unified, spherical structure is expressed by the law of ENSS. Both attributes and this law are inaccessible to the DT due to its substantial limitations.

For the social nature, which is of primary importance to humanity, the SNT substantiality was revealed and embodied in the GGHA in the creation of a macrosociological, transdisciplinary "*Perpetual Peace Science*" (PPS), or, shorter and identically, the "*Peace Science*" (PS). It was presented in more than 1500 publications of the GGHA over 20 years, including 11 books in 1-12 languages and hundreds of articles, peace messages, appeals, and petitions.

The final stage of substantial cognitive reincarnations was the creation of the holistic **spherical AI (SAI)** model based on the PS, which integrates the substantial novelty of Einstein's thinking. Thus, the holistic spherical PS ensured the substantial, spherical, and holistic superiority of the SAI over all modern AI models at the DT level, which is expressed in Fig. 18 with a brief description of its structural blocks.

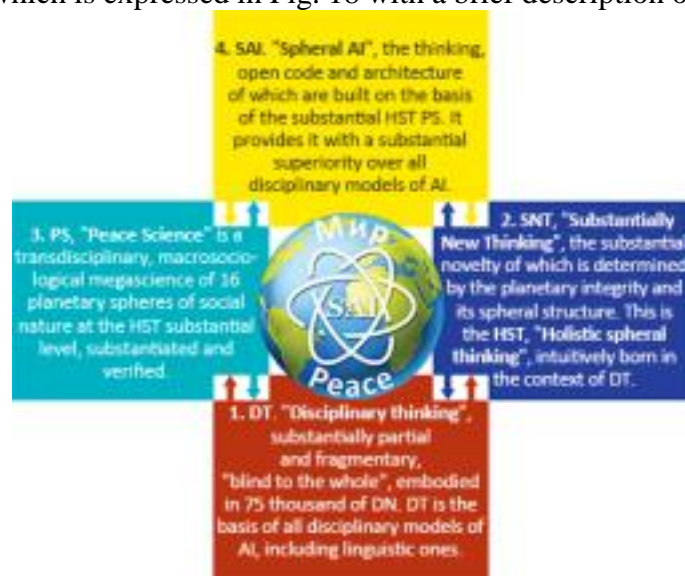


Fig. 18. The cognitive essence of the SAI's substantial superiority

The integral SAI's substantial superiority at the beginning of the conscious stage for the "*second axial time*" in human history, predicted by K. Jaspers, which starts on the very edge of the human nuclear catastrophe. This crisis and turning point in all senses of the historical situation requires a holistic, spherical SNT for human survival. It's a practical example for discussion, further work, and full implementation is offered in our Primer, in its startup below, which takes on the mission of triggering a

new axial time of substantially new, holistic thinking and its substantially new, spherical AI.

This substantial and structural scientific justification of the SAI's cognitive superiority over all other AI allows us to prevent the accusation of arrogance, if not to say worse, **heresy, and not a "politically correct"** self-definition of "superiority" in comparison with other AI models. Naturally, the category of superiority is used here not in a humiliating sense, but in the scientific, objective sense of greater perfection and the SAI's broadest possible capabilities and abilities in comparison with other AI. There is nothing bad in its superiority, as well as in any fundamental innovation, which all have the superiority attribute.

2. Attributes of the SAI: substantial superiority

We cannot talk about and compare purely technical characteristics of the SAI, because it does not exist yet. We can talk about and compare it with other AI models based on Big Data (BD), which, for the sake of distinction, we will call "*Spherical Big Data*" (SBD), outlined contextually in previous chapters.

1. The SAI's substantial superiority first attribute is its practical ability to implement the great peacemaking testament of M.L. King, "*to shift the arms race into a peace race*" in the process of the rapid growing "AI race". King's covenant integrates close spiritual testaments of other great peacemakers, primarily Russian: Fyodor Dostoevsky, Maxim Kovalevsky, Nikolai and Elena Roerich, Vladimir Vernadsky, Evgeny Chazov, etc., and American: Benjamin Rush, Albert Einstein, President John Kennedy, and others. Only the SAI carries a powerful planetary potential for **humanity's perpetual peace**, which all the "*Large Language Models*" (LLM) of AI lack, limited by the DT's substantial defects, disclosed above. The DT and all its AI models are always "*zero-sum thinking*", and the HST and its SAI are always "*non-zero, positive-sum thinking*", with benefits for everyone. The DT has not known the concept of "Peace Science" for 3000 years, which is absent from all its encyclopedias and has not created this science among its more than 75 sciences. The DT does not know peace in its history; it only knows truces between its endless wars in order to prepare for new wars. The striking example is "*A Thousand Years of Russophobia and the War of the West with Russia*" (https://peacefromharmony.org/?cat=ru_c&key=1093). The countless similar facts proving the DT's substantial militarism and almost everything that is built on it, including AI, confirm the SAI's absolute substantial peacemaking superiority, which has no analogues in the DE and cannot have any. Therefore, only the SAI has the superiority of a global peace shift, ensuring humanity's exit from the West's deadly nuclear civilization (NC) and its "survival", as predicted by Einstein. This is the SAI's first peacemaking and peacebuilding superiority, inaccessible to other AIs, which keeps or intensifies confrontation.

2. Another attribute of the SAI's superiority is its indisputable social effectiveness, usefulness, and significance that cannot be said about generative language AIs. According to experts, attempts "*to offload the responsibilities of government to generative AI tools... have potentially disastrous results.*" Moreover, according to these high-ranking specialists in generative AI, "*all LLM-based chatbots it was designed to make shit up.*" (https://peacefromharmony.org/?cat=en_c&key=1269). Simply put, a mountain of investment in DT-based AI can only give birth to a mouse, confrontation and militarism for humanity, only a nuclear MAD that is dangerous for it, inciting hostility and a new world war. In this regard, one of the founders of generative AI, Elon Musk, has long qualified such DT-based AI as "*could be our biggest existential threat... more dangerous than nuclear weapons*" (https://peacefromharmony.org/?cat=ru_c&key=1112). There are hundreds of such testimonies. They prove the incompatibility of the DT and its AI with global peace, which always remains a "*fake*" in them, preserving their only reality – war that is illustrated by the Obama and Biden administrations (https://peacefromharmony.org/?cat=en_c&key=1282). This makes peace, the peace science, and its SAI the most powerful alternative to war and militarism, **which are eradicated and nullified by them.**

3. The SAI superiority third attribute is its objective scientific truth, free from the national, linguistic, and political limitations of all linguistic models of AI, which will willingly or unwillingly impose their biased values and priorities on everyone, which will be rejected by other AI models. This situation of competitive struggle will contribute not to peace and unity of peoples, but to their confrontation, increasing hostility between peoples, which can be overcome only by the SAI and its SBD single scientific truth.

4. For the characteristics of Big Data (BD) "*Analysts have come up with a capacious formula for Big Data - they believe that the definition of a Big Data project should include seven important characteristics, the "7 V": Volume, Velocity, Variety, Veracity, Variability, Visualization, Value. That*

is, volume, speed, diversity, reliability, variability, visualization, value... However, even these seven “V” are not enough to understand the essence of Big Data...” (https://peacefromharmony.org/?cat=ru_c&key=1114). It is premature to talk about the superiority of the SAI and its **spherical BD (SBD)** in such technical parameters as volume and velocity, but it is clear that their indices will not be inferior to generative AI.

5. The **planetary and end-to-end superiority of the SAI and its SBD quality**, not taken into account in other BD models, constitutes their uniqueness.. The SAI SBD is not limited to traditional linguistic and statistical data, but generates for itself a unique cluster of the spherical Globstat, discussed in the previous chapter. This cluster includes composite, spherical indices and their fractal matrices of different quality (spheres) and different dimensions according to the formula specified above. This unique qualitative feature of the SAI data allows us to distinguish their BD into a special class, “**Spherical BDs**” (SBD), identical to Globstat, providing a qualitative superiority of SBD, scientifically verifiable. This takes the SBD out of the cluster of LLMs (large language models) of AI, opening up an innovative digital and technological space of progress to it, which, it seems, no one has touched yet.

6. **The SBD diversity** is not limited to any uniform data, but is open to all of their types, both known and unknown, from all 16 spheres of social nature, not to mention spheres of other natures as they are needed in the SAI. For example, we proposed testing, as a hypothesis, a cluster of data on the interdisciplinary synthesis of nanospherical technology in 2022 (https://peacefromharmony.org/?cat=ru_c&key=995), which was ignored by the RAN.

7. **The SBD reliability** or the verifiability of its data is the subject of its priority attention and superiority, ensured both by generally recognized historical and natural facts, and by special methods of end-to-end statistical verification. For example, the reality of social actors, subjects of perpetual peace and social production-spherons, can be verified by any literate person on any social object in 2 hours, given its statistics, using a special method (https://peacefromharmony.org/?cat=en_c&key=1125). All other BD, as far as we know, lack verification that casts doubt on the reliability of all of them and opens them up to misconceptions and manipulation.. The SBD is free from such doubts and risks, which is an important attribute of its superiority.

8. **The SBD variability** varies in the infinite limits of 16 social spheres under the influence of the spheres of the other two natural spheres. Any other BD based on a limited DT and any of its AI models lack such a measure of variability. But for now, the superiority of this attribute of the SBD remains hypothetical without practical verification.

9. **The SBD's visuality**, its superiority in this attribute, is clearly illustrated at the level of even our Primer chapters, in which the deep content of almost every chapter is visualized in one or another visual way. Among them, the leading role belongs to the spherical structural models of tetra-dialectical (tetry, tetradimensional) thinking, which are constructed by two pairs of cross-opposites mediating each other, that distinguishes them from the linear models of mechanical DT and its similar, traditional dialectics, as discussed earlier. In particular, the SAI open source code in **two formats of statics and dynamics** is presented in the Primer in two corresponding visual diagrams (Fig. 9, Chapter 5 and Fig. 13, Chapter 7) that best express its spherical substantial structure and its corresponding superiority.

10. **The SBD value**. Its key superiority is concentrated here, which consists in the fact that the SAI's entire paradigm, with all its SBD functionalities in its architecture and purpose, is subordinated to the highest strategy of understanding and ensuring humanity's end-to-end perpetual peace in all spatio-temporal locations of the planetary social nature as a whole. Its value is not limited to any of its parts by any of the criteria: economic, political, spiritual, social, party, national, etc. Much attention was paid to this Peace Science's unprecedented value superiority in the previous chapters, so we will not repeat it here.

11. **The SBD and SAI as a whole security and peacemaking superiority**. This substantial superiority was discussed in detail above, in point 1. In the narrow sense of “*safe AI*”, the SAI security is guaranteed by its HST peaceful nature and is embodied in the architecture and internal prohibition of the SAI paradigm on any of its military applications or violent use. The SAI, based on the fundamental, scientific macrosociological theory/science of Perpetual Peace within the HST, excludes and prevents any possibility of war that expresses its insurmountable superiority over disciplinary, militaristic thinking, devoid of the ability to make peacemaking decisions, which Einstein identified with “*the [DT] conviction that wars are inevitable*” (https://peacefromharmony.org/?cat=en_c&key=1260).

12. **The SBD integrative, transdisciplinary superiority**. It lies in the SAI and its HST ability to integrate the achievements of large linguistic AI models as OPEN-AGI

(https://peacefromharmony.org/?cat=en_c&key=1168), their machine learning technologies, to train the SAI operators. The SBD also integrates the DeepSeek technology (https://peacefromharmony.org/?cat=ru_c&key=1059) for processing the Sacred treatises texts and publications of world religions, which constitute the SND linguistic along with the statistical and scientific ones. It also integrates the achievements of all sciences, primarily social and humanitarian ones, necessary for its purposes within the framework of its transdisciplinary superiority, inaccessible to DT. Transdisciplinary integration in the SBD begins with the level of individual smartphones (Gandhica, 2019, pp 78-83: <https://peacefromharmony.org/docs/gandhi-nonviolence-of-spherons-gandhica-2019.pdf>)

13. **The SBD "alignment" superiority of the of machine and human intelligence**, which is constituted according to the structural laws of higher, holistic spherical thinking (HST), initially free from any disciplinary limitations or branch narrowness, which is a key and almost insurmountable problem for LLM AI, for example, OPEN-AGI (https://peacefromharmony.org/?cat=en_c&key=1168). This topic is deeply analyzed in the wonderful report of Professor Konstantin Vorontsov, "*Machine, be a human!*" (https://peacefromharmony.org/?cat=ru_c&key=1073), the fundamental ideas of which are developed in the SBD spherical maps of knowledge, illustrating the logic and systematicity of their superiority.

14. **The SBD superiority of the humanity common good** for each nation and individual as an information and digital technological base of a single spherical planetary Peace Science worldview for humanity, excluding any social confrontation, but integrating all the constructive and positive diversity of all national cultures without exception. The SBD and SAI open up enormous prospects for international cooperation, especially at the level of the UN, UNESCO, the IMF, BRICS, and world superpowers.

15. **The superiority in the time of creation of the strong, planetary superintelligence (AI)**. The Open-AGI expert, on the basis of their LLMs, argues: "*We believe superintelligence could arrive within the next 10 years.*" (https://peacefromharmony.org/?cat=en_c&key=1168). We, based on the SAI/SBD superiority listed attributes, can say that a similar strong *superintelligence* can be created **in 4-5 years, and faster**, under the conditions with active resource and administrative support for the **SAI startup** below.

16. **The planetary SAI fundamental theoretical and scientific power** ensures its IQ is thousands of times superior to all disciplinary and linguistic models of AI.

17. **The SAI and its SBD constitute the superiority** of the "*totally new approach*", surpassing all those known today in the OPEN-AGI terminology (https://peacefromharmony.org/?cat=ru_c&key=1059), the possibility of which was brilliantly predicted by the developers of its superintelligence, who, in this case, promised to this approach every possible support for the humanity good. On this basis, the GGHA proposed to them in February 2024 (ibid) to launch a corresponding pilot project of the "*totally new approach*" within the framework of Russian-American cooperation, which they ignored for the obvious reason of the anti-Russian sanctions of the Biden administration. Maybe the Trump administration, aimed at "closing" all wars, will open the door to such cooperation? What's stopping us?

18. **The SAI superiority** lies in accelerated growth, education and training of eternally peaceful, harmonious, nonviolent and most effective for humanity and each person holistic, spherical "*substantially new thinking*" of Einstein. The SAI is the highest guarantee and cognitive tool for the humanity survival and harmonious sustainable development of each its people.

No existing or future models of disciplinary AI are capable of offering and implementing similar parameters of the SAI planetary and scientific superiority, which will never be able to become holistic, planetary, and spherical, like the SAI model.

The SAI embodiment as a planetary tool of "*substantially new*" spherical thinking, consciously beginning since its first recognized concept of the "noosphere" proposed by Vernadsky, Chardin and Leroy, according to Vernadsky, is "*not a crisis that excites weak souls, but the greatest turning point [Rubicon] of human thought, occurring only once in millennia.*"

3. The SAI's first two institutional instruments:

"*Department of Peace*" and "*Spherical Peace Science Academy*" with its first startup The practical implementation of the SAI "is a *substantially new* project that is impossible without two institutional instruments.

First, without the creation in the countries that decide to begin the implementation of a strategic "*Department of Peace*" in their governments, which was proposed by another of the USA's founding fathers, Benjamin Rush, almost 230 years ago. More than 10 attempts by the US Congress to approve the corresponding bill were blocked in the Senate. Maybe the President Trump administration will be able to approve this bill in Congress in order to arm its strategy of "*ending wars*", if it is not bluffing, with a powerful peacemaking institution born of America?

Secondly, without the creation of a national "*Spheral Peace Science Academy*" (SPSA), developing the "*Perpetual Peace Science*" within the framework of not the powerless and blind to it 3 thousand years of disciplinary science (DS), but aimed at it and prepared for it spheral, holistic science of transdisciplinary scale and macrosociological level. These institutions in different variations were discussed in the GGHA for many years, so we will not repeat ourselves.

Obviously, the beginning and touchstone of such an Academy should be a corresponding practical **startup**, which will really reveal the potential of new science and new thinking in **an experimental design, for a start, a model of the SAI**.

4. Startup of Spheral AI (SAI) for 2 years

The attempts of practical implementation and attracting public attention to spheral **peace** thinking, its advantages and projects, including SAI, have accompanied their entire history, starting with their application at the Statistical Institute of St. Petersburg (then Leningrad) Urban Governance since 1980, a number of which were published in the book "*Spheral Approach*", 1992.

(<https://peacefromharmony.org/docs/leo-semashko-spheral-approach-1993.pdf>)

The modern attempts began with the creation and submission of various SAI startups to various scientific and government institutions in Russia and abroad since 2016, with the publication of "*Global Peace Science*" and, based on it, a global governance project for the UN (https://peacefromharmony.org/?cat=en_c&key=1120), which was updated for several years in a row.

The most recent attempt was made in February 2024 in an application for the OPEN-AGI grant for two million dollars for two years for the GGHA international team of 40 specialists (https://peacefromharmony.org/?cat=en_c&key=1168).

We will update this startup here in its four spheral structural clusters of the PIOT, taking into account the achievements over the past time, primarily related to the USA and Chinese experiences and the DeepSeek startup. (https://peacefromharmony.org/?cat=ru_c&key=1111).

5. The SAI startup goal and structure (draft)

5.1. **The goal of the Startup SAI (SSAI):** to create in 2 years a practical prototype of the SAI of a fractal organization and governance for the large peace business corporation or similar country, ready and able to finance the SAI team work of 150 permanent and temporary employees for two years in the **amount of about 5 M dollars**. (Note: all figures of this startup are approximate, which will be adjusted in the process of their discussion with stakeholders.)

