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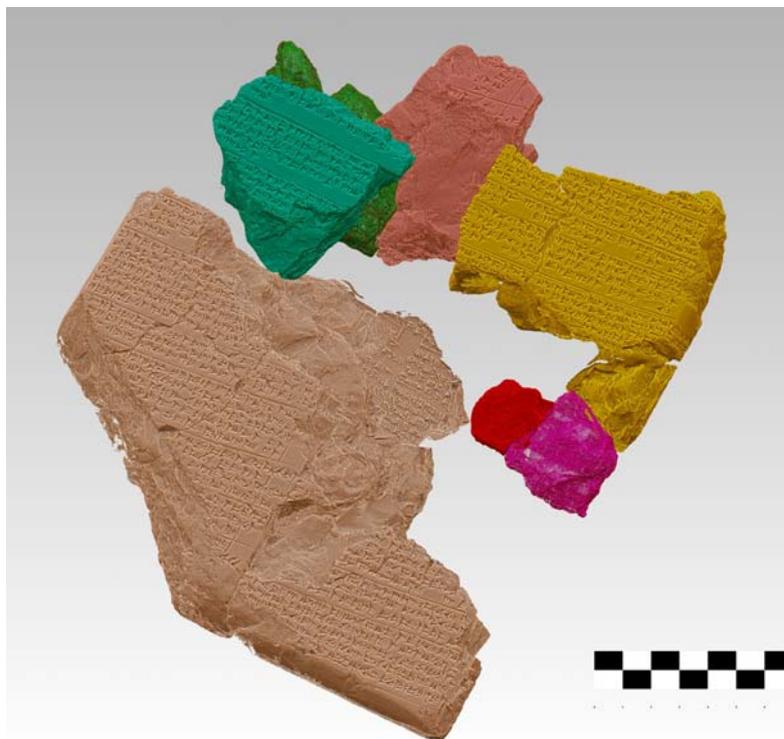
announces an Informal Talk

by

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Computer-aided Analysis of Cuneiform Manuscripts: A Case Study for Quantitative Palaeography

Cuneiform script represents one of the world's earliest writing systems, characterized by wedge-shaped marks obtained by impressing a stylus on the moist clay. With hundreds of thousands of recovered fragments, cuneiform texts constitute the widest pre-classical written corpus, a heritage of invaluable importance for our understanding of the languages and cultures of the ancient Near East. The pronounced three-dimensional nature of this script has always represented a major challenge for cuneiform palaeography, which is worsened by the often microscopic size of its basic component, the wedge, as well as by the huge number of recovered manuscripts.

How to overcome this challenge? A solution is to adopt a computer-aided approach, following the vision of the great German palaeographer Bernhard Bischoff. As early as 1979, Bischoff wrote in his authoritative book Paläographie des römischen Altertums und des abendländischen Mittelalters that "Mit technischen Mitteln ist die Paläographie, die eine Kunst des Sehens und der Einfühlung ist, auf dem Wege, eine Kunst des Messens zu werden". By doing this, he did not imagine to elicit a veritable querelle among his colleagues, with a number of scholars vehemently defending traditional "empathy" against insensitive,

cold "measuring". But his prophetic words had hit the mark: as in other branches of study, a shift from qualitative to quantitative data appears to be the only way out of the cul de sac that traps palaeographic research into the bondage of subjectivity.

The paper aims to explore the potential of a computer-aided approach to the documentation and analysis of cuneiform manuscripts, based on the results of the joint project 3D-Joins und Schriftmetrologie (www.cuneiform.de). Concept and methods to be presented are based on two cornerstones, 3D imaging and quantitative palaeography, and affect a wide range of applications in the fields of palaeography, codicology, archaeology, 3D imaging, and data mining. The focus will be on computer assisted collation, join identification, manuscript reconstruction, diachronic script characterization, analysis of scribal hands, and reconstruction of writing techniques. A novel graphic tool will also be presented, which allows to identify and process selected geometrical properties of wedge impressions in order to extract relevant palaeographic features.

Bringing philology, computer science and statistics together, it will be argued, enables access to previously unattainable layers of information, opens up new research questions, and provides scholars with powerful research tools.

Wednesday, 25 November 2015 at 11 am

Room 0001, CSMC