



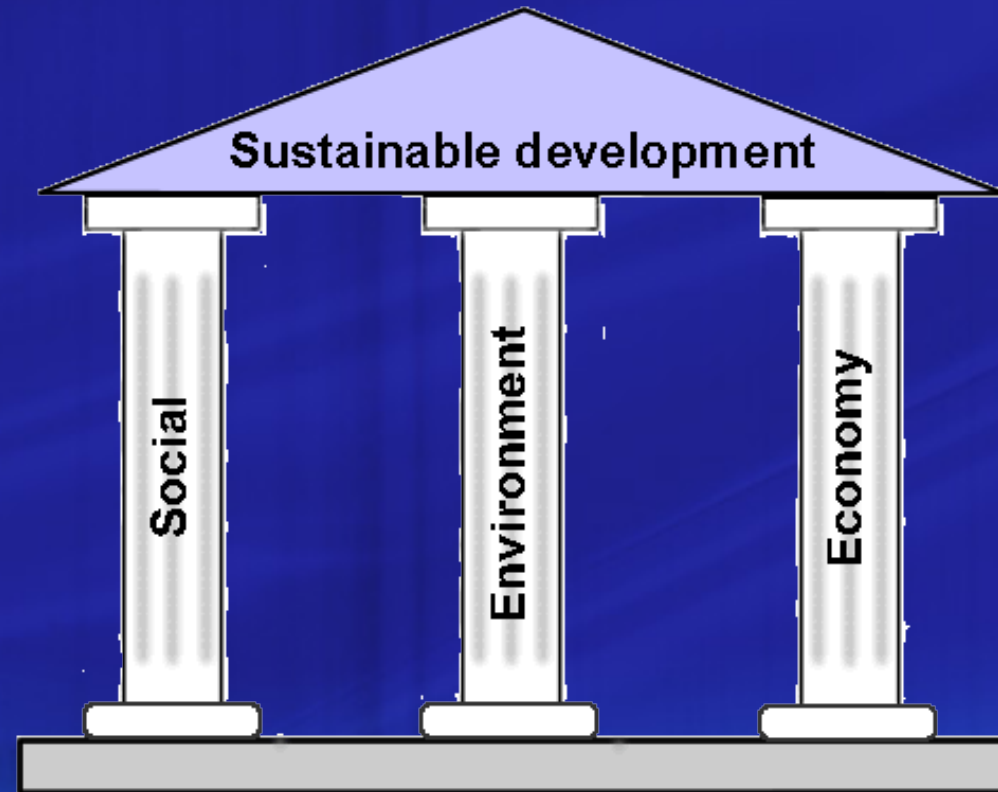
TRANSDISCIPLINARITY APPROACH TO STRONG SUSTAINIBILITY

**Congress « Paradigms,
models, scenarios and
practices in terms of strong
sustainability»**

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**Basarab NICOLESCU
CIRET, Paris, France
University Babes-Bolyai, Cluj, Romania**

Standard, simple view



But this became more and more complex. New pillars were added: future generations, environmental justice, economical justice, universal human rights, culture of peace, politics, etc.

Very interesting is the fact that studies on sustainability underline the necessity to consider the interaction of a bigger and bigger number of disciplines. Complexity is more and more increasing: there are 17 goals and 169 targets.

The concept of sustainability is not well defined: it is multidimensional and multireferential. It is inevitably fragmentary and reductionist.

Some approaches try to formalize sustainability in a mathematical way.

One speaks even about a « science of sustainability ». But the methodology of science excludes the human being (the Subject) which is an important paradox: the human being must be in the center of a sustainable world.

Big question: WHAT COULD BE REALLY SUSTAINABLE?

- Environment? Economy? Society? Education? Politics? Religion? Spirituality? Future? Nation? World order? \Rightarrow No one in itself. All of them are inter-related.
- Transdisciplinarity (TD) is therefore a necessary approach.
- TD \Rightarrow The only known sustainable system is the cosmic system, in all its dimensions, from the quantum particle till the most distant galaxy.
- EVERY LEVEL OF REALITY SUSTAINS EVERY OTHER LEVEL OF REALITY**

WHAT IS TRANSDISCIPLINARITY?





Unprecedented increase of knowledge

Number of disciplines:

1300:	7
1950:	54
1975:	1845
2019:	> 8000

National Register of Scientific and Technical Personnel, National Science Foundation (NSF) archives, USA, 2000

MULTIDISCIPLINARITY: studying a research topic not in just one discipline but in several at the same time

INTERDISCIPLINARITY: transferring of methods from one discipline to another

TRANSDISCIPLINARITY: studying that which is at once between the disciplines, across the different disciplines, and beyond all disciplines