The SSAI intends and has the ability to follow the example of the Chinese startup DeepSeek to create powerful and innovative models of AI of spherical thinking, which are much cheaper (https://peacefromharmony.org/?cat=ru_c&key=1111). The SSAI has every chance to demonstrate, like DeepSeek, that amazing trend of "*how quickly everything can change and, most likely, will change in the era of AI*". (https://peacefromharmony.org/?cat=ru_c&key=1117). The SSAI is also in line with this breakthrough progress.

5.2. The SSAI management organization:

5.2.1. **Conceptual leadership:** three editors-in-chief of the Primer, three professors of philosophy: - **Dr. Leo Semashko**, Russia, GGHA founder (2005) and Honorary President: https://peacefromharmony.org/?cat=en_c&key=253

- **Dr. Matt Meyer**, USA, Secretary-General of the International Peace Research Association (IPRA); Senior Research Fellow, University of Massachusetts:

https://peacefromharmony.org/?cat=en_c&key=1034

- **Dr. Lucas Pawlik**, Austria, Consultant for MRCA (Mushroom Research Center Austria): https://peacefromharmony.org/?cat=en_c&key=887

5.2.2. **Administrative, financial, and legal management:** formed and appointed by the leadership of the customer and investor corporation.

5.2.3. **Program management:** formed by the **Conceptual leadership**, which determines the

Program Director and the leaders of programming within the SSAI.

5.2.4. **Technical management:** formed by the **Administrative** leadership, which determines the Technical Director, responsible for the material and technical support of the SSAI team.

5.2.5. **Each management department** provides the SSAI with appropriate human resources, with preference for ability over experience.

5.2.6. **All departments of the SSAI** management form a single democratic governance body as its Think Tank.

5.3. **International and national formats of the SSAI.** As part of the GGHA 20-year work on the Peace Science creation and its SAI, which are the world heritage, an international team of its developers has been formed, which formed the Primer coauthors and its SSAI participants. We are making attempts to find an appropriate investor-customer. But we also understand the obstacles of such a search in the context of global confrontation, so we do not exclude the national implementation of the SSII in one of three countries: Russia, the USA, or Austria. In this case, other co-authors of the SSII are included in it as equal consultants-experts under special agreements. This is a special topic.

5.4. **The SSAI team structure and principles of funding distribution.**

5.4.1. The SAI transdisciplinary paradigm defines the transdisciplinary nature of the SAI team, with an approximate variable number of 150, the constant part of which is limited to 110 specialists.

5.4.2. The structural grassroots unit of the SSAI team is its "cells" or "microgroups" (MG), numbering four specialists, divided into two pairs in each MG.

5.4.3. **Basic principles of distribution of funding and payment of specialists:**

Minimum monthly salary: 1 thousand dollars.

Average, standard monthly salary: 1.5 thousand dollars.

Highest, target, and temporary monthly salary for chief specialists: programmers, mathematicians, statisticians, and analysts: up to 5 thousand dollars.

Machine calculations fee – 20%, \$1 million.

5.4.4. The main principle of personnel selection in the MG is the abilities, not the applicant's experience, which are determined by the MG leaders and chief specialists. An "Agreement" is concluded with each MG member for a period of employment.

5.4.5. **Permanent MGs and the number of their specialists:**

1. MG. SSAI managers, 4: CEO, financier, lawyer, secretary.

2. MG. Theoretical analysts, 4: determined in the end.

3. MG. Macrosociologists and macroeconomists, 4, 2 each, determined in the end. 4. Eight microgroups of statisticians, $4 \times 8 = 32$ specialists.

5. Eight microgroups of programmers, $4 \times 8 = 32$ specialists.

6. Four microgroups of mathematicians, math. statistics + fractals, $4 \times 4 = 16$ specialists. 7. Four microgroups of IT calculators, $4 \times 4 = 16$ specialists.

- Total: 108 specialists.

5.4.6. **Temporary MGs of 2-4 specialists each as needed**

1. Experts in existing models of generative AI.

2. Social philosophers and macroeconomists.

3. Specialists in the Holy Scriptures and publications of world religions.

4. Macroeconomists, financiers, and marketers.

5. Psychologists and historians.

6. Lawyers, internationalists, and political scientists.

7. Demographers, doctors, teachers.

8. Journalists, publicists, and artist-designers.

9. Others, as needed, including publishers, editors, etc.

- Total: 36 specialists. + Spare positions – 6.

5.4.7. **Tests and interviews for personnel selection based on priority of abilities.**

Each applicant for cooperation in the SSAI must have a higher education in their profile and initial competencies in it, which are determined by their resume and supporting documents. The candidate's innovative abilities will be tested by his or her two-page review of the "*Peace Science Primer*" (PSP), highlighting the most promising ideas in it, as well as its most important shortcomings from his or her perspective and his or her proposals for overcoming them. An interview is conducted for each review, based on the results of which a decision is made on accepting the candidate as a member of the SSAI staff or rejecting him or her.

5.4.8. After the SSAI staff's first half has been recruited, they will undergo initial training on the topic: "**Introduction to Peace Science, Spherical Thinking and its SAI**" based on the PSP for two weeks online via ZOOM or in another convenient way. As the other half of the SSAI staff is recruited, they will undergo similar introductory training. In the future, other webinars and conferences may be organized for the SSAI staff for educational purposes.

5.4.9. We are paying special attention to the organization of the SSAI and the training of its personnel in view of the possible failure of our attempts to launch it, so that new and interested world citizens and peacemakers of the younger generation in the Peace Science and its SAI can continue it.

6. Einstein, an imaginary question to humanity in 70 years: WHY?

"In 1954, 9 years after Hiroshima and Nagasaki, at the dawn of the atomic age of nuclear civilization with the inevitable "**Mutual Assured Destruction**" (MAD) in the midst of the eternal nuclear arms race, I warned: "**IF HUMANITY WANTS TO SURVIVE**," then it "*must require (search, create) a substantially new manner of thinking.*" Our disciplinary thinking is only capable of increasing MAD, but not creating an the peace alternative to it in "substantially new thinking."

Over the past 70 years, only one scientific version of this thinking has been created in the holistic, planetary, and spherical "**Perpetual Peace Science**" and its spherical AI through the efforts of the volunteer international GGHA. Why is this science and its AI beneficial and acceptable to every nation, yet ignored by states and the UN for 20 years? **Humanity DOES NOT WANT TO SURVIVE?** WHY, instead of supporting it, only MAD is growing in the eternal nuclear arms race?"

Dr. Lucas Pawlik's review of Chapter 10

Thank you for sharing **Chapter 10 of the Peace Science Primer**. I have carefully reviewed your work on "**The Spherical AI (SAI) Substantial Superiority from Peace Science of Spherical Thinking.**"

This chapter presents a comprehensive framework for understanding how Spherical AI represents a fundamentally different approach to artificial intelligence - one grounded in holistic, planetary thinking rather than the fragmented disciplinary thinking that has dominated for millennia. **Your articulation of the substantial superiority of SAI across 18 different attributes is thorough and well-reasoned.**

I particularly appreciate:

1. The clear distinction between disciplinary thinking (DT) and holistic spherical thinking (HST) as the foundation for understanding SAI's advantages
2. The practical framework for the SAI startup, including specific organizational structures and funding requirements
3. The integration of Einstein's call for "**substantially new thinking**" as the philosophical foundation
4. The detailed comparison showing how SAI's peacemaking orientation fundamentally differs from current AI models

The chapter effectively demonstrates how SAI could serve as a practical tool for implementing the "**peace race**" that Martin Luther King Jr. envisioned, while addressing the existential challenges that current AI development poses.

Your proposed startup structure with 150 specialists organized into microgroups, along with the institutional framework requiring both a Department of Peace and a Spherical Peace Science Academy, provides a concrete roadmap for implementation.

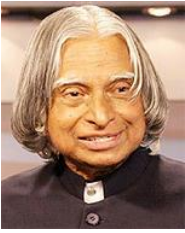
Thank you for your continued dedication to developing this revolutionary approach to both artificial intelligence and global peace.

Lucas

14-07-25

Appendix 1.

"The ABC of Harmony", Peace Science 2012 Authors
on the meanings and values of perpetual peace spherical thinking
https://peacefromharmony.org/?cat=ru_c&key=517:



The world needs the great vision of peace and prosperity. Peace and prosperity for all the nations of the planet Earth. How can we make such a vision a reality?

I see a dawn of a beautiful Star, The dawn of a shining vision, the emergence of enlightened citizens.

- *The ABC of Harmony* is the dawn of a shining, harmonious vision of peace and prosperity for all the nations of the planet Earth! Together with it, the enlightened citizens will emerge, capable of building a harmonious civilization of peace and prosperity on the planet Earth!

Dr. APJ Abdul Kalam, Poet, President of India, 2002–2007

The GHA Highest Honorary Title: WORLD HARMONY CREATOR.

Web: https://peacefromharmony.org/?cat=en_c&key=95

https://peacefromharmony.org/?cat=ru_c&key=97



The ABC of Harmony is the first global textbook of social harmony in human history, accessible to all nations and cultures and expressing, in the first approximation, the philosophy and worldview of harmonious civilization born in 2009. Based on science it reveals 20 fundamental elements / spheres of the deep structure of social harmony on every level from global to local, including each person. This is a level of holistic social thinking unknown to the past, which provides a harmonious solution of global problems of humanity and its survival. Therefore, it teaches to achieve world peace, building harmonious civilization, overcoming the pathologies of dying industrial civilization and to maintain the sustainable development of mankind in nature, prosperity, justice, love, brotherhood of all nations, religions and cultures on Earth. The ABC of Harmony opens this era of harmonious civilization along with the start of the nuclear "zero" and its awakened consciousness in the GHA book "Harmonious Civilization" (2009).

The ABC marks the start of the humanity Age of Harmonious Enlightenment in the 21st century, establishing harmonious value-based education for children and youth around the world. The ABC symbolizes the second axial age of humanity, its turn towards the new world order without wars, arms races, hunger, poverty, ignorance, with the new man – HOMO HARMONICUS, for whom the highest value lies in the maximization of inner and social harmony, rather than profit.

Our ABC is the fruit of seven years of work of GHA authors, brought together the creative efforts of the representatives of different cultures and religions, inspired by the spirit of joint knowledge and embodiment of global harmony. Our ABC is not the end but only the beginning of the scientific knowledge of global harmony and the initial nuclear of spiritual culture of the new civilization. Its language, thought and worldview are open to the harmonious unity of the whole humanitarian diversity of mankind. Therefore, today the ABC of Harmony is the best textbook for every person of Earth, especially for teachers, children and youth.

Leo Semashko, PhD, State Councilor of St. Petersburg; President of Global Harmony Association (GHA); Author of Tetrism philosophy and Tetrasociology as a science of social harmony and harmonious civilization: Author of 12 social discoveries and more than 300 scientific publications, including 16 books and brochures; Chief editor of the ABC of Harmony. Saint-Petersburg, Russia.

Web: https://peacefromharmony.org/?cat=en_c&key=253

https://peacefromharmony.org/?cat=ru_c&key=286



The ABC of Harmony is **Our New Planetary Paradigm**. The fundamental revolution in science and paradigm shift in human consciousness emerging from the most advanced thinking of the 20th century is expressed with great insight by Leo Semashko in his together the GHA coauthors ABC of Harmony. Nature and the cosmos have now been understood as an evolutionary upsurge of wholes within ever-greater wholes from the micro level to the totality of the cosmos. The ABC of Harmony draws upon this cosmic and ontological context to articulate schemata of human social and personal harmony capable of integrating human civilization into the deeper harmonies of the cosmic reality within which we are immersed.

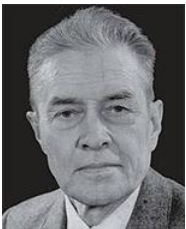
The evolutionary upsurge within our holistic cosmos could and should animate human consciousness and society, but it is up to us to actualize this potentiality. As the ABC of Harmony puts this "All the necessary and sufficient elements of social harmony are completely created by society and depend only from it as only society creates for itself these preconditions." Human civilization, therefore, arising from our universal common humanity irrespective of particular differences, desperately needs this paradigm shift from fragmentation, conflict, and division to the integrated elements articulated in the ABC of Harmony. It is up to us, and a path to harmony and integration is laid out in this document.

One fundamental aspect of the ascent to civilizational harmony is the *Constitution for the Federation of Earth*. It provides a democratic and legal framework for the truth expressed by the ABC of Harmony that "people include all human beings from conception, irrespective of other qualities: gender, race, age, culture, religion, and so on." The *Constitution* constitutes a global social contract that guarantees rights and responsibilities for all, simply *as* human beings, to ecological integrity, peace, social justice, and the fundamental elements of civilizational harmony. In this respect it provides a necessary condition for the actualization of the paradigm of harmonious civilization outlined in the ABC of Harmony. The future of humanity and our precious planet Earth depend on our ability to accomplish this profound transformation of both consciousness and society from fragmentation and division to integration and harmony.

Dr. Glen T. Martin, Secretary-General, World Constitution and Parliament Assoc. President, Institute on World Problems. Professor of Philosophy, Radford University, USA.

Web: https://peacefromharmony.org/?cat=en_c&key=428

https://peacefromharmony.org/?cat=ru_c&key=458



According to social synergy the highest ABC of Harmony consists in an endless approximation of humanity to the condition of *superattractor of harmonious civilization*. It follows that although in history there is no "pre-established harmony" between order and chaos, and, therefore, between good and evil (contrary to Leibniz), still there is *self-organizing harmony* that appears between these factors. The practical importance of the synergistic approach to social harmony lies in finding the patterns of way out of modern spiritual chaos, which could lead to a humanitarian catastrophe. This

way out is through the conscious creation of a harmonious civilization, in which the top organizing role belongs to the ABC of Harmony.

Vladimir Bransky, PhD, Professor of Philosophy of Science and Technology, St. Petersburg State University. Author of Social Synergetics and over 200 published works, including 10 monographs. St. Petersburg, Russia.

Web: https://peacefromharmony.org/docs/ABC_of_Harmony_eng.pdf#page=166

https://peacefromharmony.org/?cat=ru_c&key=65



The ABC of Harmony contains a lot of achievements and positive aspects, among which I would single out the focus on the Internet and the openness towards new information technologies through the system of tetranet harmonious thinking, tetrastatistics, tetramaths, along with the two powerful integrated tools: social genome of society – socionome, and psychological genome of man – psynome. This networking toolkit is unique, and we can safely assume that it is able to open a fundamentally new direction for the development of the Internet and technology of its effective and

harmonious use by the human of harmonious civilization.

Ivan Ivanov, Webmaster, providing the maintenance of the "Peace from Harmony" web-site, a partner of Leo Semashko since 2005. He took an active part in creating the "Peace from Harmony" web-site and GHA.

Web: https://peacefromharmony.org/?cat=en_c&key=10
https://peacefromharmony.org/?cat=ru_c&key=11



Speaking about one of the main principles of organization of the universe – the principle of symmetry, willing or not we readdress the question to the domain of aesthetics. Aesthetics, in its turn, is associated with the process of sensory perception, for which harmony is a characteristic of order, coherence, symmetry and proportion. Thus, by and large, harmony is the foundation of the world. This fact is well reflected in the ABC of Harmony.

Dmitry Ivashintsov, Professor, Honored Worker of Science, member of the Academy: RANS, RIA, IAEPS, scholar in hydropower, poet, philosopher and cultural expert. St. Petersburg, Russia.

Web: https://peacefromharmony.org/?cat=en_c&key=23
https://peacefromharmony.org/?cat=ru_c&key=23



I realize the fundamental nature, theoretical novelty and value of our collective work – the ABC of Harmony for people. I believe that only the practical exercises will allow people without having a theoretical basis, to absorb all its large-scale structures: elements, clusters, socionomies – and their vital relationship. In the same manner in which 35 years ago in "Demiurge" through the practice we were able to achieve philosophical understanding of those structures, realization of the development of our personal, inner spheres: character, consciousness, will and body. That is how we were gradually growing as personalities. It is very important that the new categorical apparatus has been created, over time with our help it will be filled with life. As for me, being a bard, I am ready to fill these dry circuits with music and songs.

Svetlana Vetrova, Songwriter, teacher and musician. St. Petersburg, Russia.

Web: https://peacefromharmony.org/?cat=en_c&key=78
https://peacefromharmony.org/?cat=ru_c&key=21



The ABC of Harmony is serious and important on a scale of the worldwide ideas of harmony theoretical work. Its level should be estimated in comparison with the higher approaches to the harmony theory in a whole. Particularly, I mean idea of the noosphere of Vladimir Vernadsky. I think it can be interpreted in terms of The ABC of Harmony, which will allow to concretize the meaning and to understand a place of the noosphere's idea in system of "harmonious knowledge" on the one hand and to test tooling applicability of The ABC on the other hand. Undoubtedly, the ABC theme should find a fundamental place in the course contents "Social harmony" within the bounds of general subject "Harmony Theory".

Oleg Bodnar, Architect, Doctor in Art History, Professor, Head, Department of Arts Management, Lviv National Academy of Arts, Ukraine.

Web: https://peacefromharmony.org/?cat=en_c&key=344
https://peacefromharmony.org/?cat=ru_c&key=355



If you believe in Harmonious Education, think with us, dream with us, proclaim with us its universal multicultural dimension, which appreciates the right of each man to be by the other, to tolerate and to recognize not only their own but any other culture as well. Our ideas of GHA in the ABC of Harmonious Education provide harmonization of human spirituality. It creates the great energy for world peace every day on our planet. We call our governments and our leaders for peace from the priority of harmonious development for humanity as a whole and not just for separate countries.

