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Do Emotions Shape the Clever World of Scientific Stupidity?

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Abstract

An ordinary person can be stupid, but is it ever permissible for a scientist? This issue is quite uncomfortable because, as noted by Clifford Geertz, we seem to have the least tolerance for doubt in our abilities of comprehension. Let us leave aside all other kinds of stupidity and observe only the epistemological stupidity of a wise person defined by James Welles as the failure to gather and use information efficiently; therefore it is aided and abetted by self-deception. Hence, let us define scientific stupidity as epistemological stupidity occurring in scientific activities. Robert Sternberg emphasizes that stupidity is not merely a trait of personality but can also manifest itself in a person's activities. The status of a certain statement as evidence of stupidity or wisdom does not solely depend on facts: it seems, rather, to be a value judgment or emotional judgment, often given much later using new paradigmatic context. Francis Bacon's concept of *idola tribus* demands that the scientists should depart from their emotions. Antonio Damasio assures us that emotions are a part of scientific process. Therefore, it is quite possible that without scientific stupidity (in Bacon's sense), science as a creative process might be all but impossible.

Keywords

Bacon's idols, beliefs, emotions in science, stupidity, stupidity in science, religiosity in science, philosophy of science.

Alongside the secularization process in Western society, there is a growing demand for science to answer the questions that were formerly dealt with by philosophy and religion. Perhaps it is precisely the need to refrain from examination of existential problems which has brought the philosophers of science to a more accepting position regarding religion than they had half a century ago. This might become one of the motivators for initiating and continuing dialogue between science and religion. As there are no other authorities left to turn to, scientists nowadays are obliged to know the order of things in the world in the firmest and most exact way.

Yet from the experiences of my colleagues and myself, I can affirm that the questions presented to scientists by the general public force them to leave their comfort zone in their chosen scientific disciplines. Thus it may happen that a scientist presents metaphysical views that are based on their personal worldview. Where a devoted and true scientist would feel themselves perplexed by this, a professional science propagandist might be better suited to answer the grand expectations of the public. For them, it is evident that in the interests of truth a little lie might also be acceptable, i.e. not telling the whole truth at once. That's how things are presented, often involuntarily, both by scientists, when they step up as metaphysicians, and by propagandists, when they step up as scientists. Evidently, we have to distinguish between the scientist as a scientific researcher and the scientist as a human being, because as a person, they might know things in a different way than as a researcher. On a closer look, we see this distinction is also relevant within the boundaries of science.

Modern philosophy of science has withdrawn the demands that science should seek after ultimate truth, and that scientists should be constantly wise (van Fraassen 1980: 12). It is rather expected that science should present information that is objective and useful either actually or potentially. In scientific activities, one has to follow the rules that were partly set by Francis Bacon in his "Novum Organum". Along with his rules for scientific research, he also formulated the idols that prohibit a scientist from doing decent science. Idols of the Tribe "have their foundation in human nature itself, and in the tribe or race of men": these are the perceptions, and the human understand itself that "distorts and discolors the nature of things by mingling its own nature with it". Idols of the Cave "are the idols of the individual man …owing either to his own proper and peculiar nature". Idols of the Market Place exhibit the power of language on our thoughts, these are mostly revealed in our communication, or as Bacon says, "commerce and consort". Idols of the Theater are born from "various dogmas of philosophies, and also from wrong laws of demonstration" (Bacon 1620: Book 1, §§ 38–44).

With his four idols, Francis Bacon presented inhuman demands to scientists: to separate their scientific thought from their being human, individual, communicative, and having a theoretical background. On the other hand, these demands have proven themselves in the scientific tradition. It seems that if a scientist wants to be successful in their profession, they have to be inhuman as a scientist. As science is still conducted by human beings, we have to differentiate between a scientist as a person, living their life as humanly possible, and a scientist as a scientific researcher. A human being cannot do science all the time, just as divers cannot spend their whole lives under the water. A diver differs from a layperson by being able to work under water, and a scientist differs from a layperson by being able to work in science; but in their private lives, both have to stay human. (Perhaps that's why many scientists in all kinds of commissions and councils are standing out by their parvanimity, ineptitude, and dogmatism.)

