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III

EMPIRICAL SCHOLARSHIP IN THE NEO-ASSYRIAN COURT

Eleanor ROBSON (University of Cambridge)

Introduction

Hermann Hunger's edition of some 570 astrological reports to Neo-Assyrian kings is an often overlooked milestone in the study of cuneiform scholarship (Hunger 1992, henceforth SAA 8). For, together with around 350 extispicy queries and reports (Starr 1990, SAA 4) and nearly 400 letters from that same group of | 603 scholars to those same kings (Parpola 1993, SAA 10), those reports provide systematic evidence of Neo-Assyrian royal scholarship in practice. Despite further studies by Koch-Westenholz (1995), Brown (2000), and Rochberg (2004) it is rarely acknowledged how significant this body of data is, not just for the history of Assyro-Babylonian scholarship but also for the history of science in its largest sense.1 As Assyriologists we perhaps take for granted the extraordinary textual wealth of seventh-century Nineveh, but the volume, range and immediacy of first-hand testimony from Kuyunjik is completely unparalleled in other ancient cultures.

Recent work with Karen Radner on SAA 4, 8, and 10 (Radner and Robson 2007-08) has brought to the fore questions of empiricism in Neo-Assyrian court scholarship. That is to say, there are gaps, tensions, and disjunctions between the images of scholarship presented in the theoretical writings of Assurbanipal's library and the bodies of practice witnessed in the letters, queries, and reports.² For instance, there are early 130 surviving letters from about half a dozen Neo-Assyrian court āšipus to their royal patrons (SAA 10: 185–313). In those letters they regularly quote rituals (e.g., SAA 10: 238; 277; 296) just as their colleagues the asûs send medical recipes to the king (e.g., SAA 10: 321). Yet, as Heeßel (2000: 93) has already noted, never once do they cite any of the so-called āšipus' omen series such as sakikkū in support of their diagnoses, recommendations, or instructions. Rather, they rely on 'careful observation, long experience, and a large dose of nononsense pragmatism' (Robson 2008).3

¹ See also Maul 1994 (with the important review by Veldhuis 1995/96) and Jean 2006.

² This phenomenon has been the subject of close attention in other branches of the history of science in recent years (e.g., Dahan and Bottazzini 2001).

³ But note that the priest Nergal-šarrani writes to the king, 'I am being told: "You are afflicted with the 'hand of Venus,' due to intercourse with women." I am afraid' (SAA 13: 73 r1-5). He does not say whether a professional practitioner is the source of this information.

In what follows I present a case study in Neo-Assyrian court extispicy, by comparing the testimonies of the $b\bar{a}r\hat{u}s$ ' letters, queries, and reports with the evidence of the omen series, and other library genres. By the end I hope we shall have a clearer picture of what the $b\bar{a}r\hat{u}s$ who worked for Esarhaddon and Assurbanipal actually did (and what they didn't do), in an attempt to present a different perspective from the synthetic accounts of extispicy that have prevailed in recent years (e.g., Steinkeller 2005).

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The surviving royal correspondence from bārûs comprises a dozen letters and some 350 divinatory queries and reports from the reigns of Esarhaddon and Assurbanipal (SAA 10: 173-184; SAA 4). The letters cannot be dated exactly, but some refer explicitly to events in Esarhaddon's reign and in the early years of Assurbanipal. About half are from the chief haruspex Marduk-šumu-usur, the rest (where assignable) to scholars who also wrote Queries and Reports. As Starr (SAA 4: XIII) and others have already noted, there was a shift in the diviners' technical writings in the late 650s BC. During Esarhaddon's time and for the first decade or so of Assurbanipal's reign, the diviners presented written Queries to the sungod Šamaš, putting the king's question to the deity and inviting a response which disregards the possibility that any aspect of the ritual was mis-performed. Short records of the state of the exta observed were often added afterwards (SAA 4: XIII). Some 280 Queries survive, with extant eponyms ranging from 672 BC (SAA 4: 183) to 657 BC (SAA 4: 278). About forty preserve colophons which mention around twenty different diviners by name. The 170 known Reports, by contrast, were written during or after the ritual inspection of the sacrificial animal's innards.5 They systematically report observations and associated omens, summarise the diviners' verdict, and give the question to which the extispicy pertains. Some twenty give eponyms in the three year period 652-650 BC, and about thirty preserve some sort of authorship information. About a dozen diviners are attested in the Queries,