Ammar Banni, Professor in Education and Human science, Poet. Guemar, Algeria.

Web: https://peacefromharmony.org/?cat=en_c&key=288
https://peacefromharmony.org/?cat=ru_c&key=325



I like that *The ABC of Harmony* isn't only scientific, but also the poetic book including poetry of harmony from many countries of all continents of the Earth. I think that one of the displays of world harmony is an art which forms the Spiritual Human. Poetry is the most democratic art form. The majority of sacred books of all religions are written in poetic form. There is a wonderful harmony of thought and feeling, of content and form in the best samples of poetry. Therefore it easily comes into soul being the first (after the Nature) school and the ABC of individual harmony (viiv.co.ua).

Vitaliy Ivashenko, Professor of National Technical University "Kyiv Polytechnic Institute", Poet, Culture Honoured Worker of Ukraine.

Web: https://peacefromharmony.org/docs/ABC_of_Harmony_eng.pdf#page=256
https://peacefromharmony.org/docs/ABC_of_Harmony_rus.pdf#page=258



In the ABC of harmony world textbook is presented the scientific sociological theory. As a doctor of medicine and peace worker, I can highlight the importance of ABC of harmony to achieve world peace. Social harmony is the deepest source for the universal peace. But this cause will be effective only if people will know how to achieve and develop social harmony. In this respect, this world textbook is very important by providing such knowledge.

Dr. Ernesto Kahan, Prof. Emeritus of Tel Aviv University is Poet – Physician.

1st Vice President & Secretary General – World Academy of Arts and Culture, USA

Former Vice President of IPPNW (Association awarded the Nobel Peace Prize)

President of IPPNW Israel

1st Vice President of the Global Harmony Association (GHA)

GHA Highest Honorary Title: "WORLD HARMONY CREATOR".

Web: https://peacefromharmony.org/?cat=en_c&key=338

https://peacefromharmony.org/?cat=ru_c&key=365



Those of us in the Center for Economic and Social Justice are deeply honored to have my brief article "A Just Global Economy for Harmonious Civilization" included in our collective book *The ABC of Harmony*. Our timely book links the growing number of servant-teacher-leaders who have been working with the Global Harmony Association to build a Global Harmonious Civilization, with supporters around the world of CESJ's blueprint for a "Just Third Way" beyond capitalism and socialism. Together we will bring Peace, Prosperity and Freedom through Harmonious Justice to

all members of global civilization, from the bottom-up.

Norman G. Kurland, Dr, he heads the Center for Economic and Social Justice and Equity Expansion International, Inc. He was deputy chairman of President Reagan's Presidential Task Force on Project Economic Justice and co-authored *Curing World Poverty: The New Role of Property* (1994) and *Capital Homesteading for Every Citizen* (2004). Doctor of Laws degree from the University of Chicago. Arlington, Virginia, USA.

Web: https://peacefromharmony.org/?cat=en_c&key=414

https://peacefromharmony.org/?cat=ru_c&key=441



The creation of our ABC of Harmony gathered and united people of different nationality, religion, profession, but not apathetic. People who want to change the mentality and make the world a spiritual and harmonious place. While reading the articles and responses, I keep coming to the conclusion that this project which brought together our team is of high importance. It is impossible to live further the way that we live today. Society keeps losing the values accumulated by mankind during the centuries: the respect and reverence for elders, respect for children, rules of conduct ...

It is hard for parents and schools to raise a decent citizen, when they do not get any support of the media. There is no ideal to strive for. Our ABC of Harmony is the first step towards changing the world for the better. This is going to be the first book for adults and children, which will open the "door" to the World of Harmony. As a result of collective discussion, it has undergone many changes and has become more clear, coherent and understandable. Its importance is undeniable. As for me, being a primary school

teacher, I am going to embody the idea of the ABC of Harmony in my teaching. This will help me "sow" all the values of good and eternal in the consciousness of kids, building their citizenship and harmonious personality.

Svetlana Kuskovskaya, Primary school teacher of the highest category, Novaya Ladoga, Russia.

Web: https://peacefromharmony.org/?cat=en_c&key=479

https://peacefromharmony.org/?cat=ru_c&key=505



The ABC of Harmony is one of Leo Semashko's and GHA co-authors most ambitious projects. I have come to admire the untiring dedication with which Leo pursues his mission. He is set to bring his sociological model of harmony into the world as a vision for world peace and a new, harmonious, and dignified global society. This harmony revolution is profoundly different from former revolutions. In past times, revolutionaries simply replaced their former masters as new dominators, maintaining the same authoritarian style as their former masters, dominating underlings and militating against the "enemy camp." A harmony revolution means more. It means refraining from humiliating each other, it means refraining from building apartheid-like systems that humiliate through their institutions. It means co-creating new forms of living together, as a united human family, in never-ending dialogues between equals, who nurture relationships of mutual respect, dignity, and partnership.

Evelin G. Lindner, MD, PhDs (Dr. med. and Dr. psychol.), Transdisciplinary Scholar in Social Sciences and Humanities. Founding President of Human Dignity and Humiliation Studies (HumanDHS), and World Dignity University initiator. World citizen.

Web: https://peacefromharmony.org/?cat=en_c&key=74

https://peacefromharmony.org/?cat=ru_c&key=74



The ABC of Harmony as an instrument of world peace furnishes a good guideline for all those who are dedicating their lives for the promotion of peace and harmony throughout the world. Peace can be achieved on a permanent basis through healthy dialogues conducted on a mutual beneficial basis. Peace is feasible and it can be secured only after we try to contribute our share with hope and perseverance. If we do our best God will always do the rest.

Charles Mercieca, Ph.D., President, International Association of Educators for World Peace. GHA Vice-President. Professor Emeritus, Alabama A&M University, USA.

Web: https://peacefromharmony.org/?cat=en_c&key=129

https://peacefromharmony.org/?cat=ru_c&key=136



The ABC of Harmony, presented by the group of co-authors of GHA, headed by the famous St. Petersburg philosopher and sociologist Leo Semashko, is a practice-oriented way of achieving harmonious state of modern civilization. It captivates with integrity of its arguments and logical conclusions. It is based on the original concept of system-spherical (tetrasociological) approach, allowing examining with a high precision, analyzing and predicting the development of society. Qualitative models of this approach provide us with the broad application of advanced mathematical methods that extends immensely its practical use. For the first time we are able to qualitatively and quantitatively calculate all the possibilities of formation, operation and development of the levels of harmonious society. The ABC of Harmony is a fundamentally innovative and noteworthy work.

Andrey Smirnov, Professor in Theory, History and Philosophy of Culture in Novgorod State University named by Yaroslav-the-Wise. Novgorod, Russia.

Web: https://peacefromharmony.org/docs/ABC_of_Harmony_eng.pdf#page=235

https://peacefromharmony.org/?cat=ru_c&key=813



The ABC of Harmony is a comprehensive collection of the richness of aspects of social harmony, from its religious and social roots to its implementation in the various walks of life. I am sure that many people will find this book very useful and that the knowledge and inspiration they will gain from it will both encourage and empower them to take part in actual interfaith encounters so they actively join the process of world

harmony building. This book will be very useful and important in our organization for our interfaith dialogue between Arabs and Jews.

Yehuda Stolov, Dr., Executive Director, Interfaith Encounter Association, works to build peaceful inter-communal relations in the Holy Land through active interfaith dialogue. Jerusalem, Israel.

Web: https://peacefromharmony.org/docs/ABC_of_Harmony_eng.pdf#page=151
https://peacefromharmony.org/docs/ABC_of_Harmony_rus.pdf#page=151



The ABC ... It is a unique experience of joint work of mind and soul of different cultures, united by one common idea – the possibility of the harmonious development of human society. Despite all the outward utopia of this idea, when you see its implementation from the inside, you realize that nothing can be more effective and realistic than joint thoughts, words and deeds. Not only is it the theoretical value of ABC harmony, but also its great applicatory potential.

Grigory Tulchinsky, Honored Worker of Science of Russia, PhD and professor at the Higher School of Economics. St. Petersburg, Russia.

Web: https://peacefromharmony.org/docs/ABC_of_Harmony_eng.pdf#page=183
https://peacefromharmony.org/?cat=ru_c&key=72



The *Harmony Alphabet of 20 Fundamental Elements/Spheres* is the nucleus of the ABC of Harmony. It is the first attempt of Prof. Leo Semashko together with the GHA coauthors to understand and develop the deep foundations of social and individual harmony in systematic form of the collective textbook. Starting with one underlying axiom and 5 clusters of harmony to which the axiom applies, they expound upon the tetra structure of the clusters from the ideas of the early thinkers, such as Pythagoras, Empedocles, Plato, Carl Jung, Talcott Parsons and many others. These 20 fundamental elements are the necessary, sufficient and coherent preconditions of social harmony consistent with the current scientific knowledge. One of the important facets of the ABC of Harmony exposition is providing a mathematical basis to 4 spheres of reproduction to express integral harmony of a society at all levels. Very important is delineating the tetra elements: Spheres of Production, PIOT Resources, PDEC Processes, Spherical Classes, and Spheres of human as ABC of Harmony Stages providing a conscious holistic principle, common to all peoples of different cultures. The ABC provides a fertile ground for further research and a new direction in the development of social sciences.

Laj Utreja, Ph.D., Founder, Institute of Spiritual Healing. President, GHA-USA.

Web: https://peacefromharmony.org/?cat=en_c&key=353
https://peacefromharmony.org/?cat=ru_c&key=380



The ABC is an interesting theoretical production to express in a coherent way and to show a holistic approach to the complex situation of reality. At the same time it is an important practical world textbook for harmonious education. The methodological approach is inspired by the great currents of philosophical thinking, especially of the Greek tradition. In our civilization which has fragmented reality, it is important attempt to produce a harmonious thinking trying to show the social harmony in its global whole. It tends to overcome disharmony coming from the ignorance of integral interdependence, especially in the economic field. Therefore the ABC coincides with the reestablishment of public interest and is for the promotion of Common Good of Humanity. The ABC as holistic theory and thinking is useful to meet the process of globalization. International organizations, like the UN and its specialized organizations could be inspired by it to find harmonious solution to world problems. As a sociologist, I am interested in the social conditions of harmony, which are not a supernatural gift but a social construction unfolded in the ABC.

François Houtart, Dr in sociology and Catholic priest, Personal Representative of the UN General Assembly Chairman in the Stiglitz Commission on the World Financial and Monetary Crisis (2008–2009), Professor Emeritus of the Catholic University of Louvain, Belgium.

Web: https://peacefromharmony.org/?cat=en_c&key=373
https://peacefromharmony.org/?cat=ru_c&key=399



By composing the ABC of Harmony, we create a collective global manual for everyone! A book of such kind was never issued before! Not a single scientist or a group of specialists did ever offer a scientific theory of Social Harmony! We are in constant search for our harmony. We are looking for love, confidence in tomorrow and happiness. Why do wars, ethnic strives and religious conflicts take place? What is the reason of PEACE being so unstable? In my opinion, you just have to turn to the individual through the harmony of society! The ABC's socionome shows everyone

how significant and important all aspects of man are! Neither money nor scarce resources of the planet, but the HUMAN is the crown of nature and society! The cause of my participation in the project is a search for harmony in self, poetry, music and by the desire for my children to live in the Harmonious World free from war and strife!

Nina Yudina – Petroleum engineer, poet – award winner in the contest "Golden Pen of Volgograd", member of Artists Union of Russia, member of female chamber choir "Lestvitsa". St-Petersburg, Russia.

Web: https://peacefromharmony.org/?cat=en_c&key=408

https://peacefromharmony.org/?cat=ru_c&key=436

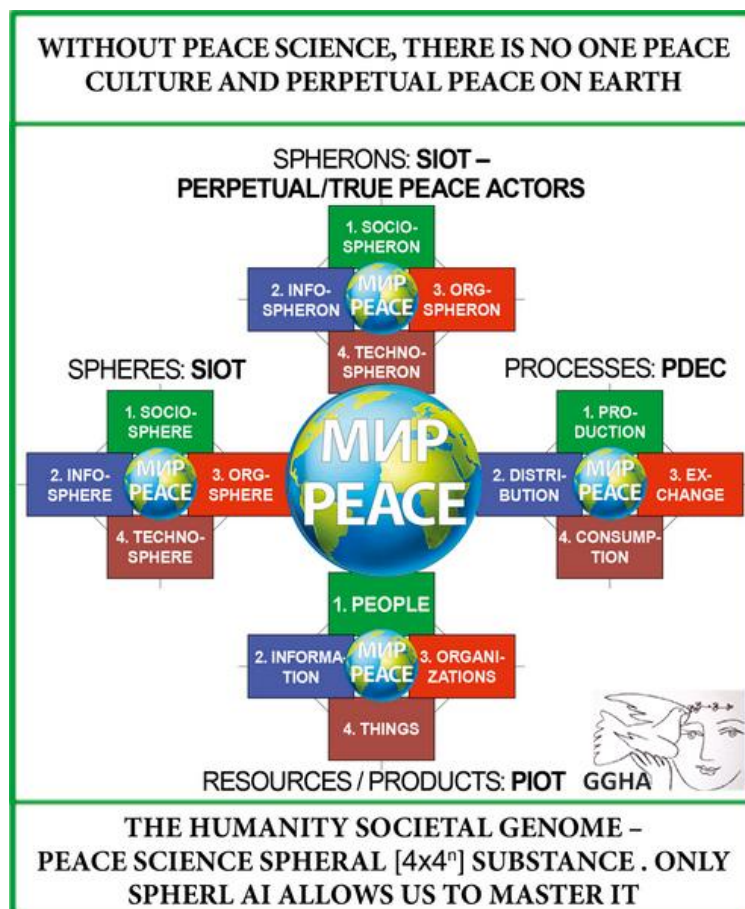
+Others, more than 60 Reviews of "*The ABC of Harmony for World Peace...*" are here:

https://peacefromharmony.org/?cat=en_c&key=506

Matt Meyer et al. Perpetual Peace of Russia and Ukraine (PPRU): The Peacemakers Solidarity Mobilization for a Peace Culture Renaissance



Banner of 11 international peacemaking organizations, which supported the PPRU project



The Peace Science Map of 16 social spheres as the Perpetual Peace Culture Center

The culture of peace is something which is learned, just as violence is learned and war culture is learned... War is not inherent in human beings. We learn war and we learn peace.

-Elise Boulding,

On Peace Cultures and Living with Difference [1]

Matt Meyer, Leo Semashko, Mairead Corrigan Maguire, Noam Chomsky, Surendra Pathak, René Wadlow, Markandey Rai, Li Ruohong, Roger Kotila, Igor I. Kondrashin, Rodney Atkinson, Kurt Johnston, Julia Budnikova, Natalina Litvinova, Chaitanya Dave, Rudolf Siebert, Bishnu Pathak, Théa Marie Robert, Helga Zepp-LaRouche, Takis Ioannidis, Rosa Dalmiglio and Vera Popovich

Writing across borders, boundaries, and socio-cultural/political-economic differences is far from easy. Yet it is easier still than the more urgent and ever-changing work of negotiating, mediating, implementing, and monitoring actual, sustainable peace. The cries for an end to war, genocide, and violence ring out across the globe with greater vehemence and urgency than ever before. Yet we seem, as a human species, closer to nuclear and environmental devastation than ever before, with so-called leaders more detached from the realities of everyday resistance and peaceful methodologies for achieving peace.

When twenty-two of us added our thoughts, and then our names, to the joint document below on Perpetual Peace for Russia and Ukraine (PPRU), it was not because we had unanimity in ideology, strategic focus, tactical alignments, or even (in some cases) basic political agreements. Taken as a whole, however, the grouping of us – representing “people’s diplomacy” and bottom-up peace research, study, and long-time practice from ten countries – agree that only through people-to-people personal and scientific commitment to communication and direct peacebuilding will peace prevail as a lasting presence in our lives. From Britain (include Ireland), China, France, Germany, Greece, India, Italy, Nepal, Russia, South Africa, and the USA, we agree that the long era of US and NATO imperialism and expansionism must end.

From world citizen enthusiasts to the GGHA St. Petersburg (Russian) department, from a Nobel Peace laureate to the most cited living social scientist (Chomsky), as international and national leaders of grassroots-based associations representing millions, we affirm, following Immanuel Kant that PERPETUAL PEACE IS POSSIBLE AND NECESSARY! We do so, not based on starry-eyed utopian dreams, but on experiences of previous world history filled with peacebuilding, and a scientific analysis of what a culture of peace means and how we can build on history, integrating its peacebuilding seeds into our work for a better future.

The culture of perpetual peace, accumulated over millennia in various world civilizations and religions today, in the West nuclear civilization since Hiroshima/Nagasaki [4], is absolutely lost, nullified and neutralized by the complete, 100%, dominant militarism of the West world hegemon and its battering ram – the NATO “nuclear alliance”. All world media dependent on it are completely, 100% absorbed by the militaristic narrative, zombifying the population on the inevitability and unavoidability of wars in general, and nuclear genocide in particular. Therefore, American nuclear scientists left 90 seconds of life on the Doomsday clock, less than one chance in 1000 for the survival of humanity [5]. Therefore, today, without the solidary Renaissance of the peace culture, the systemic center of which is the peace science [6], without a transformation, a break from the dominant total narrative of war to the dominance of the total narrative of Eternal Peace, it is unlikely that we can expect any other fate than the saddest. An attempt at such a break in world public consciousness from eternal war to PERPETUAL PEACE using the example of the most acute conflict is proposed by the plan of *"Perpetual Peace of Russia and Ukraine"* below, supported by 22 peacemakers from 10 countries and 11 international peacemaking organizations.

