

Seminar SAW

Rethinking Practice and Culture in the History of Science

organized by Koen Vermeir and the SAW project's group

Université Paris Diderot, Condorcet Building - room 646A - 9:30 am to 5:30 pm

<http://sawerc.hypotheses.org/seminars/practices>

Programme March 2nd, 2016 - Session 3

Readers and Speakers

Ivahn Smadja, *Texts reading of Matti Bunzl and Andrew Zimmerman*

Nadine de Courtenay, *Texts reading of Hasok Chang*

Christine Proust, *Cultures of quantification: multiple ways of evaluating surfaces in Mesopotamia*

Hans-Joerg Rheinberger, *Glimpses into the Space Between Laboratory and Discipline*

Ivahn Smadja, *Texts reading of*

Matti Bunzl, "Franz Boas and the Humboldtian Tradition : From Volkgeist and Nationalcharakter to an Anthropological Concept of Culture", in *Volkgeist as Method and Ethic. Essays on Boasian Ethnography and the German Anthropological Tradition*, George W. Stocking Jr (ed), The University of Wisconsin Press, 1996.

Andrew Zimmerman, *Anthropology and Antihumanism in Imperial Germany*, The University of Chicago Press, 2001, chap. 2. "Kultur and Kulturkampf : the Studia Humanitas and the People without History", pp. 38-61.

Nadine de Courtenay, *Texts reading of*

Hasok Chang, *Pluralism in science : a call to action*, in *H. Chang, Is water H2O? Evidence, realism and pluralism*, pp. 253-301. Springer, 2012.

Christine Proust (Laboratoire SPHERE, SAW project - CNRS & Université Paris Diderot)

Cultures of quantification: multiple ways of evaluating surfaces in Mesopotamia

Abstract - Calculating the area of a rectangular surface seems at first glance to be such a simple operation that it does not deserve much attention. Yet the ancient Mesopotamian sources testify to very different practices, and show, for instance, that the assessment of a surface is not always a calculation, or that large surfaces of royal lands were not evaluated in the same way as small surfaces, such as houses or brick faces. What are the elements that vary from one text to another, from one milieu to another, from one period to another in the process of evaluating a rectangular surface? This question will lead me to identify mathematical and metrological tools that were used in the evaluation of surfaces in different contexts, and to perceive the variability of the very concept of surface. I will show that the notion of surface for a provincial governor of the pre-sargonic periods (2900-2300 BCE) was not the same as that of a teacher in charge of teaching mathematics in an Old Babylonian school (2000-1600 BCE), or as that of a priest of the Hellenistic period (323-63 BCE) involved in real estate transactions. Motivations, knowledge or innovation capabilities of these different types of actors were very different. The presentation aims to discuss how the analysis of the perception of surfaces by different types of actors allows to detect "cultures" of quantification which are specific to given communities.

Résumé : Le calcul de l'aire d'une surface rectangulaire semble à première vue une opération simple, qui ne mérite pas une grande attention. Pourtant, les sources anciennes de Mésopotamie témoignent de pratiques très diverses, et montrent par exemple que l'évaluation d'une surface n'est pas toujours un calcul, ou que les grandes surfaces des domaines royaux n'étaient pas évaluées de la même façon que les petites surfaces, comme celles des maisons ou des faces des briques. Quels sont les éléments qui varient d'un texte à l'autre, d'un milieu à l'autre, d'une période à l'autre dans le processus d'évaluation d'une surface rectangulaire ? Cette question m'amènera à identifier les outils mathématiques et métrologiques mobilisés dans l'évaluation des surfaces dans différents contextes, et à percevoir la variabilité de la notion même de surface. Je montrerai que la notion de surface pour un gouverneur de province des époques pré-sargoniques (2900-2300) n'était pas la même que pour un maître chargé de l'enseignement des mathématiques dans une école paléo-babylonienne (2000-1600), ou pour un prêtre de l'époque hellénistique (323-63) se livrant à la promotion immobilière. Les motivations, les savoirs ou les capacités d'innovation de ces différents types d'acteurs étaient très différents. L'exposé a pour but de discuter en quoi l'analyse de la perception des surfaces par différents types d'acteurs permet de détecter des « cultures » de quantification spécifiques à des communautés données.

Hans-Joerg Rheinberger (Max Planck Institute fuer Wissenschaftsgeschichte)

Glimpses into the Space Between Laboratory and Discipline

Abstract - For a long time, scientific disciplines were the structures that were of particular interest to historians of science and sociologists of science alike. With the practice turn, laboratories moved into the focus of science studies, history of science, and anthropology of science. This paper focuses on the space between these macro- and micro-levels, respectively. I will treat a number of historical attempts to conceptualize this meso-space, and try to concretize its characteristics through examples taken from the history of molecular biology.