# Systemic Science Manifesto

## Prologue

We are currently experiencing a change in the image of science in politics and the public. What only a few years ago was or should have been an open exchange of different, factually sound opinions, has now clearly degenerated into a tight corset of politically prescribed definitions ("pandemic", "infection", "disease", "national emergency" etc.). Under the control of the normative "sciences" of economics, law, pedagogy and politics, medicine now also becomes a normative "science". For all those subjects, "Thus, the possibility of normative science remains controversial". (Source: <a href="https://de.wikipedia.org/wiki/Normative\_Wissenschaft">https://de.wikipedia.org/wiki/Normative\_Wissenschaft</a>)

The political intent behind the transformation of science can be seen in the English Wikipedia entry: "In the applied sciences, normative science is a type of information that is developed, presented, or interpreted based on an assumed, usually unstated, preference for a particular outcome, policy or class of policies or outcomes."

(Source: https://en.wikipedia.org/wiki/Normative\_science)

Our conventional science thus becomes for all to see a mere instrument of power for manipulating opinion. Free research and teaching are no longer possible under these conditions. For these, and many other reasons, I am trying to launch an initiative for new forms of life and communication by founding a new kind of science, which can be joined by freethinkers in order to re-establish the former ideals of science in a contemporary, reflected form.

For this purpose I publish here the "Manifesto of Systemic Science". A manifesto should be a "clarifying guide" for a "proposed program for implementation". Throughout history there have been both political (such as Communist) and aesthetic manifestos. Finally, even computer scientists have formulated their wishes for change in the form of a manifesto (such as "The Object-Oriented Database System Manifesto" by Atkinson, DeWitt, Maier, Bancilhon, Dittrich and Zdonik, see here: <a href="https://www.sciencedirect.com/science/article/pii/B9780444884336500204">https://www.sciencedirect.com/science/article/pii/B9780444884336500204</a>).

The aim of the "Manifesto of Systemic Science" is to reformulate science in a holistic, independent and contemporary form. I cordially invite all those who feel addressed by the topics mentioned to cooperate and actively participate.

### **Initial Situation**

Science today is divided into many different fields, each of which uses its own technical language and special models that make communication with specialists in other fields difficult or impossible. The exchange of knowledge and experience often fails at the boundaries between the disciplines because different model structures and terminologies are used. Furthermore, practically all scientific disciplines are guided and dominated by the "sciences" pedagogy (in the educational system from kindergarten to schools to universities), economics (tight budgets of states and public institutions, alignment of research goals with the interests of industry, etc.) and law (legal norms as a framework for the exercise of research and teaching).

Pedagogy, economics and law are not sciences in the true sense of the word. They are regarded as "normative sciences" whose methods are not defined and which, from the perspective of philosophy of science, are therefore not to be classified as "real sciences" but only as "sciences in name". In fact, "normative science" is the generic term for intellectual constructions that serve a hidden political preference, i.e. they are instruments of power in the service of certain ideologies. (Source: <u>https://en.wikipedia.org/wiki/Normative\_science</u>)

If the central axiom on which every hypothesis or theory is necessarily based can no longer be questioned, sustainable progress is no longer possible and scientific development freezes. Since countless technical inventions have been and are being marketed, and since the owners of the respective companies interpret this methodological knowledge as a static "asset" in the development of which they have "invested" large sums of money, marketable sales must be generated for as long as possible. Technical progress, which would make these commercially used methods obsolete, is therefore not desired, is prevented or fought against. The well-known contradiction in knowledge management between "knowledge" (as a static, valuable stock of methods) and "learning" (as the flexible combination of "unlearning" old methods and "learning" new, more efficient, less harmful and more powerful methods) is clearly visible in all commercial sub-areas of the application of scientific knowledge.

This dominance of the "normative ideological structures" of pedagogy, economics and law over the freedom of research and art has hindered human development for over 250 years, at least since the beginning of the "industrial age".

