

On September 14, 2018, I put up a poster outside the Dean's Office of the Faculty of Arts & Humanities of the University of Graz. The poster – content see below – was removed only 7 minutes later by a university staff member. In the following days, weeks and months I have put up several hundred copies of similar posters proposing 28 theses in places such as the University of Graz' main campus building, as well as its School of Business, Economics & Social Sciences, in the main building of the University of Vienna as well as in other universities and places in Austria.

In 2018, I experienced the largest environmental and climate damage in my farming and forestry business so far, with damages exceeding my usual annual income as a farmer many times over.

Twenty-eight theses criticizing our scientific culture
and furthermore, evaluating our civilization

1. Albeit the lack of a clear theoretical justification, progress, scientific research, an increasing complexity under the paradigm of innovation, and change for its own sake are still considered to be supreme values of our scientific culture and civilization.

2. With the beginning of the so-called modern era, European scientific culture has become a global world culture. Its triumphant development is based on a new – and so far unrivalled – understanding of science. Its foundation lies on a radical criticism of existing traditional worldviews, which were mainly developed by outsiders of the scholastic sciences at that time, such as Nicolas Copernicus or Galileo Galilei. Subsequently, it was then believed that 'De omnibus dubidandum' (*all is to be doubted*) – a new point of view explicitly covered by Rene Descartes – should herald an entirely new era to help rid the sociocultural existence of all the primal misery and injustice.

Nowadays – in the age of postmodernism – it is becoming increasingly clear, that especially this scientific culture – through an inadequate and unmanageable increase in complexity – has led humanity, as well as the entire biosphere, into the greatest crisis of our entire cultural history.

3. Following a radical, yet in many cases justifiable, doubt concerning existing metaphysical worldviews and authorities of the Middle Ages, natural sciences of the European modern age chose to rely on strictly empirical observations (also by means of so-called experiments), albeit ignoring the fact that this knowledge, too, is only culturally specific and randomly incomplete. As a matter of fact, from an epistemological point of view, it is still unclear whether what we observe in nature actually corresponds to the laws of nature or simply follows the organizing principles of our own central nervous system.

The attempt of presenting my research about this central topic at the Faculty of Arts & Humanities of the University of Graz was disregarded or brushed aside as it was obviously seen to disturb the existing worldview. You may compare my diary entries, my innovative essays or early publications; text samples can be found on my homepage under www.johannes-hofer.at.

4. Even the so-called 'exact sciences', including the empirical natural sciences, can only provide a modifiable incomplete knowledge that needs to be corrected and replenished. The fact that the high standard of knowledge concerning our sciences only refers to partial knowledge – whereas individual scientific disciplines often operate entirely independent – is one of the reasons that both, the massively increased discretion to act and its side effects, are epistemologically unrepresentable and therefore not fully predictable or even manageable.

Ultimately, scientific knowledge is only a culture-specific partial knowledge determined by interests and subjective values. Accordingly, its structure does not clearly differ from metaphysical knowledge. Hence, the option to criticize for the purpose of eliminating error is necessary and appropriate in our scientific culture as well.

5. The medium used by our scientific experts is language. More precisely, they use a language developed in the Stone Age by phylogenesis to deal with everyday life rather than the legitimation of an elite special knowledge. As I have repeatedly pointed out in earlier studies – which unfortunately remained ignored as well – the main function of human language is not portraying a real or representative depiction of reality. It is rather meant to establish a world view that is constantly relevant concerning culture specific behavior and actions. (My early criticism of Wittgenstein and co., too, was repeatedly ignored or simply went unnoticed.)

Thus, our scientific culture is based on a structurally false paradigm: as the world is fully apparent, fully describable, and fully explicable, it can therefore be fully controlled and shaped by these sciences.

6. As a matter of fact, the new self-confident scientific culture doubted a great deal of things – almost everything apart from itself. Their newly discovered methods of active empirical observation and active experimenting were now beyond the shadow of a doubt and any criticism. However, alongside an increased potential for knowledge, it also led to an enormous increase in the discretion to act.

In this newly found euphoric faith in progress especially incalculable side effects of a significantly increased discretion to act were completely overlooked and not theoretically considered – neither epistemologically nor when it comes to action theory.

