

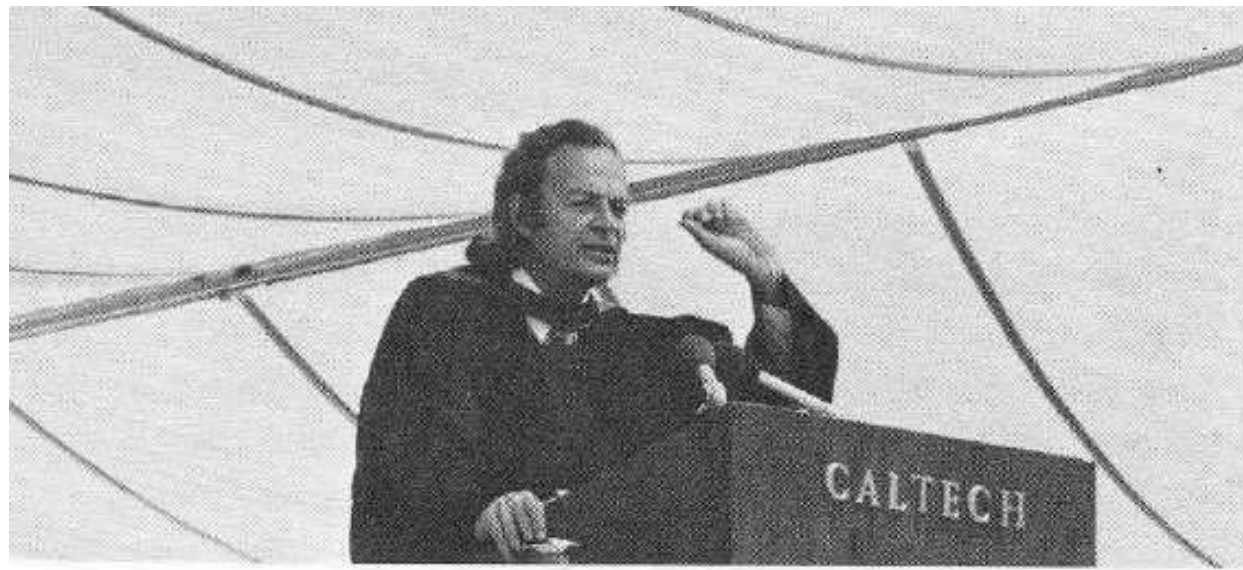
Ethics of quantification: Practicum

Andrea Saltelli

Centre for the Study of the Sciences and the Humanities
(SVT), University of Bergen (UIB), and Open Evidence
Research, Open University of Catalonia



MNF990 19H / Theory of Science and Ethics, Bergen,
Thormøhlens gate 51 (VilVite), Konferanserom CD,
September 12, 2019



Cargo Cult Science

by RICHARD P. FEYNMAN

**Some remarks on science, pseudoscience,
and learning how to not fool yourself.
Caltech's 1974 commencement address.**



“[...] there is one feature I notice that is generally missing in cargo cult science. That is the idea that we all hope you have learned in studying science in school [...].



It's a kind of scientific integrity, a principle of scientific thought that corresponds to a kind of utter honesty--a kind of leaning over backwards. [...] Details that could throw doubt on your interpretation must be given, if you know them. [...] give all of the information to help others to judge the value of your contribution.”

Search on your mobile/laptop CUDOS, select Mertonian norms (e.g. on Wikipedia) and answer the following questions

- 1) What norm has been described by Richard Feynman
- 2) Choose one among the four norms and offer
 - (i) one reason why we should follow it today,
 - (ii) one reason why we should NOT follow it today (two different students in the team to play the pros and cons advocates)

Communalism – the common ownership of scientific discoveries, according to which scientists give up intellectual property rights in exchange for recognition and esteem

Universalism – according to which claims to truth are evaluated in terms of universal or impersonal criteria, and not on the basis of race, class, gender, religion, or nationality;

Disinterestedness – according to which scientists are rewarded for acting in ways that outwardly appear to be selfless;

Organized Skepticism – all ideas must be tested and are subject to rigorous, structured community scrutiny.