## Objective

In the natural science established today, a "big bang", conceived by a Belgian theologian, is assumed as starting point, when "from nothing everything" is supposed to have originated. About the cause responsible for it or "the time before" natural science can therefore also not make any statements. However, this arbitrary central axiom, on which every theory is necessarily based, contains several implicit extensions, which can certainly be questioned. First of all, it is assumed that "dead matter" was created, that mind and consciousness are an "evolutionary epiphenomenon", which developed emergent on several levels, only gradually (quantum cosmos, atomic level, molecules, biomolecules, neurophysiological structures, bioelectrical signals in neuronal networks). Consciousness would thus emerge evolutionarily ("randomly") and, structurally conditioned and only quantitatively describable (number of network nodes, memory size), "by itself". All research projects of the so-called "Artificial Intelligence" (AI), which have the highest funding, are based on this basic assumption, on this (arbitrary, unproven and unprovable) axiom. Anyone who wants to research his own consciousness on a scientific basis today must therefore first study quantum physics, followed by atomic physics, chemistry, biochemistry, neurophysiology and psychology, and in doing so cross or first create meaningful bridges between these disciplines. Obviously a single human life is not enough for this. Scientific questions about consciousness or the question where we were "before birth" or where we will be "after our death" can for this very reason not be asked at all within the framework of established science. The arbitrary subject boundaries and the arbitrary central axioms of the individual disciplines make this important research project impossible. However, if a human being does not know where he was "before birth" and where he will be "after death", he naturally also lacks a value system for the time between birth and death. This person therefore becomes receptive to authoritarian (coercive) systems of rules, whether they originate from religions, political ideologies or technocratic norms. He will not only be receptive to them, but (as a being seeking meaning) downright grateful for his own indoctrination, in the worst case a fanatical advocate of an instrumentalized ideology, who can thus also be abused for violent acts (war, terrorism).

The meaningful and peacemaking alternative is a new form of science based on another arbitrary central axiom:

#### Consciousness is fundamental.

This sentence means that consciousness itself does not have a causal dependence on matter and energy, but that consciousness itself may possibly underlie the "forms of perception of matter, energy, space and time". The axiomatically assumed fundamentality of consciousness also means, however, that consciousness is "eternal", since it was not "composed of other parts" (originated in time) and cannot "disintegrate into these again". Fundamentality, thus understood, therefore also implies eternal existence.

But if we now accept this axiom, there follows (as logical derivation) another theorem:

#### **Everything else "is" Communication.**

If material building blocks and movement (energy) as "foundation" of the modeling are omitted and "only consciousness as a building block" remains, then this consciousness can only act communicatively, not mechanically (like energetically moved matter, according to lever laws etc.). This means that any context in the natural and social sciences known today can best and most easily be described and interpreted as a form of communication.

There is no doubt that the rules and contexts established in the "normative sciences" (pedagogy, law, economics) will always represent a use case of communication. Communication therefore represents the meta-level of these regulatory areas. What does this use case look like in medicine? In the human body, cells communicate with each other and with other single- and multicellular life forms (microbiome). The role of light impulses for cellular communication (biophotons) seems to be as revolutionary as the effects of mental techniques (meditation, hypnosis) in numerous diseases (a use case of communication between soul, spirit and body). What connections can be found in quantum physics? Entanglement phenomena, "transmission of information faster than light" between particles (the famous "spooky force at long-distance effect", as Einstein called it) are a popular example. In macrophysics, e.g. in mechanics, we can think of resonance phenomena of mobile apparatus, methods of "global scaling" and similar, it would even be possible to recognize in the term "resonance" itself again a special case of communication. In biology today we know the "language of trees", and we know that bees and flowers also communicate chemically and optically, that communication across species boundaries is not the exception but seems to be the rule.

#### Consciousness is fundamental (and therefore eternally existing). and: All is Communication.

These two simple sentences can become the starting point for a new, holistic form of science. What does this mean for us as humans?

## Everyone is a scientist

This makes sense because it makes systemic science applicable to itself: Communication through and about communication. Every human being learns to walk, to speak, to understand the interplay of action and reaction between himself and his environment through trial and error (i.e. empirically) from childhood on.

Through the simple basic model of communication of conscious beings based on an underlying intention, we can gradually dissolve the boundaries between scientific disciplines and integrate the entire thinking and feeling humanity into this learning and developing global or universal network. Within the framework of this development, the Internet available today can gradually be transformed into an open place of free encounter, peaceful cooperation and the co-evolution of valuable knowledge. Communication is the meta-level of all observable processes in the universe. From this level, negative developments such as wars, devastation and exploitation also make (historical, psychological) "sense" in so far as their causes and development can be understood and avoided for the future in a sustainable, truly causal and not merely symptomatic way ("violence against violence").

Systemic Science should therefore contribute to a better understanding of individuals and groups in human society and thus to the peaceful development of our species. Apart from this, it can also contribute significantly to a huge increase in the quality of life of all of us, since curiosity and its satisfaction is probably one of the greatest motivating factors of our species. In an environment in which we can research, discover and invent together to our heart's content, we will enrich our individual biographies as well as our future communities materially as well as intellectually and spiritually.

