

THE 12 AXIOMS

In an open system far from equilibrium conditions the following **axioms** are valid as a result of an influx of energy

1. **(Prigogine): Transformations exist from disorder into order, leading to the creation of life: Chaos → Order.**
2. **(Leuenberger): The same process is responsible for “inorganic life”, i.e. for the formation of highly ordered crystals in nature: Chaos → Order. The only difference is that inorganic chemistry has not the capability of storing so much information as DNAs!**
3. **(Schrödinger): Life = Information = Software = Our Genetic Code (DNA).**
4. **(Schrödinger/ Prigogine): The human being is a living (super) computer!**
5. **(Fröhlich): The evolutionary process uses all existing physical laws of the present (imperfect) standard cosmological model to find a niche for a successful survival of the biological system.**
6. **(Zwicky): The evolutionary process uses unknown physical laws beyond the present standard cosmological model!**
7. **(Mandelbrot): Nature’s principle of self-similarity described as fractal world leading to scale independent self-similar laws.**
8. **(Steele/Leuenberger) Bionic inspired philosophical solutions**
9. **(Prigogine/Stengers/Leuenberger) The human society is a living biological entity following the same laws as in case of a human being.**
10. **(Leuenberger) The common denominator of all religions are an ethical codex.**
11. **(Leuenberger/FDA*/Tribelhorn**) Common denominator of ethical Marketing and Politics = Trustworthy Communication.**
12. **(Leuenberger/FDA*/Tribelhorn**)Common denominator of all Trustworthy Sciences = Scientific Integrity and Integrity of Data*.**

**Health authorities such as FDA request that the marketing information must be based on scientific integrity and integrity of data to be trustworthy, which is also needed in politics as discussed by*

***Marc Tribelhorn of NZZ cited in “Business Ethics in the Pharmaceutical Industry and Beyond” (see downloads).*

Some slides supporting the axioms 8 and 9:

“What is Life?”



Axioms continued...

8a. (Steele/Leuenberger): **Bionic Inspired Philosophical Solutions** based on **Biologically Inspired Engineering (Bionics)** is the application of biological methods found in nature. **Nature is Our Teacher!** 8a: What is the secret of the **Horseshoe Crab** living with Nature **in peace** since **450 million** and the Homo Sapiens since **450 thousand** years?



Limulus Test

(https://en.wikipedia.org/wiki/Horseshoe_crab)

12

According to the axioms 1-7 a living being uses during its evolutionary process all existing laws of nature for its successful survival. The evolutionary process is triggered by the environmental conditions till the living being lives in peace with nature.

“What is Life?”



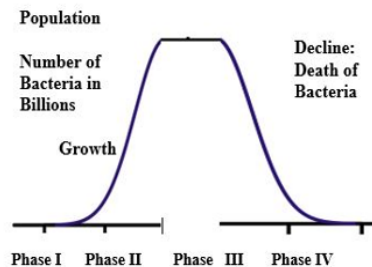
Axiom 8 continued...

8b. (Steele/Leuenberger) **Bionic Inspired Philosophic. Solutions with Nature as our Teacher:**

Life and Death of a B. Colony in a closed Habitat.

The Death is the Result of Pollution and Lack of Resources!

Is this the future of the Homo Sapiens?



The life and death of the number of living beings in a bacterial colony of a closed habitat is compared to the number of human beings living on the earth as a closed habitat being more and more polluted and with decreasing resources.

“What is Life?”



Axiom 8 continued...

8c. (Steele/Leuenberger) **Bionic Inspired Philosophic. Solutions with Nature as our Teacher: Problems of Mankind:**

- 1) **Exponential Growth of Population!**
- 2) **Pollution** →
- 3) **Lack of Resources**



14

Regarding a sustainable planet suffering from overpopulation and anthropogenic pollution (picture „Bane of the Carrebian“, Courtesy Klaus Eichler, [Follyship](#))

“What is Life of the human society?” Axioms continued...



9. (Prigogine/Stengers/Leuenberger): **The human Society is a living biological entity** consisting of **system relevant** organs such as **brain** (world pool of scientists) **heart** (world bank system) pumping blood (money) to the **muscles** (all types of industry), to the **lungs** (energy combustion plants)



to the **digestive system** (recycling and fertilizer industry).



In fact, as in case of the publication “What is Life?” it is not only possible to create a “VIRTUAL PATIENT” as model of the human being but as well a model of the state of a “VIRTUAL HUMAN SOCIETY” as a patient. It is the task of the wise human being called “Homo Sapiens” to define the necessary framework conditions for the society’s quality of life.

According to axiom 8a the life of Homo sapiens is living on our planet since approximately 450 thousand years, but is currently preparing the insane tools for its eradication, a solution called MAD (Mutual Assured Destruction)!

Thus, should we use our wisdom as Homo sapiens developing Artificial Intelligence AI for faster achieving the MAD solution or for replacing the irresponsible power play between the nations with AI to find a win-win solution of all parties involved with the goal to achieve a healthy and more peaceful and sustainable world!

CONCLUSION:

As a result of the 12 axioms it can be anticipated a convergence of all sciences thanks to artificial intelligence, computational science based on scientific integrity and integrity of data. Thus, the human being has an opportunity to find a solution for a sustainable world and for a quality of life of the human society.