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Institutional Degeneration of Science

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The scientificity of the research should be evaluated according to the methodology used in the study. However, these are usually the research areas or the institutions that are classified as scientific or non-scientific. Because of various reasons, it may turn out that the scientific institutions are not producing science, while the "non-scientists" are doing real science. In the extreme case, the official science system is entirely corrupt, consisting of fraudsters, while the real scientists have been expelled from academic institutions. Since 2016-2017, there has been much talk about the "post-truth era" and the politicians who are "denying science". However, simultaneously, many complaints about the corruption of science appeared. The outsider cannot tell who is telling the truth as it may be the case that the science fraudsters are defending themselves and these politicians are aware of the corruption. It is also untrue that the censoring or suppression of science started from 2016-2017. Suppression of science because of political and ideological reasons was present already long ago, and during the last few years, it has been increasing. The picture is highly complicated as there are many pretenders, false accusations, etc. For example, because of political reasons, someone may be set up as a pseudoscientist, the real scientist may be expelled using political accusations, justified criticism may be labelled as political pressure, etc. There is something like an inner information war ongoing in and around science. The classical philosophy of science seems unable to handle it because every formal rule can be misapplied. Science, as a whole, may be unable to persist.

Keywords: censorship, degeneration of science, science fraud, philosophy of science, post-truth, pseudoscience, science

Theses1

Since Popper and Lakatos, the demarcation line between science and non-science has been considered one of the fundamental issues of the philosophy of science. According to Lakatos (1973), pseudoscience is a non-science, which appears as science, using science's public authority. Since then, mountains of texts have been published on how non-sciences, such as astrology are not sciences.

But the enemy is not on the other side of the border. The enemy is in our midst.

I remember one science fiction story in which there was approximately the following dialogue:

- "From what direction the enemy is threatening us?" they asked.
- "From the inside!" answered The Bag of the Wisdom.

The scientificity of the research should be evaluated according to the *methodology* used in the study. However, usually, it is the *areas* of research that are classified as scientific or non-scientific. Moreover, the

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research is often classified as scientific or non-scientific purely on the grounds of what *institution* was performing the study. Even more: In the elite universities, there is a tendency to regard all research activities performed outside of them as non-scientific.

However, many studies classified as non-scientific are quite scientific, while a massive amount of scientifically-declared texts are meaningless non-science.

A meaningful text about the area regarded as a domain of non-science and written by the non-scientist can be more scientific than a publication about the area regarded as science and written by the individual, who earns scientist's salary.

The best way to do the pseudoscience is to fuss inside the big enterprise recognized as a science.

We are not living in the era of Francis Bacon.

The science has been institutionalised, a large number of scientists earn salaries. The scientists constitute the caste of priests. They are interested in keeping others back from the pie.

There is a competition between scientists. The competition, however, is not always good. Instead of searching for the truth, one starts to think about the rivals. Negative competition appears—envy, slandering, etc.

The institutional decadence of science is comparable to the history of the church. Several church reforms have been performed in history. Finally, Kierkegaard (2009) said that the church is entirely corrupted and that it is not a faith what is going on in this institution.

There are millions of scientists on the earth. Millions of publications. Thousands of years of the history of philosophy. How can people manage this informational mess? I think they cannot.

Some words about the scientific information systems, like Eesti Teadusinfo Süsteem (Estonian System of Scientific Information, ETIS).

There have been many philosophical discussions about measuring the *IQ* (Gigerenzer, 1993)—whether it is meaningful, whether and how it can be used, etc. However, I am concerned about measuring the scientists. The scientific information system, based on the number and rank of scientific publications, is complete nonsense. It is particularly harrowing for the philosophers.

The scientific info system is one of the modes of modern scientific bureaucracy to produce priests' class, generating the noise and maintaining their power. The system produces the quantity, and these are the normal scientists in Kuhn's sense, who are staying in it. They are mechanically repeating the same method, applying it to different objects. Today, they are counting the sand grains here, tomorrow there.

In the publications of the so-called school, the holy cows have to be quoted, and the critics should not be quoted. This is a circular warrant system.

After a while, real scientists have begun to work as miners, firefighters, and night watchmen, because the priest class has pushed them out of the subsistence hierarchy.

This is a *pokazuha*-science.

At first, the alien who gets on the planet is confused. In the end, the alien realises: It is just like in Poe's horror novel about a mental hospital visited by inspectors. The doctors were locked in the basement, and the crazies had white smocks on and pretended to be the doctors (Poe, 1844).

How to otherwise interpret the society that burns and starves its geniuses and regards as science the army of mediocre interpreters who teach the texts of geniuses in the universities, but usually only after their death?

Even the philosophy of science is a hypocritical theological justification for the class of priests.