### Truth versus perception

As "natural systemic scientists", however, we should resist the temptation to discover or determine "eternal truths". Since we, within the framework of systemic science, always understand ourselves in a dialogue with other thinking and feeling beings (fellow human beings, animals, plants, but also beings whose physical appearance may remain hidden from us), the postulate of an "eternal truth" represents a mental act of violence against our interlocutors. We can, however, try to describe our current perception in order to enable our partners in dialogue to empathize with our biography and situation. However, the "fixation of truth and reality" should always be understood as a consensual act, which is only valid for the beings involved in this agreement and can only be revised or developed further together by them. In this sense we thus fill the old theological principle with new life, according to which "it is not given to man in his lifetime to recognize final truths".

### Laws of nature versus perceptible similarities

If we subject the conceptually conceived "elementary particles" in the cosmos to the so-called "laws of nature", we not only make them into "human beings", i.e. subject to the illusion of anthropomorphism (note: the attribution of human characteristics to animals, gods, forces of nature and the like), but even make them obedient citizens. Laws are decided by committees or absolutist rulers and can be changed or abolished by them at any time. Thus, the so-called "eternal laws of nature" are probably the best known but at the same time the least questioned oxymoron of our society. The very fact that this contradiction is obviously accessible to every free-thinking human being, but is apparently completely ignored in the so-called "natural sciences", makes it clear that these too can hardly be "real sciences".

What we can actually perceive in our environment are certain regularities that can be statistically recorded as a correlation. The conclusion from correlation to causality, however, can never be drawn purely mathematically/statistically. This requires a separate model of the causal relationships, which is often assumed axiomatically itself. Einstein already pointed this out to us, in his quote: "The theory determines what we can observe". This leads us to the importance of models.

## The meaning of models

Models represent causal interpretations of observable processes. Thus, they are usually in a linear temporal relationship to observed events and phenomena. Within the framework of Systemic Science, all researchers and observers are always aware that they themselves, as perceptive subjects, are part of the experimental set-up, just as a "color" without the physiological structure of our retina and our subjective perception and experience (biographically shaped by sentences such as "The sky is blue.") as a mere frequency of light alone does not exist and cannot be adequately described. Thus, models are no longer instruments for determining the "solely valid objective truth of the world" but merely formal languages that serve the communication between thinking and feeling

beings (observers, researchers, teachers and students). In this interpretation models (hypotheses, theories) can therefore not be "verified" or "falsified". However, we can and should first of all disclose their purpose, the axioms on the basis of which they were created, and the exact definitions of the terms and descriptions used in them. Thus, the success of the application of such a Systemic Model can then be measured and communicated within precisely defined limits (in space and time, but also in terms of axiom and definitions). Different models start from different basic assumptions and are used for different purposes, each with different success with respect to the practical purpose of their application. This alone ultimately determines their practical use. There is no longer any need for different models to compete for the "correct representation of the only true reality". Therefore diversity and dynamics of intellectual development in research and teaching are preserved.

### Data versus information

We should understand data as "syntactically correct strings of characters and symbols" and information as "data relevant to solving a concrete problem". This makes clear that already a "correct syntax" as well as a "permissible character set" are a basic presupposition (axiom, consensus) for the existence of "data". The communication process therefore does not begin with the "sending of data", but with the agreement of a character set and a set of rules (syntax) between thinking and feeling beings. We define information as only those data which are helpful for a certain (axiomatically agreed) problem. Thus it becomes obvious, that this attribution is also the decision of thinking and feeling beings and not the result of a measurement and also not a "law of nature". Terms like "automated information processing" should therefore be fundamentally questioned or, based on these findings, best avoided in the future. Only conscious decisions, in which the decisive subject (decision maker) is fully aware of the consequences of action as well as the consequences of inaction, actually represent "decisions". In those cases, in which this conscious knowledge is not available, it is the execution of commands, not a decision. This leads to the question of ethics and morals.

## Ethics and morals

While morality is an accumulation of ethnic, social and religious feelings, which can be represented and understood psychologically and sociologically in their origins, ethics claims to be able to make "normative" and thus "universally valid" decisions on questions of morality. But how this claim could be justified logically, from which "supreme instance" such rules could be derived resp. who should formulate the "values", which shall underlie the "evaluation of moral action", remains open.

Let's have a look at the oldest "moral law", the so called "golden rule": "What you do not want to be done to you, do not do to anybody else". We realize immediately, that this describes an empathical communication process! Ethics, like economics, law, pedagogy and politics, also belongs to the "normative sciences" (sciences in name only) and should therefore be regarded in the same way as "local folklore" and not as a legitimate science.

A better orientation in the mindful communication process is offered by the holistic resonance as part of a sensitive dialogue. In compassionate communication, for example, pleasure and pain are shared equally, even to the extent that these two sensations can be transformed and it can be decided

together whether this should then be enjoyed or avoided. Moral rules in ethical interpretation are more of a hindrance than a help.