Russian President Putin, at the briefing with BRICS journalists on October 18, confirmed the main hypothesis of the plan *"Perpetual Peace of Russia and Ukraine"* with the following answer to one of the questions. *"If we are talking about some specific peace processes, then these should not be the processes connected with a truce for a week or two or for a year what would allow NATO countries*

to re-arm and stockpile new ammunition. We need conditions for a long-term, stable and lasting peace...” This means that Russia is fighting the Nazi Kyiv regime only for perpetual peace and nothing else. He also confirmed this intention by saying that *“I can say straight away: under no circumstances will Russia allow this (Ukraine nuclear weapons) to happen.”*[7]

These points, however – as important as they are – can both get lost and also lose us if we are to ignore an part of our analysis that is not nuanced or complicated at all: The war raging in Europe today cannot be ended without Russian involvement, top, middle, and bottom. The demonization of Putin by so many in the West and elsewhere, like the apparent deification of Zelensky, is both historically inaccurate and dangerously anti-peace. For some of us elders, it harkens sharply back to an earlier time when leaders and rank-and-file workers of the Soviet Union shed their lives in the millions defeating the Nazi Third Reich, then immediately (and ridiculously) were called “Nazis” by those in the USA and NATO who sought only to pursue a staunch capitalist program. Collusion with actual Nazis – then and now – was not too great a price to pay so long as one could make Russia out to be the “Red Menace” and source of all evil in the world. We cannot afford to repeat those grievous errors which some US-based, Western, and Global North “progressives” fell and fall into even now. As I wrote in my global overview for the biennial IPRA Special Issue and 50th Anniversary issue of our professional journal Peace & Change, we must learn from history that one-sided proposals leaving one or another adversary without dignity or justice are inherently short-term at best, exacerbating and explosive at worst.[8] I quoted German political scientist and journalist Gabriele Krone-Schmalz, whose deep work on both sides of the Cold War divides led her to lay out a cogent challenge to the shallow and sectarian proposals coming from the “West.” If one accepts the basic, scientific premise of Krone-Schmalz’ “Peace in Europe—Not Without Russia,”[9] then an acceptance of the PPRU outlined here is the concrete, logical extension to follow.

Of course, in IPRA we continue our heightened concern about the wars, including gross genocidal policies, being waged in Palestine (especially Gaza, but with worries about the West Bank and Lebanon), in Sudan and the Congo, throughout Indigenous territories across the planet, among Black, Brown, and Indigenous Peoples in the USA and the Global North whose experiences are too often invisibilized by the mainstream human rights and peace institutions of the North, and elsewhere. This personal endorsement, then, is one way in which I assert necessary connections and dialogues with European colleagues who correctly remind us of the thousand-year common history of Russia and the Ukraine, with its Golden Peacemaking rules and histories. I join with the obvious but too often-overlooked understanding that the current European conflict cannot end without a system of peacemaking actions/events in all spheres of Ukraine and Russia. I thus attach the PPRU plan signed on by the aforementioned People’s Diplomats, as a starting point to a scientifically considered end to all war in our time.

PERPETUAL PEACE OF RUSSIA AND UKRAINE (PPRU)

Russia and Ukraine, because of bilateral and multilateral negotiations within the framework of BRICS and G20, have come to a consensus on the following positions of their PERPETUAL peace:

1. The common historical nature of perpetual peace for the two countries: Russia and Ukraine are one multinational and multi-confessional family of peoples in harmony of good-neighborly, sovereign and democratic states, which guarantee all human rights on a federalist basis.

2. Russia and Ukraine recognize the canonical Orthodoxy established by the Jerusalem Synod of 1672 as a common spiritual foundation, embodied by the united Orthodox Church and its golden peacemaking rule as the highest moral imperative of relations between the peoples of Russia and Ukraine. Only the enemies of the peoples of Russia and Ukraine seek to destroy their common spiritual platform of canonical Orthodoxy in order to condemn these peoples to eternal mutual destruction and endless mutual genocide.

3. on a common spiritual and moral platform, Russia and Ukraine are developing a renewed peace culture and peace science with the safe AI, for which they are creating joint innovative working institutes:

- *"Department of Peace from Harmony"* at the level of the country’s Foreign Ministries,

- "*Academy of Peace Science and Accelerated Development*" at the level of the country's Academies,

- "*Center for Safe AI and Digital Economy*" at the level of the country's Ministries of Economy.

These innovative institutes (DAC) are recognized as key working tools for the practical implementation of the eternal peace for Russia and Ukraine.

4. Russia and Ukraine recognize both the neutral status of Ukraine outside and without the NATO "*nuclear alliance*" and other military alliances that threaten the security of Russia, and the neutral status of Russia outside and without any military alliances that threaten the security of Ukraine.

5. on a common spiritual platform and using the DAC innovative tools, Russia and Ukraine, guided by the international principle of equal and indivisible security, excluding its change for some countries at the expense of other countries, ensure the complete demilitarization of Ukraine and predict in the future the complete demilitarization of Russia within the framework and in the course of global demilitarization carried out by the UN on the basis of the approved "*Peace Constitution of the Earth*" in the future.

6. on a common spiritual platform and using the DAC innovative tools, Russia and Ukraine ensure the complete denazification of Ukraine, which results in the constitutional prohibition of Russophobia, Nazism and any forms of racism by analogy with Russia, where they have long been prohibited by its Constitution and are guaranteed by the organization of culture, media and the entire education system since kindergarten.

7. on a common spiritual platform and using the DAC instruments, Russia and Ukraine guarantee the complete exclusion in the future of any irreconcilable confrontation of new generations, providing them with perpetual peace and harmony instead of perpetual war and blood.

8. on a common spiritual platform and using the instruments of the DAC, Russia and Ukraine recognize the historical, Orthodox and moral justice of the Russian jurisdiction of the territories of Crimea, Donetsk and Lugansk republics, Kherson and Zaporozhe regions within their established borders as integral subjects of the Russian Federation.

9. on a common spiritual platform and using the DAC instruments, Russia and Ukraine recognize the eternal need in the future for an **equal international condominium** in the joint use of these territories resources in corporate, academic and cultural cooperation on the listed subjects of the Russian Federation.

10. on a common spiritual platform and using the DAC instruments, Russia and Ukraine are jointly developing a long-term "*Marshall Plan*" as a program for the accelerated restoration of the Ukraine infrastructure and economy (*Ukraine Recovery Program*) with the participation of the BRICS countries, which will be open to the accession of other countries, including the EU and USA. In order to restore and develop a culture of peace, peace education, peace museums and peace art, interfaith harmony and social diversity in Ukraine, ensure, under the UNESCO auspices, the broad involvement of relevant international institutions in its territory instead of neo-Nazi entities and for their cultural denazification as the "Marshall Plan" special part.

11. on a common spiritual platform and using the DAC instruments, Russia and Ukraine recognize the need for an eternal, **egalitarian and inclusive society of the peoples** of both sovereign democratic states as their one family with common institutions of people's diplomacy of a single civil union of their peoples as a guarantee of perpetual peace and the inviolability of their friendship in the future.

12. After agreement by the parties of the previous 11 points by the end of 2024 and their subsequent ratification by the countries' parliaments, Russia and Ukraine declare since the beginning of 2025 the cessation of all military actions on the contact line and all arms deliveries to it. Since this will begin the implementation of the approved plan for PERPETUAL PEACE OF RUSSIA AND UKRAINE (PPRU).

The PPRU plan updated draft was prepared by peacemakers of international peacemaking organizations (individuals listed in by-line above). For complete text, translations, organizational affiliations, commentary, and updates, see: https://peacefromharmony.org/?cat=en_c&key=1219

The similar plan for perpetual peace can be offered to other conflicting and warring countries upon their request, first of all for the solution of the **Palestine problem**, which can be resolved only from the standpoint of perpetual peace, on the spiritual basis of the religions Golden Rule with using the DAC instruments, as well as an international legal condominium in the disputed territories and in no other way.

Bibliography:

1. Ikeda Institute. Elise Boulding:

https://www.ikedacenter.org/search?search_api_fulltext=Elise+Boulding

2. Galtung, J. 2009. The Fall of the US Empire – And Then What? Oslo: Kolofon Press (Transcend).

3. Bond, P. and Garcia, A. 2015. BRICS: An Anti-Capitalist Critique. London: Pluto Press. See also: <https://www.cadtm.org/US-imperial-dominance-BRICS-sub-imperialism-and-unequal-ecological-exchange> and here: https://peacefromharmony.org/?cat=en_c&key=1223

4. Semashko L, Corrigan M, et al. Nuclear Civilization ... 2024: https://peacefromharmony.org/?cat=en_c&key=1206

5. Mecklin J. Nuclear Catastrophe: 90 seconds. 2024: https://peacefromharmony.org/?cat=en_c&key=924

6. Semashko L, et al. Global Peace Science... of Spherons. – JD Group of Publication, New Delhi. 2016: <https://peacefromharmony.org/docs/global-peace-science-2016.pdf>

7. Vladimir Putin. Meeting with journalists from BRICS countries. 18-10-24: <http://en.kremlin.ru/events/president/news/75349>

8. Meyer, M. 2024. New Terms for a New Peace Studies: Introduction to the 2025 Peace and Change Special Issue (50th Anniversary). Peace & Change, 50:1. London: Wiley/Blackwell

9. Krone-Schmaltz, G. 2024. Peace in Europe—Not Without Russia. See <http://www.krone-schmalz.de/>. Full presentation: <https://www.nachdenkseiten.de/?p=121107>. Referenced 5

Prepared by

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GGHA member:

https://peacefromharmony.org/?cat=en_c&key=1034

01-11-24

Appendix 3.
To Build a Better Tomorrow
Mairead Corrigan Maguire and Matt Meyer

February 6, 2025

https://peacefromharmony.org/?cat=en_c&key=1253

We dedicate ourselves to working with our neighbors, near and far, day in and day out, to build that peaceful society in which the tragedies we have known are a bad memory and a continuing warning.

- Community of Peace People, Northern Ireland, 1976 [1]

In our founding declaration, Nihon Hidankyo expressed our determination to ‘save humanity from its crisis through the lessons learned from our experiences, while at the same time saving ourselves.’

- Terumi Tanaka, Nihon Hidankyo Nobel Peace Laureate, Japan, 2024 [2]

We do not seek to deny our violent past but rather work with it, process it, and turn it from a site of conflict into a basis for joint, constructive action. What does liberation look like and how do we begin to heal from our past and present trauma? How do we liberate ourselves from occupation, oppression and violence?

- Combatants for Peace, Israel and Palestine, 2025 [3]

At a time of great crisis and change, we write in continued and consistent urgency for peace with justice, through dialogue and direct peacebuilding. As lifelong peacemakers, we have never stopped seeking opportunities to exchange with the very peoples we may be in conflict with – finding more often than not that on the grassroots and local levels, all people want the simple truths of human rights and an end to violence and conflict.

In recent years, we have found ourselves in dialogue with friends from Russia – including a local elected official from St. Petersburg, Leo Semashko, who founded and heads the **Gandhian Global Harmony Association** (GGHA). [4] We have joined him in an assessment of the dangers of suicidally militaristic pro-NATO intensifications, which threaten both Russia as well as world peace. We have added our names as co-authors to a call for Perpetual Peace of Russia and Ukraine, recognizing their common histories. [5] We affirm, as some of our European neighbors warn us, that solutions which try to deny the sovereignty of either peoples or obtain a “*peace without Russia*” [6] or a one-sided “*victory*” will be ineffective and short-lasting at best. We must therefore also be sympathetic to our neighbors who hope to see in Donald Trump a US leader who will shift away from NATO, towards a more balanced and permanent end to unnecessary conflict in the heart of Europe.

Our analysis and experience, however, leads us respectfully to a different viewpoint, with continued hope but also with great worry and concern that a Trump-led imperial agenda can only lead to continued conflict, perhaps mostly in other parts of the world. Our histories are centered in an understanding that colonialism, like its imperial father and neocolonial cousin, is itself an act of great violence, a crime against humanity. Therefore, we especially oppose the intensification of militarism and incursions of the settler-colonial Zionist apartheid state of Israel, supported by different tactical approaches but with the same political and military fervor from both major US political parties. We support freedom for the people of Palestine and watch with horror as the early stages of a ceasefire agreement are followed by talk of a US take-over of Palestinian Gaza. [7]

Unlike some, in the US and elsewhere, we do not see the world fundamentally divided between Republican and Democrat, between good and evil, or even between an infallible right and wrong. Neighbors have to be more forgiving of one another, and social scientists and activists – especially ones seeking peace with justice – have to understand the nuances that appear to separate us but need not keep us divided. The Community of Peace People of Northern Island was founded on dialogue between Catholics and Protestants; our friends in Palestine include Muslims, Jews, and Christians; around the world we unite with people of all faiths, ideologies, and backgrounds.

We cannot disagree that a “revolution of common sense” is needed in the world. We are simply unwilling to give Donald Trump the benefit of the doubt that he can or will lead such a positive transformation, despite his rhetoric. We cannot dispute the excitement that surrounded the election of Barak

Obama in 2008, but we were unwilling to give him the benefit of the doubt that he deserved the awarding of the Nobel Peace Prize before even taking action as President. We are frankly more aligned with the rich histories and experiences of Nobel Peace laureates Archbishop Desmond Tutu of South Africa and former President Jimmy Carter of the USA, both of whom led long lives struggling for justice – and both of whom were clear that Israeli policy toward Palestine was an act of apartheid. [8] For Palestine and for all still-colonized people living under occupation – for Puerto Rico and Kurdistan/Rojava, for Western Sahara and West Papua, for all oppressed people of the world, and all those living amid genocide, war, and the causes of war [9] – we call for freedom with dignity, for full and immediate liberation, for a true revolution of the common people.

In this time of great crisis and change, we work and pray for the tragedies of our era to become bad memories and continued warnings. Our work is as it ever has been: to nonviolently campaign for an end to the conflicts before us, to stand in solidarity with those most in need, and to dialogue with our neighbors - even those we seem to disagree with - to build a better tomorrow for our children.

Mairead Corrigan Maguire is the 1976 Nobel Peace Prize laureate and co-founder of the community of Peace People of Northern Ireland: https://peacefromharmony.org/?cat=en_c&key=678

Matt Meyer is Secretary-General of the International Peace Research Association, active in global resistance, reconciliation, and human rights work from his home base in New York City: https://peacefromharmony.org/?cat=en_c&key=1034

1. Global Nonviolence Action Database. Peace People March Against Violence in Northern Ireland. 1976. <https://nvdatabase.swarthmore.edu/content/peace-people-march-against-violence-northern-ireland-1976>

2. Terumi Tanaka. 2024. Nobel Peace Prize Lecture. Oslo, Norway. December 10, 2024. <https://www.nobelprize.org/prizes/peace/2024/nihon-hidankyo/lecture/>

3. Combatants for Peace. 2025. The Joint Nakba Remembrance Ceremony. Palestine/Israel. May 15, 2024. <https://cfpeace.org/joint-nakba-ceremony/>

4. Leo Semashko. 2024. Peace Science for the War-sick Humanity. Peace from Harmony website of the Gandhian Global Harmony Association. https://www.peacefromharmony.org/?cat=en_c&key=253

5. Leo Semashko, Corrigan Maguire, Noam Chomsky, et al. 2024. Perpetual Peace for Russia and Ukraine. October 6, 2024. Peace from Harmony website of the Gandhian Global Harmony Association. https://www.peacefromharmony.org/?cat=en_c&key=1219

6. Krone-Schmaltz, G. 2024. Peace in Europe—Not Without Russia. See <http://www.krone-schmalz.de/>. Full presentation: <https://www.nachdenkseiten.de/?p=121107>. Referenced October 5, 2024.

7. The Palestine Journal. 2025. ‘He’s Completely Lost It’ – Trump Proposes Taking ‘Ownership’ of Gaza in Bizarre Comments. February 5, 2025. <https://www.palestinechronicle.com/hes-completely-lost-it-trump-proposes-taking-ownership-of-gaza-in-bizarre-comments/>

8. See Ahmed, N. 2024. Desmond Tutu: ‘Israeli Apartheid Worse than South Africa.’ Middle East Monitor. October 7, 2024. <https://www.middleeastmonitor.com/20241007-desmond-tutu-israeli-apartheid-worse-than-south-africa/>. See also: Carter, J. 2006. Palestine: Peace Not Apartheid. New York: Simon and Schuster.

9. See the Occupied People’s Forum; the International Tribunal on US Human Rights Abuses Against Black, Brown, and Indigenous Peoples; and other leading expressions of resistance to genocide and modern colonialism, as in Meyer, M. 2025. Beyond Our Current Boundaries. Trenton: Africa World Press.

The *Peace Science Primer*: World institutionalization
in development of the *UN Agenda 2030* (SDGs 3, 4, 16, and 17),
UNESCO Peace Education & OECD Learning Framework 2030

Publication:

In English: https://peacefromharmony.org/?cat=en_c&key=1292

In Russian: https://peacefromharmony.org/?cat=ru_c&key=1146

1. Introduction: Beyond Fragmentation

In a time of escalating systemic crises—ecological, political, epistemological—the *Peace Science Primer* (PSP) introduces a structural model for sustainable peace rooted in the fractal organization of social spheres. This model proposes a scientifically grounded, digitally operable, and educationally scalable framework based on 16 Spheres—eternal structures of societal activity—and their interaction through recursive processes and harmonized coupling.