Some Questions and Answers²

"Don't you think that you have made an unwarranted inductive generalization from some rare cases of corruption in science to the whole science?"

"I have heard such criticism before. My answer is that it is rather you who are making unwarranted generalizations.

First, from some rare mental pictures of the 'real scientists' like Newton or Einstein the inference is made to the whole system of science.

Second—I object to Ryle's argument from the 'category mistake' here—, from some rare successful scientists in the university the inference is made about the whole university, spreading the authority, while it is well known that there are other departments in the university that are weak.

Besides, the myth about the progress in science is itself a generalization."

"But there are cases when the competition is fruitful?"

"Sometimes the competition is fruitful, and sometimes it is not (Heffernan, 2014). It is a modern myth that competition is a general solution to all problems. In economics, it is based on some model. However, it is only a model, and as such, it has some assumptions. These conditions are not always satisfied. How else to explain, for example, the fact that there has been a competition between the newspapers, but the quality of the newspapers has seriously degenerated?"

"Maybe the result is finally not so drastic?"

"Yes, I do not know. I have presented a possible black scenario. How is it possible that society persists, despite there are many criminals in society? How is it possible that society survives if there are so many liars in society?

Perhaps some model of the evolutionary game theory works, there is some stable equilibrium, for example, that 40% of the scientists are liars and 60% of the scientists are real scientists?

However, perhaps there is a competition between the states. If the war begins, that side of the war that believed one's own mistaken propaganda had reduced one's probability to win that war. The side with more degenerated science may lose the war."

"Your philosophy is pessimistic; there is no optimism in it."

"The optimistic point is that there is nothing supernatural. It has happened before that the civilizations have died out."

Scientists Investigate the Corruption of Science

Investigative journalism and the scientists themselves—both qualitatively and quantitatively—have investigated and described the science system's corruption. The number of such studies is already sizable, and those philosophers who know about such works would not ask some dogmatic or naive questions.

Even an overview of corresponding literature would be voluminous. Concerning some sub-issues, some summaries of the literature have been published (Campanario, 1998a; 1998b).

For the year 2016, alarming publications had appeared revealing the catastrophic degeneration of science (Belluz, Plumer, & Resnick, 2016).

The spread of scientific fraud was reported (Belluz, 2014; Fanelli, 2009). Simultaneously, shocking separate exposures appeared (Interlandi, 2006; Borsboom & Wagenmakers, 2012; Matthews, 2015).

The bias and low quality of the peer reviews of scientific journals were addressed (King, 2014; the classic paper is Merton, 1968). The academic cartels were exposed (Meyer, 2013; Van Noorden, 2013).

It was claimed that most of the results of scientific investigations are unusable or even wrong (Ioannidis, 2005; 2016) and that the motivation to repeat and check the experiments made by others is missing.

It was argued that scientific papers are published in such a way that makes it impossible to repeat the experiments, and that merely up to 30% of scientific results are repeatable and checkable (Begley, 2014; Feilden, 2017; Tajika, Ogawa, Takeshima, Hayasaka, & Furukawa, 2015).

² Discussion translated by the author.

It was also argued that the U.S. wastes approximately 200 billions of dollars per year—85% of scientific funding—to useless studies (Belluz, 2015; Ioannidis, 2016).

It was claimed that the experts are bribable. The climate sceptics complained that the censorship was applied in science to expel competing schools. It was reported that in the U.S., half of the *Ph.D.* students have depression and that 10% of them are committing suicide (Walker, 2015), etc.

As the causes of the decline of science, among other things, the overproduction of the *Ph.D.*s has been mentioned (if compared to the number of vacant jobs); also the hypercompetition to careers and finances (Edwards & Roy, 2017; Fang & Casadeval 2015; Anderson, Ronning, De Vries, & Martinson, 2007); the robust demand for novelty and effectiveness; the quantitative evaluation of scientists' performance, etc.—which in sum has led to massive sham and fraud in science.

Science Denial vs. Corruption of Science

Since 2016, there has been much talk about the "post-truth era" and the politicians who are "denying science". For example, the invitation of the *Estonian Annual Philosophy Conference 2017* with the theme "The Post-Truth Era" began with the following words:

"Post-truth" was the Oxford Dictionaries Word of the Year 2016. According to some authors, post-truth is a useful concept to understand some of the most recent political events...

Obviously, those recent political events mentioned were the Brexit referendum and the rise of Donald Trump. Some people regarded it as the beginning of the post-truth era.

However, as we saw above, approximately at the same time, many had felt that Feynman's warnings about the decline of science (Feynman, 1974) had become real.

This process continues (Mounk, 2018; Stuart, 2020).

However, the outsider cannot discern who is telling the truth as it may be the case that the science fraudsters are defending themselves and the politicians are aware of the corruption.

