

I have been asked to speak about my experiences with contacts between climate scientists, including myself, and the media. I have not studied scientifically the issue. Instead, I have formed an opinion based on episodes, which I came across.

Let me start with what I perceive **what climate scientists think about the role, the task, and the practice of media**. Most climate researchers, whom I know, have a background in physical sciences; I do not discriminate between different type of media - let us refer to newspapers, weeklies, radio and TV programs, which would be associated with “quality”-media.

Only a minority of scientists comes regularly in contact with journalists; this is not so because they do not want to interact, but likely because of the presence of a sufficient number of so-called experts, who serve the needs of journalists.

Many of the scientists are convinced that they have an urgent message for “the” society: The climate problem needs priority attention and a determined response to implement measures for reducing the greenhouse gas load. They are also convinced that the media have to play a decisive role in explaining the urgency not only to the general public and but also to the political elite. Here, the role of the media is essentially to convey the “truth” to society, while relying on the assertions of “the” science. Media are not supposed to confront this truth with critical attitudes; they are not supposed to give skeptics a platform to present their either stupid or evil claims. In principle, media are just transporters of truth; they do not contribute to this truth, but they make this truth more efficient by telling the story in a way which is more easily accepted by the general public. In classical theory, this is referred to as “Public Understanding of Science” or “deficit model”.

We had one case, when a German climate scientist considered a journalist as publishing unsubstantiated and misleading skeptical claims. This climate scientist approached chief editors pointing towards irresponsible behavior of this journalist. The journalist considered the situation as threatening to her professional status, withdrew from reporting about climate issues. Eventually, she sued the climate scientist, and won two out of three claims in court. Now, at this time we have another case, when a German federal agency published a brochure on climate change and claimed that certain name-given journalists would routinely report wrong and misleading claims - this case will be considered by court later this month.

I recognize here an undemocratic pattern, namely first the claim that scientists are better suited for societal decisions than anybody else, and second that the media are not supposed to pay attention to what is going on within the social process of science, but merely have to focus on the dominant narrative. Some 50 years ago, media critique of members of the elite, say bishops, ministers, heads of unions and big companies, sportspeople etc. was rare. Now it is common, but scientists have kept their immunity for media scrutiny.

Next issue: How do I perceive **reporting about climate change in the media**? My view is limited, as I am located in Germany. I read regularly newspapers in English, Danish and German languages, but not in Russian, French, Chinese, Swahili or other languages.

First, this reporting is less conditioned by the severity of the issue but depends more on the public excitement and on the utility in pursuing political agendas. I guess this is true for all issues not just climate change. Both are related to the public demand, as people do not want to read boring stories, and minor details. Instead most want to read that their judgment including their prejudices is confirmed by most recent scientific results, and that claims of opponents turn out to be false. This is what we read in the New York Times as well as in the "Die Welt". Some write nicer, some work the arguments out in more depth, but real surprises, which contradict the basic assumptions of the readers, are rare. One may be tempted to complain about this, but media are adjusted to the political fabric of its society, which knows how to read and use what is offered by the media.

There are certainly cases, when some media try to push for a specific agenda, for political or economic reasons, but I am convinced that *society has the media it wants to have*.

What are my **own experiences with media**; I am relatively often approached by media, and journalists expect me to show a certain restraint from dramatic statements, a critical attitude to newest and exciting results, and a recognition that science is a social process, with scientists being social actors. I am not considered a skeptic, even if some alarmists tried in vain to shove me into that box.

My standard routine is to respond to all inquiries by journalists, as far as time and other obligations allow and as far I consider myself competent; I raise one condition namely that I may authorize my direct quotes. This request is motivated by my concern that I may express myself in a way which may be easily misunderstood, not that I expect journalists to manipulate my statements. This request is almost always honored, and I have never seen me misquoted, with one minor exception.

Interestingly, I have recently twice observed that the German public TV has used reporting about events in the climate community as a starting point to present the usual catastrophe images and talk, which had no connection to the event, and asking activists voicing their views instead of speaking to people involved in the events.

Apart of these isolated cases, I may conclude that I hardly had negative experiences when working with media. I perceive journalist as mostly doing what they are supposed to do, namely to construct their own views, of listening to experts but making up their minds - thus being mostly independent social actors in the process of public opinion making. Often enough, they do not really understand the issues, or rely too much on specific informants. But this is, I guess, unavoidable.

Finally I would like to touch the issue of **post-normality**. This concept was introduced in the 1980s by Funtowicz and Ravetz to describe certain conditions for science. Conditions are post-normal, when there is inherent uncertainty about the issues, when stakes are high and decisions are urgent, and when values are in dispute. In such conditions science is not done in the normal way for satisfying curiosity but provides key arguments in political conflicts about the right way to go. The perceived quality of science depends less on the methodical rigor but more on the political utility of the results. Climate science operates under such

post-normal conditions, and the dominance of the political utility of results emerges quite clearly in the media.

In post-normal conditions, the borders between policymaking and scientific analysis become blurred. Policymakers claim to have no alternatives apart of one solution which is scientifically given. Scientists become politicians however without democratic legitimation. Policymaking becomes scientized and thus de-politicized, whereas science is de-scientized and politicized.

I wonder if this is a concept which may also be applied to media. Possibly one could say that post-normality is normal for media. Issues in post-normal conditions are interesting to report about, because they are associated with societal conflict and with taking sides, with being right and being wrong. I wonder if scientific issues are reported in most cases only if post-normal conditions prevail, or if it is the reporting itself which creates post-normal conditions.

My impression is that in case of post-normal conditions not only the borders between policymaking and science, but also those between policymaking and media, and media and science dissolve.

All in all, the triumvirate of science, media and policymaking is an interesting cosmos; I do not think that we can improve it because this is social reality. Maybe we cannot even say what an improvement would constitute. But we have the privilege of having the exciting opportunity of observing it.