Latin word « trans » = between § across § beyond

Goal : understanding the present world

UNDERSTANDING = KNOWLEDGE+BEING

Finality : unity of knowledge

**TD → study of the interaction of Object
and Subject**

→ new knowledge

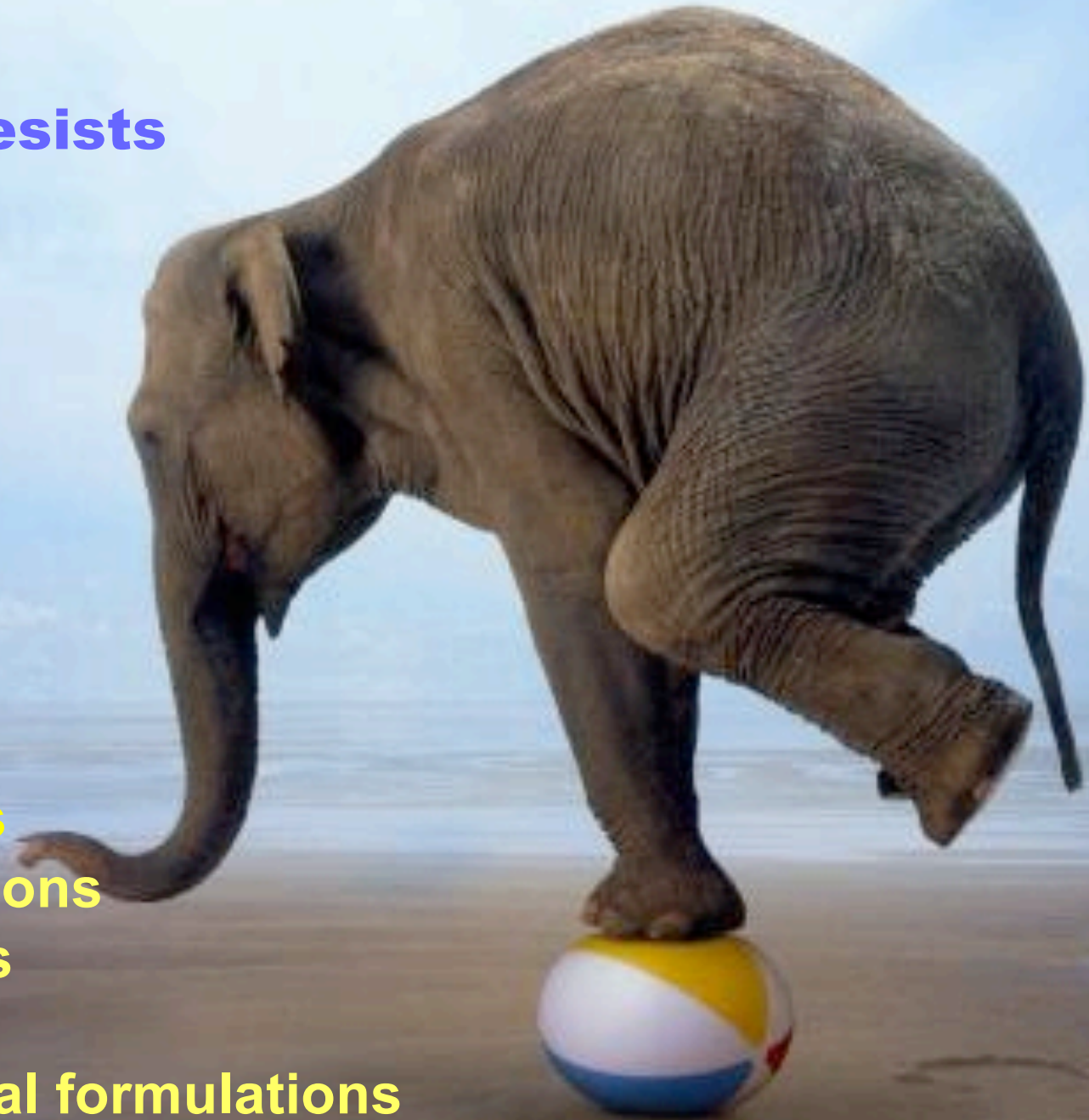
THE ONTOLOGICAL AXIOM OF TRANSDISCIPLINARITY

There are different
levels of Reality of the Object
and, correspondingly, different
levels of Reality of the Subject

REALITY

That which **resists**

- our experiences
- our representations
- our descriptions
- our images
- our mathematical formulations



REALITY

that which resists - accessible to our knowledge
+ trans-subjective dimension

REAL

that which is - veiled for ever





LEVEL OF REALITY

Set of systems invariant under certain general laws (natural systems) or under certain general norms and rules (social systems)