7. Nowadays nobody can master the entire socio-cultural system anymore – not an individual human being, not a politician, not a group of people, not even the ‘scientific community’ or our scientific culture as a whole. The overall socio-cultural system has experienced a momentum, independent from any human recognition, planning and free will.

8. Bearer of the scientific culture is the established ‘scientific community’. Through its high reputation, partially stemming from its elite special knowledge, it portrays an almost inviolable elite caste that lies largely outside the criticism of the public and media. Restraint and moderation – proven and widespread values in many cultures – are completely alien to the dominant scientific culture.

9. Usually, politicians and their legislation are blamed for certain negative phenomena in our society. This practice is alien to our world, as well, and does not correspond to the actual socio-cultural standards. It is not the politics or even the economy that represents the actual self-confident leading culture of our society but science itself. However, following the maxim ‘freedom of research and teaching’ it acts largely untouchable.

10. One of the reasons for this crisis-ridden state of our technocratic civilization is that this scientific culture – the presumptuous and intolerant leading culture of our society – lies outside social criticism, without any implicit or explicit request for an elimination of errors. In addition, established and privileged leaders in economy, science, politics, culture, etc., can have little intrinsic systemic interest in effectively questioning the current, deadlocked, unbalanced system, as they, being biological entities – at least in the short and medium term – simply have a big advantage.

11. Nowadays, the ‘belief’ in progress is nothing more than a mere subjective or metaphysical expectation, a mere hope for better times ahead, that would actually come ‘one day’. We do not need new technology, new human beings, a new science, a new policy, etc. but a functioning, more modest technology, etc. – especially one proven in the past. Moreover, human ‘reason’ is the most recently developed product of evolution, hence it is least tested and proven.

12. Subjective views of language and the world may be very dominant. In every socio-cultural era they constitute the actual cultural standard in the specific societies – rather than merely the so-called economic conditions of a still dominant ideological world view or of the contemporary, materially oriented, ratiomorphic worldview.

13. Almost everything in our enlightened society can be fundamentally questioned and criticized – everything but so-called progress and the value of change per se. Therefore, obvious mistakes, weaknesses, inconsistencies of our scientific culture and its bearers are exempted from criticism. From this preferred, rarely questioned position e.g. our science culture can use all resources on our planet and all technical possibilities here and now without being asked.

In practical terms, this means that by means of unseen resource acquisition the privileged are living at the expense of future generations, but also at the expense of the poorest of the poor currently living on our planet. It seems that an adequate standard of living is not enough for everybody living in our post-industrial scientific culture. Which rational instances are questioned by these phenomena in our perspective distorted perception?

14. Hence, one of the major problems of our time is that through the momentum of ‘progress’ there can no longer be any functioning elimination of errors. – ‘Power without responsibility and without accountability’ is one of the most serious deficits in our apparently so humane, democratic and transparent scientific culture. It is not science itself that is the main problem, but its hubris, its uncritical feeling of superiority over the proven existence, its intolerance, its preference for knowledge as power over moral insights and self-restraint.

15. Examples of the critical state of our biosphere and our civilization are not only climate change, the extinction of species within the plant and animal kingdom, the poisoning and contamination of the oceans with plastic, mercury and other chemicals, as well as the misuse of resources, but above all, the ever greater gap between the poor and rich on our planet. Additionally, there are possibilities and

dangers of incompetent and dishonest elites from politics, economics, science, etc. exerting inadequate, non-transparent and illegitimate power on others.

In addition to the immediate current primary crises of our biosphere, secondary and tertiary crises – especially in the global and social area – can be predicted for the medium-term. First signs showing today are, for instance, the large refugee movements. If the average temperatures in Africa, for example, rise a couple of degrees and certain areas of this continent will no longer be habitable to humans, protective walls of some European countries will hardly help solve this global problem or even reduce human suffering.

16. It is not politics, not even the economy that is the true leading culture of our society, but science itself. However, our scientific culture rids itself of every responsibility due to its uncritical sense of superiority. Due to their high reputation and elitist knowledge its bearers – this can only be emphasized again – are a lot less under public scrutiny than people and institutions from other sociocultural areas. Once again I would like to point out my main thesis:

Ultimately, the terrible condition of our biosphere is the product and merit of the intolerant leading scientific culture of our society.

