Nadim Sradj

GLOBAL SCIENCE

10 THESEN ZUR WELTAUFFASSUNG IM 21.JAHRHUNDERT

10 Theses for a Scientific Conception of the 21st Century

10 Thèses sur la conception du monde au XXIème siècle

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MANIFEST · MANIFESTO · MANIFESTE

English

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Euro-Science: Theses regarding the 20th Century Worldview

The term “scientific worldview” was introduced in the year 1929 by the Vienna Circle of logical empiricism. The composers of the manifesto *The Scientific Conception of the World: The Vienna Circle* (published by the Ernst Mach Association) were Hans Hahn, Otto Neurath, und Rudolf Carnap. The matter involved the formation of an international societal order using the insights of the sciences and humanities in the 20th century:

1. The spirit of the scientific worldview was shaped by Enlightenment philosophy. Sober human reason stands in the foreground. The rejection of metaphysics and theological dogmatism are thereby justified.
2. The political philosophy of the Vienna Circle was liberalism, which defined the individual as a carrier of values. Knowledge exists for the service of the people and has to be accessible to everyone. As a result, the idea of adult education centers arose.
3. Logic is the basis of clear thinking. The scientific worldview’s method is logical analysis. Its goal is unified science for all disciplines of study.
4. Scientific activity seeks the recognition of structure (forms of order) in objects, not the recognition of their essence. Subjective sentiments such as desire are experiences, not insights, and are for that reason neglected.
5. In the area of mathematics progress was made in knowledge through detecting antinomies. The work of mathematicians such as Boole, Frege, Schröder, and Peano enabled the discovery of symbolic logic (logistic) by Whitehead and Russell (1910). In this connection there arose pure, formal, basic research as a branch of epistemology.
6. In physics the basic terms such as space, time, probability, among others, were freed from their metaphysical admixtures. Forerunners of this trend were Helmholtz, Mach, and Einstein.

7. Quantum theory changed normative theories of nature into statistical probabilities. The limits of measurability were made a topic of discussion.
8. In geometry the classical Euclidean concept of space was expanded. Hyperbolic and spherical geometry were developed.
9. Through empirical controls, biology, psychology and the social sciences overcame their speculative and hypothetical elements. In this way, advances in knowledge achieved a higher level. It is noteworthy that medicine did not participate in the scientific discussion within the Vienna Circle.
10. The manifesto of the Vienna Circle culminated with the concluding statement: “The scientific world-conception serves life, and life receives it.”

Note: The founder of the Vienna Circle, Moritz Schlick has been shot down in the University of Vienna in 1936. This politically motivated crime caused the emigration of many European scientists.

Global Science in the 21st Century – A Definition from the Standpoint of Political Philosophy

We take the term 'global' to be the overcoming of internal (psychological) and external regional and national (geographic) limits on the multi-dimensionality of the pluralistic world (see appendix: "Development of Global Thought").
In contrast, what is local is marked by conscious demarcation. Borders are principally a negation of freedom.
Global science consists of **three types of components**:

1. **Logical :** the presentation of dynamic relationships of elements to each other while taking their functional complex of meaning into account (teleology). Structural knowledge differentiates itself from the conventional inductive experimental logic of John Stuart Mill (1843).
2. **Genetic:** Knowledge serves to gain orientation and experience improvement within the living environment and attempts to overcome detailed know-how for the benefit of orientational knowledge and in order to determine what is constant among what is changing.
3. **Topical-perspectival:** Common sense formulates a catalog of *topoi* (*Aristotle's Topics*) in order to recognize and solve a problem situatively and argumentatively. It contrasts with normative expertise and experts' authoritarian behavior (thinking about problems versus systematic thought).

In contrast to the scientific strategy of knowledge as 'trial and error,' which leads to unending experimentation, we represent a dialectic of simultaneity including both progress and regress. This philosophy of dialog with the natural world attempts to overcome the knowledge sovereignty that is bound up with false consciousness and alienation, thus seeking to avoid irreversible damages from technology (Chernobyl, Fukushima).

Similar to the United Nations' non-governmental organizations (NGO),

we call for the establishment of an independent control commission so that artificial demarcations such as that between ‘German’ and ‘Jewish’ physics during Nazi rule are not able to be repeated.

Knowledge, regardless of the form in which it comes, is bound neither to national borders nor powers. The dynamics of thought has as a consequence a situation where centers of knowledge and power are not able to perpetually hold their monopoly position.

The development of what is global proceeds from the part to the whole, from the simple to the complex, and from that which is static to changeably dynamic.

