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The Art of Divination in the Ancient Near East: Reading the Signs of Heaven and Earth by Stefan M. Maul

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Although the front cover of this volume displays an image of a clay model of entrails—giving the impression that the content describes the practice of extispicy only—it links to the development of early astral sciences in their connection with the tradition of oracular omens. The two main genres of omens here discussed are the "signs of earth", in particular, the markings on a sheep's liver, and the "signs of heaven", understood from the calculation of the cycles of the heavenly bodies and the astronomical phenomena related to them.

For clarity's sake and for a chronological perspective, I am making a distinction between the terms "astral divination" and "astrology". In the context of this review, the former is not based on the zodiac or the zodiacal constellations, while the latter dates from the very late fifth century BC and is based on the zodiac as it appears in different forms [Britton 2010].

This book's contribution to the wider scholarly corpus on divination and to the history of the philosophy associated with this belief system rests on the various ways in which the gods speak as well as on the messages received by earthly mediators. Its study of the connections that diviners made between heaven (that which is written in the stars and is predestined but not oracular in the strict sense) and earth (terrestrial omens or signs, which may be read as answers from the deities to questions from the king or a common person), and of how diviners of the former operated together with diviners of the latter, offers welcome insight into the space between heavenly and earthly

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prognostic procedures. The volume further describes responses from the royal courts in the ancient Near East to putatively oracular judgments or signals from the heavenly bodies, particularly during the second and the first half of the first millennium BC.

The reader learns that the skills of astral and terrestrial diviners were tested and rigorously examined and re-examined. The social and political process by which this was achieved and the consequences of this bureaucratic system, as discussed by the author, are enjoyably imaginative and well illustrated by colorful examples from cuneiform documents, as well as by images of miniature models of livers used to teach apprentices heptoscopy and tiny reproductions of actual extispicies.

Stefan Maul divides his book into 10 chapters plus a final concluding chapter. It is fair to say that the first six chapters form a natural "part 1": thematically, stylistically, and methodologically. Chapter 1, "Signs of Heaven and Earth", a brief introduction for the non-specialist to the social history of the subject, situates the origins of divination (both heavenly and earthly) firmly in the ancient Near East. Knowledge was passed down over two millennia, influencing the later genesis, transmission, and preservation of Mesopotamian oracular procedures in the Etruscan, Greek, and Roman worlds.

Citing ancient scholars from the Greco-Roman world, such as Pliny the Elder, Berossos, Diodorus, and Strabo, Maul states that the attribution "Chaldeans" was used by these writers to bestow authoritative status on Mesopotamian divinatory knowledge by virtue of its great antiquity [3–5]. He reminds us that this literature on the subject was substantiated by archaeological discoveries in the mid 19th century, and he usefully explains the difference between the Akkadian, Babylonian, and Sumerian languages as background.

No word on the history of the decipherment of cuneiform is offered here, though it would have been of interest, as Maul notes the ongoing task facing scholars today in translating, joining, and making sense of lacunae from duplicate texts [5–7]. But our job, he suggests, is to make sense not of the wedge writing pressed into clay but of how these people regarded their relationship with the cosmos, a relationship which was ultimately subject to a plurality of divine wills but still within their control if the right procedures were followed [8].

The very short chapter 2, "Sacrifice and the Art of Divination", contextualizes the early history of extispicy as an art of sacrifice to communicate with the gods, acts described in early Mesopotamian literature. The procedures for extispicy performed by a "seer" (*bārû*) differed from that of a regular sacrifice

to feed the gods [13–14]. From a sacrificial offering to please a deity, Maul suggests that people progressed from asking the gods for favor to repurposing the tradition as an oracle as well. Divine approval or rejection of a plan could be indicated by examining the sacrificial animal's entrails, particularly its liver [14–15]. Remarkably, the practice did not disappear until the eighth century AD and became a prestigious tradition in Hellenistic Greece, Etruria, and Rome, outliving its use in ancient Mesopotamia and cuneiform culture. He adds that in ancient Mesopotamia, lambs were used for the wealthy, while poorer people could offer a bird, flour, oil, or incense for purposes of divination, thereby signposting a chapter later in the book.

The substantial third chapter, "Messages in Livers and Entrails: Extispicy's Essentials", is more detailed, containing examples from cuneiform documents with information about the practice over many centuries. Textual evidence from the third millennium BC onwards reveals that only a male lamb—preferably a very young male lamb, without any blemish, that had never come into contact with someone regarded as unclean—or dove-like birds could be used for extispicy [17]. In the Neo-Assyrian period (*ca* 1000–609 BC), sheep are specified in the texts, whereas pure lambs—lambs with white fleeces, probably—less than a year old are mentioned for this purpose in Old Babylonian texts (*ca* 2000–1500 BC) [17]. A sign or a list of features and qualifications needed to become an oracular lamb developed between the 21st century BC and the Old Babylonian period. Dealing in these animals was a cottage industry among diviners, and Maul provides social testimony for a conflict of interest among the seers who were providing animals for clients, or stealing them and performing the ritual themselves [17–18].