There is **discontinuity** between levels

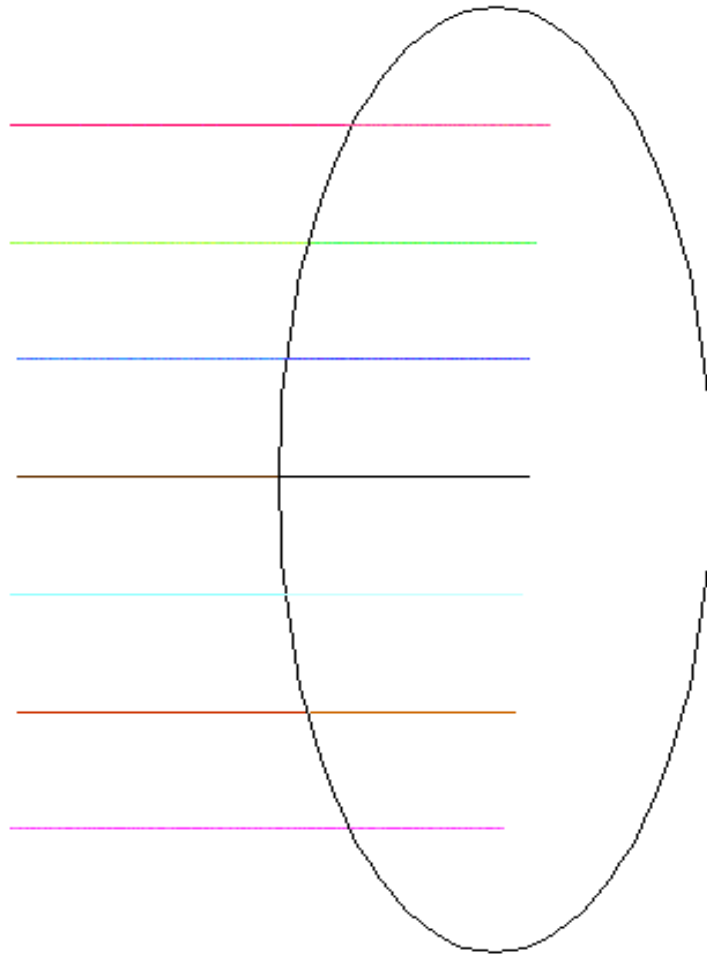


Fig. 3. OBJECT

Levels of Reality
of the Object +
Zone of non-
resistance

Restores **the
continuity**
between levels

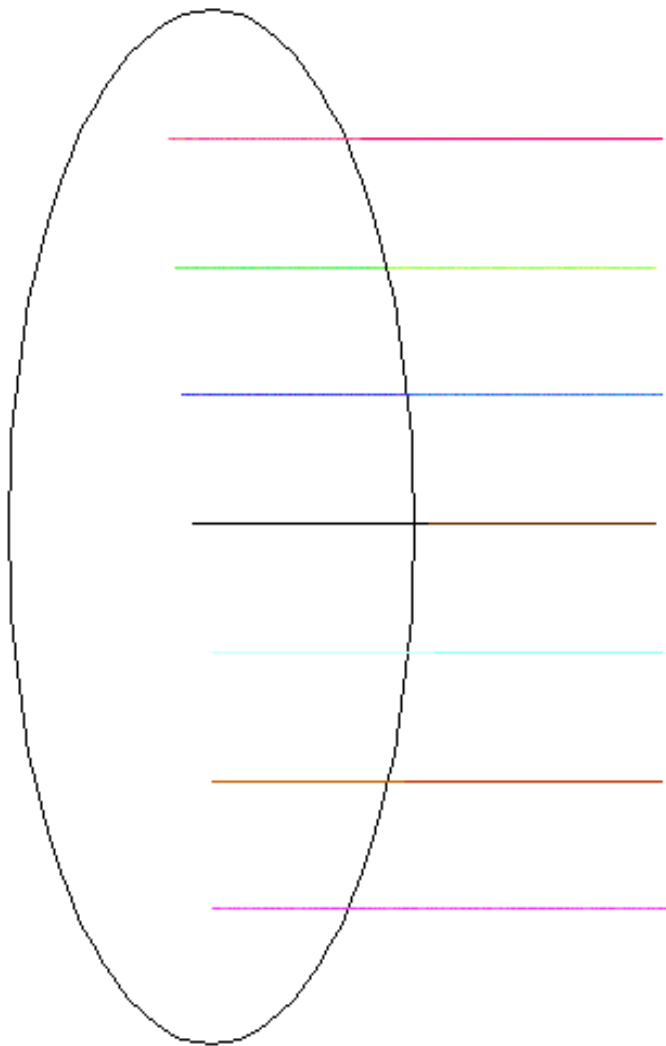
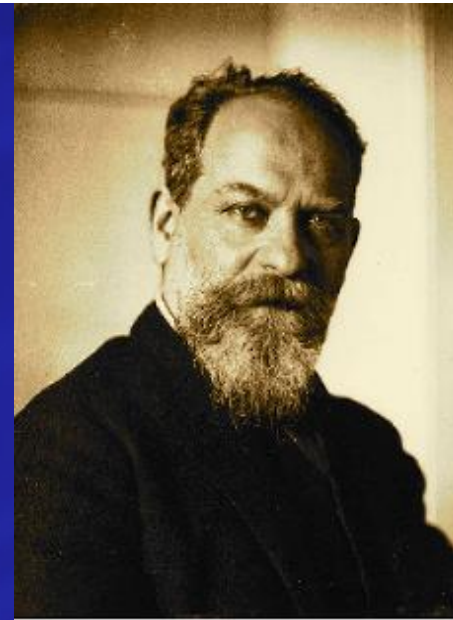


