Why trust scientists?

Szabó Dorottya

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Wonder implies the desire to learn. Aristotle

A number of surveys, conducted in the aftermath of COVID19, have found that levels of trust in scientists are moderately high worldwide, although there are significant differences between countries. As the largest global survey reveals, scientists are perceived to have a high level of expertise, moderate integrity and benevolent intentions. Although with a different research focus, the 2024 edition of the Edelman Trust Barometer also found that trust in scientists is high relative to government leaders or CEOs, making them expected to lead the implementation of innovations.

The role of scientists in our knowledge-based socio-economic systems characterized by more and more disruptions and challenges is therefore expected to become increasingly important. But what guarantees the perceived integrity and benevolence of scientists? Can they remain politically neutral in a highly polarized world?

"Awe as a scientific emotion"

In his book, Awe: The New Science of Everyday Wonder and How It Can Transform Your Life (2023), Dacher Keltner summarises decades of research and outlines a scientific approach to awe. In his research, Keltner explores not only the origins of this emotion, but also its impact on our broader emotional state, our mindsets, our health and our relationships with others. Keltner suggests that awe is an emotion induced by something vast that feels difficult to comprehend, and this feeling stimulates the processes of accommodation, in which we reconstruct our mental structures in order to be able to grasp the phenomenon that left us in awe.

In one of the <u>studies</u>, Keltner and his colleagues investigated the association between awe-proneness and scientific thinking and beliefs about the natural world. They found that people who experience awe more frequently tend to show a more nuanced understanding of scientific knowledge. Moreover, awe seems to lead to the rejection of scientifically questionable teleological explanations about our natural world, but this doesn't result in a scientific hubris or in a dogmatic belief in science and its supremacy over other ways of rendering truth about reality.

This result is in alignment with other pieces of <u>research</u> which conclude that awe tends to lead to more systematic cognitive processing. Uncertainty and longing for understanding are believed to be the binding feelings behind this relationship.

These studies suggest that people with scientific curiosity are generally more prone to experience awe. Since the studies could only reveal correlations and not causality, the nature and direction of this relationship is not straightforward. Awe can inspire scientists to investigate the world around them, but a more sophisticated understanding can also lead to the experience of awe, potentially resulting in a virtuous circle. In any case, understanding the natural world often requires scientists to reform their mental structures that frame their cognitive processing.

Awe and tolerance towards other's opinions

Awe doesn't only enable people to better understand scientific knowledge, but it also leads to increased humility and awareness of belonging to communities and social networks. Relying on these earlier findings, in another sutdy, Keltner and his colleague investigated the relationship between awe and ideological convinctions. Their results suggest that experiencing awe can lessen convinction about one's ideological attitudes and enhance tolerance towards people with whom they disagree.

Considering that scientists have an increasing responsibility in providing explanations of different global challenges and show potential pathways towards the appropriate solutions for them, their political neutrality in their profession is essential. It's fundamental not only per se, but also because it's a cornerstone of actually earning the trust that citizens place in them.

Although scientific activities are inherently embedded in socio-political systems and exposed to power structures, the aformentioned studies demonstrate that the psychological processes that often accompany scientific thinking can increase respect not only for the mysteries of our natural world, but for social communities and other's perspectives, too. This can potentially assure us of scientists' humility and ideological or political neutrality.

In a polarized world where we need unification and integration more than ever in order to cope with the global challenges we face, awe-induced (scientific) curiosity can help to pave the way for a better understanding about our natural world, as well as for more tolerance towards others' opinions.