For the 'Visual Cognition in the History of Science' Symposium

To be held at the XXIII. International Congress of History of Science and Technology
Budapest, Hungary, 28th of July – 2nd of August, 2009

The scientific studies of science have, in the last decades, emphasized the diversity, richness and complexity of scientific practices. In this context, where people are departing from the initial restrictive focus on language, the role of visualization in science appears to be pervasive. Scientists look at the result of their experiments, they produce images and graphs for thinking about the phenomena they investigate and they communicate to their peers with visual artifacts. Tools for the generation of images, ranging from multiple types of microscopes and telescopes to computer generating graphs and 3D pictures, are constantly being developed and are often fully incorporated in scientific practices. Scientists and mathematicians often generate, interpret and manipulate them as part of their scientific work.

Why is visualization so pervasive in scientific practices and thought processes? What does visualization enable scientists to achieve? What epistemological status is given to visual representations and visualization? Does this status change over time and across disciplines and why? Visualizations are cognitive processes using or producing visual representations. How do the specifics of these processes influence scientific practices and, perhaps, scientific content? Does specifically visual scientific cognition contribute to shaping the history of science?

We hope to find answers to such questions by means of case studies of visualization in science analyzed from sociological, anthropological, philosophical, historical or cognitive perspectives. We invite interdisciplinary studies describing the scientific practices of image production, interpretation and manipulation. We would especially welcome studies that provide insights into the cognitive bases of visual scientific practices and that are informed by studies in cognitive psychology.

Submission:
Please send an abstract of your talk to one of the organizers listed below. Submissions should include in that order: authors' names and affiliations, the title of the talk, keywords, and an abstract of less than 300 words.

Submission deadline: December 10th, 2008

Organizers:

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