

Rodolphe Sepulchre

Academic authority was once rooted in separation from society, education of the elites, communication in specialised journals, and slow percolation to the general public of what would eventually be regarded as scientific truth.

Today, academia is much closer to the public. Scientific communication is encouraged to be widespread, accessible, and instantaneous. Statistics, opinions, and consensus play a much bigger role in shaping what is regarded as truth.

A digital and globalised society has probably made science more democratic than what it used to be. But the academic world must strive to balance its presence in society and its distance from society. Both are needed to maintain people's trust in academic authority.

Bert Seghers

(Perceived growing) distrust towards authority

What can academia learn from our colleagues: doctors, teachers, priests, politicians ...?

The internet fuelled various evolutions in society, of which we have not yet seen the end (like the peer to peer economy). Elevated demandingness (NL: *mondigheid*) and empowerment of civil society is another one, of which the theme of this Ethical Forum is an instantiation.

After all, this evolution of "apparent decline in people's trust in academic authority" does not affect science alone, but all instances perceived by society as "carrier of authority" (power, knowledge). We see a similar perceived grow in distrust (or perhaps better: an increased demandingness) towards the Church, towards Justice / legal court, towards politicians, towards teachers, towards doctors.

According to Dutch reports (Rathenau: public trust in science | full report | summary), trust in science is the one that holds best, compared to others.

*What are the parallels between academia and these other "carriers of authority?"
What are the important differences? What can we learn from them? Do you think scandals erode trust in these authorities in the same way?*

One similarity might be the following. The fact that knowledge (and information) is ubiquitous and more easily accessible than ever before (think of Wikipedia, MOOCs, websites) gives people a (sense of) elevated literacy, the feeling that they too can have a say, because they (think they) know what it's about. This, together with expression means (social media, democratic participation) leads to what academics might perceive as growing distrust. This goes hand in hand with the evolution towards more openness and transparency (made possible by the internet), and might even be a reinforcing system, as transparency is increasingly demanded by society. Another observation is the following. The big visibility of a minority might distort the perception of the full group – just like teachers may feel a certain class is difficult or unpleasant to teach to, because only two pupils are difficult to handle. Thus, that some minor fraction of society shows increased demandingness, does not imply a pandemic distrust in the whole population.

Be aware of biases when communicating science

And act to it: show what science really is (not authority!) and take it apart from politics
Input from the floor – Ethical Forum 2017 – 6 December, 2017 Bert Seghers

A lot of research has been done on psychological mechanisms influencing people's tendencies to believe or to distrust. Yes, PR agents and lobbyists use tricks based on that knowledge. But so can scientists. My favourite article "From Ear Candling to Trump: Science Communication in the Post- Truth World" covers precisely that, and I think it is an excellent background for this Ethical Forum!

It can be useful to be aware of these things, described in the article and in the peer reviewed literature.

- Filter bubble: state of intellectual isolation that can result from personalized searches (Google search, Facebook timeline) or being exposed to only like-minded people in social media. As a result, users become separated from information that disagrees with their viewpoints.

- Confirmation bias: the tendency to search for, interpret, favor, and recall information in a way that confirms one's preexisting beliefs or hypotheses.[Wikipedia definition]
- Backfire effect: when confronted with evidence contradictory to their own beliefs, people not only reject the new evidence, but increase their beliefs (get entrenched, believe more strongly). ---- The backfire effect only affects ideologically loaded (political, religious) topics, where different opinions exist. New knowledge not contradicting existing beliefs (like most science communication in mathematics or chemistry) is accepted smoothly (if understood).
- Enhanced worldview effect: the more you know about a subject, the more the backfire effect plays. The higher science comprehension, the more extreme are opinions on topics.
- Science curiosity as the antidote. Science curiosity promotes open-minded engagement with information that is contrary to individuals' predispositions. So science communicators should not flood people with facts, but spark curiosity.

Both Andreas De Block and a Finnish report (to be published) recommend science communicators (1) to more explicitly dissociate scientific evidence from possible policy measures; (2) to illuminate the scientific process and communicate uncertainty. Research results that have not yet reached scientific consensus carry no authority (yet). But that message is easily lost.

