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Modelling and Simulations Futures

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A Reality Hypothesis
“Natures Way”

Sociology of Absences

The objective of the Sociology of Absences is to disclose, and give credit to, the diversity and multiplicity of social practices in opposition to the exclusive credibility of **hegemonic** practices.

On being an Independent Researcher

Some highlights

- Switzerland 1961
 - DC 8 Airplane simulator (Analogue computers)
- UK 1963
 - DC9 Simulator (Digital Computer, Ferranti Argus 350)
- Fort Irwin USA 1987
 - War simulator (Blue and Red Divisions)
- Arizona USA 1991
 - Biosphere 2 (What do we know about Biosphere 1)
- Management Simulator “ESPRIT” proposal
 - Rejected as too advanced

On being an Independent Researcher

Thoughts

- Independent of
 - Seeking grants
 - Following department focus
 - Publish or perish
- Result
 - More time to think
 - Follow the problem
 - No peers to review
 - No publications

Research Action

- The fundamental Nature of Information
 - 1983
 - 2022 breakthrough
 - 2023 Result
- Resulting Hypothesis
 - A model of Reality
 - Ancient and Modern Knowledge
 - Process
 - Multilevel

Agenda 2023

- Outline a Reality Hypothesis
- Explain Why Planet is in trouble
- When did things go wrong
- Why did things go wrong
- Natures Way
- Destruction of the Biosphere
 - Humanity did does not understand “Biosphere 1”
- Humanity invented speech
 - 50,000 years ago
 - Nature uses a universal language
- Western languages use the Law of excluded middle

International Centre for Earth Simulation

Workshop V11

- Earth
 - Planet Earth
- Simulation
 - Maps of Territory
- Simulation to understand the territory?
- To educate / train the inhabitants of Planet Earth

Fragmentation of Knowledge

- We are the inheritors of categorised knowledge. Therefore we inherit also a worldview that consists of parts strung together rather than wholes regarded through different sets of filters.
- Historically, **synthesis seems to have been too much for the human mind**, where practical affairs are concerned. The descent of the synthetic method from Plato through Augustine took man's perception into literature, art and mysticism.
- The modern world of science and technology is bred by Aristotle and Aquinas by **analysis**.

Splitters and Lumpers

Proposed Reality Essentials

(Evolving, Conscious, Alive, Spiritual, Self Organising)

	Reality feature		Comments
1	Process theory	“Process in Reality”	Whitehead / Chew
2	Multiple levels	Transdisciplinary	Nicolescu /Lupasco
3	Two Spaces	Sum to zero energetically	
4	Matter in Actual Space	Evolving within limits	3D
5	Everything is recorded	Akashic field	-1
6	Spaces Rhythmically Compared	Evolution beyond Darwin	Level dependent (ZBW)
7	Nature records everything	Each level evolves	Akashic field

(ZBW Zitterbewegung “jittering”)