According to documents containing the royal accounts in the Old Babylonian period, huge numbers of lambs were sacrificed for this purpose. One tablet notes that more than 4,000 were bought in eight months, an average of more than 500 lambs per month [19]. Maul describes details of the ritual slaughter at length [35–38] and explains that what we would anachronistically call scientific principles were in force: the result was double checked with a second extispicy performed by a different seer [37], although it is not known if this procedure took place at the same time in the same ritual or the next day with another lamb [38].

Sacrifices took place at dawn before the Sun god Shamash rose in the east after the diurnal revolution of the fixed stars [20, 33–34]. In order to achieve a positive result, the seers did not leave the timing of the sacrifice to chance; there are numerically good and bad days of the month, so they had to ensure that the act took place on the most auspicious date [22]. The sky had to be

clear, not cloudy; the sacrifice had to take place in the open air, away from crowds, in a pure place [24]. The diviner stayed up all night in full view of the rising of the constellations in the parts of the sky assigned to the sky gods Anu, Enlil, and Ea and of the setting of the stars, which brought the client's request to the underworld, the place where the Sun resided during the night before rising in the east with his response [26–27]. The seer whispered the question into ear of the animal while it was still alive, possibly at the moment when the Sun god appeared on the horizon, and then the sacrifice was enacted [31–32]. The seer also plugged his ears with tamarisk and cedar to cut himself off from the world, to be free of external influences. Notes have survived in the state archives of Neo-Assyrian kings that preserve the prayers accompanying the rituals [33–34] and details of how the sacrifice was carried out [35–37].

Maul describes the process of examination in one extispicy by two seers [38–47], which is illustrated with clay models from the royal palace of Mari, dated to the 19th century BC [49, fig.]. The procedure, as intricate as it is, apparently took less than half an hour [55]. In order for the reader to understand the diviners' readings better, Maul examines a sheep's liver, complete with blemishes, using modern anatomical information and the interpretation of blemishes in the cuneiform manuals. Here, the sheep's liver is analyzed according to 12 regions known as "canonical markings" [46–80]. At one point, Maul states that it is "doubtless hardly by chance" that there are 12 "canonical markings" and 12 divisions of the zodiac [53]. Although he is probably right, the 12 sections of the zodiac date to the late fifth century BC. (Such missing links of divinatory mathematical thought, spanning some 14 centuries, remain intriguing.)

The systematic method and its implications for historical techniques of divination are explained: points of interest include an area of the liver that "belongs to the enemy" (the left side), while the right side represented the person asking the question. In a sense, two divinations may have been performed from different perspectives on the same sacrificial lamb or possibly on two lambs [66]. In some cases, two sacrifices were indeed carried out, the second being a "control" or a second opinion when adverse signs were involved. Maul supports this practice with letters from the royal palace of Mari, Old Babylonian extispicy records, and "handbooks" containing model oracular questions [67–68].

A "college of diviners" would collectively weigh up the meaning of the signs. Maul gives examples of the records of a Hittite extispicy of the second millennium BC in which the "control" consisted of an extispicy performed

upon a dove or a similar bird, or the casting of lots [78–79]. Some information about divination by lots would have been an interesting contextualization of the different kinds of oracular procedures.[1]

Kings often did not rely solely on the college of diviners but could judge their deductions themselves through the use of clay models. Maul suggests that some of the collections of miniature clay models of livers contained reports of actual extispicies [80], so the royal ruler could "inform himself most exactly" of the gods' will, according to one account from Old Babylonian Mari.

One of the most interesting sections of this chapter deals with the issue of a permanently problematic reading [81–85], whereby the inquirer appears to be shunned by his celestial masters. The implication that the gods could reject a sacrifice is dramatic on all levels. In literary terms, the reader is reminded of the biblical story of Cain and Abel [Gen 4: 2–6]. Readers or audiences in the ancient Near East would have readily understood the tension between wanting to offer a sacrifice to please the gods and fearing that it might fail to please them. Maul reproduces a poem written in Babylonian of the "righteous sufferer" [81–82], which was written in the first person, about a man abandoned by the gods, shunned by his community, and afraid of an uncertain future. The emotions conveyed are reminiscent of the biblical book of Job. This composition and the other apotropaic prayers cited in this section [81–85] are of interest to biblical studies.

