Thomas Young Polymath

The Law of Interference

I have found so simple and so demonstrative a proof of the general law of the interference of two portions of light . . . that I think it right to lay before the Royal Society a short statement of the facts which appear to me so decisive.¹

Thomas Young, Bakerian Lecture (1803)

The decision in 1798 by the executive committee of the French Revolution, known as the Directory, to send an overly ambitious general to the far end of the Mediterranean Sea to conquer Egypt like Alexander the Great, was the unlikely link among a set of epic discoveries that changed the course of science. One of these discoveries was the most famous linguistic decipherment in history. Another was the most important theorem in the mathematics of functional analysis. Joining these were discoveries that exposed the nature of light. All of these took place over the decades following the invasion, but they were connected, like the threads of a cobweb, to the fateful decision by the general to comply with the Directory's wishes.

Napoleon Bonaparte, the general in question, had his eyes on Egypt and the Middle East with a plan to sever Britain's ties to India, but his ambitions were more than military. When he