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Wit and Lightness in Science: The International Perspective

Bruce Lewenstein

A conversation with Bruce Lewenstein, Dean of the Faculty of Science & Technology at the renowned Cornell University, USA. He is an all-rounder and busy world traveller when it comes to science communication. The tenor of the meeting with Wolfgang Chr. Goede in Munich: Science and humor meet shyly.

Science is serious business. Deadly serious for some, says Lewenstein. The search for truth according to the laws of being obviously doesn't tolerate any humor. Not even in the United States, which is supposedly so devoted to entertainment. That's why scientists so often come across to the

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world with a stick up their backsides, wooden and nerdy instead of talkative, witty, sparkling. For many, any contact with the public remains awful. And this despite the fact that science communication is slowly opening up to the laws of a democratic society, embracing better comprehensibility, accountability, even good humor … (Peters 2014).

Of Pioneers and Coincidences

Bruce Lewenstein goes to great lengths to set the scene. Two pioneers, gifted performers, broke with deadly seriousness in the USA in the 1950s. The legendary Johnny Carson, who first on radio, then on TV with his "Tonight Show" entertained an audience of many millions for over thirty years, especially with science topics. One of his regular guests was the astrophysicist, exobiologist and writer Carl Sagan.

Among the shining lights of a science that dared to come out of its ivory towers was the ingenious physicist and Nobel Prize winner Richard Feynman, co-developer of the atomic bomb, who made a name for himself in an unconventional way, with wit and fine self-irony. Third in the group tearing down the walls of science was the cartoonist Sidney Harris, who appeared in many specialist journals, even in the intellectual "New Yorker", with whimsical drawings, whose texts then puzzled even the research community. Perhaps it was a good thing that they did not really understand his subtle follies and hidden allusions.

Then the big turnaround. "In the 1970s, a wide gate opened for public science communication, by accident," Lewenstein says. The "New York Times" discovered a new lucrative business model of enriching the paper with a

special supplement on weekdays, for example about fashion, and thus acquiring coveted advertisements – only Tuesday was still open, and that's when a newspaper manager fell for science, which had been treated stepmotherly until then.

This move proved to be so profitable that "Science Sections" mushroomed in the US media and soon infected major daily newspapers in Germany with this hype. Another fruit of this marketing strategy was the establishment of special interest magazines on hobbies, sports and science, such as "P.M." in Germany, "Peter Moosleitners interessantes Magazin" (not to be confused with PM, "Popular Mechanics"). Broad, popular science journalism was born, and on both sides of the Atlantic it was in demand for fresh professionals. In Germany, the Robert Bosch Stiftung addressed the shortfall and trained a good hundred science journalists on the fly in the early 1980s.

Accidents and Frankenstein Food

This opening, which science did not want, was compounded by technical accidents that disenchanted research and technology in the eyes of the public. This was long before the Chernobyl nuclear disaster of 1986 and the ensuing chaos of news and information by scientific experts across the board. Lewenstein recalls the British nuclear facility at Sellafield, which had been the subject of criticism since the 1950s with a long chain of mishaps. The grievances and issues, including erroneous forecasts, contaminated milk, destruction of sheep farms, added up to a long catalogue of scientific sins first nailed by British social scientist Brian Wynne (1989).

The hopes of science at the beginning of the last century dissipated in disappointments and fears, which were also increasingly taken up by a critical science journalism. The crash of the space shuttle Challenger in 1986 triggered a future shock, Lewenstein says, comparable to the sinking of the Titanic, and showed how fallible the modern technology gods were.

Partly as a result of this scepticism, the US House of Representatives stopped the construction of the super particle accelerator SCC in 1993, "to which most scientists reacted with sheer incomprehension," Lewenstein recalls. The 12-billion-dollar project showed, says the Cornell scholar, that science has always been, is and will always remain a political issue, everywhere in the world. But most scientists still refuse to see this. The "March for Science" in 2017, in which tens of thousands of people took to the streets for the freedom of science in major German cities and other places around the globe, has done little to change this, despite loud media thunder.

The environmental movement has sown doubts about scientific progress in Europe, more than anywhere else. Genetically modified foods and organisms GMOs were baptized "Frankenstein food" in Great Britain. There, the "Bodmer Report" had already made waves in 1985. The human geneticist Walter Bodmer had advocated a new scientific culture in parliament in order to overcome the deficits of existing, science-centred communication and to build bridges to a new, public understanding of research and social commitment.

Between Governance and Dissemination

This new approach was transferred to other countries and internationalized, especially by the British Council, the cultural institute of the United Kingdom. John Durant of the

London Science Museum and professor for "Public Understanding of Science" (PUS) earned merits in its dissemination. With the turn of the century, the idea of the dialogue model became established (Weitze and Heckl 2016).

This brought the community to a crossroads: Some interpreted the required commitment as a social obligation of science to account for its goals and results, with the greatest possible transparency as well as critical reflection ("governance"). Others understood engagement as taking scientific knowledge to the marketplace, sharing it with citizens, and developing innovative, even emotional forms of science communication for this purpose, participatory and interactive, away from the lectern and towards eye level, and importantly, also with wit and humor ("broad-based dissemination").

Science Festivals and Science Slams

Or can both be combined? Since the dawn of the new century, many new science events have established themselves around these two thrusts. Science festivals and "Science in the City" (large-scale fair-like events) as well as local science slams and FameLabs (in which scientists compete with each other to present their research to the public in the most effective way). Science theatre and bar camps, science clowns and cabaret forms also find their audience, sometimes with thousands of visitors. Formats that promote participation and democracy are booming: from consensus conferences and science debates to citizen inclusion in research projects.

So much for the background, genesis and current state of lightness, wit and humor in science and research, and the debate about them. Are these new forms robust and

sustainable? Are they capable of introducing parody and thus self-deprecating, critical reflection into science in the cabaret style, as is standard in political cabaret?

Peer Pressure

All too often humor as such has yet no place among scientists. They tend to feel attacked by humor. Scientists want to stay in their lane, especially since they are under considerable peer pressure. Changes are made only hesitantly, also because science funders and donors prefer a positive image, no leaps in it and certainly no criticism, cautions Lewenstein.

That is one, insistent side of science, on the other, a fresh wind is already blowing. Since the end of the last century, more and more university graduates have settled in journalism, communications and entertainment. However, a cabaret-style parody, such as that attempted by the popular comedian John Oliver on US television's "Last Week Tonight" show, usually features only a pro-science interpretation, reports Lewenstein. But there are many approaches today, all of which help to modernize our scientific culture.

The Author

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Fig. 12.1 Bruce Lewenstein is a lecturer in demand worldwide, here at China's Academy of Sciences. (Photo: Sally Sun)

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