Fig. 4. SUBJECT



Edmund Husserl
(1859 - 1938)

Levels of Reality
of the Subject +
Zone of non-resistance

TD REALITY

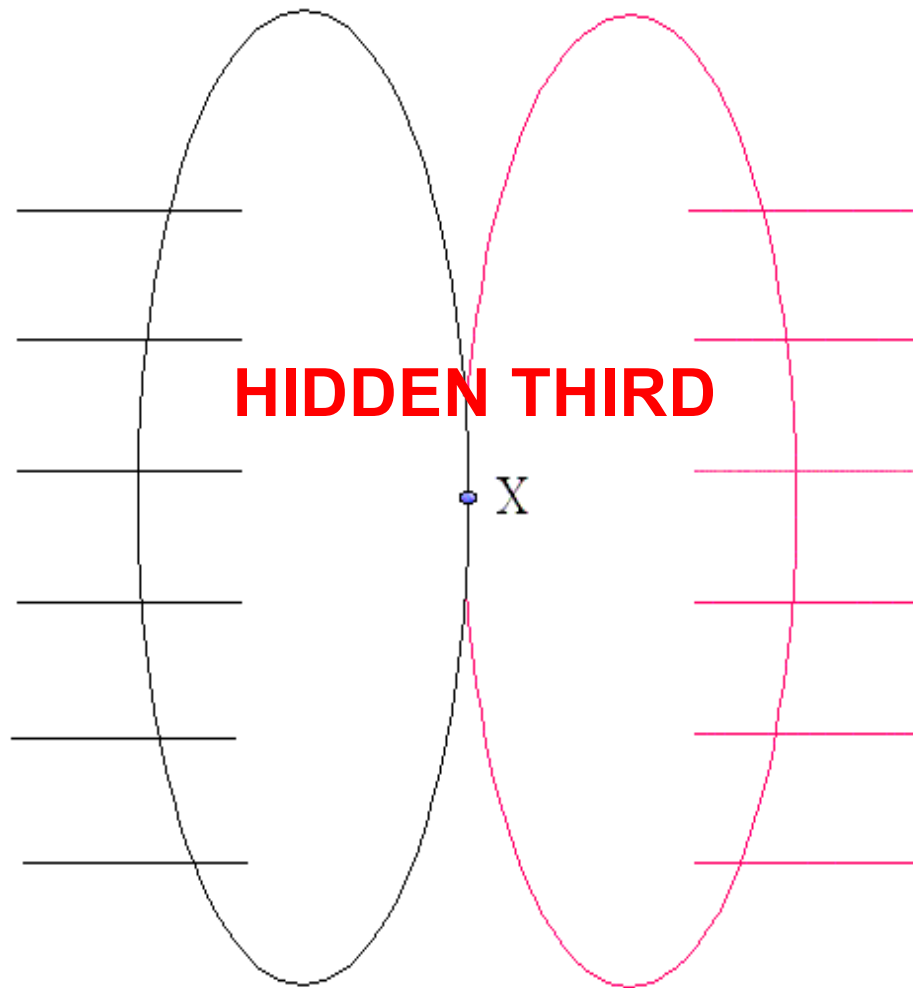


Fig. 5. TD REALITY

Knowledge is
neither
exterior nor interior

Examples

Natural systems:

- quantum level
- macrophysical
(classical) level
- cyber-space-time level
- superstring level