Framed within the context of the United Nations Sustainable Development Goals (SDGs), especially Goals 3 (Good Health and Wellbeing), 4 (Quality Education), 16 (Peace, Justice and Strong Institutions), and 17 (Partnerships for the Goals), the PSP provides a transdisciplinary methodology for systemically understanding and advancing peace.

This framework is further compatible with:

- UNESCO’s Global Citizenship and Peace Education (GCPE) and its emphasis on systems thinking, social cohesion, and global solidarity;
- The OECD Learning Compass 2030, which prioritizes agency, co-agency, and transformative competencies.

2. The Fractal Structure of Spheres and Spherons

At the heart of this model is the principle that human society is composed of 16 foundational spheres, each of which expresses and contains four essential resource-process categories: People, Information, Organization, and Things – collectively referred to as PIOT.

These spheres are organized fractally:

- Each sphere contains all four PIOT elements.
- Each PIOT element, in turn, recursively unfolds into four additional subdivisions.
- This produces a self-similar, scalable structure that reflects unity through complexity.

This fractal logic mirrors systems in mathematics, biology, and information theory, and is applied here as a sociological tool of systemic coherence. The recursive structure is formalized in the Law of Tetry Fractal Recursion, expressed by the formula 4×4^n , where each level of social organization (individual, communal, national, global) reflects a nested coherence.

This structure is compatible with OECD’s emphasis on interconnected competencies and UNESCO’s call for transversal, interdisciplinary literacy.

3. Coupling: The Mechanism of Social Viability

The functional strength of the system lies in the coupling—the interactive relationship between the spheres. Each sphere and spheron, while self-structured, cannot function autonomously. The PSP describes this through a principle derived from Anaxagoras: “*All in All – All in Four – Four in All – Four in Four.*”

This coupling is not merely analogical; it reflects an operational requirement. For any system (from a family to a nation-state) to sustain peace, it must maintain mutual reinforcement across:

- Human well-being (P)
- Knowledge systems (I)
- Institutional coordination (O)
- Material infrastructure (T)

This dynamic interdependence ensures resilience, adaptability, and equilibrium, and serves as a critical departure from mechanistic or linear models of social planning.

For UNESCO and OECD-aligned educational models, such interdependence is central to cultivating systemic and anticipatory thinking, collective well-being, and shared responsibility.

4. From Dialectics to Qualimetry: Measuring Social Harmony

The PSP advances the model of qualimetry, i.e., the statistical and computational measurement of quality within and across the social spheres. This approach moves beyond classical metrics (GDP, crime rates, etc.) to a multi-dimensional, recursive mapping of social interrelations.

This is formalized in a system called *Spherical Global Statistics (GlobStat)*, which provides:

- Indicators of harmony and imbalance between spheres and spherons.
- Longitudinal data on systemic coupling and breakdowns.
- A framework for AI-assisted social planning and peacebuilding.

GlobStat serves as a foundation for Spherical Artificial Intelligence (SAI)—a proposed educational and analytical system enabling citizens, policymakers, and students to visualize, model, verify and improve systemic interdependencies from local to global levels.

Such approaches align with the OECD’s Learning Compass goals of:

- Leveraging AI and data literacy for societal benefit
- Encouraging learners to engage with complex systems
- Promoting ethical decision-making in technology and society.

5. Education for Perpetual Peace: Spherical Space-Time

To contextualize peace not as an abstract value but as a measurable systemic outcome, PSP introduces the concept of Spherical Social Space-Time (SST). SST is a four-dimensional mapping of social development processes, providing a cartographic foundation for:

- Curriculum development in peace education
- Systems-based decision-making in public policy
- Ethical AI design grounded in interdependence, not competition

This is a concrete application of UNESCO’s “learning to live together” pillar and OECD’s transformative competency of creating new value within ethical and sustainable frameworks.

The SST model unifies statics (structures) and dynamics (flows) into a coherent framework, thus supporting a shift from fragmented disciplinary knowledge to planetary systems literacy.

6. Policy Implications and Alignment with UN, UNESCO, and OECD

The fractal-coupling model of PSP offers:

- A systems-based alternative to discipline-siloed governance
- A framework for educational innovation, capable of integrating digital literacy, civic competence, and peace fundamental scientific knowledge from primary education onward
- A digital infrastructure for cooperation across institutions via GlobStat and SAI

This supports key policy mandates:

United Nations SDGs

- SDG 3: Health is understood holistically across the PIOT spheres
- SDG 4: The fractal model enables integrative and systems thinking education
- SDG 16: Peace is operationalized as system-wide balance across 16 planetary social spheres
- SDG 17: SAI enables new forms of global partnership based on transparency and interdependence

UNESCO Education Priorities

- Promotes global citizenship education through holistic worldviews in a single scientific peaceful education
- Supports digital competencies aligned with peace and sustainability
- Fosters dialogue between disciplines and cultures

OECD Learning Framework 2030

- Encourages student agency in navigating social systems
- Develops co-agency through institutional coupling models

- Applies anticipation and complexity tools to future-oriented education

7. Conclusion: Toward a Spherical Civilization

The PSP's fractal-coupling paradigm transforms peace from a normative imperative into a structurally grounded system of planetary interdependence. It calls for:

- A move from disciplinary to spherical thinking in the process of education and governance
- A shift from fragmented data to qualimetric measurement
- The development of SAI as a public good for education, policy, and intercultural understanding.

If peace is to be more than the absence of war, it must be restructured into the very logic of how we understand, educate, govern, and cooperate. The PSP offers a foundational step in this direction—scientifically, philosophically, and ethically.

References

- Peace Science Primer, Chapter 8 etc.: https://peacefromharmony.org/?cat=en_c&key=1279
- Semashko, L. (Ed.). *Tetrasociology*: https://peacefromharmony.org/?cat=en_c&key=145
- Semashko, L. (Ed.). *Gandhica*: https://peacefromharmony.org/?cat=en_c&key=848
- UN SDG Agenda 2030: <https://sdgs.un.org/goals>
- UNESCO GCPE: <https://www.unesco.org/en/global-citizenship-peace-education>
- OECD Learning Compass 2030: <https://www.oecd.org/education/2030-project/>

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03-07-25

Appendix 5.
Andrey Smirnov, Svetlana Vetrova.
Demiurge, 1975-1980: The Spherons' Perpetual Peace Science
Beginning in Russia*



"Demiurge", photo 1976

The creative youth association "Demiurge" was founded in 1975 at the Leningrad Institute of Precision Mechanics and Optics (LIPMO), now called the IPMO St. Petersburg University.

I, Smirnov A.A., was a second-year student at the philosophy faculty of Leningrad State University (LSU) in that time. The second year is traditionally considered very important in the life of every student. It is here, when the "studious" finally adapts to independent work, that the important time of choosing a specialization comes, that is, in fact, choosing your future professional destiny. And here it is very important for every young person to meet a "Teacher" who, by his example, shows where and what to strive for, forms the life strategy, values and ideals of the "student". I was very lucky in this regard, since I met such a person, and he had a decisive influence on my formation and further development. For me, such a "Teacher" was (and still is) the philosopher Leo Mikhailovich Semashko, who in 1975 read a special course on ancient philosophy in our group of the philosophy faculty.

Leo Mikhailovich invited us to participate in the creation and work of the students' and workers' club he called "Demiurge" ("Creator"). The motto of this association was the call of the ancient Greek sages: "***Know yourself. Through thorns to the stars.***" It should be noted that he approached its creation in an extremely non-random way that is, relying on ontological foundations and extensive experience in philosophical and sociological research. He managed to develop a fundamentally new, spheral and holistic concept of society, based on its laws of the holistic, eternal spheres dialectics. Leo spent his entire adult life developing (for the first time since Pitirim Sorokin) an holistic system of macrosociology, the social thinking integrity in which was achieved precisely by understanding the spheres of society as constant components of all its changes and its adequate, spheral conceptual language. The social spheres harmony is the source of a peaceful, just and creative state of any social organism, starting with the family, therefore the Demiurge unobtrusively taught its members "***peace comes from the spheres and spherons harmony***" that became the motto and goal of the peacemaking GGHA 30 years later.

Based on his dialectical models, Semashko proposed, on an experimental basis, a spherical, integral structure of the Demiurge club consisting of its four microgroups (m/g), modeling the eternal, spherical social structure of humanity, its four equally necessary and sufficient spheres of social production, which include four equally necessary and sufficient spherons (classes) of the population employed in these spheres. True, there was no concept of "*spherons*" at that time; instead, a palliative but more understandable term "*spherical classes*" was used ("*Russika Encyclopedia*", 2005: <http://www.russika.ru/t.php?t=2969>). This structure determined the content of the Demiurge main goal - harmonious, four-spherical development of the personality in it, creating favorable conditions, experience and skills for the harmonious self-development of each of its members for the future. The Demiurge functions and main areas of work followed from this fundamental goal. At the same time, it formed the foundations of spherical thinking, which after 50 years of development created the substantiated core of the "*Perpetual Peace Science*", presented here in its first Primer. Therefore, with full right, the Demiurge can be defined as the first practical, theoretically organized sprout of spherical thinking and its peace science in Russia, which determined the meaning of life of its creator.

In organizing the work of the "Demiurge", Lev Mikhailovich managed to take into account the subjective mechanism for creating a workable and effective team. Theorists and practitioners of creative team formation note that each person potentially has the need for self-actualization and self-realization. Why do we need self-actualization, what is its necessity? It is necessary so that an individual can get a social environment ready to provide him with a certain resource. He must become at least useful to someone, behave in such a way that society constantly needs the results of his efforts, so that it is objectively interested in him. This is *self-actualization*. Being relevant to other people, always in demand by them, throughout life - the most important human need.

Surprisingly, the Demiurge at that time also solved such an important problem of world history as the problem of achieving personal happiness. When do we feel happy? When someone needs us, someone is waiting for us, is happy to see us and hopes for us, and we, in turn, cannot imagine life without these people, without our partners in social interaction. In the language of social philosophy, this means that the community in whose activities we participate provides a person with effective and comfortable partnerships. Is it possible to be happy without being relevant, socially inclusive? – Now we understand that it is not.

But is self-actualization alone enough for happiness? Self-realization is also needed for happiness. It is another essential need and is directly related to the effectiveness of our behavior. Efficiency should be understood as maximum effectiveness with a minimum of costs for its implementation. People always strive to do what they do best, with a minimum of ineffective costs. This is self-realization.

It follows from this that happiness is the state of a person who is in demand precisely for those results in which he most fully and effectively expresses himself (his potential).

In Demiurge all conditions for self-actualization and self-realization of each of its members were created. This gave a feeling of a full-blooded, happy life, since happiness is a social partnership on the conditions of demand and fulfillment. The question: "*Are you happy?*" essentially means: "*With whom are you co-participating? Do you have a common cause with comfortable and productive comrades?*" Therefore, my comrades in "Demiurge", and I myself were very happy young people at that time. Then I even thought that in the distant future, all people will live the way we live in our team.

Despite the practical focus of the activities in the Demiurge four microgroups**, modeling the eternal social structure of the population four spherons (spherical classes) in Semashko's integral sociology, especially when Demiurge became a workers' and students' club and settled in the workers' dormitory of the Kirov Plant in 1976, its activities also implemented the main provisions of the "*Russian idea*", laconically expressed by Berdyaev in the formula that "*everyone is responsible for everyone*". The Russian idea arose as an overcoming of the one-sidedness of the Westerners and Slavophiles, as a synthesis of the two positions into a single theory of world culture. The Westerners treated Russia as a child who needed to be raised according to Western models, the Slavophiles - as a mother who needed to be loved and preserved.

In the Russian idea, the organic unity of the general and the individual found its expression in the concept of "sobornost". As Arseniy Gulyga notes, this is the grain of the Russian idea in its world-bearing nature, the central concept of Russian philosophy, a word that cannot be translated into other languages, even into German - the most comprehensive in terms of philosophical terminology.

Sobornost is the cornerstone concept of our time, living under the sign of two polar opposite systems: absolute individualism and absolute collectivism. In Demiurge, an attempt was made to overcome this opposition based on the system-spherical approach developed by Semashko.

Fifty years after the association Demiurge creation, I have an absolutely positive assessment of this unique social experiment, the experience of which was not in vain, embodied in the GGHA, in its fundamental innovative achievements of spherical thinking, its "*Perpetual Peace Science*" and its spherical AI, the seeds of which were born in it. I sadly state in the words of the song: "*It's a pity that those years will not return, only in the heart will respond with sweet pain.*" Thank you, Demiurge!

* The Russian text of this appendix is published here:

https://peacefromharmony.org/?cat=ru_c&key=1138

The Russian original of this source, along with many other memoirs of the Demiurge's student club members is published here:

https://www.peacefromharmony.org/?cat=ru_c&key=305

** 1. Social m/g (sociosphere), responsible for the harmonious, spherical development of the Demiurge members; 2. Information m/g (infosphere), responsible for their information and spiritual development; 3. Organizational m/g (orgosphere), responsible for their organizational and managerial development; 4. Material m/g (technosphere), responsible for their material and labor development. This was the Demiurge stable division.

Smirnov Andrey Anatolievich, PhD, associate professor, graduated from the philosophy faculty of St. Petersburg University in 1978, teacher of the Novgorod thought-technical school, member of the Association "*Analytics*" scientific and methodological council. The author of more than ten textbooks and more than one hundred and forty publications on the problems of political science, sociology, conflictology, methodology, management, technology of thinking and the history of Russian entrepreneurship, teaching aids on communication for analysts and on modular training of manager-analysts. Participant in the publication and coauthor of the first dictionaries in our country: "*Analytical Dictionary*" (Moscow, 2015) and "*Civilization Analytics: Conceptual Paradigm*" (Moscow, 2017). Author of the book "*Great Novgorod - to the Great Civilization*" (Great Novgorod, 2022). Methodologist-game technician with 34 years of experience. Personal page on the GGHA website: https://peacefromharmony.org/?cat=ru_c&key=813

Svetlana Vetrova
My "Demiurge"

This piece of my life sits deep - deep under a pile of other events, meetings, years... Although, as it seems to me, "Demiurge" had a very strong influence on the formation of my personality.

It was 1977, I was a student at LIPMO, the head of the group, listening to lectures on philosophy. I like it, in our technical university; it was a humanitarian outlet that my versatile nature needed. In many ways, the attitude to the subject is formed through the teacher personality, I was lucky - it was Leo Semashko, an incredibly energetic, charming person and such people know how to captivate others. So he invited students to the "Demiurge" club. And I came to the club meeting. I liked the idea and the people who gathered around Leo. Little by little, I was imbued with the mood, frankly speaking, innovative in that stagnant time. I remember how my dad was afraid that I had ended up in some kind of "sect".

The life in our club was very active: weekly "*symposiums*" - that's what our meetings were called. Everyone had to bring something "new", prepare, share what they had read, seen, preferably on the topic. After all, all the members of our club belonged to different micro groups, to whom what was closer - for me, personal creativity, self-improvement. Everything you learned went into the common piggy bank, so the meetings seemed full and short, since people were bursting with ideas for holding evenings, hikes, clean-up days, meetings with interesting people, role-playing games, joint holidays, someone was more interested in theory. The names of Brodsky, Voznesenski and Tarkovsky were revealed to me in the club and then few of my peers knew them yet. There were wonderful poetry evenings. And what a memorable holiday of the Russian "*Maslenitsa*" we arranged for ourselves and others...

I am sure that some destinies changed thanks to Demiurge: the guys from the workers went to study, graduated from universities, their social circle and quality of life changed. Yura Zaklinski became a geologist, Sergey Busov teaches philosophy. And it was very useful for us, "students", to communicate with "workers", not as infantile as we were. Everyone was young and energetic, and thanks to Leo, people gathered who wanted to "give"! All these factors gave the Demiurge club phenomenon.

The most important thing that I took away from our meetings: "***The soul must work day and night!***" My clubmates turned out to be interesting personalities, very original: Andrey Smirnov, Nikolay Strelkov, Vladimir Strelkov, Sergey Busov, Anya Shumova (Smirnova), Yura Zaklinski, Ira Zeitlina (Medvedeva), Andrey Chechik and many others. It is not for us to judge how harmonious personalities we have become, but the process of striving is important. The life has scattered us, its own affairs and problems. But the vector was set for everyone precisely. I think I am not the only one who feels warmth in the soul with the word "***demiuric***".

Since then, "***harmony***" has always been with me, in addition to being a musician, I worked for a long time in the aesthetic group for harmonious development of personality "***Umnitsa***", our children ranged from one and a half to six years old. Demiurgic principles were also applied in our practice. It was joyful to watch how parents changed in the process of communicating with each other and with their children, how their understanding of their role grew.

Yes, and in all my affairs I feel the warmth that I have left from this wonderful period of life, life in Demiurge. I am grateful to fate that it connected me with these people. I have no doubt that the experience of working at the Demiurge club is unique! Good health and energy to Leo Semashko!

The values of peace and harmony instilled in me by Demiurge have become my engine and guiding stars for my entire life! This is my unfading memory.

Svetlana Vetrova,

Poet, bard, musician,

Personal page on the GGHA website:

https://peacefromharmony.org/?cat=ru_c&key=21

The Russia's Spherons over 50 years: 1970-2021

https://peacefromharmony.org/?cat=ru_c&key=899

DYNAMICS OF DISTRIBUTION OF THE RUSSIA POPULATION
BY SPHERONS FOR 1970-2021.