Crossing borders represents progress in the conscious awareness of freedom.

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1 Aristotle. Topik Organon V. Hamburg, 1968.

2 Viehweg, Theodor. Topik und Jurispudenz – Ein Beitrag zur rechtswissenschaftlichen Grundlagenforschung. C.H. Beck: München, 1969.

Global Science: 10 Theses for a Scientific Conception of the 21st Century

1. Scientists cannot place themselves above or outside of nature. “Knowers” and “non-knowers,” human beings as well as plants and animals, are an integral part of nature.
2. Laws composed by people can not determine nature.
3. Science is not the monopoly of any particular nation, state, society, or institution. Every nation has its own specific cultural tradition and is to be respected for its individual manner of viewing things and solving problems. For example, in Europe, China or India pain is treated differently. There is no hierarchy of knowledge. The dynamics of knowledge do not allow this, since cognition is constantly undergoing modification.
4. What follows is a call to methodological pluralism in research. There are no specific and exclusive methods leading to truth. The history of science is a history of trial and error.
5. The modern phenomenon of normative ‘expertocracy’ (leadership by the experts) constricts the scientific perspective in an inadmissible way. Common sense is formally more comprehensive than the so-called ‘scientific’ findings of experts. Arguments based on reason are more important and more often correct than statistical ‘proofs’ and ‘significant’ curves. The most recent international economic and financial crisis has provided evidence for this.
6. Expertocracy modifies scientific opinions and results into norms, standards, and laws. By this, it transforms knowledge of communication into knowledge as an instrument of power.
7. The adage of the philosopher Bacon that “knowledge is power” paves the way for corruption and crime. The philosopher Paul Feyerabend rightly introduced the term of “science mafia” as a new dimension of contemporary epistemology (comp. Feyerabend, P. *Widerstreit und Harmonie* (*Conflict and Harmony*), Vienna 1996, p. 78). Progress by science is not the only way of development; it is often used as mere justification of interests.

8. Establishing a strategic equilibrium for research approaches between economics and ecology, between technology and biology, and between natural and synthetic substances (gene manipulation) is called for.
9. Concepts, hypotheses, and theories are heuristically necessary but not sufficient. Additionally, pictures are required in order to make interrelationships clear. Art and science should compose an intellectual unity (e.g., Dali: watches + pictures of polyaxial chronometry).
10. Mankind has to give up the idea of dominating over nature and has to aspire after reconciliation and dialogue with nature. In this way the idea of ethics and of morality in science and research will regain their particular importance.

Explanatory Notes on 10 Theses for a Worldview in the 21st century

1. Scientists are unable to place themselves over or outside of nature. 'Knowers' and 'non-knowers' are, like plants and animals, an integral component of nature.

Science is a system of statements ordered according to principles which are either deductive, hypothetical (based on premises held to be true) or inductively empirical (based on problems and seeking to find a viable answer). In this connection, what is decisive is that the process of gaining knowledge can be traced intersubjectively and is logically stringent.

Over the course of the centuries, Protagoras' statement that 'man is the measure of all things' has led to a massive overestimation of man's own capabilities and an absolutization of mankind with all its negative consequences. After the 'failure of reason' (Kojev) it has become clear that living nature has a basic value which has largely been ignored up to the present. The consequence of this knowledge is the following:
Not mankind but rather whatever is alive, as a whole (man, animal, plant, usw.), is the measure of all things.

2. Laws composed by mankind cannot determine the laws of nature.
Immanuel Kant formulated his theory of knowledge in the following manner: 'Human reason prescribes laws to nature.' Without wanting to belittle the achievements of Kant as a great critical philosopher: In this respect he was not critical enough. To principally derive nature from human wisdom is not acceptable. This point of view corresponds to a false awareness, an ideology.

3. Science is not a monopoly belonging to a particular nation, state, society, or institution. Every nation has its own specific cultural tradition, having its own approach that is to be respected, its things to observe, and its problems to solve. For example, pain is treated differently in Europe than in China and India. There is no hierarchy and no authorities over knowledge. The dynamics of the matter do not allow this, since knowledge is subject to constant transformation.

While the scientific worldview of the 20th century was shaped by European philosophy, the tendency of the 21st century is to overcome this Euro-centrism. An example of this is the successful combination of different international research approaches in the development of our System Therapy we practice with respect to macular degeneration (see appendix: International Origins …). A patient in a critical situation (such as being in danger of blindness) no longer asks about national borders. The patient only seeks help – wherever in the world that might be!

4. What follows from this is the call for methodological pluralism in research. There is no specific and sole method which leads to truth. The history of knowledge is the history of trial and error.

