LEN BERGGREN, Simon Fraser University

Currents and counter-currents in the history of mathematics in medieval Islam

Among recent changes in approach to history of mathematics in medieval Islam are: a widened definition of 'mathematics' to include its applications to such religious duties as the times and direction of prayer and taking mathematical instruments as serious witnesses to mathematical activity; an argument that in medieval Islam theory informed and supported practice to a much greater degree than in ancient Greece (*e.g.*, in arithmetic, architecture and astronomy); a role for Babylonian mathematics in the origins of Islamic algebra different from what has been supposed; a close study of the mathematical achievements and interactions of a number of individuals; understanding the history of an area such as magic squares which seems unrelated both to much of which came before it and (for some centuries) to any social context. We shall conclude with a consideration of the motivations of medieval and Renaissance Europe for their acquisition of medieval Islamic mathematics and how such motives affected what material was selected for acquisition.