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Seeds of Science

Peer Review Comments on *Seeds of Science* articles (2022-2023)

Payal B. Joshi[1]

Reviewed articles (links to comments below)

1. What are the Red Flags for Neural Network Suffering?
2. Will general antiviral protocols always be science fiction?
3. Why Proposal Review Should Be More Like Meteorology
4. The Muscle-Readers, a Historical Sketch
5. How to Escape From the Simulation

1. What are the Red Flags for Neural Network Suffering? (article)

- Authors: Marius Hobbhahn and Jan Hendrik Kirchner
- Date: September, 2022

The seed is based on an intriguing premise of our understanding on neural networks in terms of pain and suffering. While most of the scientific literature describes machine learning and thinking, little has one given a thought on pain and suffering too. Human-assisted machines are our future and hence this seed taken us on this less-traversed path. The seed has justified its stance in terms of nociception which is interesting for gardeners who work on artificial intelligence. This brings to the fore about pain stimuli and other facets while discussing Human-AI interactions. Quality of writing is lucid, narrative yet defining, giving a new vertical to the discussion on neural networks. Finally, an interesting perspective on why neural networks may suffer is brought out succinctly. An interesting podcast by Ajeya Cotra on biological anchors is cited precisely and I, as a gardener learnt something new while reading the seed's ideation. Overall, I am thrilled to read, review and even learn from this perspective-based text.

[1] Director and Head, Shefali Research Laboratories

2. Will general antiviral protocols always be science fiction? (article)

- Author: Rick Sheridan
- Date: December, 2022

The paper is written in an intriguing manner and the topic is relevant in today's time resonating with our quest for antivirals. I believe the article is presented in an insightful manner. Of particular bits that I instantly loved about the article are 1) Shimoi's mechanism and 2) calling polyphenols "stick" (yes, indeed). I highly recommend the publication of this article.

3. Why Proposal Review Should Be More Like Meteorology (article)

- Author: Roger's Bacon
- Date: May, 2022

The premise of peer review as a forecast seems amusing. It is believed that most of them "free" their time to review grants & manuscripts, I think this may work well. Authors could have structured this article in a slightly better manner as the methodology of applying it is not quite clear. How do you propose forecast-based review? Provide a clear example in a lucid way to put across the idea. Overall, the idea may not be pathbreaking, yet has no potential flaw & certainly deserves to see the light of the day

4. The Muscle-Readers, a Historical Sketch (article)

- Author: Leverage Research
- Date: January, 2023

The article is well-written and is found consistent with the theme. Though no major flaw is seen in the article, there are some concerns with the article in the present form. The title needs to be revised to reflect the exact tone of what the author/s wish to deliver to readers. As the genesis of the article lies on historical perspectives, Carl Hertz works on muscle reading perspective is missing. The historical works on mentalism with magic by D. Blaine et al, Dunningher and Kreskin are missing. Overall, the reading displays a linear growth of the mental-reading field which is certainly not true, given the number of Leverage Research (February, 2023) 13 of 16 Seeds of Science mentalists and muscle-readers of that time. The application of muscle reading utilized on famous personalities and sports persons are not provided. Overall, the article is certainly publishable, however, it needs crucial historical details to not be left behind.

Author Response: *We certainly acknowledge that the article is, at most, a cross-section of history. Viewed in its entirety, the story of muscle reading more closely resembles a delta of crossing streams than a linear series, and much has been set aside for reasons of space. Building the research out would, as Dr. Joshi notes, necessarily involve more discussion of muscle readers like Hertz and the practice of stage muscle reading, and we hope that more work will be done in the area.*

5. How to Escape From the Simulation (article)

- Author: Roman Yampolskiy
- Date: March, 2023

The article is presented in a surreal manner that is deviant from the regular way of communicating author/s thinking. It comes across that this article can be a potential movie plot, if not a groundbreaking notion on simulated life. However, it is too long as an article, thus it is suggested to revise or skim sections on escape scenario quotations from Hans Moravec (1988), Eliezer Yudkowsky (2008) and An anonymous 2014 post to extract the crux of the matter. If skimming/reducing is not plausible, add it as a figurative material that makes it an engaging read. Section 3.5 on Suggested Escape Approaches to Investigate is again too lengthy as a read and can certainly be made interesting by including a clear, concise statement. Either reduce references or add interesting ideologies on escape routes pertaining to this section. I particularly liked sect. 4 and 5 where AI containment is well described, though I partially agree on the premise of cybersecurity as depicted by the author/s. It is farcical to expect with advanced computing power and AI we can retain security. It is true that cybersecurity is imperative, yet the solution provided is flawed that talks about penetration targets. The article in its present form is only acceptable if it is made succinct and shorter with 1-2 more interesting figures/cartoons to describe simulated life or any other facet described therein.