

Seminar SAW
**Seminar Exploring 19th and 20th centuries historiographies of
mathematics in the ancient world 2015-2016**

organized by
Karine Chemla, Matthieu Husson, Agathe Keller, Christine Proust and the SAW group

Université Paris Diderot, Condorcet Building
room 483A - 9:30 am to 5:30 pm

<http://sawerc.hypotheses.org/seminars/internal-seminar-historiography-2015>

Programme - February 19th, 2016

**Historiography of ancient mathematics and astral sciences, with a focus of
China, and the Indian subcontinent: The beginnings of
professionalisation**

Presentation – The history of ancient mathematics and astral sciences, and in particular interest in the mathematical sciences of China and the Indian subcontinent, underwent a movement of professionalisation in China, India, as well as in the West from the 20th century onwards. What was at stake in the professionalisation of ancient history in these different contexts, and which transformation did it represent in the historical work carried out on these topics? These are two of the questions that will be addressed in this session. In particular, we will attempt to examine the parts devoted to a historical approach to ancient mathematics and astral sciences in these contexts. The political backgrounds, in which these developments took place, and how these backgrounds left an imprint on the knowledge produced, will also be topics of interest to us. In this respect, in addition to examining the case of professionalisation in China and India, we will also focus on the cases of USSR and the USA.

Jiří Hudeček, *Evidential Scholarship and New Humanism: Li Yan and Qian Baocong as Historians of Chinese Mathematics*

Dhruv Raina, *The 'Analytics' and the Indologists: How the history of mathematics shaped mathematics education in Nineteenth Century India?*

Ksenia Tatarchenko, *Old Truths for Tomorrow: Sketching Professional, Popular and Amateur Histories of Ancient Mathematics in the Soviet Union*

Alma Steingart, *Cold War Antiquities: Histories of Mathematics in the Postwar United States*

Jiří Hudeček (Charles University, Prague)

Between Evidential Scholarship and New Humanism: Li Yan and Qian Baocong as Historians of Chinese Mathematics

Abstract – Chinese mathematics became an object of scholarly study in China between 1915 and 1920. The establishment of history of mathematics as a professional academic discipline in USA, Europe and Japan played a crucial role in the acceptance of history of mathematics as a “scientific” pursuit; but there was also a contingent factor of the simultaneous emergence of two strongly determined figures, Li Yan (1892-1963) and Qian Baocong (1892-1974), who took it as their lifetime duty to investigate Chinese mathematical tradition and write its reliable history from a Chinese perspective. This talk will introduce the main intellectual traditions motivating their historiographic writing, including traditional evidential scholarship (*kaozheng*), essentialist visions of national culture from Japan, comparative histories of world mathematics from USA, the May Fourth “doubting of antiquity” (*yi gu*) and George Sarton’s take on the “New Humanism”. I will show the reflection of these ideas in the choice of topics and actual style of writing produced by these two major historians.

Dhruv Raina (Jawaharlal Nehru University, Delhi)

The 'Analytics' and the Indologists: How the history of mathematics shaped mathematics education in Nineteenth Century India?

Abstract – Inspired, in part, by the Scottish mathematician, John Playfair, British Indologists set out in search of the canonical texts of Indian mathematics and logic from the last decades of the eighteenth into the early decades of the nineteenth century. The publications of Indologists such as Davis, Burrow and Colebrooke played an important role in shaping ideas about the nature of Indian mathematics in Britain and provoked criticism in France. The papers of Colebrooke on the history of algebra and mensuration and the history of logic in India were particularly influential within the circle of Indian mathematicians. In this talk I shall try to argue how the reception of these papers within the circle of 'Analytics' subsequently went on to shape the dialogue between British educationists in India and so called traditional scholars; and in fact influenced the choice of books to be translated into the regional languages. I shall in this context like to take up the translation of two books authored by Augustus De Morgan into Marathi and Gujarati.

Ksenia Tatarchenko (Université de Genève)

Old Truths for Tomorrow: Sketching Professional, Popular and Amateur Histories of Ancient Mathematics in the Soviet Union

Abstract – Throughout the existence of the Soviet Union, the Russian language publications on the history of ancient mathematics proliferated, aiming at teachers, students and historians of mathematics as well as generally cultivating a mathematical culture among their audience. But how was the “mathematical culture” and the narratives about the past mathematical knowledge used to build a communist future? In this talk I explore three prominent functions of the professional, popular and amateur histories of ancient mathematics: ideological, pedagogical and disciplinary myth-making. I start with an overview of the Moscow school of the history of mathematics in a larger context, from the rise of the Soviet version of science studies, “naukovedenie,” to the generational struggle within the mathematical community, the infamous “Luzin affair.” Next, I analyze the pedagogical and political stakes behind a set of texts dedicated to teaching and popularizing the history of ancient mathematics in the post-war period. Finally, I show the interplay between the new discipline of computer science in search of its own origin story and the Soviet claims on the ancient knowledge of medieval Central Asian mathematics, in a volatile region on the eve of the war in Afghanistan.

Alma Steingart (Harvard Society of Fellows, USA)

Cold War Antiquities: Histories of Mathematics in the Postwar United States

Abstract – The twentieth century witnessed a proliferation of historical writings about mathematics for both popular and professional audiences. Morris Kline, Edna Kramer, Dirk Jan Struik, and Carl Boyer sought to provide a grand narrative connecting ancient mathematics to its contemporary manifestations. As I will demonstrate in this talk, two main features characterized these works. First, they were concerned with the applicability of mathematics and the way mathematical ideas were crucial to what they conceived of as the progress of humanity. Second, they were marked by an interest in the ways in which mathematical ideas and tools were transmitted and transformed across cultures and time periods. As such, they reflected the anxieties that characterized the authors’ own experiences – concerns, namely, about the uses of mathematical ideas for political and social purposes, and about the transmission of scientific knowledge across the Iron Curtain. These midcentury historical forays into the world of ancient mathematicians are therefore examples of what some scholars have termed “usable pasts.” They tell more about the status of American mathematics during the Cold War than they do about the past.