My input is based on many sources that inspired or influenced me, among others:

- Antonio Gomes Da Costa, From Ear Candling to Trump: Science Communication in the Post-Truth World, (in Ecsite magazine)
- Julia Galef, Why you think you're right – even when you're wrong (TED talk)
- D.M. Kahan et al. Science Curiosity and Political Information Processing (Political Psychology)
- Iina Kohonen, Public science communication as part of the responsible conduct of research (slides on World Conference on Research Integrity)
- Andreas De Block, Wetenschappers moeten niet bluffen (De Standaard, 25-11-2017, p40-41)

Peter Van Roy

How the Internet amplifies threats to society and what to do about it

Today's Internet technologies greatly exacerbate threats to the healthy functioning of a democratic society. They enormously amplify the problems of alternative facts, i.e., false information, and echo chambers, i.e., where one only hears what one agrees with. The ease and rapidity with which any individual can disseminate their opinions and connect with others have never been greater, with the enormous success of social networks such as Facebook, micromessaging tools such as Twitter, and blogging software that allows anyone to publish anything. In the 1970s, the Internet was conceived by a community of idealists, who believed that an open and trusting environment would be to the benefit of everyone. Now we realize that this ideal was not realistic; that today many groups use the Internet as a terrain on which to battle ruthlessly to advance their own goals.

Organized misuse of the Internet takes many forms. Misinformation sites such as InfoWars continuously spout conspiracy theories and slander. Propaganda organizations engage in online influence campaigns using social networks. The ironically named Internet Research Agency is funded by the Russian government to undertake massive trolling campaigns and has successfully influenced the 2016 US presidential election and the UK Brexit referendum. Botnets (Mirai, Reaper, and many more) hijack large numbers of Internet-connected devices for DDoS (Distributed Denial of Service) attacks. Criminal organizations exploit security flaws to endanger citizens' private lives (identity theft, ransomware, theft of credit card numbers and medical histories, etc.). All these approaches are efficient precisely because the Internet was not originally designed to thwart them.

Internet technologies must urgently be updated to address these and other misuses. The foundation of a hypothetical new "protected Internet" is clearly strong cryptographic security, which is easily usable by all and unbreakable even for powerful organizations. However, that is only the first step. We urgently need to change the way that Internet collaboration works. For example, all email should be encrypted (most emails are still sent in cleartext), all news items should be digitally signed with provenance information (which defines the origin of the news), and user identities should be traceable to physical persons so that social networks can require physical identity if so desired. Sensitive information should be managed by its owner, instead of dispersed over large Internet companies (such as GAFAs). Some progress has been made, for example many Web sites now use the https protocol, which is a secure version of the http protocol that was designed to enable Web commerce. But this is by far not enough. We need to take urgent action to turn the tide.

Academic communities, in particular universities, can be pioneers in the effort to make a protected Internet by themselves adopting updated technologies and thus setting the example for others. Reputable sources of information can then follow and adopt these technologies as well. Readers will be able to verify that an article comes from the New York Times instead of from InfoWars. Social networks will be able to verify that a user is a physical person in Europe and not a Russian troll. Thus, we hope that the open Internet and its misuses will be relegated to a temporary period in Internet history.

Rachel Hoekendijk

Aren't we simultaneously facing some kind of crisis in the academic world as well ? What I have in mind when I ask this question concerns the valuations models of academic work or the mechanisms by which the funding is distributed. It appears to me that some thesis, some kinds of work, are de facto censored by not being funded, or by not finding a place in the literature, or by not fitting with the editorial slants of the journals in which one might want to publish in order to be read by the proper audience. Is the drive of scientific research really the quest of "truth" ? Or is it the quest of being funded next year, or fitting the expectations of one's University's staff ? Has academic research been transformed into nothing more than a career perspective, in which one will make the strategic choices that need to be made, and say what needs to be said, in order to have a job for the next following years (within the limits of intellectual honesty, obviously) ? What percentage of publications are relevant contributions to the academic discussion ? (And on the other hand, what percentage are simply a way to "not perish" in the academic world ?)

Now maybe you can hear in the depiction I am making the frustration of a young person that is disappointed in academia (like, I believe, quite fraction of the youth is) but I just can't unsee how academia isn't working properly, as an institution, and it concerns me. Could it be possible that academia has lost some of its authority because of these issues, that makes its voice just "one voice among others", also pressured by a neoliberal regime ?