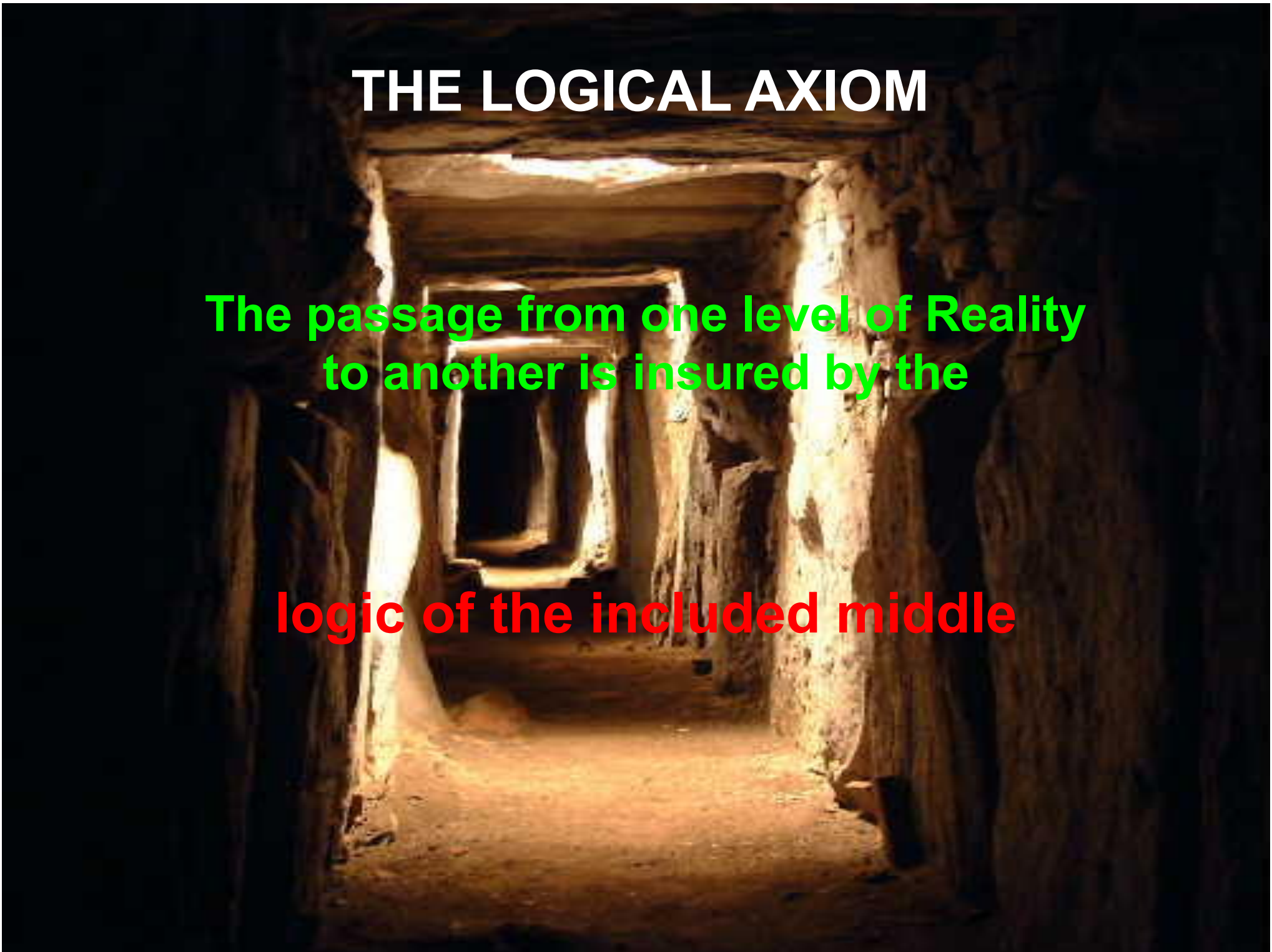
Social systems:

- individual level
- geographical and
historical community level
(family, nation)
- cyber-space-time
community level
- planetary level
- cosmic level

