Skepticism and science : a risky relationship

Skepticism toward science : a slippery slope (6)

From climate denial to flat-earth advocates/proponents , conspiracy theories and ~~the~~ distrust toward scientific knowledge/evidence ~~that they feed/fuel~~ ~~are on the rise~~ / are gaining ground. This phenomenon is illustrated by Harry Dyer’s testimony published in livescience.com in May 2018 about the Flat Earth Convention he attended in the UK and in a more humorous tone/approach through a conversation between two characters of the American sitcom Friends – Phoebe and Ross – who discuss the theory of evolution, while a column written by Cynthia Leifer, a professor of immunology in Pacific Standard in 2015 about the role of doubt in science together with a 2010 cartoon from The Philadelphia Inquirer point at the potential dangers of such theories. How far can skepticism toward science go before it becomes hazardous for society ? (119)

As the ~~multiplication of~~ flat-earthers convention(s) ~~such as the one~~ Harry Dyer attended exemplifies, a swelling number of people are getting skeptical toward science. Cynthia Leifer quotes a poll revealing that, like Phoebe ~~the layperson~~ who challenges Ross the scientist on the veracity of the theory of evolution , 40% of Americans do not believe in evolution ~~or in man-induced climate change~~, as well as influential people such as senator and ex-surgeon Rand Paul who relay that skepticism by for example questioning vaccines efficiency. They all claim ~~that~~ they are entitled to having a different opinion, however well-established those theories are – an idea illustrated on the cartoon where a teacher pointing at names of unquestioned scientific theorists opposing various conspiracy theories, addresses his pupils saying they can opt for whatever they want. In fact, as H. Dyer explains, what these people distrust or what Phoebe challenges by reproaching Ross with imposing his ideas, is the power scientists ~~and scientific institutions~~ bestow on themselves by controlling scientific knowledge. However today challenging this link between centralized knowledge and power, already described by philosopher Michel Foucault in the 20th century, is made possible thanks to social media where competing ideas ~~can~~ emerge and go viral. 181

Actually, neither scientists nor conspiracy theorists deny the importance of doubt in science. Leifer is adamant : (~~makes it perfectly clear when she states that doubt)~~ doubt is indispensable insofar as it spurs scientists to further investigate scientific discoveries in order to either confirm or debunk them ~~when they are false~~. She names Galileo who, because his discovery was doubted by his contemporaries, spent his whole life collecting evidence to prove his theory right. Even the flat-earthers Dyer has met insist on ~~the value of experiment and~~ ~~on~~ the necessity to accept one might be wrong. Phoebe defies Ross over his truth-holder arrogance, reminding him that without doubt, many discoveries deemed as undeniable/irrevocable facts/truths today would never have been possible. Therefore as Leifer and the cartoon suggest, being open-minded and accepting doubt is a healthy attitude. 117

However unreasonable doubt may have far-reaching consequences. Indeed as Leifer argues, for influential persons like senator Paul to consistently allege that vaccines may cause autism can obviously be harmful for citizens’ health. But she also insists that ~~denying and~~ not teaching proven facts like the theory of evolution or climate change can deprive entire generations of the scientific knowledge required to fully understand the stakes and advances of society – which may also result from teaching children that those theories are as valuable as conspiracy theories as Tony Auth’s cartoon suggests. For indeed when flat earthers, Phoebe or educators challenge irrefutably proven scientific truths and prioritize emotions over reason, they instill doubt in people’s minds over undebatable truths, and such skepticism opens a slippery slope from healthy doubt to harmful distrust that may dangerously undermine social cohesion. 132

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