

READERS' FORUM

Journal editors should take note of the resounding success of the far more equitable arXiv. You do not have to pay to publish. You do not have to pay to read it. And there is no referee. Some junk gets posted, sure, but at least the reader can decide what is junk.

Anonymous peer review is not a bedrock scientific and Enlightenment principle. The Enlightenment and the science it birthed valued fairness, equality, free inquiry, and openness, not anonymously blessed publications hidden behind paywalls.

The current system needs to be examined critically. I believe in the antiseptic properties of sunlight, and I think all peer reviews should be made public. We need a broader discussion about the meaning of peer review. And I think having a single referee is far worse than two, three, or even none.

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► **Baldwin replies:** Yves Gingras is right

that we ought to distinguish the modern peer-review system from the more general idea of having colleagues give opinions about a book or paper. Because my focus was on tracing the origins of the former, I do think it was legitimate to highlight William Whewell's innovation. However, perhaps it would have been better, and more precise, to say that Whewell was "arguably the inventor of systematic refereeing."

The term "peer review"—itself a creation of the 20th century—is so weighted with modern connotations that I think historians must be cautious when bestowing it on practices from the past. I agree with Alex Csiszar that the internal approval practices of 17th- and 18th-century scientific societies were significantly different in both form and purpose from modern refereeing, in part due to the dramatic changes in scientific publishing that took place in the 17th through 19th centuries.

Gathering such a wide range of practices under the umbrella of "peer review" seems misleading to me, and it risks creating the false impression that the refer-

eeing system has been a consistent part of science since the Scientific Revolution. My hope, in the article, was to show that the story is much more complicated.

I regret not mentioning Lewis Pyenson's excellent article on Planck's work at the *Annalen der Physik*, and I recommend it to PHYSICS TODAY readers.

For Vitaly Matsarski's question, I consulted a handful of fellow historians but was unable to confirm the story about Wolfgang Pauli. I would welcome further correspondence on the subject.

Finally, Peter Williams's letter is not the only one we received that expressed frustration with the current workings of the peer-review system. As historians work to write a more complete and nuanced history of peer review, one hope I have is that past changes in refereeing practices might shed light on how the process can change in the future to better serve the scientific community.

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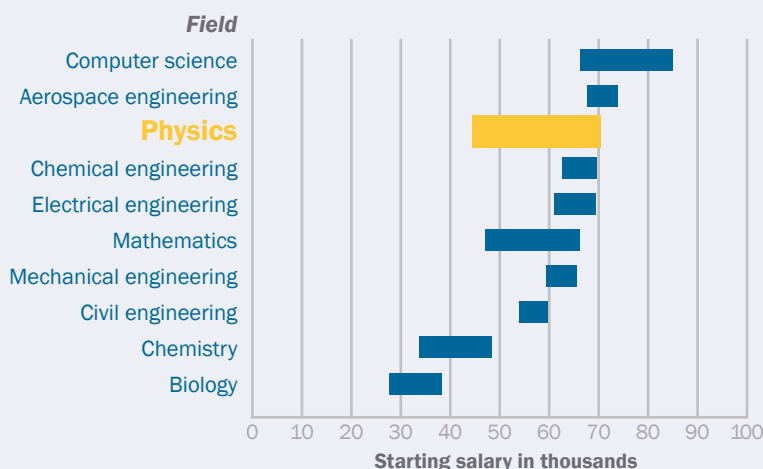
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