Magical practices and intercessory prayers were used in rituals to appease the gods in an attempt to change divine "judicial verdicts", some of which, interestingly, find an echo in biblical remedies for disease, prayers, and the rituals performed on the Jewish New Year's Day (Rosh Hashanah) and the Day of Atonement (Yom Kippur) in different forms [82–84]. The rich illustration of these problems with case studies, including a reproduction of a tablet with unfavorable results regarding the health of the Assyrian king Ashurbanipal, dated to the early summer of 651 BC, provides ample evidence of the need for these practices and the conclusion that it was not always possible even for powerful kings to enjoy heavenly favor. Despite "controls", prayers, and secondary oracular opinions, diviners could not always bring the hoped-for good tidings. This is an extremely rich and readable section, well written and accessible to readers of all levels.

[1] On page 79, the footnote [n350] for lots refers the reader to page 180; however, the information on this page does not mention lots but other forms of non-sacrificial divination.

The somewhat shorter chapter 4, "The Fine Art of Asking Questions", describes some of the tricks of the trade in trying to obtain a clear response to an extispical inquiry. It was important to frame the question in such a way as to receive an unambiguous, useable response. Maul gives several examples of surprisingly detailed questions and of pre-written specimen "books of examples" that list multiple questions covering common queries concerning timeless human anxieties [88–91]. The range of questions that were asked by clients, though very few were preserved in Assyrian state archives, could include inquiries about the intentions of third parties or about current situations and were not only about the future [93–94].

More examples from actual cases are given for diviners' queries that included the duration of the validity of the "instruction", and ranged from questions of general health to military tactics [95–96]. If the result was unfavorable for the time-period intended for a plan of action, the question could be repeated after the period of validity had expired to see if the course of action would be successful at the later date, and to ascertain the most auspicious time for the undertaking [96–97]. Tablets survive in which the king of Mari assessed the security of his kingdom regularly each month by these means. If the powers-that-be consistently gave an unfavorable response, different timescales notwithstanding, clients would have to consider abandoning their plan of action, or whatever their scheme may be, and leave their fate in the lap of the gods [98].

Maul quotes from a remarkable double-extispicy cast for King Zimrilim of Mari by the same diviner asking whether he should hand over one of his cities to the Babylonian King Hammurapi, who had requested it, and whether by refusing to do so he would jeopardize his kingdom. The diviner carried out two extispicies, phrasing the question first in the positive and then in the negative. Based on the readings, the diviner advised his king not to relinquish the city [98–99]. Further examples of tablets from royal archives include one concerning the queen at a Hittite court that covered matters of state security and information not in the public domain. This indicated that the diviners were comparable to modern-day civil servants who had access to classified information that could not be divulged. This chapter, like the one before, is vivid and methodically presented.

Despite its light-hearted title, chapter 5, "An Option of Going Cheap: The Inspection of Sacrificial Birds", is no less serious than the earlier chapters focusing on heptoscopy. It is a tour—like the examination of lamb offerings—of the inspection of sacrificial birds (here, termed ornithoscopy), and the parallels are evident [103–121]. Although records of this practice are sparser

than for the more expensive procedure of obtaining a divine "instruction" from a sacrificial lamb, Maul argues convincingly that this practice became common in daily life during the second half of the first millennium BC, when doves were bred in Babylonian temples for this purpose. (The lives of ordinary people are missing from royal archives in the ancient Near East; hence, there is a shortage of case studies [103–104].)

At an earlier time, from the Old Babylonian period (*ca* 2000–1500 BC) until the first millennium BC, ornithoscopy was a secondary divinatory procedure employed in royal oracular consultations. What is not missing, scanty records notwithstanding, are the detailed anatomical oracular procedures of this practice, presented by Maul, in a similar format to that described for the inspection of lambs in extispicy. And indeed, the sacrificial process, terminology of areas of internal organs, and interpretations of markings and blemishes were similar. Maul suggests the possibility that the birds, which were sacrificed to feed the temple deities rather than to ascertain an instruction connected to war, politics, and economics—the primary purpose of this form of bird divination—were probably also examined for any messages connected to the gods' welfare. Ornithoscopy survived in Greco-Roman culture, as is known from satirical literature [120–121].

The slightly amusing titular headings continue with chapter 6, "Divination 'To Go' and Prognostication 'On a Shoestring'", which deals with divination by the use of flour, incense, or oil, with each method discussed in turn along with their recorded histories. In his introduction to this subject, Maul points out that an offering to the deities for the purpose of prognostication had to be the product of either labour-intense husbandry (lambs or doves), or intensive non-animal production processes involving vegetable origins (such as the manufacture of flour, incense, or oil). Wild animals or foraged fruits would be unacceptable as oracular offerings [124]. The sacrificial offerings of Cain and Abel, thus, have verifiably ancient traditions.

