

# Review of: "Objectivity and Honesty in Science: The case of Light Interference Phenomena"

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The article analyses the debates on light propagation in the early 19th century through the angle and the history of emotions. The author aims to demonstrate the impact of factors exterior to science in adopting or rejecting scientific theories.

The paper is well-researched and relies on a relevant body of unexploited primary sources. The author is also proficient in the technical aspects of the theory she discusses.

There are, however, several aspects of this paper that need to be improved to make it publishable in a reputable academic journal:

- The article lacks a discussion of the existing historiography on the topic. The consistent historiography concerning the history of emotions (in general and in their relationship with the history of science) must be discussed to introduce the article's theme properly. The existing literature on the sociability of intellectuals must also be considered and discussed to point out the contributions the article aims to bring. The author should also consider existing studies on scientific disputes (none is mentioned in the paper).
- The research question must be clearly defined, and its relevance must be stated. The paper seems to multiply the research questions (quote: "Why was Young attacked in Great Britain? Was it really for scientific reasons? Could he have convinced French scientists by himself, without Fresnel's help and Arago's implication? Was their correspondence fruitful? Did it allow to establish a faithful collaboration between those physicists? Did it lead to Fresnel's fragile success? What were Arago's role and interests? Why were both protagonists, Young and Fresnel, if not totally forgotten for decades, not praised? And, why were their works published much later?"), which is not conducive to the clarity of the article's purpose.
- The paper's organization must be revised. The text presents too many sub-sections that could be more usefully regrouped into a few bigger ones. The choice of subheadings also needs to be reworked to highlight each subsection's points of interest.
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- Several comments sound naïve (e.g., the author's astonishment at the multiple competencies of Thomas Young at a

time when being a polymath was not unusual; or the surprise for him not being isolated from society, which seems to refer to a stereotypical image of intellectuals being solitary persons while history shows that quite the opposite used to happen)

- The correspondence's content analyzed in the paper should be assessed appropriately and not reduced to exclamations.
- The critical assessment of the correspondence should generally take more room. The article as it is primarily descriptive and does not demonstrate with a sufficient degree of evidence the impact of non-scientific factors on the adoption or rejection of a theory.
- The language must be improved, polishing it from formulations that are not appropriate for an academic paper and getting rid of inaccuracies (e.g., the use of capital S is not consistent)