Suppression of Science

There is a widespread view that together with Donald Trump and Brexit, such an era began when scientific investigations were suppressed because of ideological and political reasons.

However, there have been well-documented cases when some scientists have complained that scientific investigations of some kind have been suppressed because of ideological and political reasons. Moreover, this has been so already long ago—before the so-called "Post-Truth Era" had supposedly begun. Specific scientific ideas, schools, investigations, and results have been suppressed or censored. It has been total: scientific funding, journals, encyclopedias (including *Wikipedia*), popular science, and mainstream media—the whole infrastructure of science.

The presentation Eintalu (2017) discussed the controversies around the so-called "scientific racism", particularly suppression of scientific investigations concerning race and intelligence or the *IQ* (Ceci & Williams, 2009; Rose, 2009).

Alternative medicine has been suppressed a long ago. It has been belittled and expelled from *Wikipedia* (Gale & Null, 2018). Even the Chinese traditional medicine has been despised, despite one representative of it—Tu Youyou—has earned the Nobel Prize in Medicine (Gale & Null 2020; W. Liu & Y. Liu, 2016) for discovering the antimalarial drug.

"Climate Sceptics" have been suppressed a long ago.

There is a whole new discipline investigating what research directions are censored in *Wikipedia* (Wikipedia, n.d.).

Concerning the vaccines, much negative information has been suppressed. How many people know that the Gates Foundation was sued in India because of human rights violations during human experiments with new vaccines (Sharmeen, 2017)? Western mainstream media is silent.

However, it was not enough.

2019-2020 were the years of increasing censorship in the Western world. Moreover, it concerns science, as well.

One may guess that it is because of the coronavirus pandemic. People's lives are at danger, and spreading false information should be hindered.

Unfortunately, what we are witnessing is *politically motivated censorship*.

For example, Larry Romanoff's (2020) article "China's coronavirus: A shocking update. Did the virus originate in the U.S.?" was labelled as "false information" by Facebook's "independent fact-checkers". It seems that this article has been blocked on the internet now.

Facebook's official explanation was that this article contained false information. However, Facebook misdescribed the content of that article. Thus, it was Facebook itself who was spreading false information. Furthermore, it was also making logical mistakes. That article was a *question*, not the answer. Moreover, the facts presented in this article actually did prove that it was *technically possible* that the virus SARS-CoV-2 originated from some U.S. bio lab. The article said neither that it actually happened nor that such an event had been proved.

Facebook is one of the leading Western social media platforms, and it has one billion users worldwide. All these people are cut off from some facts and well-posed scientific hypotheses because of *political* reasons.

However, composing an initial list of plausible alternative explanations of the event is the essence of any scientific, objective method of searching for the truth.

The origins of the virus SARS-CoV-2 have been called as the most censored scientific issue on the earth.

After the coronavirus pandemic began, the Norwegian virologist Birger Sørensen (2020) had been unable to publish his scientific investigations in academic journals. He says that because of political reasons. Thus, he has published his discoveries shortly in the local newspapers (Sørensen, 2020).

Western mainstream media did not tell so much that climate scientist Michael Mann lost one lawsuit in 2019 because he never presented the raw data of his "hockey-stick" graph (O'Sullivan, 2019).

UK academics advocated silencing dissent on climate change (Durden, 2020).

In 2020, *Wikipedia* administrators started to discuss the deletion of the chapter "Hockey Stick Controversy" (related to the theme "Climategate"), and they managed to do it (Wikipedia, 2020). One overview of the conflict between scientific schools has been eliminated. A chapter on the history of science has been deleted. However, *Wikipedia* is the most used encyclopedia in the world.

Furthermore, then, the U.S. 2020 presidential elections began. Then, the propaganda war started about the rigged elections. Again: Western mainstream media and leading social media platforms established censorship about possible violations during the elections. Facebook blocked informed articles explaining in details possible faults of the voting machines and programs (Redmayne-Titley, 2020).

There are countless other examples of the increasing censorship concerning specific scientific investigations or claims.

In sum, it is simply untrue that ideological censorship on science began during the so-called "post-truth era" starting from 2016-2017. Moreover, it seems that this political suppression of scientific facts, claims, hypotheses, and theories has been increasing in the Western world during the last years.

Conclusion

The picture of science is highly complicated as there are many fraudsters, pretenders, plausible false accusations, etc. For example, because of political reasons, someone may be set up as a pseudoscientist; the real scientist may be expelled using political accusations; justified criticism may be labelled as political pressure, etc.

There is something like an inner information war ongoing in and around science. The classical philosophy of science seems unable to handle it because every formal methodological rule can be misapplied, and a clever fraudster can pretend to be consistent with these formal rules.

Science, as a whole, may be unable to persist.

The financial bubble exploded.

The scientific bubble may collapse as well.

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