A single tablet written in the hand of a schoolboy in the Old Babylonian period (*ca* 2000–1500 BC) is the most detailed collection of the reading of signs from different methods of prognostication by flour, e.g., by aleuromancy ("divination with wheat") or by alphitomancy ("divination with barley") [128]. Another method ("putting grain on fresh water") is recorded more briefly in the first millennium BC and attested in a Sumerian royal inscription and other sources, including Homer [128]. Interestingly, the principles for divination by flour are the same as those for extispicy. The procedure would also take place at sunrise, and findings in the different methods followed similar readings. Markings, blemishes (on living sacrifices), or various

movements (on inanimate offerings) were favorable if they were on the side of sunrise (east) or to the south (right), and unfavorable if they were on the side of sunset (west) or to the north (left). Maul takes us through an apprentice diviner's exercises inscribed on his tablet and challenges us to interpret a sign in the cuneiform text, as the boy's teacher may have tested his pupil 4,000 years ago, thereby ensuring that the reader, student, and specialist alike engage with the ancient mindset [123–129].

Textual evidence for prognostication by incense (libanomancy), divining by means of the ascending smoke and pleasant smells from a censer, is similarly scarce: it is found in but two sources from the Old Babylonian period which describe the procedure and its interpretations in depth. The practice is also mentioned in a copy of a Sumerian prayer from the seventh-century BC about another Job-like figure abandoned by the gods. Libanomancy is also referred to in a self-eulogy by King Shulgi in the 21st century BC, as well as in an Old Babylonian collection of omens in which the result has a military context [129–131].

Maul suggests that libanomancy (flour is included in the mix of aromatic woods, resins, and herbs) would have been ideal for oracular decisions during warfare, as the process was simple. The interpretations of the movement of the smoke is seemingly uncomplicated (as deduced from the texts), and the procedure could be used for urgent decisions, presumably without second opinions and controls (not mentioned by the author).

Divination by drops of oil (leconomancy) used the same sacred oil for oracular purposes as that used for offerings of food to the gods, that is, oil from pressed sesame seeds that was usually placed in a special bowl or mixed in a cup with various liquids such as beer, water, and milk. To receive an "instruction", a seer mixed oil and water and judged the result [133–143]. This procedure was accessible to common people and was used in the royal court as evidenced by several tablets that Maul adduces from the Old and Middle Babylonian periods. It is well attested from a wide range of literary texts and omen collections in the second millennium BC. There is also an allusion to it in a very old Sumerian proverb. Maul's comprehensive overview of this well-known form of divination informs the reader that the inquirer was represented by the oil, and the forces against them by the water [138].

Like all the omen texts for each medium of instruction, the structure of the interpretations was set out formulaically in the conditional (protasis-apodosis) format, or what Maul calls "compound sentences" of the sort "If *p* then *q*", where *p* is the description of the sign, that is, how the medium is

acting or appearing at the moment of the question, and *q* is the meaning for the client, the economy, the country, or whatever the context is. The rules for non-animal divination were the same as for animal sacrifices, with the same exceptions: negative readings for military, political and economic outcomes turned into their opposite, and vice versa, when the question concerned sickness. Like extispicy, ornithoscopy, flour divination, and prognostication by oil also involved a double examination in which the question pertaining to the situation was asked again but rephrased from its opposite perspective in order to confirm the first result [140].

An interesting variant in Maul's absorbing and thorough survey is cited for a question about marriage that involved not the mixing oil with water, but the pouring out one drop of oil for the man and one drop of oil for the woman to see if the drops met. There were also different possible outcomes and corresponding interpretations: if either drop turns black, that person, the man or the woman, will die [141]. The technical details connected to all of these methods of reaching out to the supernatural to ask advice about the future implied a system of phenomenological hermeneutics that modern minds can relate to.

The simple, age-old Old Babylonian marriage question in an omen collection, like queries on military strategy, is interesting because there is the strong implication that if the drops of oil did not meet, or a drop of oil turned black, the diviner would have advised the couple not to marry. Indeed, the plethora of selected examples throughout the book demonstrate, in a thought-provoking way, that early Babylonian divination concerned questions on wider human actions that invited choice and what modern audiences would describe as "free will". In omen divination, a person's or a people's fate is not absolutely predetermined; clients, from kings to ordinary people, could avoid certain actions and their consequences if forewarned either by the blemishes on the liver from a pure lamb, or by drops of sesame oil. If the philosophy of irreversible and unavoidable Fate had existed in the second millennium BC, there would have been no need for the *bārû*, or, in later Greek, Roman, and Etruscan cultures, the haruspex.