17. The globalized scientific culture of the so-called modern age has broadened our world view and immensely increased our discretion to act, and thus opened up socio-cultural possibilities for which the phylogenetically adapted man of the Stone Age is not programmed. Considering the scientific worldview, the existing type of 'Cro-Magnon Man' has been living for about 30,000 years. Life on Earth has existed for over three billion years. Early forms of human beings, so-called ape-men, existed for several million years, ancestors of the present human beings, such as the Neanderthals, existed for several hundred thousand years.

Judging by our current sociocultural level, Cro-Magnon cannot and will not exist in 30,000 years. For the Homo sapiens the socio-cultural as well as the biological evolution will end long beforehand due to misdevelopments and massive disturbances of the biosphere. Prognoses of the end of the biosphere or even the extinction of the present human species vary. Theoretically, the end of 'homo sapiens' could occur within a few centuries or even earlier given the cumulative dynamics of progress. – Two, four, eight, sixteen? How many more major nuclear power plant accidents would humanity and its genetic material as a whole be able to endure unscathed?

According to our present knowledge, the main cause of the massive disruption and destruction of the biosphere is the current uncritical handling and practice of the apparently humane scientific culture with its sometimes too direct and unevaluated link to armament, to the economy and thus also to the insatiable, seemingly infinite human need of security. The latter, in particular, is never enough, even for the in a number of ways wealthy and successful one!

Realistically seen, economics and science are integrated components of our socio-cultural existence and, for their part, are also capable of high human potential which, in turn, should be constantly questioned, further researched and complemented.

18. Many promises and expectations of the Enlightenment were not kept or irredeemable. – Major sociocultural phenomena of the so-called modern age were either not perceived at all, transfigured, downplayed or reinterpreted according to their own culture-specific worldview by the established sciences, especially the humanities. These include e.g. the phenomena and excesses of colonialism and imperialism.

New York's Statue of Liberty obviously has and had a different meaning for European immigrants than for Indigenous Indians. For example, contrary to the claim of the neo-positivistically-oriented historical sciences, there is no universally valid and objective universal history. Even the seemingly objective scientific theories are ultimately no more than rational arguments within a specific culture-specific worldview, which at some point in the socio-cultural dynamics of space and time will fade again and lose their relevance.

19. Not only scientific research is determined by subjective interests – the humanities have long been affected by the bug of interest-oriented perception. Just as the late Middle Ages needed Reformation and Enlightenment, today, our technocratic civilization, including our scientific culture, is in need of a rigorous second-order enlightenment for the purpose of effective elimination of errors.

20. Since Enlightenment, our scientific culture has claimed to represent democratic, transparent, humane values. Ideally, in the natural sciences or humanities, every person may contribute ideas and benefit from them. As my own records concerning the Faculty of Arts & Humanities of the University of Graz show, at least the latter is not readily possible. The story of the innovative outsiders of science is a history of exclusion, intolerance and isolation, and it stands in contradiction to our image of an open and democratic scientific culture.

21. The needs of the factual world are largely overlooked in our technocracy. The engine of scientific and technological progress is an autonomous momentum as well as the self-interest of our privileged elites. The academic elites have long since lost contact with the needs of factual life.

22. I myself, as a farmer and forester, am closely connected to the biosphere and the factual life in the real world. While politicians and experts driven by certain interests, are on the fence about whether a threatening climate change is indeed taking place and if, for example, the oceans are actually contaminated to the extent that we should actually not eat any food coming from the largest biotope on earth, I certainly recognize negative excesses of our civilization through my own objectifiable perception in my agricultural and forestry business:

As early as about 30 or 40 years ago, all the old elms in our forestry in the *Fischbacher Alps* died. Currently, we have a severe decay of ash trees, which has fatal consequences since the ash tree has always protected the low-lying embankments from landslides in the unstable terrain at the end of the *Jasnitztal*, municipality *Kindberg* in Upper Styria, where my forestry is located. Today, this valuable species of trees is threatened by extinction in our high-tech scientific culture. Furthermore, larches and beeches suffer from diseases, etc. Shallow rooting trees, such as spruces – our current main source of forestry income – are completely unsuitable for a future dynamic development and in our latitudes very vulnerable to dehydration, pests and wind.