THE LOGICAL AXIOM

The passage from one level of Reality
to another is insured by the

logic of the included middle



Included middle

There exists a
third term

T

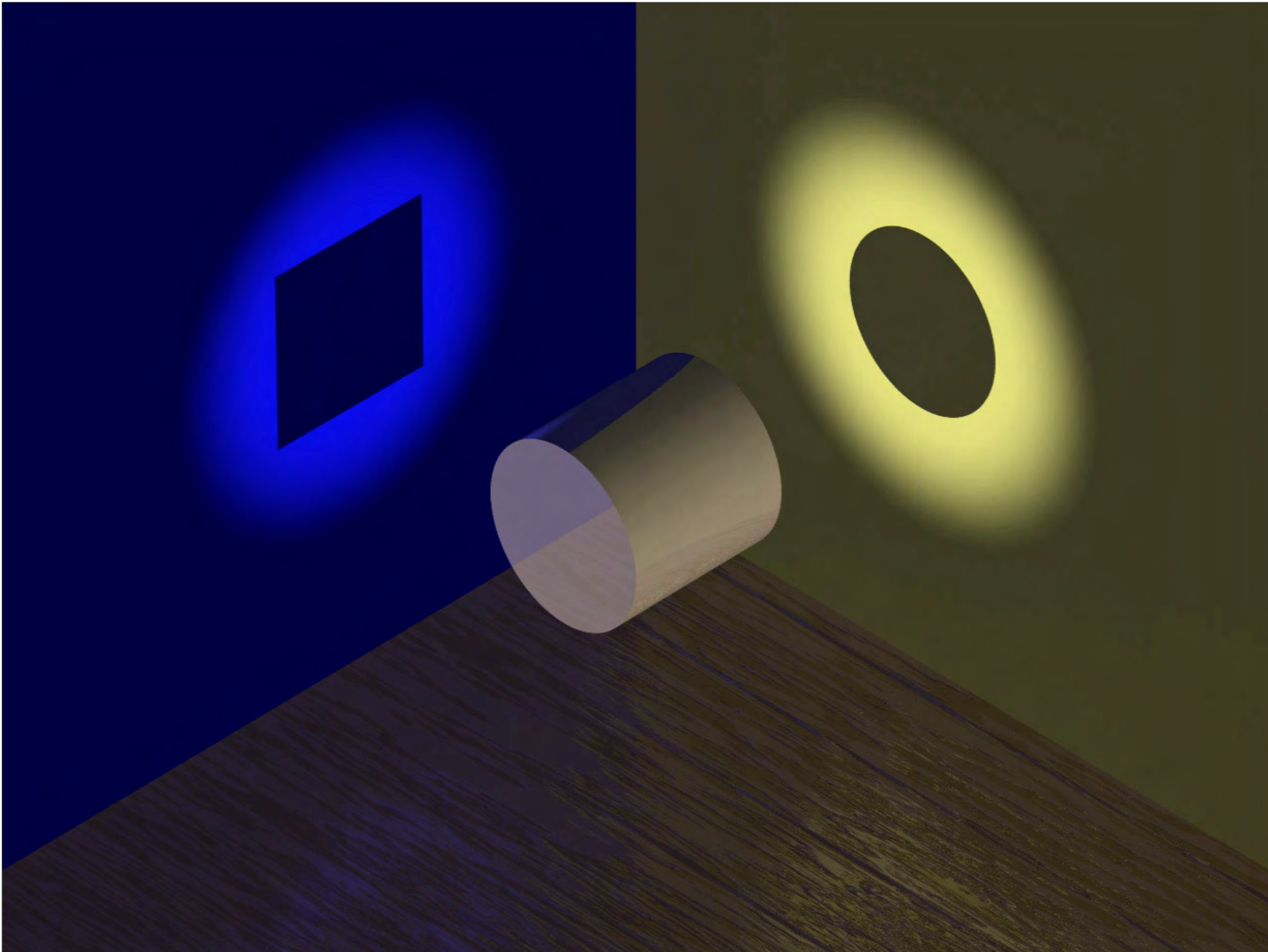
which is at the same time

A

Non-A



Symbolic representation of the
action of included middle logic



The background of the slide features a full moon in a dark, starry sky. The moon is positioned in the upper left quadrant. Below the moon, a body of water reflects the moon's light, creating a shimmering path that leads towards the bottom center of the frame. The overall scene is dark and atmospheric.

THE EPISTEMOLOGICAL AXIOM (COMPLEXITY)

The structure of the totality of levels of reality of the Object and of the totality of the levels of reality of the Subject is a complex structure:

Every level is what it is because all the levels exist at the same time

TD REALITY

- Levels of Reality of the Object
- Levels of Reality of the Subject
- The Hidden Third

- organization
- structuring
- integration

- objectivity
- subjectivity
- complexity

- confusion
- language
- representation/
interpretation

- knowledge
- understanding
- being

- ignorance
- intelligence
- contemplation

Levels of
Contextualization

- materiality
- spirituality
- non-duality



A new Principle of Relativity

- ◆ No level of Reality constitutes a privileged place from which one is able to understand all the other levels of Reality
- ◆ Every level - incompleteness
- ◆ Knowledge is forever open

TRANSREALITY

TD OBJECT

TD SUBJECT

Natural information

Spiritual information

Planetary
Cosmic



Political

Economic



Social
Historical

Environment
(natural and artificial:



Individual

Quantum
Macrophysical
Cyber-Space-Time

Religions
Spiritualities
Cultures

HIDDEN
THIRD



The notions of natural information and spiritual Information (see Basarab Nicolescu, "The Hidden Third as the Unifier of Natural and Spiritual Information", *Cybernetics and Human Knowing*, Vol. 22 (2015), no. 4, p. 91-99).

In the transdisciplinary approach, the Hidden Third appears as a source of knowledge but, in its turn, needs the Subject in order to know the world: the Subject, the Object and the Hidden Third are inter-related.

The human being appears as an interface between the Hidden Third and the world.

The eradication of the Hidden Third in knowledge leads to a one-dimensional human entity, reduced to their cells, neurons, quarks, elementary particles, and electronic chips.

The role of the Hidden Third is to establish the link between Reality and Real.

Catalyst of movement, it possesses an infinite number of faces.

The Hidden Third is the guardian of our irreducible mystery and the only foundation of human dignity.

TD definition of strong sustainability (TDSS): **sustainability which takes into account all levels of Reality and the Hidden Third.**