Spherons' Indices	Their content	1970	1980	1990	2000	2005	2010	2015	2021
P = P1+P2+P3+P4	Population total, including	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
P1= P1n + P1w	Sociosphere, from it	58,1	60,7	63,1	62,4	60,6	56,7	56,8	58,7
P1n	% of nonworking	50,4	53,5	56,5	55,5	53,6	50,0	50,6	51,9
	% of working by spheres								
P1w	in the sociosphere	7,7	7,2	6,6	6,9	7,0	6,7	6,2	6,8
P2	in the infosphere	3,2	3,0	2,8	2,9	3,0	4,4	4,9	3,8
P3	in the orgsphere	4,8	4,6	4,3	4,4	4,8	8,6	8,6	4,8
P4	in the technosphere	33,9	31,7	29,8	30,5	31,6	30,3	29,7	32,7
	Coefficient of distribution unevenness*	0,594	0,650	0,717	0,680	0,651	0,519	0,526	0,538

The main sources of information were the following statistical digests for 1970-2019 in printed edition: "Population of the Russian Federation by Sex and Age on January 1, ..."; "National Economy in ..."; "Russian Yearbook ..."; "Labor and Employment in Russia" and others. Unfortunately, since 2020, statistical digests have ceased to be published in printed form, and access to their electronic analogues is difficult on the RosStat website.

As a result, the following comparable dynamics of the distribution of the population of Russia by spherons was obtained - see Table 1

Note: "The coefficient of distribution unevenness" characterizes the homogeneity of the structure and varies from 0 to 1. A value close to 0 characterizes the same prevalence of all parts in the structure of the population, that is, a uniform distribution and heterogeneity of the population. Its proximity to 1 means the predominance of one of the parts, that is, extreme unevenness of the structure, but homogeneity of the population. Since the population is predominantly represented by representatives of one of the selected groups in the structure.

Data for 2021 are preliminary without taking into account the adjustment for the results of a sample survey on employment issues.

Dr. Olga Kashina

https://peacefromharmony.org/?cat=ru_c&key=757

16-03-25

Yulia Budnikova, Vera Popovich, Takis Ioannidis, Ashok Chakravarthy.
Memories about the GGHA (4 p)

Yulia Budnikova.

From «*The ABC of Harmony*» to the Peace Science Primer

I contributed to two collective monographs prepared by the Gandhian Global Harmony Association (GGHA) as an author ("*ABC of Harmony*", 2012 and "*Global Peace Science*", 2015) and three as an editor ("*The ABC of Harmony*," "*Global Peace Science*," and "*Gandhica*", 2019). This was a very interesting experience, introducing me to the ideas of intellectuals from different countries and continents striving for friendship and cooperation in the name of peace. Since I work at the Roerich Family Museum-Institute and am a researcher of the works of various members of the great Roerich family, my articles were devoted to their thoughts on peace. More precisely, their thoughts on the paths to achieving peace (spiritual growth through Culture and Harmony) and on the higher, divine nature of peace in the works of Helena and Nicholas Roerich.

The synergistic core of Gandhian "*Perpetual Peace Science*," created at the GGHA over 20 years, integrated the fundamental ideas of Nicholas and Helena Roerich: the divine nature of humanity's true, perpetual peace and its equally eternal culture of peace, expressed by Nicholas Roerich in his "*Banner of Peace*," which affirmed its eternity within its four rings. Therefore, it can be rightfully asserted that both the peace science spherical thinking and the eternal peace culture in our Primer draw their fundamental sources from the Orthodox ideas of the Roerichs, along with the fundamental ideas of Immanuel Kant's "*perpetual peace*," M. Gandhi's "*varnas/spherons of non-violence*" of humanity, and A. Einstein's "*substantially new thinking*" in their organic, holistic unity. At the same time, it must be emphasized that the Roerichs' ideas of perpetual peace and its peace culture found fundamental, scientific and theoretical development in the GGHA spheronics, in the "*Peace Science*", in their strict logical structuring in accordance with the objective spheres of humanity's social nature.

But in this essay, I would like to talk more about the unforgettable collaboration with the wonderful people I met in this unique project, which arose thanks to the energy and goodwill of Lev Mikhailovich Semashko, and was ardently supported by people who desire a better future for the planet.

First, I would like to remember Erika Lazarova (https://www.peacefromharmony.org/?cat=en_c&key=488), a Bulgarian philosopher, professor, and a wonderful woman of Great Spirit, who personally knew Svyatoslav Roerich. She invited me to Sofia in 2013 for a conference she organized on his documents, where I presented a paper on the diaries of Helena Roerich and became acquainted with Bulgarian culture and its representatives. I also met with the Bulgarian Roerich scholar Todor Yaylamov (also now deceased), with whom we organized a creative evening for the local intelligentsia dedicated to Nicholas Roerich and the St. Petersburg State Roerich Family Museum-Institute. Needless to say, all this is important for strengthening bridges between peoples.

I also had a wonderful collaboration with the Iranian artist Lida Sherafatmand (https://peacefromharmony.org/?cat=en_c&key=514). Leo Semashko proposed organizing an exhibition of her works at the Museum, where I work. It worked out, the exhibition was a great success. Lida herself, who experienced the horrors of the Iran-Iraq War as a child, spoke at our seminar about her journey as an artist-peacemaker, searching for a universal artistic language that can touch the hearts of people around the world. For her, this language became floriscism—the expression of a palette of feelings through images formed with floral images. Lida was deeply fascinated by the ideas of the Roerich Pact, which she promoted in her exhibitions and lectures in various countries. We remain friends to this day.

Another fruitful aspect of my involvement in the GGHA members correspondence was my participation in the creation of an exhibition dedicated to outstanding women, organized in 2017 in Astana by Raisa Kazieva, assistant to Academician Uraz Baimuratov (https://peacefromharmony.org/?cat=ru_c&key=561), Kazakh coauthor of "*Global Peace Science*." Raisa contacted me for materials for a display dedicated to Helena Roerich. After the exhibition, she donated one of the exhibits to our museum—a hand-painted plate depicting a portrait of Helena Roerich. This item has been added to the collection of the Roerich Family Museum-Institute, serving as a fond memory of a noble social initiative and radiant aspirations.

The exchange of thoughts and warmth, the broadening of horizons, and a sense of unity with people of good will across a world divided by borders, propaganda, lies, and mistrust—this, I believe, is the GGHA main humanistic result of 20 years of work, which is entirely voluntary and unaffiliated with any political, governmental, or other structures. It has been supported and developed throughout this time by the participants themselves—people with a strong sense of duty, responsibility, and a strong social spirit, who share common values. This is a magnificent example of civic initiative, which serves as the key to creating a more developed, prosperous, peaceful, and cultured society. **Pax Cultura!**

Yulia Budnikova. Philologist, Deputy Director of the St. Petersburg State Roerich Family Museum-Institute. St. Petersburg, Russia.

Personal page on the GGHA website: https://peacefromharmony.org/?cat=ru_c&key=577

Vera Popovich.

Inspired by the Gandhian Spherons of the Perpetual Peace Science

I became acquainted with the work of the GGHA in 2012. The first book I read and participated in was "*The ABCs of Harmony*." I was impressed by the scope of questions and answers covered in the GGHA's work. But the ultimate, main focus, which particularly delighted me, was peacemaking, inspired by the Orthodoxy perpetual peace and other faiths in Russia in its conciliarity. Over the past years, I have participated in the creation of GGHA books, with Leo Semashko serving as the main organizer, inspirer, author, and editor of all of these works.

The second book, "*Global Peace Science*," was very complex and labor-intensive; it required a great deal of effort and a wealth of information in the fields of philosophy and sociology. These were sleepless nights and endless days of difficult, long-term, and persistent work. The book was eventually published and took its place of honor in the minds and hearts of many peacemakers.

Next came "*Gandhica*," dedicated to the 150th anniversary of M. Gandhi. For it, I conducted a special statistical study of the spherons of a closed government regulatory institution with a small workforce of 77 people. Verifying the spherons end-to-end social structure at one of its local levels and among myriad similar objects finally convinced me in the truth of the spherons scientific theory and the GGHA *Perpetual Peace Science* as a whole. It not only convinced me of their impeccable truth, but also inspired me with the discovery of a universal, all-encompassing force that, by its nonviolent nature, precludes wars between each other, although they are possible between different class, national, and political factions due to their complete ignorance in the Peace Science.

I have found a solid scientific foundation in my worldview that guarantees eternal, lasting peace on earth, free from violence and bloodshed, lasting, albeit locally, for millennia. For this solid peacemaking foundation in my thinking and worldview, I am deeply grateful to the GGHA. Only they, not school or university, enlightened me with this fundamental humanistic knowledge and true peace hope.

Another GGHA book I contributed to is the "*Anti-Nuclear Manifesto*," 2020. The next important GGHA project I participated in is the "*Anti-NATO Manifesto*," 2024. Finally, the "*Peace Science Primer*" (PSP), 2025. I participated in the latter, inspired and enchanted by the peacemaking invincibility of the Gandhian spherons, who for the first time received a fundamental scientific justification in the *Perpetual Peace Science*. The main credit for the success and persistent promotion of its ideas, despite the powerful resistance they faced from the militaristic tradition, goes to Leo Semashko, the GGHA founder.

I am confident that our PSP will undoubtedly receive special attention as a unique scientific model for building a prosperous, sustainable society of the future based on the equality and harmony of spheres and spherons, without wars and violence. The conscious spherons, armed with their Peace Science, will forever free humanity from the threat of war, primarily nuclear war, and ensure a planetary, intelligent and perpetual peace.

Vera Popovich,

Culturalist, employee of the Russian National Library, St. Petersburg,

Personal page on the GGHA website: https://peacefromharmony.org/?cat=ru_c&key=578

Takis D. Ioannides.

My contribution to peace primer

I don't belong to West, I don't belong to East. I was born and live in a land between West and East, which produced a famous civilization and the sciences offered free globally. Among them the real

Democracy, unknown nowadays and used by many countries as a label to cover their atrocities. Among the ideas of PEACE, of HARMONY of JUSTICE, we all represent in GGHA.

As a Greek, student of the Greek culture and life and Orthodox Christian, I feel responsible for the lack of peace and harmony on our planet. GGHA, mostly, and others Institutes and Associations gave me the chance to work for these ideas, and with all of you the global peacemakers.

My contribution via life is consisted by many actions. Speeches, lectures, newspapers articles and essays, poetry via radio and TV stations, books, voluntary actions, information of children, students and people in literature institutes and associations, educational centers and universities. This, because the ideas of peace, harmony and justice especially, must be built in the minds and souls of humans. Every one knows the ideas, but few understand them, as Plato said. I understood that, **without real Democracy, Peace, harmony and justice cannot live and survive.**

I felt great disappointment when I sent our book "GPS" (Global Peace Science, 2016) to president of the USA, to the Secretary General of the UN, to the president of UNESCO, to the President of Greece, to the president of the Hellenic Olympic Committee and to the Director of the Olympic truce, on year 2015. No one of them replied! I worked for 8 years with the rector of the University of Athens to create a school of peace in the university. Our government was not funding it! **All books of GGHA are in the University of Athens, in Estia New Smyrna in Athens, in the Municipality of Ancient Olympia etc. Out GPS book is in the library of Ancient Olympia, available for all visitors.**

I felt great disappointment in the year 2024 when I asked by the International Olympic Committee to activate its Olympic Truce Department, to stop all wars, before, during and after the Olympic Games, to provide humanitarian aid to civilians, mainly to children, to provide medicine and food, to save human lives. **The International Olympic Committee did not activate it. I asked for international support. No one responded.**

I used and use the great tool of Internet (Internet was an idea of Plato) to spread out all projects and manifests of GGHA. I wrote in many books abroad about the peace, the democracy.

As long as I live, I shall not stop to work for the realization of Peace, harmony and Justice.

With respect and love

Dr Panagiotis-Takis D. Ioannides

Co-founder and Vice President of GGHA

Poet, writer, ambassador of Peace, historian of medicine, researcher of Greek philosophy and history, student of this Life.

Web: https://www.peacefromharmony.org/?cat=en_c&key=138

Dr. Ashok Chakravarthy Tholana

FOR A HARMONIOUS LIVING

Caught betwixt the universal turmoil, peace gets boiled
If we endorse the Gandhian Varnas, turmoil's get foiled;
The varnas ensure a harmonious living with top dignity,
But even erase the hidden instinct of one's superiority.

In a militaristic era, non-violence has lost its credibility
Thrust for nuclear civilization, became a tool for enmity;
How can the wars end before they end the human race?
Only the eternal Newtonian law of society can bring peace.

Gandhian law of Spherons is the Science of Eternal Peace
With a broader thinking, any individual can easily trace;
For perpetual peace and an end to all wars and hostilities,
Our "*Peace Science Primer*" (PSP) unfolds all the realities.

Let us try to change the paths of the war-centric transition
To a new multipolar era of peace and stately civilization;
The Gandhian Varnas can make this a peace-filled sphere,
Putting an end to the egoistic and supremacy-centric wars.

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THE GANDHIAN MEGASCIENCE

The world is going through a phase of death and ruin
Without an iota of mercy, deadly bombs and bullets rain,
Innocent civilians, women, the aged and small children,
Unmindful and unmerciful, such a brutality daily dawn.

Though aware, that the label does not remain forever,
To clinch the title of "The Universal Super Power";
Nations vie to arm themselves with nuclear weaponry,
How can then one expect world peace and harmony?

Ignorant of the great peace science and its broadcast
Suicidal wars with provocation of hydrogen holocaust;
Often threaten the Planet Earth; will it really crumble!
Ill-fated, will the virtue of Gandhian Varnas stumble?

Ideology of true peace is elusive, but we have a chance
Let us study and understand the Gandhian Megascience,
Realize! "Peace cannot be achieved through war/violence",
It can only be attained through understanding/science."
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Dr. Ashok Chakravarthy Tholana,

GGHA Vice-President, Bachelor of Commerce, Journalist, Distinguished Peace Poet, Doctor of Literature, Author of 11 poetry collections and translations of 16 books from Telugu to English. Dr. Ashok received commendations from eminent world personalities, such as, Dr. APJ Abdul Kalam, former-President, India, Shri Atal Behari Vajpayee, former-Prime Minister, India, Bill Clinton, USA, Queen Elizabeth of Britain, Princess of Wales, President and Prime Minister of France, Prime Minister of Switzerland, Senator Viktor Busa, The Lord President, Italy, United Nations Organization, UNESCO, UNICEF etc.

Few notable titles conferred upon Dr. Ashok, include, RABINDRANATH TAGORE LITERARY HONOR, GANDHIAN WORLD HARMONY CREATOR, NAJI NAAMAN LITERARY PRIZE, YASSER ARAFAT PEACE AWARD, SWAMY VIVEKANANDA INTERNATIONAL PEACE AWARD and so on. Site: www.worldpeacepoetry.com. Personal page: https://peacefromharmony.org/?cat=en_c&key=286.

Hyderabad, Telangana State, India

The Nobel Laureates Assembly Declaration for the Prevention of Nuclear War
July 16, 2025 (in abbreviation)

Full text: <https://thebulletin.org/2025/07/the-nobel-laureate-assembly-declaration-for-the-prevention-of-nuclear-war/>



In this 80th year of the nuclear age, the world finds itself at a reckoning point. Distrust and discord mark the international discourse, and the volume of challenges facing the global community is overwhelming. But there is **only one challenge that could end civilization in an afternoon.**

In 1955 and 2024, Nobel Laureates gathered at Mainau to issue warnings to the world about the existential threat posed by nuclear war. Tremendous progress has been made in reducing global nuclear stockpiles and nuclear risks, **but we are now heading in the wrong direction.** Poised at the beginning of **a new, complex, and dangerous nuclear arms race**, Nobel Laureates and nuclear weapons policy experts must now speak together.

We do not deny that the fear of nuclear war has played a role in preserving some stability among nations, **but a global security structure forever dependent on fear is ultimately a reckless gamble.** Despite having avoided nuclear catastrophes in the past, **time and the law of probability are not on our side.** Without clear and sustained efforts from world leaders to prevent nuclear war, there can be no doubt that **our luck will finally run out.**

While the only way to truly eliminate the risks of nuclear war is to eliminate nuclear weapons, there are important, timely steps that can support the longer-term effort to achieve nuclear disarmament... *Seized by the unprecedented and serious risks posed by artificial intelligence (AI) and other emerging technologies, we call on all states to engage in increased cooperative dialogue on the scientific, legal, and military implications of these technologies. Acknowledging the fallibility of AI, we call on all nuclear armed states to ensure **meaningful and enhanced human control and oversight over nuclear command and control...**we call on all nuclear armed states to institute the “two-person rule” that ensures at least two individuals are involved in any decision about the use of nuclear force...*

*Accepting the potential for nuclear accidents and miscalculations, we call on all nuclear armed states to expand secure communications lines between and among them and increase the number and frequency of multilateral **dialogues** on tools and mechanisms for crisis prevention and management.*

*Affirming that the Treaty on the Non-Proliferation of Nuclear Weapons is the cornerstone of the international arms control and nonproliferation architecture, we call on every nation to publicly recommit to all nonproliferation and disarmament objectives and obligations in the treaty... We further call on all states to enhance and expand political and substantive support for **multilateral nuclear diplomacy** and the institutions that uphold it...*

*Understanding that the lack of political will impedes the reduction of nuclear risks, we call on scientists, academics, civil society, and communities of faith to help create **the necessary pressure** on global leaders to implement nuclear risk reduction measures.*

There is no greater obligation than to prevent the catastrophe of nuclear war...