Just by taking forestry as an example, it can be seen that the rationalization effect of this so-called progress occurring through new innovative technologies is by far overestimated. For example, it is said that about 100 years ago a forestry worker was able to process three solid cubic meters of log wood using a manual pit saw and ax. However, by using a chainsaw he could accomplish 10 and more cubic meters per day. Nowadays, using new technologies such as a harvester and processor, we are able to process more than 60 cubic meters per day. However, this calculation does not take into account technicians, metalworkers, bureaucracy, etc., providing said technologies as well as the enormous forestry and biological disadvantages of modern economic methods – from taking away soil organic matter from the forest to a constant increase in density of the forest soil and the concomitantly reduced capacity to absorb water. Furthermore, the enormous negative impacts on the forest habitat caused by general ecological environmental damages, which are yet to be examined entirely, have not been taken into account either.

When will our economy finally conduct a complete and transparent scientific investigation of all negative side effects of our scientific-technological cultural standard? We know what the South Pole and Mars look like, we have extensive knowledge about the structure of quanta, atoms and molecules. However, we fail to see or do not want to know what our biosphere is going to look like in fifty or a hundred years from now.

23. Although human beings have increasingly expanded their potential for knowledge and action through scientific and technological progress, they are increasingly less able to master their earthly existence with help of their knowledge and scientific culture. In our civilization, we see more and more unintended processes that were neither rationally planned nor intended and appear to be incalculable side effects of the gigantically increased potential for action and cognition.

24. Our scientific culture has – through its arrogance and uncritical intolerance, even over archaic cultures and proven metaphysical world views – endangered the socio-cultural existence of mankind and thus led the entire biosphere into the greatest existential crisis and threat to the entire cultural history.

25. Tomorrow, humane values which are both close and beneficial to life will be inevitable in order to develop future-oriented action perspectives, rather than mere specialized knowledge. Among other things, this requires more direct democracy, sensitivity and perception of our highly specialized elites concerning the needs and vital interests of the ordinary people. It is not science and its hubris, not the economy, not the gross national product, not 'progress', that is the measure of all things, but the individual human being with its predispositions and needs. Furthermore, even multinational corporations and their interests have to subordinate to our digital and global age.

26. From now on, humanities should rather focus on the decrease of complexity than its constant and uncritical increase. – A program of happiness research includes finding human bliss, success in life and fulfillment on a smaller scale rather than through maximized solutions. – If all people living on our planet were to maintain such a high standard of living as do the privileged in the rich countries, the biosphere would tilt within the blink of an eye.

27. The conventional image of science is ratiomorphic, that is, rationally-oriented, and accordingly emphasizes the feasibility of human action on the basis of reason. However, the actual course of history does not correspond to this subjective, culture-specific assumption. The early advanced civilizations – as I have shown in my extensive, yet hitherto unregarded research – were already strongly influenced by irrational motivation. This irrationality continues throughout the course of history. For example, imagine, what the 20th century might have been like if young Adolf Hitler had been accepted to the Academy of Arts at the University Vienna, if the assassination of archduke Franz Ferdinand in Sarajevo had been prevented, and if, accordingly, there would have been no First and Second World War followed by the fateful German division into East and West?

Thus, the most significant events of the 20th century were not rationally determined by man, but were irrational, often mere happenstance, and incidentally caused the greatest catastrophes of the 20th century. **If essentially the 20th century, just like the entire history predating it, was irrationally determined, how can our optimists of progress be so certain that the 21st as well as all the following centuries can be planned, managed, and shaped for the benefit of our entire humanity by means of human reason and scientific culture?**

28. Citizens want enlightenment and transparency!

In my diary entries 'The motivated student and his enemies' I have, among others, presented some of the structural deficits stated in these theses by means of using realistic examples. So far, it has not been possible to present the research documented in my diaries at the University of Graz. How democratic, efficient and transparent does this make our scientific culture?

Why, for the first time in cultural history, are the biosphere and thus the existence of humanity seriously at risk in our civilization in particular? Will our scientific culture henceforth be able to get by without comprehensive and unprejudiced occasions to criticize for the purpose of a quick elimination of error?