The Heavenly Writing: Divination, Horoscopy, and Astronomy in Mesopotamian Culture by Francesca Rochberg

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Francesca Rochberg is author of several books and articles on the Babylonian approach to celestial phenomena. In the preface of the book under review, she writes, 'The primary goal of the study is to locate and define interconnections among the various and diverse parts of the Mesopotamian scribal traditions of celestial science.' The main body of the book consists of a prologue, seven chapters, and an epilogue.

The prologue [1–13] explains the book's title, which is derived from a Babylonian idea that the stars are like a writing that expresses messages from the gods. Chapter 1, 'The Historiography of Mesopotamian Science' [14–43], deals with the many, disputed meanings of the term 'science' and states for the purposes of this book,

Science... is not viewed as emerging from a magical-religious culture, but as fully integrated with it. In the face of the cuneiform evidence, the dichotomy between such hypothetical cultures is artificial and ahistorical.

Appropriately, then, chapter 2 [44–97] is called 'Celestial Divination in Context'. It is an introduction to the different kinds of divination used in Babylonia, with particular emphasis on omens derived from the sky. In chapter 3, 'Personal Celestial Divination: The Babylonian Horoscopes' [98–120], the author turns to a group of texts well known to her. She describes these texts in detail, referring to her book of 1998 and to the various other sources for celestial omens.

Chapter 4, 'Sources for Horoscopes in Astronomical Texts' [121– 163], tries to find where the compilers of the horoscopes could have looked for the information they included. It is most likely that the

so-called Almanacs were used as a source for horoscopes; but, for some of the data in the horoscopes, it remains uncertain where they came from. The author points out that one cannot assume the production of horoscopes to be the incentive for the development of mathematical astronomy by the Babylonians, if only because both occur at about the same time. Chapter 5, 'Sources for Horoscopes in the Early Astrological Tradition' [164-208], compares the horoscopes to traditional celestial omens. First, the metaphorical language of the omens is discussed: it is used to describe celestial phenomena by speaking about the gods represented in them. Divination was considered as a revelation from the gods; this gave it authority. The events indicated by divination could always be changed by the gods, who might, for example, listen to prayers and rites addressed to them in order to prevent some evil from happening. Finally, this chapter describes the nativity omens which appear late in Babylonian tradition, and considers them as a precursor of horoscopes.

Chapter 6 [209–236] deals with the scholar-scribes in the first millennium BC. From the colophons appended to some of the traditional texts (and from other sources as well), it can be seen that the scribes kept this traditional knowledge among themselves, handing it down only to those who had been trained properly. The author then turns to the so-called scribes of Enuma Anu Enlil, who by their very title are connected with that celestial omen compendium. Their activities were, nevertheless, not restricted to divination from the sky; they also dealt with astronomical computations. At the court of the Neo-Assyrian kings in the seventh century, they functioned as experts in related fields of divination and as advisers of the king in general. In Hellenistic times, they are found producing astronomical tablets of new types and of impressive complexity. In that period, they seem to be dependent on the temple.

Chapter 7 [237–286] takes up again the question of calling Mesopotamian celestial inquiry a science. First, the Babylonian contributions to the astronomy that was later developed in Europe are described. Then, since there is widespread agreement among modern historians of science that it is not possible to define science in a general way, some of the criteria associated with science are applied to Mesopotamian divination in general, and then to the Mesopotamian efforts directed to celestial phenomena. The numerous omen protases containing physically impossible phenomena clearly show that not all of them can go back to actual observations. The difference in regard to modern concepts lies in the extent of what is considered 'observable' by the omen texts. All these phenomena which are 'impossible' to us were obviously potentially observable to the ancient diviners, even if they could never have observed them. The role of empiricism is, therefore, very limited in divination. The connection between protasis and apodosis of an omen is best seen by the Babylonian expression for it, 'judgment', that is, a decision by the gods. Of course, while the gods may have decided in a certain way in the past, this did not bind them to decide in exactly the same way in the future.

Predictions of astronomical phenomena appear to be an entirely different matter: these are not apodoses of omens, but statements about future occurrences of phenomena based on the periodicity of the same phenomena in the past. After a short description of what was predicted in Babylonian astronomy, the author turns to the word 'theory' as it is frequently employed by modern scholars to characterize the Babylonian predictive methods. She shows that this use is justified nowadays when 'theory' is no longer restricted to describing 'laws of nature'. In any case, 'the characteristic beliefs . . . in the possibility of divine communication through such phenomena as ominous signs, far from preventing the advance of mathematical astronomy, seem to have sustained it.'

In an epilogue [287–299], the author returns to the Babylonian horoscopes which contain both types of predictions, the astronomical and the ominous; these texts too suggest that the world view of divination in no way conflicted with astronomical prediction as practiced by the Babylonian scribes. The reviewer, being an Assyriologist by training, finds the investigation of the omen texts convincing, and is particularly impressed by the discussions about questions of philosophy of science. He therefore recommends this book both to historians of science and to students of cuneiform texts.

A few remarks on details:

• p. 66 I would have had the impression here that only Anu and Enlil figure in the title of the celestial omen series; but, as the author knows, it is only due to abbreviation that the third god mentioned in the text, Ea, is left out, as can be seen from the text of the series' introduction translated on p. 70.

- p. 109 The tablet BM 47494 was published by the reviewer [see Hunger 2004].
- p. 125 more 'Normal Stars' will be found in Roughton, Steele, and Walker 2004.
- p. 174n26 Cassirer's *Language and Myth* appeared in 1925, and was certainly known to the authors of *Before Philosophy*.
- While '*idem*' in modern English may have become a logogram meaning 'the same person' (regardless of gender), as long as one adheres to Latin grammar it has to be changed to '*eadem*' when the person referred to is a woman, as in, e.g., 69n77 and 137n54.

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