CHAPTER 4

THE ASTRONOMICAL BOOK AND BABYLONIAN ASTRONOMY: MUL.APIN AND EAE

The first assertion of cultural contact between Enochic and Babylonian astronomy was made by Weidner in 1916. His theory was subsequently substantiated by VanderKam and Albani. The present chapter will survey the teaching of the early astronomical source Mul.Apin and re-examine its similarities and differences vis-à-vis AB.

4.1 THE ASTRONOMICAL TEACHING OF MUL.APIN

Following the publication of the critical edition of Mul.Apin in 1989, the astronomical teaching contained in this text has received considerable attention in several comprehensive studies. According to Hunger and Pingree, the thematic division of Mul.Apin runs as follows:

- a catalogue of stars divided into three “paths”
- b dates of heliacal risings
- c simultaneous risings and settings


d. time-intervals between the dates of heliacal risings

e. culminating (ziqpu) stars

f. the path of the moon

k. shadow-length tables

h. observations of heliacal risings and wind directions

l. water-clock measurements of lunar visibility

i. planetary theory

j. second intercalation scheme

m. omina

Mul.Apin is a collection of astronomical lists representing the state of the art of astral sciences in Mesopotamia in the late second and early first millennia B.C.E. It epitomizes the traditional view of the heavenly bodies represented in earlier Mesopotamian literature, primarily for the purposes of divination, and as such constitutes the concluding stage of that early astronomical discipline. Around the seventh B.C.E., more advanced techniques of observation and calculation developed, paving the way for the emergence of the mathematical astronomy of the Persian and Hellenistic periods.⁴

Mul.Apin embodies the basic tools available for a Mesopotamian diviner/astronomer in the early first millennium B.C.E. The first half of the text is primarily dedicated to the risings of fixed stars. The first list (section a) lists 71 stars, dividing them according to their north-south position between the three “paths of heaven.”⁵ Section b designates the date of the heliacal rising for selected stars. This data is further elaborated in sections c and d by the calculation of simultaneous risings and settings and the time intervals between the risings of various stars and constellations. Most of the lists are based on


⁵ On the paths of heaven, see Horowitz, Mesopotamian Cosmic Geography, 165, 252–56; Hunger and Pingree, Mul.Apin, 139.