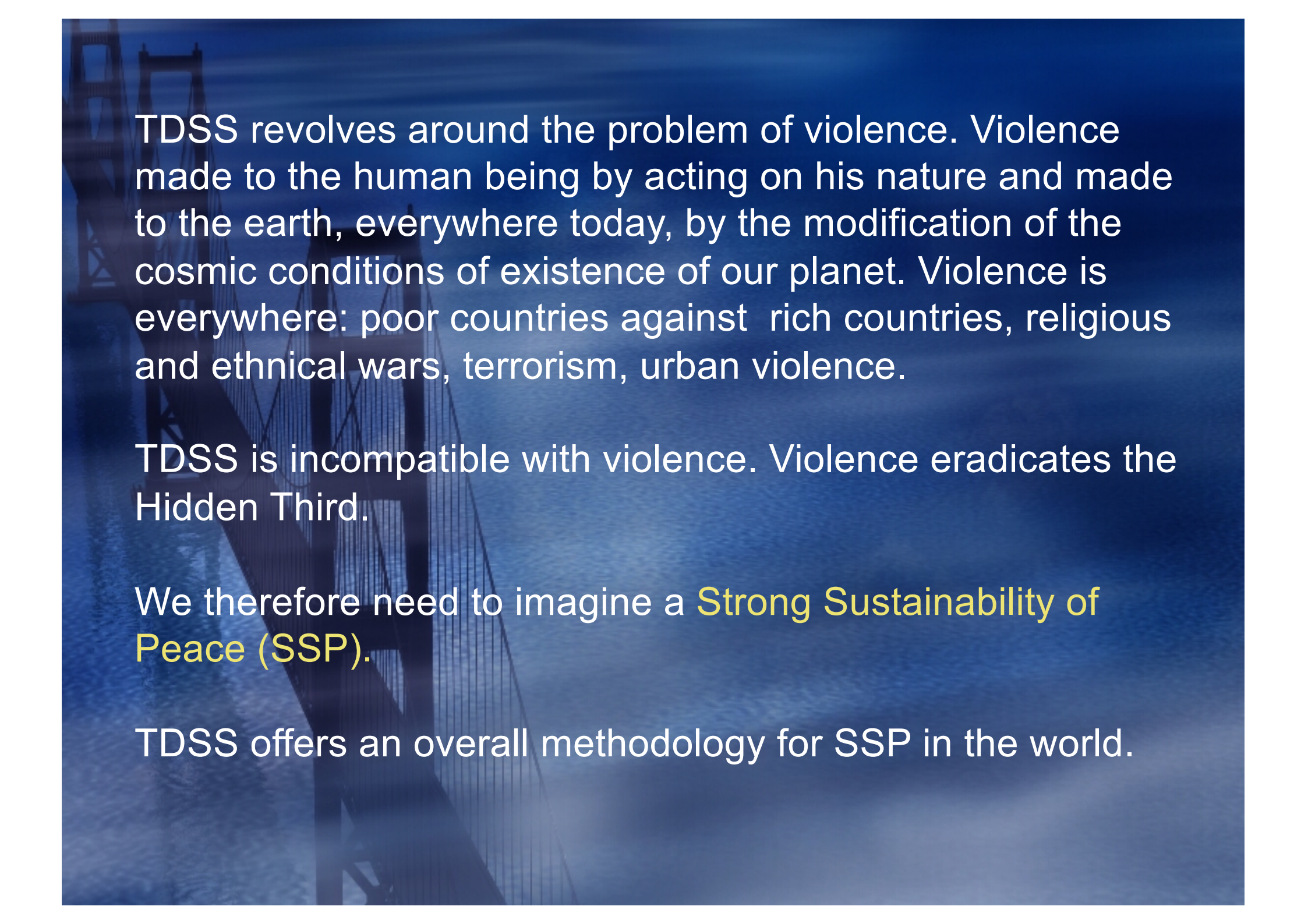
At face value, this kind of sustainability may seem an asymptotic aim and therefore utopian. But the Hidden Third has the virtue of unifying the levels of Reality.

THE KEY POINT OF TDSS:

The roots of violence are inside the human being. Our thoughts, feelings and instincts are in perpetual conflicts. Only if we can harmonize our thoughts, our feelings and our instincts we can discover a new intelligence which erases the violence in ourselves. And only when we become non-violent in ourselves, by accessing to a new level of consciousness, we can act to erase the violence in the world.

In other worlds, the key-point is the access at a new level of Consciousness, individual and collective. This obviously requires a **new civilization**, which does not suppose a revolution but a gradual transition from our own civilization.

This new level of consciousness involves a **global education for TDSS**, which must be a noble aim of UNESCO and of all countries.