### Power and Dogma

Power, as the ability to make people do things they would not do on their own, is often interpreted as immoral, dangerous or even seductive. Here we should first examine the "instruments of power" more closely, such as violence versus seduction. How is "power" to be evaluated at all if it works by changing the conviction of the beings to be manipulated, as in the case of seduction or propaganda? As long as we only have the instruments of "morality and ethics" at our disposal for this description and analysis (pseudo-sciences, which themselves are again based on axiomatic value systems), we will not succeed in providing a conclusive explanation.

But if we recognize that power can only exist if a dogma exists at the same time, i.e. one or more axioms, which cannot or must not be questioned, then we also recognize how we can prevent this power quite simply: by consistently questioning all old dogmas and preventing the emergence of newer ones. The "greed for power" probably only arises through corresponding role models (literature, films, legends) in societies in which hierarchies and dogmas have a long tradition and have never been seriously questioned. In open, dynamic and mindful communication practicing societies, however, the "greed for power over oneself (body, mind, soul)" naturally replaces the "greed for power over others", because one's own abilities and expanded forms of perception can be experienced much more intensively than the obedient execution of one's own commands by others. The eternal security in the cosmic web of life probably represents the most intensive feeling of happiness that thinking, feeling beings are capable of.

## The eternal mystery

If we understand "knowledge" as a subjective, relative state of mind in dynamic exchange with other sentient, thinking beings (knowledge as social co-construction), then it follows that we cannot attain "final knowledge" as long as we move on a time axis ourselves. Thus the future always remains open, all theories and the axioms on which they are based can be changed at any time, our own perception and our physical and mental abilities can be developed further at any time. Knowledge is not a static stock, not a financial value (asset), but itself a dynamic communication process, which changes the participating beings, whereby they themselves become dynamic processes of change or can best be described as such.

We invite you to accept and embrace the "miracle" again in the circle of (systemic) science as what it should be from the beginning: the reminder to our open mind that the unknown, the misunderstood still exists and therefore our spiritual journey is not over yet. In fact, the process of "wondering" is also an essential trigger for the greatest motivation of human beings, the urge to explore. We need a science that encourages knowledge-thirsty, searching explorers to continue this spiritual journey and to tell the "left behind" about their exotic adventures, at the core of what is understood as competent teachers, but at the limits of their knowledge in the form of personal perceptions, legends or myths. These researchers, searching for new experiences and new knowledge, are always welcomed more friendly also in the areas visited by them by the thinking and feeling beings native there than the greedy, plundering merchants, who "subjugated" foreign fields together with their inhabitants to enrich themselves materially at them. (Allusion: "Age of the Discoverers" and the genocide of the American, African and Asian natives). Commissioned researchers who do not strive for knowledge with an open mind, guided by their own thirst for knowledge, but who owe their (private or state) financial backers a financial value (asset) as a result, therefore resemble the colonizers of earlier centuries, whose raids always ended in destruction and misery. They alone were "motivated by financial debts to deliver desired results", at that time precious metals and mineral resources, at the price of the blood duty of the native population. If however mental knowledge by open, honest and sensitive communication, is the goal, then the gates to all well-known as well as unknown civilizations are open to us and from the search of our mankind a searching dialogue, a co-operation with all thinking and feeling beings, whom we may still meet, can become.

The way to this new form of science is shown to us by those "giants on whose shoulders we stand" - if we have only become aware of this fact again:

"Miracles are not contrary to nature, but only in contrast to that, what we know about nature." (St. Augustine of Hippo)

#### Conclusio

The dominance of economics and law, based on historical dogmas, which themselves again led to social hierarchies of power, have led in human history to the fact that intellectual freedom has been increasingly restricted. However, from the perspective of the "governing", this was inevitable, because since they never had sufficiently extensive and up-to-date information to "control diversity", they could only exercise their rule by restricting the freedom of choice for the "governed". The "materialistic, industrial democracies" were not and are not governed through parliaments:

"The conscious and intelligent manipulation of the organized habits and opinions of the masses is an important element of democratic society. Those who manipulate this invisible mechanism of society form an invisible government, which is the real ruling power of our country." (Edward Bernays, "Propaganda", 1928. Source: <u>https://en.wikipedia.org/wiki/Edward\_Bernays</u>).

We can take the burden off the shoulders of the (apparent) rulers, as well as from the "consulting experts", if we change the basis of our communication - from "leaders and seducers" to thinking, empathetic beings who deal with each other honestly and at eye level, for the benefit and best development of all individuals and our communities.

I look forward to the active participation of all those who have always sincerely wished for open science in an open society!

With warmest regards *Franz Hörmann*