Amongst Bacon's idols, we might be most interested in his concept of Idols of the Tribe, which demands that amongst other aspects of "all perceptions as well of the sense as of the mind", scientists should set aside their emotions. If this is a mistake, it is quite close to "Descartes' error", as analyzed by A. R. Damasio (1994).

The qualities that give a person the ability to function as a successful scientist are, in common thinking, associated with larger-than-average intellectual capacities: in other words, with wisdom. The general public insists that scientists must be wise, so they are punished with a lifelong slavery to wisdom. An ordinary person can be stupid, but is it ever permissible for a scientist? This issue is quite uncomfortable because, as noted by Clifford Geertz (1993), we seem to have the least tolerance of doubt in our abilities of comprehension. We have an intellectual allergy to being shown to be stupid, and this seems to be present also in the context of science, especially concerning our scientific stupidity. As has been asserted by the author of a presentation at the last ESSSAT conference, (quasi)religiosity, which is inherently immanent in science, can be viewed both as scientific stupidity and as an impelling power (Kasak 2014). Unfortunately, our intellectual allergy tends to mask (quasi)religiosity in science, which is why scientists cannot recognize its influence.

Defining stupidity is partly hindered by the intellectual allergy to this term, best demonstrated by the history of science and philosophy. There is a tremendous number of books and articles on wisdom, but very few adequate systematic discussions of stupidity. There is no such discrepancy in the oppositions between beauty and ugliness, honesty and dishonesty, etc.

Another obstruction has been shown by J. Welles in his study of stupidity: the field of meaning of the term "stupidity" is so wide that comprehensive definitions tend to be empty (Welles 1986). Similar problems are met in defining all widespread and overburdened terms, like "myth" or "love". It is possible to construct a working definition, though, if we restrict the field of meaning only to the aspects interesting in the context of our field of study. Hence, let us leave aside all other kinds of stupidity and observe only the stupidity of a wise person which is not necessarily contrary to wisdom. Of course there are other kinds of stupidity in science but these are not intrinsic to science. This wisdom-compatible stupidity, on the other hand, is ubiquitous in science.

In its expression, scientific stupidity can be seen in two aspects: social and epistemological. Social stupidity has been defined by C. Cipolla as one's habit to cause losses to another person or to a group of persons while deriving no gain for oneself and even possibly incurring losses (Cipolla 1988). Epistemological stupidity has been defined by Welles as "the failure to gather and use information efficiently and [it] therefore is aided and abetted by self-deception": this question has been discussed in length by G. Livraghi (2010). As shown by Mary Midgley (1992), scientific ideology has tried to play the role of religion and proven itself notably stupid (after Cipolla's definition). All in all, we can define scientific stupidity as the epistemological stupidity evident in scientific activities.

Here, we have to pay attention to a widespread misunderstanding. Usually people think of stupidity as a personal trait that enables us to place it at a certain point on an imaginary scale of stupidity, comparing stupid persons to other people. Concerning scientific stupidity, however, this conception definitely does not work. As R. J. Sternberg has stressed, stupidity is not merely a trait of personality but rather a quality of peoples' actions, including the demonstration of knowledge. Throughout the history of science, we can indeed find a lot of scientific stupidity related to the most outstanding scientists, including Isaac Newton and Albert Einstein. The status of a certain statement as evidence of stupidity or wisdom does not solely depend on facts: in general it rather seems to be a value judgment or emotional judgment, often given much later on the basis of a new paradigmatic context (Sternberg 2003). If we equate knowledge with wisdom, we are bound to repeat our mistakes. In realizing that, we also do a lot to ease our intellectual allergies.

Antonio Damasio (1994) assures us that emotions are a part of scientific process. Therefore, it is quite possible that without scientific stupidity (in the sense of Bacon's Idols of the Tribe), science as a creative process might be all but impossible. It might very well be that emotions, indeed, do shape the world of scientific stupidity.

During research, a scientist should be able to get over their intellectual allergy to their own stupidity. Maybe we should add another idol to those of Bacon: an idol of seeing oneself as wise. As with the four idols of Bacon, getting rid of this would be inhuman, but it might still be necessary to conduct creative science successfully.

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