A very wide chronological and sociological perspective on the development of Mesopotamian divinatory thought is taken in chapter 7, "From Meat Inspection to 'Science'", a 42-page historical study. Some of the earliest evidence for the practice of extispicy survives in a stone tablet from the 26th century BC concerning the appointment of a high priest. Similar evidence for the appointment of priests and the commencement of building projects with divine approval are found in inscriptions from the third millennium BC.

Maul suggests that in its early stages, the oracles were binary—the diviner could receive a yes or no answer only when, it seems likely, all the animal's organs were examined—and that the oracular system may have arisen out of the offering of sacrifices when the diviner ascertained whether a gift to the gods pleased the deity concerned (compare with Cain and Abel, again) [145–150].

A philosophy of what we might also anachronistically describe as ancient epistemology and rationalist reasoning is evidenced in the Third Dynasty of Ur (21st century BC) in the self-eulogy of King Shulgi, who appears to have officially institutionalized the tradition of extispicy. He used diviners before political decisions were finally approved; the interpretative process, however, was transmitted orally and not written down. Written compendia of omens existed in the 18th century BC in the form of "If *p*, then *q*", comprising detailed anatomical knowledge of the liver and the meanings of blemishes on significantly named micro-physiological regions of an organ. This same form of omen literature continued until the birth of early astronomy/astrology in Mesopotamia in the seventh century BC, and lasted to the mid-Byzantine era and beyond, even though the use of astronomical cycles (and meteorological phenomena) in the world of divination introduced a more rigid, deterministic, and fatalistic mindset, which was seemingly immune to oracles approached at sunrise [150–160].

The reader learns that the art of divination developed after the reign of King Shulgi and that extispicy appeared to take precedence over prophecy in matters of political/military decisions. This is demonstrated by a message from a prophet from Mari in the Old Babylonian period articulating in the first person the words of his god to his king [161]. Diviners apparently had their own professional associations which were independent of the royal court, thereby ensuring their neutrality. Their code of practice appeared to include offering their oracular services with flour or oil to the poor, although, as stated earlier, recorded evidence for this is scarce [162–163]. Sociological information based on tablets from which information about their relationships, familial and professional (with their masters and their colleagues), may be drawn, is in no short supply.

Divinatory knowledge was passed from father to son and kept within family groups sworn to secrecy regarding matters of state that were shared with them by the king. Loyalty and trustworthiness were imperative and were duly rewarded. A diviner co-led the army in the kingdom of Mari along with two generals and received the same salary as them—a psychological boost to soldiers thus carried the same weight as strategic direction [163–165].

The divination industry expanded during the reign of Hammurapi (first half of the 18th century BC) under whose watch compendia of omens from different regions in the Near East were collected, compiled, written down, unified, and fixed or canonized [166–167]. Maul's style becomes more like narrative in this historical chapter, as there is much to summarize. An expert on Mari, he relates the regional difference between divination practices in that kingdom and those in Babylon [166–167]. This attention to the minutiae in comparing the written records on this subject shows that until the omen traditions were unified in favor of Babylonian practices during the Old Babylonian period (2000–1500 BC), there was considerable local diversity in the seers' art across Mesopotamia and the Near East, including northern Babylonia where we primarily have texts from Sippar, and the south. Literacy increased during this time with the demise of Sumerian and the rise of Akkadian as the official written language and the reform of the cuneiform script. Maul notes that at this early stage the "If p, then q" formula was already emerging [171–172]. By the Late Babylonian period (the second half of the first millennium BC), trainee seers copied not only standardized omen series but also the by-then unified ritual prayers [173].

The author takes us on a journey of the diviner's apprentice that spans several centuries [168–175]. Prior to the compilations of written omen series during the early second millennium BC, teaching aids in the form of miniature model clay livers complete with inscriptions regarding their location, significance, and interpretation were used in the instruction of extispicy. Some 30 such exemplars have been excavated from the royal palace of Mari. The replicas were not always based on empirical observation: one is ascribed to King Gilgamesh, presumed to be a model of the application of hermeneutical principles [168–169].

In the section of chapter 7 on the circulation of divinatory knowledge from the Old Babylonian period onwards, Maul contextualizes the preservation in translated copies of the guarded secrets of extispicy in cultures far and wide by the end of the second millennium BC. He reports that excavators have unearthed texts from the residence of the King of Elam in the royal city of Susa, in Iran, that contained terminology for the gall bladder unique to Old Babylonian tablets from Mari [181]. This was not by chance, as throughout much of the second millennium teams of seers collected, collated, and redacted all available divinatory knowledge on extispicy, and in the latter third of the millennium compiled it into a series called the "art of extispicy" (*iškar bārûti*), filling almost 100 numbered tablets and abridged "pocket

editions" on single tablets [181–182]. However, in the first millennium, esoteric knowledge was transmitted in a different kind of script to re-establish access to Babylonian divinatory knowledge for a select few, where necessary [183–184].