⁴ They are, in descending order of frequency and ignoring Starr's conjectural restorations: Marduk-šumu-uṣur (16), Naṣiru (10), Šumaya (9), Bel-ušallim (8), Nadinu (5), Nabu-ušallim (5), Tabni (4), Aqaraya (4), Nabu-šallim (3), Bani(ya) (2), Šukinu (2), Saya (2), and Marduk-šumu-ibni, Kudurru, Bel-epuš, Balašu, Bel-iqiša, Kaṣiru, and Nabu-ahhe-balliṭ (1 each). Aqaraya, Kudurru, Marduk-šumu-uṣur, Naṣiru, and Tabni are also known authors of letters to the king or crown prince (see below).

⁵ Starr (SAA 4: XIII) writes: 'The tablets on which the queries were written are characterised by their large, coarse appearance, and by the equally large, coarse shape of their cuneiform writing ... Exceptions to this rule, such as there are, are to be found mostly among the reports from the reign of Assurbanipal.' Photographs of six relatively well preserved Queries and Reports can be found at http://knp.prs.heacademy.ac.uk/highlights/queries/ (Radner and Robson 2007–08).

only three of whom also occur in the Reports.⁶ The Reports have rarely been studied before now but, as we shall see, they are an unparalleled means of accessing the divinatory process.

Bārûs at court

Before we examine the evidence for extispicy in practice, let us consider the role and status of the diviners at court: their relationships to the king, their relationships with each other, and their relationship with other scholars and courtiers.

While it is often assumed that $b\bar{a}r\hat{u}s$ were priests with temple appointments (e.g., Lambert 1998), the diviners at the Neo-Assyrian court were supported by royal patronage.⁷ Client-patron relationships are well attested between scholars, poets, and philosophers and kings, nobles, and caliphs in the Roman empire, premodern Europe, and the Islamic Middle East (e.g., Wallace-Hadrill 1989; Asch and Birke 1991; Bernards & Nawas 2005; Brentjes 2009). Raymond Westbrook (2005) has recently given a useful overview of patronage in the ancient Near East as well. He reminds us that patronage is an asymmetric long-term personal relationship between dominant 'patron' and socially inferior 'client' based on mutual exchange of goods and services. The patron provides political access, protection and often material benefits, while the client supplies loyalty, service and prestige through his expertise. Patronage is a voluntary exchange: it involves moral obligations but no explicit rules or legal rights (Westbrook 2005: 211).

All of these features are prominent in the diviners' correspondence with the king and crown prince. The financial mechanisms and fragility of patronage can be seen in a letter that Marduk-šumu-uṣur writes to the recently crowned Assurbanipal (SAA 10: 173 o6–r9):⁸

The father of the king, my lord, gave me 10 homers of cultivated land in Halahhu. For 14 years I had the usufruct of the land, and nobody disputed it with me. (But)

⁶ Dannaya (16), Marduk-šumu-uṣur (9), Assur-da^{››}in-šarru (6), Bel-ušallim (3), Ilu-iṣbatanni, Ninuaya, Šarrat-samma-ila[›]i, and Zizi (2 each), Bani(ya), Dari-šarru, Nergal-šarru-uṣur, Sin-šarru-ibni, and Šarru-nuri (1 each). None of these men, apart from Marduk-šumu-uṣur, is the author of a surviving letter to the king or crown prince.