A Reality Hypothesis

Natures Way

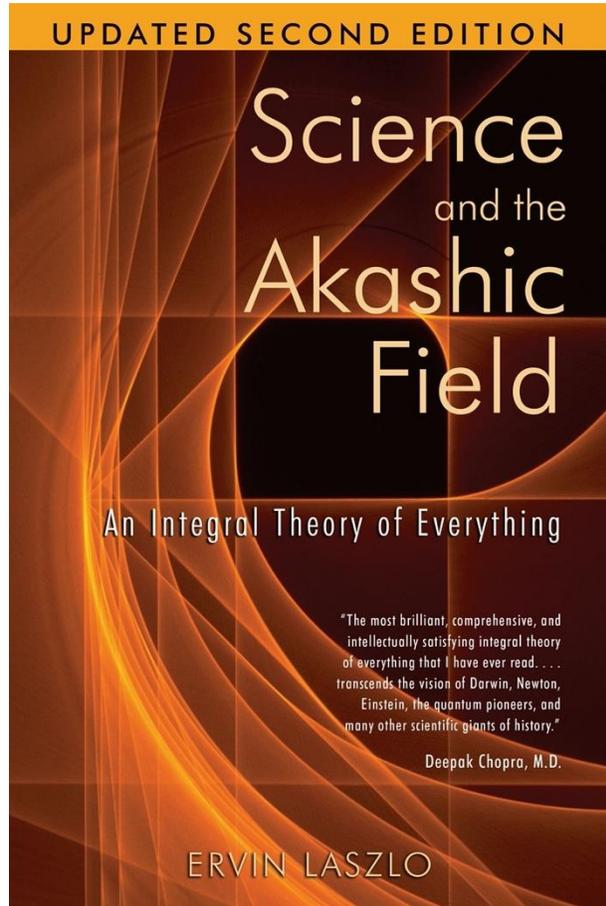
- Fragmentation of society resulting in wars & destruction of the planet share a common root.
 - Long ago humanity abandoned using the universal language shared with all living things.
 - Western Societies went astray when we began to speak, write and print.
- Using a shared model of reality, we can understand how we should behave individually and collectively in the long term and next Monday morning.
- A description of reality is proposed
 - A synthesis of ancient and modern knowledge.
 - Reality is alive, conscious, evolving, self organising, multileveled.
 - Nonmaterial reality and physical reality evolve together
 - At every level autopoietic activities act cooperatively.
- Reality is a unity
 - What applies to a level also applies to the whole

The Bootstrap Principle (= Self consistency)

Geoffrey Chew (ANPA)

- Reality is what it is because it cannot be any other way!
- A natural reaction against classical determinism
 - The death blow around 1930.
 - Equations of motion define certain entities as fundamental.
- Quantum entities are not subject to classical determinism
 - Bootstrap theory is the logical conclusion
- In bootstrap a part appears simultaneously with the whole
- Nature is seen as a global entity, inseparable fundamentally

Erwin Laszlo and the Akashic Field



The Akashic records are the entire history of everything that has ever been, and everything that ever will be.

They could be looked upon as a “memory bank” containing details about everything that has happened in the Universe.

Information about every spirit and the many lives they have lived.

The Hindus believe in a universal substance called “akasha” from the natural elements of water, fire, earth and air were created

Gregory Bateson in **Ecology of the Mind**

“Information is the difference that makes a difference”

Information, the **distinction** that makes a difference.

Information, the difference to make things **happen**.

At every level entities are in a state of movement.

An entity is unique in its complexity and energy level

When two entities of the same type are related there is a difference

One entity is changed to increase its difference and the other to reduce it.

This transaction is the passage of what we call information.

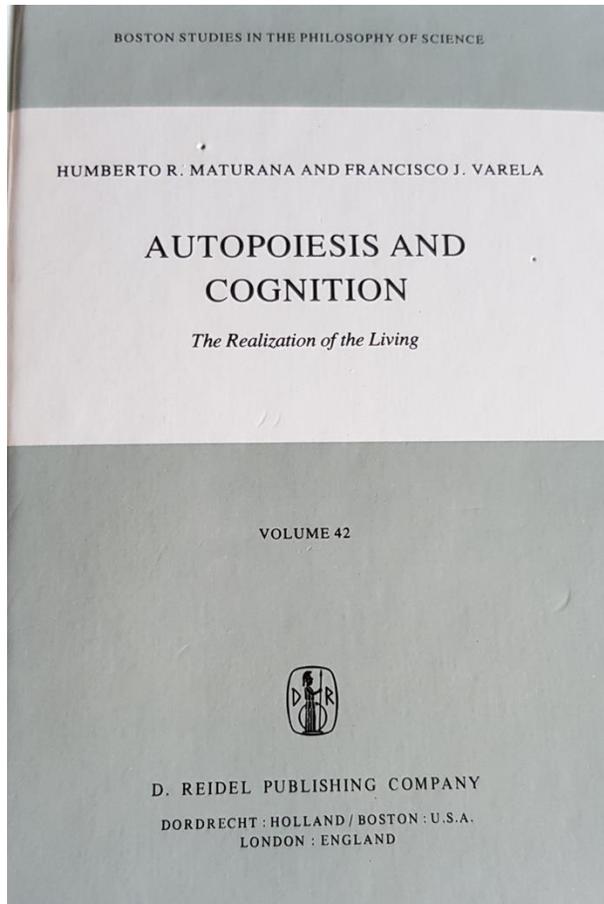
This is Peircean firstness, secondness and thirdness.

