

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

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Potential competing interests: No potential competing interests to declare.

This article fascinated me. I'm not a science historian, so I have no comments on the methodology.

The author sheds new light on this key moment in the history of optics. Here are some remarks:

- 1. Young opposed Newton's approach. He did so very cautiously, even taking up the results described in Optics (Newton's rings). We can imagine that this position was much more difficult to adopt in Newton's homeland. Have you found any evidence of this?
- 2. As for Fresnel, I find it hard not to mention his opposition to Napoleon during the Hundred days and his obligation to stay in his mother's house. This constraint ultimately benefited his understanding of the wave phenomenon of light.

  This episode is sometimes compared to Newton's forced and highly productive stay at Whoolsthorpe in 1666.
- 3. Concerning Arago, the author states that "he had his own career to pursue and had no intention of taking part in the controversy. He supported Fresnel but didn't dare give his own opinion". I find this point insufficiently substantiated. Can't we imagine Arago sincerely supporting Fresnel, and not taking part in the controversy simply because he recognized Fresnel's competence on the subject? He was much more interested in questions of photometry and polarimetry. I'm not denying Arago's possible strategic positioning in relation to his own career. But Arago went on to successfully unite all French scientists, marking a kind of golden age. He therefore accepted to put his career at the service of others, and tried to recognize the contributions of each.
- 4. The author shows that there is clearly an ambiguous and hypocritical game going on between French and English scholars. It would be interesting to recall the context of scientific relations between the two countries at the very beginning of the 19th century.

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