⁷ SAA 17: 105 r9 mentions a diviner 'tearing at his beard' in frustration: he at least was not shaved for priesthood (on this practice see, e.g., SAA 10: 96; 97; SAA 18: 40; 82; Löhnert 2007). It is important to distinguish here from the image of the ideal diviner as presented in scholarly texts (e.g., Lambert 1998) and the practices of real-life $b\bar{a}r\hat{u}s$ in letters and the like.

⁸ I use the previous editors' translations unless otherwise noted.

Eleanor Robson

now the governor of Barhalzi has come and mistreated the farmer, plundered his house and appropriated my land.

The king, my lord, knows that I am a poor man, that I keep the watch of the king, my lord, and am guilty of no negligence within the palace. Now I have been deprived of my field. I have turned to the king; may the king do me justice, may I not die of hunger!

Esarhaddon had provided Marduk-šumu-uşur with the means to support himself but a provincial official has taken advantage of the change in power to requisition it for himself. As Marduk-šumu-usur has no legal recourse, he must appeal directly 606 | to the new king for favour, reminding him of the long-term loyalty and expertise he offers in exchange for continued protection. Assurbanipal has no formal obligation to retain his father's scholars, though, as the following letter shows.⁹

This petition to Assurbanipal as crown prince from one [...]-i explicitly set out the expected parameters of the patronage relationship (SAA 10: 182 o6-13, 20-32):

[From] his [chi]ldhood till his maturity, [my father] took [care of] the father of the crown prince. [Steadily] he stood in his presence; he [shared the ...] of his basket with the king, his lord; he e[xperienced] the [da]ys of misfortune with the king, his lord.

[The k]ing, our lord, [.....] kindness [.....]; he dre[ssed him] in purple [...] and ap[pointed him] the chief haruspex. (damaged passage)

Everything that he had s[aid] Šamaš caused to be understood through his (= my father) hands.

(So) he (= the king) said: "My servant has ...ed after me; [let] me [do] my servant a favour. The first token of m[y] favour [is]: [I will assign to him] the [lead]ership of scholars. My [second fa]vour is: As long as [he is] in Assyria, l[et him be n]ear me."

Further[more] he said: "If I didn't do him a favour, would it be appropriate in the sight of the gods?" (So) he did him the (said) favour, and myself, as part of the favour shown to my father, he gave to the crown prince, my lord.

In other words, the diviner (presumably Marduk-šumu-usur)¹⁰ stood by Esarhaddon for many years, through good times and bad, interpreting the liver omens that Samas sent. If he had already been at court on Esarhaddon's succession he

⁹ SAA 16: 64 o1–6 tells a king—presumably the newly crowned Assurbanipal—very clearly how to deal with such petitions: 'Concerning the men who [appeal] for royal intervention, the king, my lord, should not tarry. Let th[e men] come and speak up, and may [the king] familiarise himself with [their] cases. May the king seize upon the matter whi[ch] is accept[able t]o him. What is not acce[ptable t]o the king, my lord, the king, [my] lord, [may] drop.'

¹⁰ Parpola (1970–83: II 373) does not attempt to identify this man, noting that the sender might be any one of Bani, Tabni, Zizi, or another.

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would have sworn a loyalty oath along with the other scholars (SAA 10: 7). In return the king gave him high courtly status and courtly apparel; he gave him close personal access and attempted to set up a parallel patronage relationship between Assurbanipal and the diviner's son. But that has apparently failed: 'Now [the crown p]rince, my lord, had added (to my misery) by dressing another *haruspex* in purple (robes); as for my heart, the crown prince, my lord, has broken it' (SAA 10: 182 r4–6). He asserts his superior expertise and family connections in relation to his currently favoured rivals, who must be ousted if he is to regain his former place at court (r24–28): 'Moreover, (whereas) [Aqaray]a¹¹ and Naṣiru have kept [in] their [hands] non-ca[nonical] tablets and [...s] of every possible kind, I have learned (my craft) from my (own) father.'