The final section in this historical chapter, "Assyria Forcibly Acquires the Inheritance of the Babylonian South", describes the looting of Babylonian libraries in the 13th century BC. We learn that much of the foregoing information has been gained from excavations at Assyrian sites such as Assur and Nineveh: for example, the Babylonian "art of extispicy" was unearthed at the latter site and copied for the library of Ashurbanipal (*reg*. 669–631 BC). The high degree to which this skill was deemed important for political purposes is shown by the fact that Babylonian diviners found a home in the Assyrian court of the seventh-century BC but had to swear an oath of loyalty to their new rulers.

Although chapter 7 is fascinating for its details and the plethora of cases and examples, it would have benefitted from a map and a timeline. A historical overview of the political complexities would have made it easier to follow the dominant power relationships in the region at a given time. As it stands, the structure is not framed with an eye to the wider picture in the ancient Near East across 2,000 years, which would be expected from a chapter inclined to the chronology of its subject. Related to this observation, it would have been easier to read if the case studies citied had been arranged in a historical pattern. It sometimes felt like the micro-content jumped around between millennia, and halves and thirds of millennia, often between paragraphs, necessitating the re-reading of the historical contexts to be clear oneself. Furthermore, some examples of information on a few tablets raise questions about the consistency of the system presented in several texts. If there had to be two diviners involved in an extispicy so that the first "instruction" could be confirmed, one may ask why, then, did an army have two generals to lead it and only one diviner to perform the public oracular sacrifice when in a battle itself? Perhaps there was a practical matter of time and urgency [164].

The development and growth of astral divination comes in at chapter 8, "New Constellations: The Inexorable Rise of Babylonian Astral Divination", a little more than half-way through the book. These diviners, the "scribes" (*ṭupšarru*), or scribes of the second millennium canonical omen series, *Enuma Anu Enlil* (*ṭupšar Enuma Anu Enlil*) [211], co-existed with the seers. As with the previous chapter, there are fine and valuable details—but it is a job to piece together the overall historical picture. The wider sociological view is particularly ambiguous since extispicy has, thus far, been presented

as the primary method of divination. Yet, as Maul points out, Babylonian expertise in astronomy, the compilation of star lists, and the calendar are well known to date to the third and early first millennia BC. He argues that there was no competition between the seers and the scribes who knew the cycles of the planets and when eclipses, lunar and solar, would take place, and who interpreted the meanings of the activities of the heavenly bodies. But our knowledge of these scribes is based on the reports uncovered from the libraries of the seventh century BC in Nineveh in Assyria and tablets from the Babylonian king Nabu-Nasir [213] (mid-eighth century BC), not earlier.

The micro-details of Babylonian astral divination are useful: the planets are written in the tablets that Maul discusses in the order of their favorable influences, the most benefic planet taking priority: Jupiter, Venus, Saturn, Mercury, and Mars. The hermeneutics, clearly given, include the rule that if the Moon eclipses a positive planet, it is a negative sign; but if it occults a baleful planet, it is an affirmative sign—an apodosis which seems understandable and logical. In a Neo-Assyrian era tablet (*ca* 1000–609 BC) cited with several "if…then" clauses, Venus is associated with revolt and famine (as the morning star) and childbirth. Different aspects of its appearance ostensibly determined whether a woman, and perhaps also the baby, would die during labor; whether it would be a difficult birth; or whether all would go well. Maul remarks that Venus is associated with "the forces of sexuality, lust, and love" and that the birth omens fall into that category. One may argue, however, that the childbirth omens relate to women and that Venus here represents females, since women are explicitly the subject of these omens [197–198].

The minutiae of astral divination regarding the different names of the planets when they are rising or setting before or after the Sun, or culminating, are all well done. It cannot be comprehensive. The same names were used for different constellations and planets, and what they represented; and the names of constellations in Sumerian were preserved. The constellations had geographical representations, such as cities and rivers: the Crab and Pisces (north and south are The Tails) are associated with the water levels of the Tigris and Euphrates, for example.

The discussion on the 360-day calendar that emerged in the third millennium BC is concise and standard, yet accessible to the non-specialist. Maul argues that the purpose of scanning the night sky was not to gather information regarding future events but to aid agriculture and to maintain a calendar based on the lunar months that is synchronized with the Moon.

A 13th month was added approximately every three years to keep the seasons in the same lunar months. (This view is taken for granted although it may also be argued that the purpose of intercalation was to keep the festivals, which have dates in the lunar calendar, in their seasons.) Most of the material in this chapter, such as the "astronomical diaries"—continual observations of the heavens and earthly events spanning some 700 years—is here well described and its chronology clarified (from the eighth century to the first century BC; the oldest extant tablet dates to 652 BC).

