

Panel: Panel: Art and Optics: The Hockney/Falco Thesis

Paper/Panelists:

"The Hockney/Falco thesis: Can a bold idea rewrite history?"

Amy Ione
Director, The Diatropo Institute
Email: ione@diatropo.com

"Did the Renaissance masters paint by eye? An analytic appraisal"

Christopher Tyler
Associate Director, Smith Kettlewell Eye Research Institute
Email: cwt@ski.org

"Art, Optics and History: New Light on the Hockney Thesis"

Michael John Gorman
Lecturer in the Program in Science, Technology and Society Stanford University
Email: mgorman@stanford.edu

"Optical rebuttals to Hockney's explanations of "opticality" in early Renaissance painting."

David G. Stork
Ricoh Innovations and Stanford University
Email: stork@psych.stanford.edu

Panel Abstract:

David Hockney's claim that he has rediscovered a lost trade secret of art's grand painters has been buttressed by Charles Falco's assertion that he has proved the Hockney thesis scientifically. Both the claim and the 'proof' have incited much controversy and the responses touch upon a broad range of topics. Indeed, the ensuing debates are particularly striking in the way they have encouraged those of diverse disciplines to look closely at areas normally outside their parameters. Scientists are considering the way paintings are constructed and art historians are re-examining the research done to date on the discovery of a number of optical devices. Additionally, interested parties have been looking at mirror images with a new fascination, even asking how concave and convex mirrors are crafted. As we re-evaluate the veracity of paintings the challenges multiply. Can we determine whether the structure of complex three-dimensional forms were traced and whether 'secret methods' lurk behind the illusionistic shadows and reflections that we see? From the excitement of the debates, these questions do not appear to be trivial questions.

This panel will discuss some topics at the core of the debates. In closely evaluating the Hockney/Falco thesis each of the four scholars will focus on one of the vantage points now being explored and place their work in the context of the larger debates. All have been at the forefront of these discussions and thus have been involved in formulating some of the responses to key ideas contained within the thesis. The session is intended to resolve some issues and stimulate further debate. As such, after each panelist presents work related to the Hockney/Falco thesis, we will allow time for audience reactions and for their participation in the discussion.

Panelists: David Stork and Christopher W. Tyler, two scientists, will expand on work they presented at the [Art and Optics Symposium](#) in New York City. This event, organized by the NY Institute for the Humanities was the public forum at which Hockney and Falco first presented their ideas to a large audience. Prof. Stork will consider the plausibility of the optical claims of the proponents, while Dr. Tyler will analyze the difficulties of the specific pictorial evidence that they offer. Michael John Gorman, a historian of Science, will speak on the optical history and sources included in the Hockney/Falco thesis. Amy Ione will provide an evaluation of the diverse responses of artists and art historians to this radical thesis.

Paper Abstracts:

"The Hockney/Falco thesis: Can a bold idea rewrite history?"

Amy Ione
Director, The Diatropes Institute
Email: ione@diatropes.com

Since the emergence of the Hockney/Falco thesis there have been a number of responses from within the art community. Some have asked "Did they Cheat?" and others have answered that artists have always used devices. Within this context a greater awareness of how artists work has surfaced. Looking at the evidence presented by scientists, the contributions of artists, and research by historians of both art and science this paper will consider whether a bold idea can rewrite history.

"Did the Renaissance masters paint by eye? An analytic appraisal"

Christopher Tyler
Associate Director, Smith Kettlewell Eye Research Institute
Email: cwt@ski.org

Hockney and Falco claim that the 'optical look' appeared in paintings after about 1430 because artists began using optical projection in restricted regions, offering evidence of multiple local vanishing points in many Renaissance paintings. Careful evaluation reveals that even the local perspective is incoherent in the cited paintings, implying composition purely through artistic intuition rather than optical aids (or accurate geometric methods). Moreover, the narrow depth of field of available optical devices should imply a wealth of out-of-focus regions. No Renaissance paintings exhibit this literal optical look.

"Art, Optics and History: New Light on the Hockney Thesis"

Michael John Gorman
Lecturer in the Program in Science, Technology and Society Stanford University
Email: mgorman@stanford.edu

Based on an analysis of sixteenth century optical writings, especially the works of the Neapolitan magician Giambattista della Porta, this paper will consider the Hockney thesis from the point of view of the history of science and technology. Did the projective system described by David Hockney and Charles Falco exist? If so, when was it created? What optical devices were really available to artists in the fifteenth and sixteenth centuries? Rather than suggesting that artists never used optical instruments of any kind, my goal is merely to understand what optical experiments artists may plausibly have made at a particular historical moment.

"Optical rebuttals to Hockney's explanations of "opticality" in early Renaissance painting."

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Ricoh Innovations and Stanford University
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We explore the technical optical grounds for the Hockney/Falco projection hypothesis in their

avored Renaissance paintings, including works by van Eyck, Lotto, Campin, and de la Tour. We also consider Giambattista della Porta, who gives us the first textual record of such image projection, and whether his contemporary Caravaggio might have used such a method. Our analysis of constraints in illumination, studio setup, focal lengths, color, brushstrokes and alternate explanations leads us to agree with the vast majority of published reviews of Secret Knowledge that proponents' claims for "proof" of the projection hypothesis in the early Renaissance are unjustified.