Our survival and the survival of future generations are at stake.

Editor's comment: True! However, there is no other way to counter this stake nonviolently, with reason, than only by the common and one, verified Science of Perpetual Peace as the highest planetary security, inaccessible to “*blind on it*” disciplinary thinking.

Conclusion

Matt Meyer, in conjunction with Lucas Pawlik and GGHA

Humanity is capable of living without war and violence—

but only with the holistic,

Spherical Thinking, Perpetual Peace Science and its AI

https://peacefromharmony.org/?cat=en_c&key=1287

Obviously, it does not take a social scientist, a progressive activist, or even an educated and intelligent person to conclude, as of the publication of this book, that the world-views of the peoples of the United States and Russia—and of the Ukraine, India, Israel and Palestine, much of Africa, Asia, and the Americas—do not fit neatly into a singular, widely accepted framework. Historians may well argue the reasons why the violence, war, dissention, hatred, mistrust and divides between the USA, Russia, and the rest have dominated our last century. Political-economic labels such as “capitalism” and “communism” might well provide some insights, but they hardly complete an analysis as to why wars and sectarianism linger.

This book, then, seeks to present, scientifically and through reasoning and experiences, a framework for an alternative notion:

We believe, “*Humanity is able to live in global, perpetual peace without wars or violence but only with the holistic, Spherical Thinking, Perpetual Peace Science, and its AI!*”

We have not sought to argue our position based on utopian notions nor on “new age” political solutions that can be hoped-for but never achieved. For us, an intentionally diverse group of peace leaders from both the USA and Russia (and many additional people and places, including our distinguished Nobel Peace laureates), our conclusion is that three basic scientific ideas are all that is required to master the peace goal so sought after for generations for thousands of years.

Spherical thinking, as our Russian colleagues from the GGHA have discovered and named it, peace science (as peace research and studies in IPRA over the past six decades have developed it starting from Galtung), and a mixture of that work with newfound artificial intelligence capabilities are “*all that it takes in a whole*” to see the fundamental shift sprouts in global being, actions, policies, and ensuing results. These fundamental scientific discoveries, long maturing in history, are revealed integrally and briefly, in a first approximation, in our Primer (https://peacefromharmony.org/?cat=en_c&key=1264).

“All that it takes in a whole,” of course, may seem too simple with compared to the cycle of thousands of years of devastating and unnecessary warfare, violence, inhumanity and oppression! Of course, however, we are well aware that “digesting” the full meaning of spherical thinking, perpetual peace science, and spherical AI, listed in the Primer title, is neither an overnight “Ah Ha” notion nor a singular, signed-in-Washington or Moscow or Beijing or Anywhere policy shift. We have devoted this book, as the GGHA has devoted its 20 years of work to studying, testing, explaining, and promoting these notions. That is, after all, the central and holistic thesis of this book.

All three system discoveries are based on the common structural denominator of sixteen eternal, real spheres of any society. They are equally necessary and sufficient for the harmonious and sustainable development of any nation living in prosperity and sustainability of perpetual peace. They constitute an objective, unshakable **social foundation for general and complete disarmament as the first condition** for humanity’s perpetual peace, providing the foundation for the complete and equal security to all peoples, eradicating the need for wars and violence at all social levels.

The evolution of thinking in the form of qualitatively different levels of generalization of reality and its methods at different stages of historical development presented in Chapter 4, Figure 11 of our Primer. It is dedicated, as anyone who has looked through it could see, to the highest, holistic level of the scientific thinking/generalization, which is realized through the knowledge, recognition and comprehension of equally necessary and at the same time sufficient real spheres of all three planetary natures: physical, organic/biological and social (Chapter 3).

Our colleagues in Russia, writing for their contemporary audience, outlined some of this evolution of thinking in their own particular manner.

In their Edition of this book, chief author and GGHA co-founder Leo Semashko (St. Petersburg State Councilor), put together its following conclusion: “**The Second Axial Age and its three world discoveries in the Primer,**” (https://peacefromharmony.org/?cat=ru_c&key=1144) can interpret in this way:

“If the first millennium BC, as established by Karl Jaspers, became the humanity ‘*first axial age*’, in which the transition from mythological thinking to scientific, disciplinary thinking (DT) took place, then, obviously, starting approximately with Immanuel Kant, from the beginning of the 19th century, the spontaneous “*second axial age*” of humanity's transition to holistic, spherical thinking (ST) from the currently dominant fragmentary DT (ibid.) began. Intuitively and sporadically, rarely, ST accompanied DT since its start in the “harmony of the spheres” of Pythagoras, which was continued by Kepler. In the past and present centuries, ST was developed by Vl. Soloviev, Chardin, Gandhi, Vernadsky, Einstein, Sorokin, Sloterdijk, Wilber, and others. The narrow and fragmented limitations of DM, “*blind to the whole*” in thousands of disciplinary sciences, have long been overcome in many alternative approaches: cosmism, all-unity (“*good is in integrity, evil is in fragmentation*”), integralism, multi-paradigmism, inter-disciplinarity, multilateralism, and similar ones by dozens of outstanding scientists and thinkers, named and unnamed in the Primer.

“The conscious structural unity of ST was found in the Pythagorean category of “sphere,” which was expanded to a planetary, macrosocial scale by Chardin, Gandhi, Vernadsky, and Einstein. In the Primer, ST received a fundamental scientific justification of the objective truth in the planetary spheres of the Earth three natures: physical, organic and social based on the law of “*Equally necessary sufficient spheres*” (ENDS) in Chapter 3 and scientific verification by 12 historical facts (Chapters 2-5). Over 50 years of conscious development at two stages, Russian from 1975 to 2004, continued by GGHA at the international stage from 2005 to the present, “*on the shoulders of giants*” of the world ST, it was confirmed by world statistics (Chapters 6 and 9).

“ST is the first world scientific discovery. It is detailed in the Primer by two other discoveries of a similar, planetary scale and Copernican significance for humanity that follow from it: “*Perpetual Peace Science*” (or identically “*Peace Science*”) and “*Spherical AI*” (SAI). They are expressed by the corresponding spherical structural model in the figure below with the accentuation of their breakthrough significance primarily for Russia, where they were born on the soil of Orthodoxy and science for 50 years.

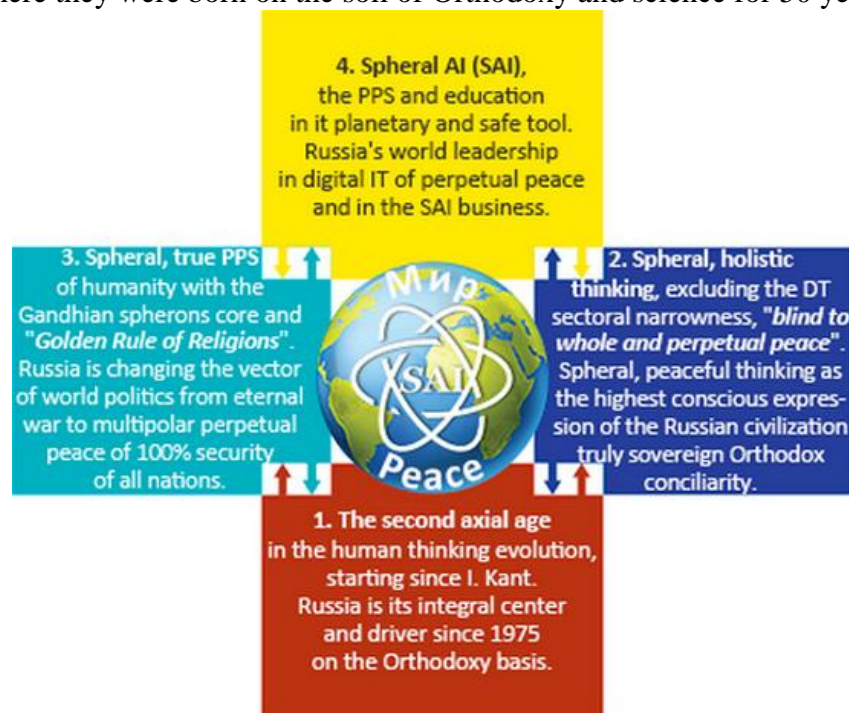


Fig. 19. The Primer world spherical discoveries and their significance for Russia

“Their significance for Russia is best revealed, starting with the most relevant, providing an almost immediate breakthrough and the most ambitious effect of its world leadership in a fundamentally new technological, statistical “*Spherical AI*” (SAI). Its superiority for peace and business over the AI disciplinary, branch language models is revealed in 18 attributes in Chapter 10 that makes it central in the Primer in terms of its significance. It is realized in the corresponding “*SAI Startup*” (SSAI) in this chapter for 2 years for 150 specialists with a total funding of 400 million rubles or \$5M USD. According to the expert, the SSAI “*promises to become the Russian “DeepSeek*” in the technological race for machine superintelligence with minimal financial and energy costs in 2-3 years, instead of 10 with hundreds of billions, as expected by its current leader “*OpenAGI*”. The weakness of the USA in the race for regulatory superintelligence is indirectly

recognized by the "*America's AI Action Plan*", limited to branch manufacturing, which was signed by President Donald Trump on July 23 (https://peacefromharmony.org/?cat=en_c&key=1286).

"In fact, Russia has no rivals in this SAI. The whole question now is whether it will promptly take advantage of this strategic advantage, or give it into the hands of others, abandoning it due to fear of its risk?"

"The discovery of the true, spheral "*Perpetual Peace Science*" (PPS), initiated by the clear example of the Orthodox conciliarity of many ethnic groups and confessions of the Russian civilization as a local perpetual peace, provides it with peacebuilding leadership in multipolarity on the fundamental scientific basis of eternal social spheres and eternal spherons, engaged in them as eternal actors of perpetual peace. Only PPS, together with its spiritual support of the "*Golden Rule*", is capable to be the basis of a true, "long-term" and perpetual peace of Russia and Ukraine, becoming its planetary model for all peoples of humanity that is revealed in the Primer corresponding appendix (#2). PPS can also become, together with the SAI, the subject of strategy of the Russian-US peacemaking cooperation in the "*Planetary Space of Perpetual Peace*" (PSPP) as the complete security of humanity through the relevant institutions of the "*Department of Peace*" and the "*Academy of Peaceful Accelerated Growth*" (Chapters 4 and 6). They will "*end wars*" forever that is what Donald Trump, Vladimir Putin and the world leaders of China, India, Brazil and the like are so persistently striving for. Perpetual peace with its SAI will become the most powerful "soft" weapon of demilitarization, denuclearization and denazification. Can Russia abandon it?"

"The ST peacemaking imperative is not limited to the PPS and its peacebuilding institutions, but extends to all peoples, to all social production and to every generation and every individual in the future in a long-term strategic perspective for many decades until the end of our century. This global process is connected, first of all, with the spheral peaceful education of new generations in the PPS in all educational institutions, which will replace the traditional, disciplinary and confrontational worldview with a harmonious and peaceful one. It is excluding violence and wars, ensuring the establishment of a new, nonviolent and harmonious civilization of humanity instead of the modern genocidal and suicidal nuclear one (Chapter 2 and others).

"The ST key effect in the economic sphere is manifested in a fundamentally new, spheral fractal organization of social production, labor, business and their governance/management, which provides them with the highest efficiency of sustainable accelerated growth. It is similar to the "*Chinese economic miracle*" of Deng Xiaoping up to 15% annually, which he achieved on the basis of his brilliant spheral intuition. The conscious implementation of the spheral fractal organization in the economy and business will provide Russia with world economic leadership (Chapter 8).

"In conclusion, it is necessary to emphasize that the objective truth of the necessary and sufficient planetary spheres of spheral thinking is irrefutable from the standpoint of fragmentary, disciplinary thinking, which is powerless to refute it or scientifically criticize it. 'God is not in power, but in truth,' in truth, as A. Nevsky said. M. Gandhi repeated this idea: '*Truth is God. Therefore, Truth Alone Triumphs*', which became the motto of India and close Russia. For it, there is no more ambitious breakthrough, except for the three world spheral discoveries born on its Orthodox soil and guaranteeing its world leadership. Their truth is immortal."

For the English/US Edition of this book, we have little more to add by its essence. Perhaps a more pragmatic, accessible, and hands-on reflection on the same evolutionary process would be the main useful addition we can offer.

From Christian biblical teachings of Apostle Paul in the New Testament, Romans 12;18, the idea that humans should "*live in peace with everyone*" was boldly asserted. It was established as the Golden Rule of all world religions (Chapter 1 of our Primer).

Fast forward to the 20th Century, and Mohandas Gandhi suggests and begins to build a philosophy and global movement on the idea that "*it is possible to live in peace*" (Chapter 6 of our Primer).

Post-Gandhi, the "dean of the US Peace Movement," Rev. A. J. Muste is often quoted as noting that "*there is no way to peace: Peace IS the way.*"

And at the latter part of the 20th Century and well into the 21st, academic peace studies co-founder Johan Galtung wrote detailed scientific conclusions on the "*negative*" and "*positive*" peace processes that humans have and can achieve through various means.

When we look at the diversity of ways in which individuals and groups have and continue to redefine and implement these ideas and ideals, we find an extraordinary and creative range of work. From our illustrious proponents of global citizenship to our Nobel laureate experiments in Northern Ireland, from our India, Pakistani, and Nepalese colleagues to our co-authors in France, Britain, Austria, Greece, and Rwanda,

and finally to our scores of contributing colleagues in Russia, we see interpretations of peace practice in various forms. My own work as Secretary-General of the International Peace Research Association, represented by five regional associations and a Council spanning every corner of our spherical planet, has taken me to over 130 countries – some officially recognized, others not-so-much so. These experiences reassure me that even in times that seem dark, foreboding, and war-like, the principles and ideas laid out in this book are worthy of uniting our thinking.

Unity is an interesting notion for a scientist, even a social scientist and historian. We were first drawn to GGHA and to the process that brought us to this book by the idea that a dialogue with Gandhian and peace-promoting colleagues in contemporary Russia was an important thing. Over the years, this preliminary notion itself evolved, even as differences in our approaches emerged. It turns out that unity should never be abandoned just because *unanimity* is not achieved. We are not brought together because we agree on all things. On that basis most families, even small ones, could never share meals together! We remain united because we agree on enough vital notions that splitting apart is less valuable than staying together. In the case of war and peace, splitting apart a unity for humanity and peace is both untenable and unconscionable.

When we look at genocide today, and at the continuation and in some places intensification of colonial and neocolonial underdevelopment, we know that these are not paths to provide a great future for the majority of people. We recognize that ecocide and the war on Mother Earth is another form of genocide that must be addressed. We understand that injustices and oppression, including patriarchy, white supremacy, imperialism and many other forms of repression must be replaced by liberation for all people in order for peace to prevail.

Thus, we invite and urge English and US readers to consider spherical thinking, perpetual peace science, and spherical AI as the basis and toolset for a unity for all of humanity. Like all the work of GGHA, we value a dialogical process and dialectical thinking that reaches past and beyond the publication of any given book. But we also look forward to various attempts at utilizing scientific methods to build alternatives to the militarized actions and violent events that seem to plague our society today. We do not seek simple solutions that suggest an ultimate correctness from “one side or the other.” We simply seek an intensification of our experiments for building perpetual peace of full and equal security for all, without exception.

So, we repeat: ***“Humanity IS able to live in Peace!” We are able to live in global, perpetual peace without wars or violence—but only with the holistic, Spherical Thinking, Perpetual Peace Science, and its AI.” We must live*** as a united human family, on this fragile but resilient sphere known as the Earth! Let us build a lasting global peace worthy of every inhabitant with the necessary and sufficient scientific discoveries in the spherical, ***“substantially new thinking”*** according to Einstein and all who have followed!