In logic the saying applies that 'nothing is closer to the truth than error.' Every instance of scientific knowledge is imperfect, incomplete, and provisional. For the most part, scientific work consists of constantly expanding the frontiers and foundations of knowledge. What serves us as a foundation are the eight known logical and methodological forms. The selection of which of these methods and forms of logic should be applied in a certain case depends on the object and the specific set of questions at hand. While the inductive-experimental method basically assumes that every new piece of knowledge is progress and thereby the borders of progress are stretched, the Heraclitic-Hegelian dialectic involves progress and regress in equal measure. The accuracy of this point of view is confirmed by the observation

that in spite of highly developed technology, there is no reduction of irreversible environmental damage.

5. The modern phenomenon of normative 'expertocracy' (the rule of the experts) constricts the perspective in an impermissible manner. Common sense is formally more comprehensive than the reductionistic and so-called 'scientific' know-how. Arguments from reason are more important and mostly more correct than statistical 'proofs' and 'significant' curves. The most recent economic and financial crises have provided a demonstration of this.

Complexity and irregular dynamics in today's world make it impossible for politicians to reach a clear orientation and to conceptualize their thinking and action. Frequently they have to move like firemen, rushing from one crisis to another. For that reason a new political class has arisen: the experts. However, experts have frequently overstepped their original advisory function and have become decision making structures. Over the course of time, they have acquired immunity and authority by virtue of so-called 'scientific objectivity.' As early as the 1972 report by the Club of Rome entitled "The Limits to Growth," attention was drawn to anomalies and undesirable developments within the economy and science. Politicians and experts have totally ignored this warning up to the present day. It is time to call them to account in this respect.

The safeguarding of decisions by measures of significance, statistics, 'clinical trials,' experiments on animals, etc., i.e., through a so-called 'scientific instrumentarium' has all too often shown itself to be a mere justification of self-interest. Through the apparent objectivity of experts, the feelings and opinions, i.e., the subjectivity, of so-called lay people are practically shut out.

6. The legitimization of knowledge that is a consequence of expertocracy transforms the knowledge of communication into sovereign knowledge.

Statements made by experts are frequently dogmatized and declared to be the ruling opinions. To this end use is made of large amounts of research materials, multicenter studies, known personalities, international comparisons and – cooperation with and manipulation of the public media. Under these conditions, 'justice' is served and laws passed. The judicial justification for this is 'convention.' Viewed from the epistemological standpoint of the philosophy of science, 'convention' means an arbitrary, one-sided decision for a theory or hypothesis, which has to be neither logically nor objectively founded (Poincaré). The alliance between major industry, party politics, and legislation allows neither critical inspection nor an alternative thereto.

7. Bacon's adage that 'knowledge is power' paves the way for corruption and crime. The philosopher Paul Feyerabend correctly introduced the term 'science mafia' as a new dimension of present day epistemology (comp. Feyerabend, P. *Widerstreit und Harmonie*, Wien 1996, p. 78; English title: *The Tyranny of Science*). Progress through science is not the sole path to development. This is often just a justification of interests.

Regarding the positive chief virtue of knowledge there are also cognitive, negative side effects, such as alienation in the sense of a degenerative change in consciousness. It is to be noted that normally knowledge is understood as an enrichment or value. As soon as knowledge is seen as power, one falls to the level of the misuse of power. The demoniacal aspect of power and the false consciousness of many a scientist shift the logic of research to the psychology and psychopathology of research. The history of science over the last one hundred years in particular has demonstrated anomalies such as the differentiation between 'German' and 'Einsteinian' physics. The falsification of scientific research results and the manipulation of statistics is in the meantime an open secret. On the one hand, scientific work holding forth new insights and knowledge is rejected through the intervention of an individual (one phone call suffices!) while plagiarism is simultaneously given the highest praise. Invoking 'scientific scholarship' is no longer a criteria for credibility and correct results.

8. There is the need for the production of a strategic balance of research approaches between commercial and ecological aspects, between biology and technology, between natural and synthetic materials (gene manipulation).

The Bush administration gave their vote in favor of the economy and against ecology with respect to the United Nations climate conference in Kyoto. During this conference, the Democratic Vice President of the United States, Al Gore, said that nature is sick and urgently needs a physician. The one-sided concentration on the economy and technology has inflicted irreversible damage on nature. The production of synthetic materials, such as plastics and poisons, have upset the ecological system. The earth has become a giant car garage. Even medicine has left its historical roots and foundation for the benefit of overly subtle technologies and an exclusively artificial pharmacology. The overestimation of the economy and technology has brought about a shift in the relationship of knowledge and personal interests to the detriment of knowledge. In the long run, thinking in categories of pure material interest bring blindness to values.