The philosophical differences between the two specialist sets of diviners is of interest. While the seer could instigate intercessory rituals and actions to ensure that a bad "instruction" was avoided, different kinds of acts were instigated by the scribe. These included the substitution of the king for a lay person during the period of a lunar eclipse, not to avert fate (which was predetermined by periodic astronomical cycles) but to negotiate ways to manipulate it [217–219].

Chapter 9, "New Teachings on the Cosmos", contains a welcome in-depth sociological overview on the co-existence of different guilds of diviners. It opens with the information that Ashurbanipal had an "advisory council" in which the scribes took priority over the seers. The head of all the diviners at court was the "chief scholar" (*ummânu*), who had mastered all the disciplines. The second string comprised the "healers" (*āšipu*) who interpreted terrestrial signs in order to identify and avert disasters, followed by the physicians, priests, and augurs (who divined by the direction of birds' flight), in that order [221–222]. They had to work together to make sure that the heavenly and unsolicited natural signs and terrestrial prognostications from solicited omens were in harmony; as in heaven, so on earth [224–228]. The explanations of the bureaucratic system of divination make fascinating reading.

Problems arise in this chapter with the description of the diviners' astronomical mores and procedures without pinning the narrative and the data to a chronology. One has to locate the references in the endnotes in specialist academic books and journals to find out the dates of some of the texts. Some single examples cited in the endnotes of Maul's book that are evidence of developments in astral divination in the history of Mesopotamian astronomy are far from readily accessible, yet this topic is aimed at the educated general reader.

Writing of the interaction between the different guilds of diviners at the Assyrian court in Nineveh, Maul states:

> The "healers" adopted from the "scribes" the doctrine that the 30° sections of the ecliptic—each of which, in keeping with the course of the sun, corresponded to one month—each possessed individual values. [224]

The statement requires clarification by contextualizing the time-periods of its terminology and mathematics, since most scholars regard the division of the ecliptic into equal sections of 30° as a later, mid-fifth-century innovation [Britton and Walker 1996, 49]. (The risk of anachronism is similar to that in Maul's comparison of the 12 canonical markings on the liver to the 12 divisions of the zodiac [55].)

A similar issue occurs in the example of an interesting "miniscule clay tablet from Achaemenid period Uruk" in which the 12 regions of the liver are each associated with a deity, a [lunisolar] month of the year, and a corresponding constellation [229]. Maul states:

> Each of the twelve sections on the liver is connected to not only one of the great deities of the ancient Near East but also to a month of the year and to a star that becomes visible again upon the eastern horizon at dawn at the beginning of that month (i.e., that rises heliacally). [229]

However, the text associates Orion (a constellation, not a star) with month 3 (Simanu). Since Orion rises heliacally in September, the link with the third month is unclear. (In contrast, in the tablet, months 1 and 2 are associated with the constellations of Aries and Taurus, respectively, which rise with the Sun in those months.) Maul's definition of the heliacal rising is problematic: it need not be associated with the beginning of a month, and it occurs just before sunrise, that is, in morning twilight or the very last of nighttime.

Maul also states that the seers perceived an image of the zodiac in the liver [230]. If he is referring to the Babylonian royal courts after the late fifth century, information about his dating is required. Moreover, when he moves onto the Late Babylonian and Seleucid era texts that assigned plants, trees, cities, minerals, and herbs to the zodiacal signs [231, 235], there is an intellectual gap that is not explained between these fourth-century BC texts, when the zodiacal signs were fixed, and texts using 12 constellations (not all zodiacal) from the Persian period. There is also very little mention of the birth and growth of Babylonian horoscopes from the late fifth century [235], although Maul's observations that scribes moved from the royal palace into temples in Babylon and Uruk are important [233].

A paragraph on *melothesia* (the correspondence between parts of the body and the zodiacal signs), which Maul speculates, correctly, must be a Babylonian innovation [232], though he adds that this cannot yet be substantiated by cuneiform sources, misses a paper that actually confirms his idea. It

was published after the German edition of Maul's book came out in 2013 but before the translation under review appeared in 2018 [Wee 2015: see also Geller 2010; 2014]. It is unfortunate that this additional research was not incorporated in the present volume.

