

ASSYRIOLOGIE

CHAMBON, G. — Normes et pratiques. L'homme, la mesure et l'écriture en Mésopotamie. I. Les mesures de capacité et de poids en Syrie Ancienne, d'Ébla à Émar. (Berliner Beiträge zum Vorderen Orient, Band 21). PeWe Verlag, Gladbeck, 2011. (24,5 cm, 200). ISBN 978-3-935012-08-9. € 29,80.

This book by Grégory Chambon, professor of Assyriology at Université de Bretagne Occidentale-Brest, is a revised version of his PhD thesis on the notation, use and functioning of the systems of capacity and weight in the Early and Middle Bronze Age Syria.

Our understanding of the numerology and metrology of the cuneiform sources from Ancient Mesopotamia has reached a new, philologically-grounded level, thanks to ground-breaking studies by Assyriologists and Mathematicians in the 1970s and 1980s. Ancient Syria, where Sumerian writing and numerology had been borrowed and applied in the local decimal numeration and measures, has received only sporadic scholarly attention. In contrast with the archaeologically well-studied systems of weight in Early and Middle Bronze Age Syria, there are no comprehensive descriptions of any of ancient Syria's systems of mensuration according to written evidence, despite the existence of rich textual data from Ebla and Mari.

The present work of Chambon makes the first step towards eliminating this deficiency. Previous works by the same author show his interest in the numerology of Late Uruk and Early Dynastic I-II texts, although the main bulk of his work concerns the systems of capacity and weight in the Early and Middle Age Syrian cities of Ebla, Mari and Emar.

The scope of his research is already evident in the title: "normes et pratiques" - the most important terms defined and discussed in the study; and "L'homme, la mesure et l'écriture en Mésopotamie" - its main subjects, including the sources employed and its temporal and geographical framework.

The theoretical foundation for this research is the understanding of metrology as a part of culture, which originates from the man's interaction with his environment. As a cultural artifact, writing functions alongside the mensuration system and adjusts its development and standardization. This approach is inspired by historians of economy and metrology such as Witold Kula in *Measures and Men* (Princeton, New Jersey: Princeton Univ. Press, 1986) and Immanuel Wallerstein's "center and periphery" theory.

The author cautions that he does not intend to cover all mensuration practices and their notations as they are depicted by ancient Syrian cuneiform texts. Nor does he care to develop a chronological account (p. 47). On the contrary, Chambon concentrates his efforts on elucidating how a system of mensuration responds to the economic needs of the urban societies that used the writing of a completely different society (Sumerian cuneiform). His goal is to define the *modus operandi* of the weight and capacity systems in Ancient Syria. He is leery of extrapolating a "norm" from the existing data. He argues: "In n'est alors pas question de reconstruire la valeur d'un étalon de référence, fondé sur une réalité concrète, mais plutôt de comprendre les mécanismes engendrant l'adoption de standards particuliers de mesures dans des contextes politico-culturels déterminés" (p. 37-38).

He discusses these two systems because of the abundance of textual references to them, as well as the availability of numerous archaeological artifacts such as stone weights and bowls interpreted as representing capacity measures. He begins with the measures' use, goes on to depict their representation, and ends with their notation.

One of Chambon's conceptual contributions is his discussion of norms and standards. 19th and 20th century historians of metrology, as well as some contemporary archaeologists, regard a norm as a reality represented by a certain strictly defined physical mass. Chambon observes that the 19th century studies regarded all measures as standardized and normalized. He criticizes the school of comparative metrology which sought to unite all available weight measures — ancient and modern — into a large universal table of interrelations and conversions, by defining one measure through another using simple arithmetical calculations and largely neglecting written evidence. This leads sometimes to such anachronisms as relating the French pound to the Greek foot (p. 31). The understanding of norm changed considerably during the recent centuries and, according to Chambon, should nowadays be taken for a relation rather than an objective reality.

The book provides us with a host of other important ideas and achievements. For instance, it demonstrates how the absence of a universally accepted measure or "etalon", which of course did not exist in any given period of Mesopotamian history, does not presuppose chaos in mensuration practices or lack of control over weight and measures. On the contrary, the plurality of local norms attests to interlinked economic systems rooted in their own historically developing mensuration practices. The metrological diversity was itself regarded as normal in ancient Syria, and there had not been attempts to standardize all existing weights and measures once and for all.