Note the goal seems to be that entities become indistinguishable.

"Bennett Energies"

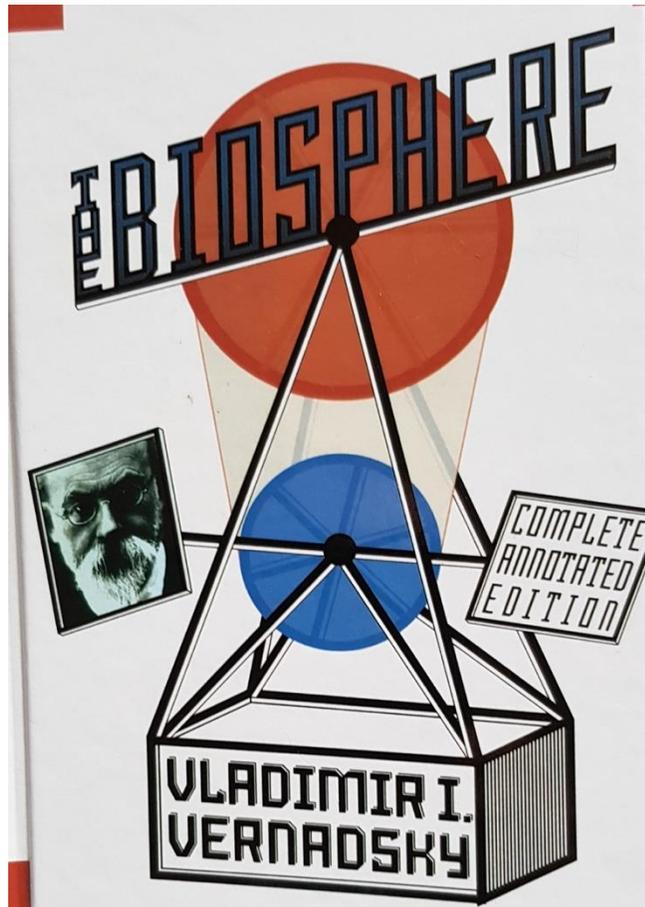
Cosmic Energies			
Spiritual	E1	Transcendent	Cosmic
	E2	Unitive	
	E3	Creative	
	E4	Conscious	
BIRTH OF THOUGHT	*****		
Life Energies			
Awake	E5	Sensitive	Living
	E6	Automatic	
	E7	Vital	
Alive	E8	Constructive	
BIRTH OF LIFE	*****		
Basic Energies			
	E17	Molecules	Basic
	E18	Atoms	
	E19	Particles	

Maturana and Varela “Autopoiesis”



- Study of living systems as a Unity
- Sir Stafford Beer
 - Human systems are biological
 - Cohesive systems are Autopoietic
- Wholistic approach, ideas from
 - Biology, Epistemology
 - Cybernetics and Psychology

The Biosphere & Vernadsky



“The stabilising force in the biosphere is no longer living systems but human thought.”

The Biosphere links all living systems on Earth
Living systems co-exist with inert systems

The Semiosphere is part of the Biosphere
Signs exist in a semiotic system

The Noosphere is also part of the Biosphere
“Thought as a system.” (Bohm)

Humanity is the fruit of the Biosphere
What is the fruit of humanity?

Reality is an evolving system

(“Darwinian” evolution applies at all levels)

ACTUAL SPACE IS NATURES EXPERIMENT!