Maul's final remark at the end of the chapter, that classical Greece is traditionally yet incorrectly believed to be the intellectual soil of "observational and computational astronomy" [235], is very out-of-date. This chapter contains a lot of useful information, particularly on the pre-zodiacal history of astrology, nonetheless. It is interesting that not only do the texts described previously reveal the debt that astral divination owes to extispicy and other forms of terrestrial omen divination, particularly in the form and structure of its language (the protasis and apodosis), but Maul claims that there was a mutual exchange of concepts and deductive reasoning [235]. However, the discussion of the *dodecatemoria* omits any citations of this body of knowledge and research [see, e.g., Sachs 1952, 65–75; Neugebauer and Sachs 1952–1953; Brack-Bernsen and Steele 2004].[2]

Chapter 10, "At the Center of Power: Divination and Political Counseling", sees Maul back in his comfort zone of the seventh century BC, now cooking with gas on the history of early astral divination and politics at the royal court, and offering the reader some truly remarkable and fascinating case studies, including those compiled from tablets written by different scribes and officials related to the same events. This chapter opens with a discussion of the widely used protasis-apodosis formula, employed by all "scholars", that is, by those involved in observing and reporting astral and terrestrial phenomena and devising their interpretations. The bald "If p, then q" sentences had to be assessed and discussed by a committee of officials, Maul's "commission for future policy", who met monthly, probably around the time of the new Moon [241]. The statements always lacked context, and specific explanations may have been developed in retrospect when the prediction in question appeared to have been fulfilled [239].

Maul suggests that the texts involved matters of security and that discussions with the king could often take place in the open air, to avoid spies. (He gives a delightful example of a report of the chief scholar appraising a young king, Ashurbanipal, in a summerhouse by the riverbank [237–240].) Consequently, little documentation relating to predictions concerning state secrets exist. Another example relates to a tablet from 678 BC in which a scribe ("an

[2] Sachs' work does not appear in Maul's bibliography.

astrologer") describes a lunar eclipse with apologies for having to put his commentary in writing, rather than report orally.

Maul also gives the detailed example of a tablet written by a priest in May 657 BC who also watched the skies and was clearly privy to classified information. Based on an astral portent, the nature of the heliacal rising of Mars that year, he advised the king to declare war on an invading tribe [241–244]. The most absorbing illustration of politics at the royal court concerns no fewer than nine separate reports and interpretations of this very same astronomical event. One report linked the observation to a full Moon some 12 years earlier that was worryingly late by two or so days (hence a bad portent because an early or late full Moon is abnormal) and that also appeared in the sky with the conjunction of two malign planets, Mars and Saturn, which was never a good combination. Maul entertainingly speculates on the political discussions and the likelihood that second opinions were sought from the other groups of diviners before all the intelligence was assessed centrally [244–248].

He adds the historical note that the Assyrian king Sennacherib (705–680 BC) was the victim of a conspiracy by his scribes not to tell him any bad news because he had a hot temper. Consequently, he was not forewarned when he became terminally ill. Since then, there was a policy of separating the scribes to ensure that they could not collude to give a fraudulent report, and of questioning the veracity of their astronomical observations, as well as other methods of monitoring their performance. The king himself was also often expert enough to identify any attempt to pull the wool over his eyes [248–250]. By using the politics of divination, a king could employ the apparent blessings of the gods as divine propaganda [250–251]. This chapter is well written and on firmer ground; the historical, political, and sociological illustrations are enjoyable to read.

In the final few pages of chapter 11, "On Prognostication as Sense and Nonsense", Maul intimates that asking whether divination actually works is the wrong question [255]. Its importance, in his view, is that the layers of bureaucracy surrounding the multiple processes and methods of prognostication influenced policies from building projects to warfare and created a safety valve. Its function was, in effect, to make certain that every official action was questioned and examined each step of the way. In other words, it seems, the organization of scribes, scholars, priests, and all sky and terrestrial watchers prevented the king from abusing his power, thereby securing a pre-Greek style of proto-democracy, albeit with a highly complex and different form of bureaucracy [259–260].

The later history of astral divination after the invention of the zodiac and the emergence of horoscopes is not actually examined in this overview. Nor are other kinds of ancient Near Eastern divination explored, apart from extispicy and related forms of sacrificial offerings. It would have been helpful to have dates or time-scales placed consistently within the text, instead of the basic author-date citations in the endnotes. There are times when the information seems a little vague, and I found myself flicking to the back of the book to follow up a reference in the endnotes, expecting to find fuller details.

Aside from these observations, this is a readable introduction to a fascinating subject. The book is certainly of interest to anyone curious about the early history of divination techniques, their sociological and practical contexts, and the intellectual interactions between the interpreters of terrestrial omens and astronomical phenomena. All of these techniques and philosophical ideas were concerned with protecting a country's inhabitants, or an individual's concerns, either high-born or poor. Maul not only traces the links between ancient Near Eastern diviners and their skills, but he relates the longevity of these practices and their changing face beyond cuneiform culture in the later antique world. One looks forward to learning more about these important gaps in the history of knowledge, a super-nova research area thanks to the author, as more and more cuneiform tablets are deciphered.

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