Chambon revisits the famous passage in the prologue of the Ur-Namma's law code (3rd dynasty of Ur) where the king argues that he had standardized (Sum. gi.n) the weight of the mina and the capacity of the sila₃. He suggests the meanings "to certify" or "to guarantee as a reliable" for the Sumerian verb gi.n instead the usual "to standardize". Therefore, rather than defining the absolute mass of the mina and the absolute capacity of the sila₃ Ur-Namma certified the weights and measures used in his households.

The notion of an "etalon" issued by a single authority did not exist in any given period of ancient Mesopotamian and Syrian history. According to Chambon, the authorities did not attempt to unify weights and measures in order to reinforce royal ideology and economic control. Their reforms should be regarded as responses to the existing and ever-changing social and economic realities. Take for example the presence of the king of Mari during the weighing out of metals to goldsmiths. Chambon argues that the king of Mari certified the weighing, not because he wanted to oust all other existing weight standards, but in order to certify the precision of weighing of the materials used in his workshops. His precaution was thus pragmatic, rooted not in metrology (which did not exist as a term or even as a separate subject) but in administrative practice.

Chambon argues that norms were not abstract, but rather revealed themselves only during the weighing or measuring. Thus "the weight of the city N" was a stone weight representing this norm. Chambon makes an important theoretical

observation in suggesting that the weighing or measuring as an every-day practice represented a consensus between two parties rather than a reference to a universal "etalon" which everybody should know and follow. He further distinguishes the context in which measurement took place. For instance, if one buys metals on a market, the "weight of the market" is used, but if he brings the same metals to the palace, "palace weights" are used.

Despite denying the existence of any etalon, Chambon defines the measures bearing the titles Sum. gi-na and Akk. *kittum* as those representing a standard. These were certified by highest authority, e.g. by the king.

Among his most important observations is identifying the interdependence between the system of mensuration, and the writing system representing it in script. Writing is discussed and exemplified in the study through the examples of Eblaite and Mariote capacity systems. They employed the Sumerian "metrograms" despite the preexistence of local capacity units defined by Semitic decimal numerology.

It is well known that often several local norms are mentioned in synchronous texts. Chambon explains that this was not meant to notate an eventual gap between the real value/mass of goods, but to make the recipient of this letter or administrative record aware of different standards.

The main body of the book is taken up by case studies pertaining to particular terms and issues. For instance, the study of the capacity systems of Early Bronze Age Ebla, Mari and Nabada (Tell Beydar) brings to light similarities in the notations of units. Taking the unit written sila₃ for 0,5 l, Chambon proposes the absolute values for each capacity unit in Ebla, Mari and Nabada. Combining written and archaeological evidence, he concludes that an-zam_x = *assammu* was equal to ca. 0,5 l (p. 56-58).

He also touches on several hotly contested issues without definite answers. Among these are the origins of the unit written sila₃ in Ancient Syria, and the meaning and origins of the Ebla shekel written giġ₄-DILMUN. These issues remain unsettled here.

The evidence discussed by Chambon on p. 43, which he takes to account for the existence of "large" and "small" norms, does not actually refer to different norms but to cases in which balance weights had been falsified. Moreover, the existence of "light" and "heavy" as defining weight measures has been refuted by Powell (RIA 7, p. 509).

The book is a well-structured easy-to-follow theoretically-grounded work, which discusses major traits of capacity and weight mensuration in Ancient Syria in the Early and Middle Bronze Age. It contains helpful graphics such as cuneiform writings of number and unit notations, which considerably facilitate the presentation of the discussed material, and it includes an index of the terms discussed. This study will be particularly helpful to scholars and students of numeric and measure systems of the Ancient Near East, and to anyone studying Ancient Syria's societies and economies. Moreover, its clear presentation and omnipresent reader-friendly introductions to each section make this book attractive to a broader public.

Frankfurt am Main, 11.03.13

Vitali BARTASH

*
* *