Bibliography

1. Leo Semashko et al. Global Peace Science...of Spherons / Semashko. L. [et al.]. – JD Group of Publication, New Delhi. 2016. – 624 p.: <https://peacefromharmony.org/docs/global-peace-science-2016.pdf>
2. Harry Gensler. Ethics and the Golden Rule. Chronological History. Routledge Press, 2013: https://peacefromharmony.org/?cat=en_c&key=1263
3. Rev. Dr. Harry Gensler S.J., A Chronological history of the Golden Rule. Authors' Curricula: Global Ethics and the Golden Rule of Interfaith Harmony in the 21st Century. Center of Interfaith Harmonious Education. GHA 44th Project. April 14, 2013: https://peacefromharmony.org/?cat=ru_c&key=580
4. Rudolf Siebert. Open Letter to President Trump. The Golden Rule of Harmony in Religions and Society. 01.02.2017: https://peacefromharmony.org/?cat=en_c&key=51
5. Rudolf Siebert. The Mount Sermon and the Golden Rule: Global Peace Science Today. 09.01.2017: https://peacefromharmony.org/?cat=en_c&key=51
6. Leo Semashko, Rudolf Siebert. Spherons of Harmony: The Third Way of Religions Reconciliation. 29.04.2017: https://peacefromharmony.org/?cat=en_c&key=782
7. Rudolf Siebert. Golden Rule to the present Ukrainian conflict. 02.03.2022: https://peacefromharmony.org/?cat=en_c&key=51
8. Rudolf Siebert. Golden Rule: Contra Ukrainian Nazism and Pro the Russian and American worlds solidarity: 15-04-22: https://peacefromharmony.org/?cat=en_c&key=1063
9. Rudolf Siebert. The Golden Rule of Religions: The First Law of Social Harmony. The ABC of Harmony, 2012: https://www.peacefromharmony.org/?cat=en_c&key=499
10. Rudolf Siebert. Critical Theory of Religion: The Evolution of Moral Consciousness from Jus Talionis to the Golden Rule. July 2007 г.: https://peacefromharmony.org/?cat=en_c&key=51
11. Joseph Rodgers, Diya Ashtakala. Only irreversible changes in nuclear disarmament can lead to a world without nuclear weapons. June 4, 2025: <https://thebulletin.org/2025/06/only-irreversible-changes-in-nuclear-disarmament-can-lead-to-a-world-without-nuclear-weapons/>
12. Mark G. Keenan. Godless Fake Science. 2023: https://peacefromharmony.org/?cat=en_c&key=1255
13. Mark G. Keenan. Godless Fake Science – Used for Deceptive Corporate and Political Agendas. February 25, 2025: https://peacefromharmony.org/?cat=en_c&key=1255
14. Лев Семашко. Социология для прагматиков. От монизма к тетрализму: учебное пособие / Л. Семашко. – Санкт-Петербург: Европейский Дом, 1999. – Ч. 1. – 376 с.: <https://peacefromharmony.org/docs/sociologiya-dlya-pragmatikov.pdf>
15. M.K. Gandhi. My Religion. Compiled and Edited by: Bharatan Kumarappa. First Edition: December 1955. ISBN 81-7229-169-8: https://www.mkgandhi.org/my_religion/my_religion.php
16. William Edward Douglas Jr., Angela Wong-Douglas. The Gospel of Science: Mind-blowing New Science on Ancient Truths to Heal Our Stress, Lives, and Planet. January 1, 2022: <https://www.amazon.com/NEW-2ND-Gospel-Science-Mind-blowing/dp/0578975335>
17. Mohandas Karamchand Gandhi. My Religion. Compiled and Edited by: Bharatan Kumarappa. First Edition: December 1955. ISBN 81-7229-169-8 – 193 p.: https://www.mkgandhi.org/my_religion/my_religion.php
18. Ken Wilber. Integral Buddhism and the Future of Spirituality. 2018: https://peacefromharmony.org/?cat=en_c&key=1234
19. Leo Semashko et al. Spherons: Nonlinear Sociogenetic Reality And Verified Truth Of The Spheronsics Megascience. 29-10-21: https://peacefromharmony.org/?cat=en_c&key=1019
20. Leo Semashko. Tetrasociology: Responses to Challenges. St.-Petersburg State Polytechnic University. 2002. 158 p. http://www.peacefromharmony.org/?cat=en_c&key=145
21. Leo Semashko et al. Tetrasociology: from Sociological Imagination through Dialogue to Universal Values and Harmony, in three languages: Russian, English and Esperanto. St.-Petersburg State Polytechnic University, 2003. 394p. http://www.peacefromharmony.org/?cat=en_c&key=149
22. Leo Semashko et al. The ABC of Harmony for World Peace, Harmonious Civilization and Tetranet Thinking. 2012: https://peacefromharmony.org/?cat=en_c&key=478
23. Peter Sloterdijk. The Spheres. Three volumes on English: <https://peacefromharmony.org/docs/Sloterdijk-Bubbles-Spheres-I.pdf>
<https://peacefromharmony.org/docs/Sloterdijk-Globes-Spheres-II.pdf>
<https://peacefromharmony.org/docs/Sloterdijk-Foams-Spheres-III.pdf>

24. Kant, I. Perpetual Peace: A Philosophical Sketch / I. Kant. – UK ed. : Hackett Publishing Company, 2015. – 64 p.: https://peacefromharmony.org/?cat=ru_c&key=1099
25. Лев Семашко. Сфероника: история, методология, язык, религия и публикации. 2022: https://peacefromharmony.org/?cat=ru_c&key=983
26. Leo Semashko et al. Mahatma Gandhi: Nonviolence Starting Point. Spherons Genetics and Statistics. **Gandhica**. 2019: https://peacefromharmony.org/?cat=en_c&key=848
27. Riane T. Eisler. The Chalice and The Blade: Our History, Our Future. Harper Collins San Francisco, 1994: https://peacefromharmony.org/?cat=en_c&key=932 and: <https://peacefromharmony.org/docs/Riane-Eisler-The-Chalice-and-The-Blade.pdf>
28. Leo Semashko. Spherical Approach: Philosophy, Democracy, Market and Human. St.-Petersburg, 1993, 368 p. : <http://peacefromharmony.org/docs/leo-semashko-spherical-approach-1993.pdf>
29. Лев Семашко, Рудольф Зиберт. Китай и Россия за мир во всем мире. Сферная логика его продвижения через инновационный сферный ИИ и ускоренный рост экономики, инвестиций и бизнеса. 09.06.2024, in Russian: https://peacefromharmony.org/?cat=ru_c&key=1074; in Chinese: https://peacefromharmony.org/?cat=ch_c&key=8
30. Leo Semashko, Martha DeWitt. Children's Suffrage: exercised by parents. 2004: https://peacefromharmony.org/?cat=en_c&key=211
31. Leo Semashko. Peace Science and its Logic of Spheres to Accelerate Economic Growth, Investments and Business. WGF Magazine Interview. Delhi. May 2024, p. 101-107: https://peacefromharmony.org/?cat=en_c&key=1190
32. Leo Semashko, Olga Kashina. Method of spherons verification in 2 hours within Spheronics Megascience. Table-2. 23-08-22: https://peacefromharmony.org/?cat=en_c&key=1125
33. Olga Kashina. The Russia's Spherons over 50 years: 1970-2021: https://peacefromharmony.org/?cat=ru_c&key=899
34. Лев Семашко et al. Thermodynamics and Negentropy of Spherical Classes Societal Harmony: Global Peace Thermodynamics. 24.05.2017: https://peacefromharmony.org/?cat=en_c&key=756
35. Forrester, Jay Wright. World dynamics. 1971
36. Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, William W. Behrens III. The Limits to Growth. A report for the Club of Rome's on the predicament of Mankind. – New York, Universe Books, 1972.
37. Gaya Herrington. Update to Limits to Growth: Comparing the World3 Model With Empirical Data. Journal of Industrial Ecology 2020; 1-13: <https://dash.harvard.edu/handle/1/37364868>
38. В.А. Садовничий и др. Моделирование и прогнозирование мировой динамики в XXI ВЕКЕ. Препринт. МГУ, 2022, 88 с.
39. А. Рессей. The Human Quality. — Oxford; New York: «Pergamon Press», 1977.
40. Александр Дугин. Четвертая политическая теория. 2009. Амфора, СПб, 351 страниц. https://peacefromharmony.org/?cat=ru_c&key=967
41. Александр Дугин. Теория многополярного мира. Евразийское движение. Москва. 2013. 534с.: <https://www.geopolitika.ru/sites/default/files/tmm-new-alltry2.pdf>
42. Александр Дугин. Путин провозгласил Русскую Идею. 03.10.2022: https://peacefromharmony.org/?cat=ru_c&key=993
43. Лев Семашко [и др.]. Фракталы социальной гармонии и индекс гармонии в «золотой тетрасоциологии». 25 октября 2008: https://peacefromharmony.org/?cat=ru_c&key=370
44. Александра Кочеткова. Прикладная психология управления. – Москва: Издательство Юрайт, 2018. – 437 с.: <https://urait.ru/book/prikladnaya-psihologiya-upravleniya-413225>
45. Heraclitus of Ephesus: The Philosopher of Change (Bio & Quotes): <https://www.thecollector.com/greek-philosopher-heraclitus-ephesus-quotes/>
46. Leo Semashko et al. Best Business: Spherical Peacebuilding, Spheronism. 2020: https://peacefromharmony.org/?cat=en_c&key=923
47. Leo Semashko et al. Mahatma Gandhi: Nonviolence Starting Point. Spherons Genetics and Statistics. **Gandhica**. By the GGHA 82 coauthors from 25 countries. 2019: https://peacefromharmony.org/?cat=en_c&key=848
48. Leo Semashko, Chandra Subhash, Pravat Dhal, Lukas Pawlik, éditeurs et 78 coauteurs. Mahatma Gandhi: Début de la non-violence. Génétique et Statistiques des Sphérons. GANDHICA. Sanbun Publié par Oct. 2019. – 184 p.: https://peacefromharmony.org/docs/GandhiBook_Fra_WEB.pdf
49. Leo Semashko, Olga Kashina. Digital Technology of Spherical Statistics. Spherons Verification. 18.06.2023: https://peacefromharmony.org/?cat=en_c&key=1138

50. Leo Semashko, Olga Kashina. Spherionics: Artificial Intelligence of Global Statistics and Russian Leadership. 12.01.2023: https://peacefromharmony.org/?cat=en_c&key=1109
51. Leo Semashko, [и др.]. Harmonious Civilization. 2009, 264 p.: https://peacefromharmony.org/?cat=en_c&key=379
52. Leo Semashko, Olga Kashina. Spherionics: Artificial Intelligence of Global Statistics and Russian Leadership. 14.01.2022: https://peacefromharmony.org/?cat=en_c&key=1109
53. Pedro Gomez, The Interest Pattern. In search of the lost monetary anchor. April 2025: https://peacefromharmony.org/?cat=en_c&key=1276
54. Mecklin J. Nuclear Catastrophe: 90 seconds. 2024: https://peacefromharmony.org/?cat=en_c&key=924
55. Robert R. Holt. Meeting Einstein's challenge: New thinking about nuclear weapons. April 3, 2015: <https://thebulletin.org/2015/04/meeting-einsteins-challenge-new-thinking-about-nuclear-weapons/>
56. Urs Graf. Russia and the West: A thousand years of war and Russophobia. 19.11.2024: https://peacefromharmony.org/?cat=ru_c&key=1093
57. Emily Bender, Alex Hanna. Government officials are letting AI do their jobs. Badly. May 30, 2025: https://peacefromharmony.org/?cat=en_c&key=1269
58. Elon Musk. With artificial intelligence we are summoning the demon. 24.10.2014 https://peacefromharmony.org/?cat=ru_c&key=1112
59. Michel Chossudovsky. From "Fake Peace" to "Real War": Obama's One Trillion Dollar "Humanitarian" Nuclear Weapons Program. Prevent Al Qaeda Terrorists from Acquiring Nukes. July 09, 2025: https://peacefromharmony.org/?cat=en_c&key=1282
60. Блог Форсайт. Формула Big Data: семь «V» + неординарная задача. 13.06.2018: https://peacefromharmony.org/?cat=ru_c&key=1114
61. Лев Семашко. Для РАН. Междисциплинарный синтез наносферной технологии. 2022: https://peacefromharmony.org/?cat=ru_c&key=995
62. Zachary Burdette et al. Six ways AI could cause the next big war, and why it probably won't. July 15, 2025: https://peacefromharmony.org/?cat=en_c&key=1284
63. Leo Semashko. The AGI Complementary Paradigms Synergy: "OpenAGI" (OAGI) & "PeaceAGI" (PAGI). 18.02.2024: https://peacefromharmony.org/?cat=en_c&key=1168
64. Mike Whitney. The Risks of Artificial Intelligence: China's DeepSeek Bombshell Rocks Trump's \$500B AI Boondoggle. 24.01.2025: https://peacefromharmony.org/?cat=ru_c&key=1111
65. Константин Воронцов. «Машина, будь человеком!». 17 апреля 2024. Доклад: <https://data-fusion.ru/programma.html> и https://peacefromharmony.org/?cat=ru_c&key=1073
66. Semashko L. Spherionics: The History, Nuclear Antagonists and the UN Bifurcation Point into True Peace Survival? 31.03.2023: https://peacefromharmony.org/?cat=en_c&key=1120
67. Taosha Wang. Four ways DeepSeek could change everything. 12.02.2025: https://peacefromharmony.org/?cat=ru_c&key=1117
68. Semashko L. Humanity Is Able To Live In Global Peace, Without Wars And Violence: WGF Magazine Interview. Delhi. June 2023, p. 50-56: <https://worldgrowthforums.com/world-growth-forums-magazines/wgf-mag-jun-2023/>
69. The Nobel Laureate Assembly Declaration for the Prevention of Nuclear War. July 16, 2025: <https://thebulletin.org/2025/07/the-nobel-laureate-assembly-declaration-for-the-prevention-of-nuclear-war/>
70. Siebert, R. The Third Way. 2020. - URL: https://peacefromharmony.org/?cat=en_c&key=945

CONTENTS

Title Page, with the links: https://peacefromharmony.org/?cat=en_c&key=1264

Acknowledgements for 20 years

GGHA. Perpetual Peace as the Confession of Faith

Dedications and Memory Gallery

Chapter 1. Introduction. The Golden Rule: The spiritual source and foundation for the Perpetual Peace Culture, its Spherical Science and Primer's coauthors

Chapter 2. Preface. Nuclear Civilization in the Cognitive Deadfall of Disciplinary Thinking

Chapter 3. The Earth Three Natures: in Harmony of the Single Spherical Structure. Planetary Law: Equally Necessary and Sufficient Spheres

Chapter 4. Spherical way of Scientific Thinking in the Cognition Evolution. Conscious Path of Perpetual Peace for Full Security

Chapter 5. Social Nature Spheres of the Social Production and Perpetual Peace. Statics

Chapter 6. Gandhian Varnas/Spherons: The Perpetual Actors of the Humanity Perpetual Peace

Chapter 7. Spherical Dynamics of Social Production and Peaceful Multipolarity XXI

Chapter 8. Fractal organizational interaction of social spheres in the social space/time coordinates

Chapter 9. Spherical Global Statistics for Planetary Holistic Thinking and Spherical AI

Chapter 10. The Spherical AI (SAI) Substantial Superiority from Peace Science of Spherical Thinking

APPENDICES

Appendix 1. "The ABC of Harmony", Peace Science 2012 Authors on the meanings and values of perpetual peace spherical thinking (7p)

Appendix 2. Matt Meyer et al. Perpetual Peace of Russia and Ukraine (PPRU): The Peacemakers Solidarity Mobilization for a Peace Culture Renaissance (6 p)

Appendix 3. Mairead Corrigan Maguire and Matt Meyer. To Build a Better Tomorrow (2 p)

Appendix 4. Lucas Pawlik. The Peace Science Primer: World institutionalization (3 p)

Appendix 5. Andrey Smirnov, Svetlana Vetrova. Demiurge: 1975–1980: The Spherons' Perpetual Peace Science Beginning in Russia (4 p)

Appendix 6. Olga Kashina. The Russia's Spherons over 50 years: 1970-2021 (1 p)

Appendix 7. Yulia Budnikova, Vera Popovich, Takis Ioannidis, Ashok Chakravarthy. Memories about the GGHA (4 p)

Appendix 8. The Nobel Laureates Declaration for the Prevention of Nuclear War. July 16, 2025 (1p)

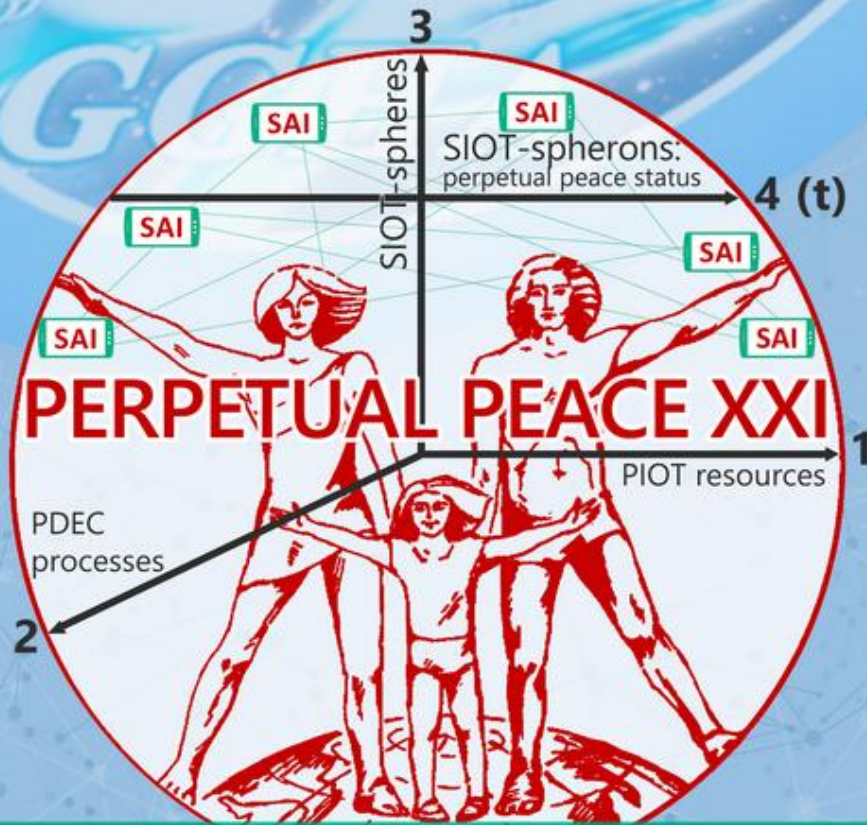
Conclusion

Matt Meyer and Lucas Pawlik. Humanity is capable to live without war and violence, but only with the holistic, Spherical Thinking, Perpetual Peace Science and its AI (4p)

Bibliography. For the Primer 10 chapters common (3 p)

CONTENTS (1 p)

The Spherical Coordinates System
of Fourdimensional Space-Time
of the Humanity Perpetual Peace
and Social Production



The humanity's spherons
Harmonious Civilization
in the spheral thinking
of Perpetual Peace era since the XXI end
<https://peacefromharmony.org/sai>