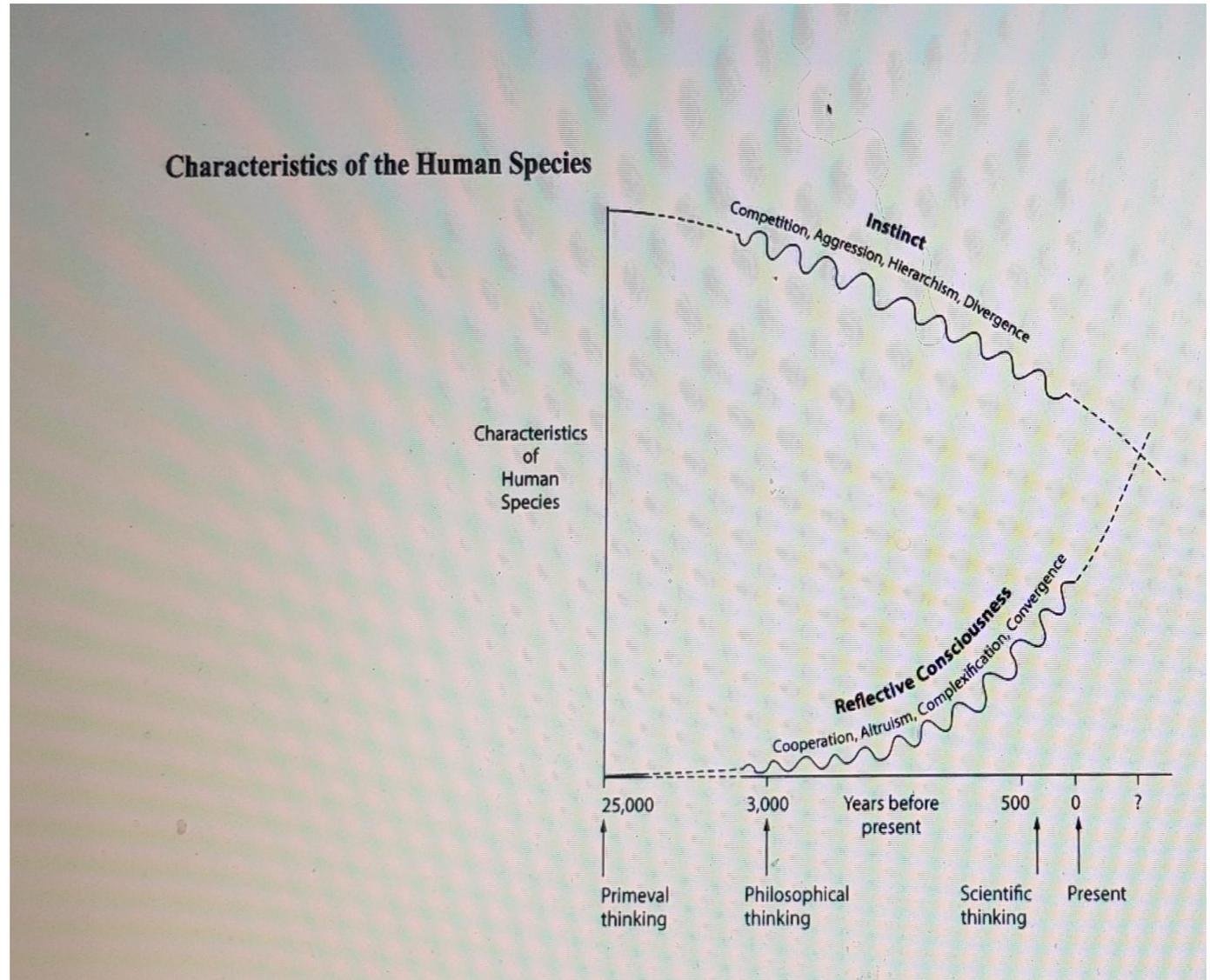
- Potential space has a record of everything that ever happened
 - The mind operates in potential space
- Actual space evolves and new levels may emerge
 - The brain operates in actual space
- Potential Space and Actual spaces are regularly compared.
 - Actual spaces can evolve within limits
- Humanity is one of Nature's ways of evolving
 - The birth of thought allows qualitative new levels

Phenomenon of Man

(Teilhard de Chardin)

1. Matter
2. Birth of Life
3. Humans
4. Birth of Thought
5. Superlife

- Seeing = Understanding
- External and Internal views
- Grain of consciousness



Mathematics

- All of mathematics is composed of two parts, the conceptual and the manipulative.
- Mathematics is simply a way of expressing concepts that anyone can understand in a way that very few can understand.
- The esoteric language is necessary because it places at our disposal powerful machinery which in turn gives rise to new concepts that would not have arisen without this manipulative process.

