EDITORIAL

Science Magazine in the Post-truth Era

In the debate between knowledge based on observable facts, with measurable, reproductible and verifiable data, which we call scientific knowledge, and personal beliefs, is the artificial word, post-truth. Post-truth, chosen by the Oxford dictionary as the word of 2016, is defined as "relative to circumstances in which facts have less of an influence in forming public opinion, than calls of emotion and personal beliefs." It is the information model used in propaganda media for proselytism and an easy way to quickly achieve objectives of mass influence. Post-truth is not new in human culture. It is now evidenced by the surge of access to popularized information. Opposing the strategy used by those who sell lies in order to find a strong footholds in personal beliefs, we have the scientific method: observation, hypothesis, corroboration, method for the study of nature.

The task is to achieve that people place value in facts, real data, reproductible and verifiable experiences, over their beliefs. It is a complicated topic because it requires method. That is, it requires a proposal to the general public to compare, in an orderly, sequential and logical manner, the popularized information it receives in a portable communication system, with several sources where files of observable actions, as well as data, are registered and verifiable, where models that enable behavior predictions will be generated. As such, science and technical magazines keep the file of human construction where there is no room for speculation, or the popularized abuse of the reader, because the facts reported therein must be observable, measurable, reproductible and verifiable.

In addition to requiring (and verifying) the originality of authors' articles, science and technical magazines have an editorial and scientific committee that qualifies the pertinence of the submitted manuscripts, the majority of which are sent to blind peers for evaluation. Even if an article passes this filter, it is still exposed to the most rigorous exam for content so that its information be verifiable. It will also subjected to the reading public, who, unable to tie themselves to personal beliefs, will need to use the scientific method to refute or validate a publication.

One cannot deny that data and evidence have been manipulated in science and technology in order to announce early withdrawals from research or development, but the scientific method, the tool of rigor, has revealed these falsehoods. That is to say that the strategy of post-truth (or rooted lies) does not prosper in science.

Scientific magazines will continue their vocation, despite the metrics of publishing companies and mass popularized information, in their labor of registering what the scientific culture has built so that others can access scientific knowledge beyond their personal beliefs.

Ricardo León Restrepo Arango Revista EIA