# Article information:

Scientific Progress (Stanford Encyclopedia of Philosophy/Winter 2019 Edition)
<https://plato.stanford.edu/archives/win2019/entries/scientific-progress/>

# Article summary:

1. Science is often seen as progressive, with clear standards for identifying improvements and advances.

2. The traditional view of cumulative scientific progress has been challenged by philosophers of science.

3. Different aspects of progress in science can be distinguished, including economical, professional, educational, methodical, and cognitive progress.

# Article rating:

Appears strongly imbalanced: The article is written in a biased or one-sided way, and the information it provides is not trustworthy enough to be considered a reliable source. You should consult other sources to find reliable information on the presented issues.

# Article analysis:

The article "Scientific Progress" provides an overview of the concept of progress in science and its various aspects. While it offers valuable insights into the historical development of scientific knowledge and different philosophical perspectives on progress, there are several areas where the article could be improved.

One potential bias in the article is its focus on the views of philosophers of science, neglecting other perspectives such as historians or sociologists of science. This narrow focus limits the discussion and may lead to a one-sided representation of the topic.

Additionally, the article makes unsupported claims about the nature of progress in science. For example, it states that there exist clear standards or normative criteria for identifying improvements and advances in science, without providing evidence or examples to support this claim. This lack of evidence weakens the argument and leaves readers questioning the validity of such assertions.

Furthermore, the article does not adequately address counterarguments or alternative viewpoints. It presents a traditional cumulative view of scientific progress but fails to engage with criticisms or challenges to this perspective. By ignoring opposing arguments, the article misses an opportunity to provide a more comprehensive analysis of the topic.

Another issue is that some important considerations are missing from the discussion. For instance, while the article briefly mentions social and cultural values influencing scientific development, it does not explore these factors in depth or consider their potential impact on progress. This oversight limits our understanding of how external influences shape scientific knowledge.

Moreover, there is a lack of empirical evidence supporting many claims made in the article. While it references numerous philosophical works on scientific progress, it does not provide concrete examples or studies that demonstrate these ideas in practice. Including empirical evidence would strengthen the arguments presented and make them more convincing.

The article also contains promotional content for certain philosophical frameworks, such as Popper's falsificationism and Kuhn's theory of scientific revolutions. These frameworks are presented as if they offer definitive answers to questions about progress in science without acknowledging their limitations or potential criticisms. This one-sided presentation undermines the objectivity of the article.

In terms of risks, the article does not adequately address potential risks or drawbacks associated with the concept of progress in science. It focuses primarily on the positive aspects and benefits of scientific progress without considering potential negative consequences or ethical considerations. A more balanced discussion would provide a more nuanced understanding of the topic.

Overall, while the article provides a useful overview of different perspectives on scientific progress, it suffers from biases, unsupported claims, missing evidence, and a lack of engagement with alternative viewpoints. By addressing these issues, the article could offer a more comprehensive and balanced analysis of the topic.

# Topics for further research:

* Social and cultural influences on scientific progress
* Criticisms of the cumulative view of scientific progress
* Ethical considerations in scientific progress
* Empirical evidence for progress in science
* Alternative perspectives on progress in science (e.g.
* sociological or historical)
* Limitations of Popper's falsificationism and Kuhn's theory of scientific revolutions

# Report location:

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