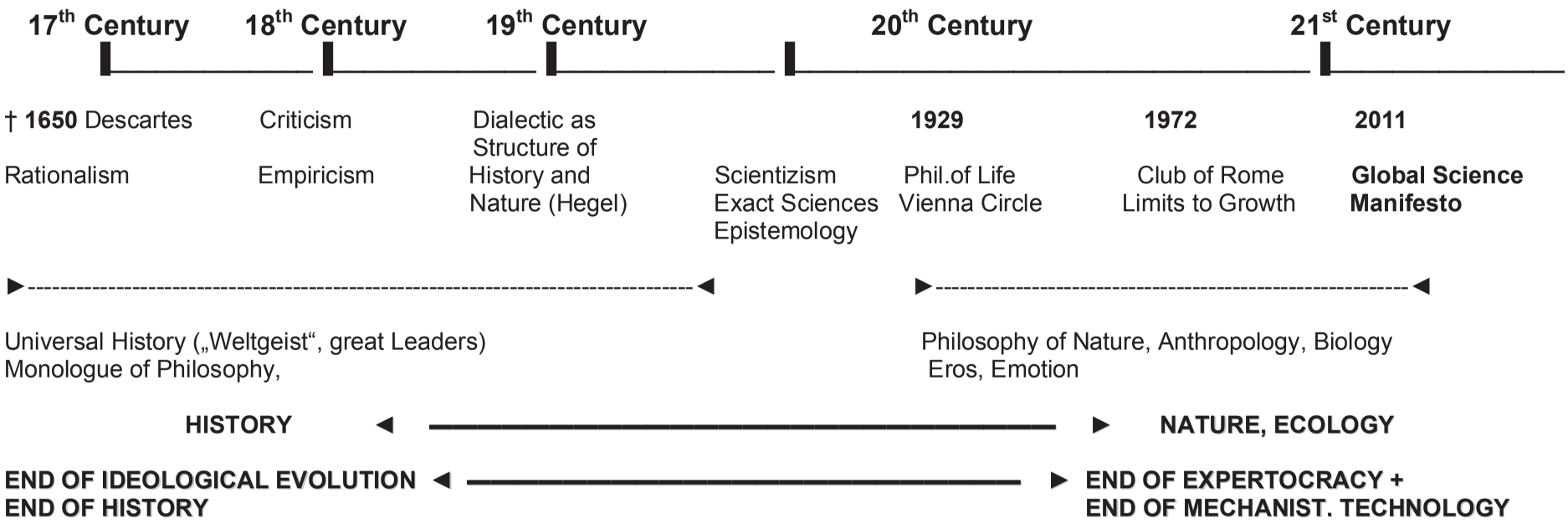
9. Concepts, hypotheses, and theories are heuristically necessary but not sufficient. Pictures are also required in order to clarify the overall context. Art and science should build an intellectual unity (e.g., Dali: watches and poly-axial chronometric presentations)

If Hegel saw the exercise of philosophy as capturing its era in concepts, then art has the mandate to present its era in images. Abstract concepts such as methodology, epistemology, among others, are a matter of principle necessary but not sufficient for the advancement of knowledge. Every discipline has its own terminology. The interaction between a picture and a concept is hereby in the position of overcoming the ‘private sphere’ of individual disciplines. Color and form are in the position to make complicated abstract facts and circumstances understandable. In aesthetics we see a real possibility of bringing reason and nature together.

10. It is necessary to give up the idea of subjugating nature in favor of reconciliation and dialog with nature. In this connection the idea of ethics and morality in science and research receives renewed special importance.

In the end effect, subjugating nature is identical with subjugating mankind. The ‘wisdom’ concept is intercultural. Wisdom, as a goal and meaning of knowledge, places borders before mankind’s boundless pursuit of the subjugation of nature.
We are on the wrong path!
Expertocracy is at its end.
In order to change directions, it is necessary for everyone to become involved.

Development of global Thought



The Cartesian Statement „cogito ergo sum“(I think, consequently I exist) introduced a general intellectual egoism: Reason is primary, nature is secondary. Processes in nature have been explained as linear and simple. Consequently, it has been assumed that nature must follow human laws (Immanuel Kant). World has been regarded as a harmonious cosmos while in reality is tends to be a chaos. 1989: end of history and ideology; 2011: decline of expertocracy and mechanistic technology (Fukushima-syndrome).