

Advances in 20th century history and philosophy of science as well as modern physics call for serious rethinking of the still dominant logico-mathematical histories of successful inquiry. Kuhn's conceptual 'revolutions' undermined the simplistic logico-mechanical notions of both scientific method and axiomatizable knowledge. Quantum theory forces us to a post-mechanical, participant framework and suggests a very different understanding of the history of successful inquiry. Earlier, Lazare Carnot, noting that 'rational mechanics' could not make sense of engineering practice, developed a post-mechanical, participant framework. Our reconsideration favors a participant engineering understanding of both quantum theory and the history of successful inquiry.