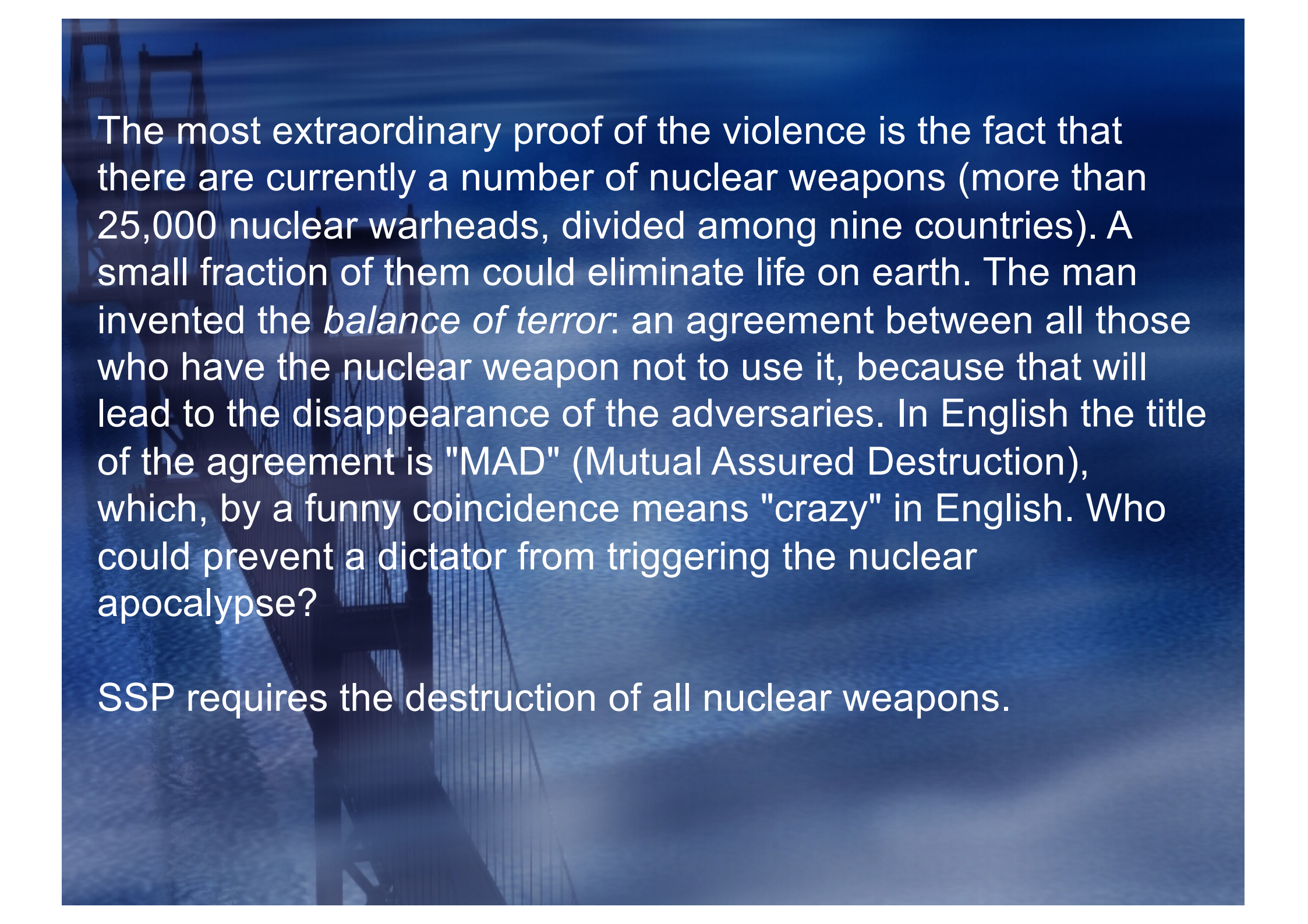


TDSS revolves around the problem of violence. Violence made to the human being by acting on his nature and made to the earth, everywhere today, by the modification of the cosmic conditions of existence of our planet. Violence is everywhere: poor countries against rich countries, religious and ethnical wars, terrorism, urban violence.

TDSS is incompatible with violence. Violence eradicates the Hidden Third.

We therefore need to imagine a **Strong Sustainability of Peace (SSP)**.

TDSS offers an overall methodology for SSP in the world.



The most extraordinary proof of the violence is the fact that there are currently a number of nuclear weapons (more than 25,000 nuclear warheads, divided among nine countries). A small fraction of them could eliminate life on earth. The man invented the *balance of terror*: an agreement between all those who have the nuclear weapon not to use it, because that will lead to the disappearance of the adversaries. In English the title of the agreement is "MAD" (Mutual Assured Destruction), which, by a funny coincidence means "crazy" in English. Who could prevent a dictator from triggering the nuclear apocalypse?

SSP requires the destruction of all nuclear weapons.



Transdisciplinarity - hope for a new era - **cosmodernity** –
founded on TDSS by the **fruitful contemporary interaction**
between science, culture, spirituality, religion, and society.

A new spirituality, free of dogmas, compatible with all existing spiritualities, is already potentially present on our planet. This would give full meaning to the already existing notion of sustainable spirituality.

The old idea of cosmos, in which we are active participants, is resurrected.

Everything is interconnected.

All levels of Reality are interwoven.



The ethical imperative of cosmomodernity: togetherness

Only through transdisciplinary dialogue can we face the challenges of the contemporary world


- Dialogue between human beings
- Dialogue between human beings and non-human forms of life (animals, plants, etc.)
- Dialogue between human beings and the cosmos
- Dialogue between human being and the divine
- Dialogue between cultures, religions, spiritualities

A blue-tinted photograph of the Golden Gate Bridge at night, with the text "We are, in spite of everything, at the threshold of a New Renaissance, founded on the TDSS." overlaid in yellow.

We are, in spite of everything, at the threshold of a New Renaissance, founded on the TDSS.

A blue-tinted photograph of the Golden Gate Bridge at night, with the word 'BIBLIOGRAPHY' overlaid in white text. The bridge's towers and suspension cables are visible on the left side, extending into the distance. The water below is dark and reflects the bridge's structure. The sky is a deep, dark blue.

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BASARAB NICOLESCU

TRANSLATED BY KAREN-CLAIRE VOSS



Basarab Nicolescu
*From Modernity to Cosmodernity –
Science, Culture, and Spirituality*

SUNY PRESS, USA, 2014



From Modernity to
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BASARAB NICOLESCU



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<http://www.tercercongresomundialtransdisciplinariadad.mx/br/>