Euler's Equation

1. Equation $e^{i\pi}+1=0$
2. 0= all that is (Energy)
3. $e^{i\pi}=-1$ (In energy terms they are equal)
4. $e^{i\pi}$ is the 3D universe, alive and evolving
5. -1 is the Information "Space"
6. Substance and Form
7. Actual and Potential

Natures Way Summary 1

Natures Way.

We start with **Zero**, the totality of **everything** including that which is unborn. According to cosmologists and mystics zero is the origin of everything that is and everything that will ever be as reality unfolds.

This event is known as the **big bang** but a better idea is the bootstrap hypothesis, a concept of great interest because it claims that reality is how it is because there could be no other way!

The story is simply a **series of evolutionary steps**.

The Zero source of “all that is” was shattered with a grain of **consciousness**.

Just like a supersaturated liquid entities were crystalised out and became **matter**.

The highest conservation law of all laws is that all is zero. So when what was distinguished became matter was noticed the opposite entity to matter the **negative aspect** was unnoticed.

Natures Way Summary 2

The supersaturated substance having gave energy to form its first children then step by step exhausted itself until nothing was left, entropy was a maximum and **a complete set of basic levels** of Reality came into being. However, Reality is restless and at each level these entities developed relationships and fundamental entities became more complex and therefore more conscious.

Billions of years passed and in one galaxy near to one star, one planet with one moon became the home where life was born. This major event, the birth of life in the form of **a cell is a new level** where matter and negative matter combined resulted in consciousness. Negative matter and ordinary matter both are carriers of grains of consciousness. Cells exhibit a limited form of cognition.

Natures Way Summary 3

Cells begat more cells, the inert environment changing from place to place was the home for the cells. Those cells that fitted well with each other and their homes survived and flourished. Natures cooperative scheme was working well. The cells had two tasks, repair and reproduce. Cells cooperate with their local inert molecules. They existed because they had the inbuilt drive to form permanent relationships. This was only possible when large numbers of cells formed communities.

Every now and again there would be level shift.

When two cells are exactly the same, they combine to be a new entity. When many cells do this a new entity at a higher level comes into being. **Cells become organs, become humans, become societies.**

At this point in history there is sense that a level shift is overdue. Examining this carefully reveals a pair of missteps. **Language and Level shift.**

This requires getting into details rather than staying in the philosophical mode.

The Hidden Third

- Basarab Nicolescu's text offers a view of humanity's current spiritual situation. The fragmented text reminds us that the whole is never given and that the beginning of understanding is always imminent. Fragmentation also mirrors a prime discovery that Nicolescu draws from his own area of scientific expertise, broken symmetry.
- Physicists now believe that a breakdown in laws of symmetry supplied the initial condition of the Big Bang. Humans' relation to God and to the celestial order has ruptured. The holy reconciling force has withdrawn, and the pathway once illuminated by it, is no longer visible. While we now pray for divine support, no reply is forthcoming.
- The call, moreover, is blocked from our ears by deep habits of thought and language. Inherited from the ancient Greek world, their source lies in binary logic: either this or that but not both. Nicolescu's rejection of binary-ism is strong: "The fiendish dialectics of binary thought have the redoubtable yet subtle force of being able to kill in the name of ideas." The death consists in foreclosing the middle, the "third not given": what is there before and remains there after the division into two. Yet that death preserves in hiding the excluded element, which allows a direct perception of multiple levels of reality, up to that of Absolute Evidence. Fear of confronting a many-dimensional cosmos lies behind the embrace of the binary.
- We opt for ready knowledge and survival of the status quo rather than participation in a work of co-creation. Because we fail to see the ambiguity in "yes or no," our spirit is blinded and put in shackles.

“The formulation of a new idea of reality is the most important and most difficult task of our time.”

Wolfgang Pauli, Nobel laureate in physics.