In the letter of another diviner, we also see the consequences of falling out of royal favour, and the temptations it may lead to. Kudurru writes, '[Ever si]nce the day when the king my lord [dep]orted me, I have sat in confinement, praying to the king, my lord' (SAA 10: 179, o3–5). He attempts to win back the king's good will by reporting a conspiracy to put the chief eunuch on the throne, which he had been forced to participate in, assuring the king that 'The extispicy [which I performed was] but a colossal fraud! (The only thing) [I was th]inking of (was), "May he not kill me." [Now th]en I am writing to the king, lest [the king my lord] hear about it and kill me' (r19'–23').

More routinely, a very damaged letter from Aqaraya shows his expectation that the king will offer him legal favour: 'Last year I [appealed] to the king concerning a lawsuit of mine ... [someone] has damaged all my property' (SAA 10: 178 o8, r8). And Naṣiru writes quite bluntly to Assurbanipal (SAA 10: 180 o8–r5):

Why am I dying for lack of *means* and of cold? Five days ago the king said, "Give Naṣiru a house," but nobody has given a house to me. Let me remind the crown prince my lord about it, and let them give me the house which the king promised so that I may not die of cold.

When the diviner Bel-epuš falls ill his fellow-Babylonian, the astrologer Belnaṣir, appends a request for medical assistance to his routine lunar report: 'Let the king command a physician to go and see him' (SAA 8: 463 r5–6).

It is sometimes wondered whether the Assyrian court scholars did not cynically abuse their power over the king, by guiding him towards actions that

¹¹ Parpola restores [Aplay]a here, but although the name occurs frequently in the royal correspondence it is not found amongst the court diviners. Aqaraya, on the other hand, is attested twice with Naşiru in divinatory contexts (SAA 4: 142 r15; SAA 10: 176 o1).

would unduly benefit them.¹² While there were undoubtedly self-interests at work—no scholarly or scientific enterprise is free of them, as sociological studies of more recent knowledge practices have shown (e.g., Shapin 1982)—those interests must have been guided above all by the importance of maintaining or strengthening the trust and favour of the king while surrounded by others—scholars, princes, governors—who constantly sought to undermine it.

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But amongst the diviners themselves there was scholarly collaboration as well as competition. A well-known roster of Neo-Assyrian court scholars lists five $b\bar{a}r\hat{u}s$ —Aqaraya, Bani, Zizi, Marduk-šarru-uṣur, Nabu-nadin-apli—the first three of whom are also known as authors of Queries and Reports (SAA 7: 1). This size of retinue seems to have been fairly stable throughout the previous decades, and—unlike the astrologers—the diviners were by no means constantly at each others' throats (Koch-Westenholz 1995: 137–151).

The 38 sufficiently preserved Queries seem always to have written by at least two men—at least, there are no surviving Queries with sole authorship—often by three, and sometimes by groups of five, six, or even ten (SAA 4: 18; 129; 139). Of the 27 cases where the lead signatory can be confidently identified, a third are by Marduk-šumu-uṣur and another third by Šumaya. But interestingly, whereas Šumaya is always the lead signatory of the Queries he is involved in, Marduk-šumu-uṣur is equally likely to be named further down the list. At least five other diviners head the lists of signatories in the remaining Queries, and there are generally no consistent patterns in the order of listing.¹³

The teams responsible for the 33 authored Reports (as extant) were somewhat smaller. Minimally there was a sole 'reporter,' *bēl ṭēmi* (who was also presumably the diviner). More typically there were two responsible scholars—the diviner and the reporter, or two reporters—but never more than three or four (e.g., SAA 4: 324). In the 27 instances where the lead signatory can be confidently identified, over a third (10) are by Dannaya and fewer than a quarter (6) by Marduk-šumu-uṣur. At least five other men take the lead in the remaining 11, in which Dannaya and/or Marduk-šumu-uṣur may also appear as minor signatories. As in the Reports, there is no identifiable order in the listing of the names.

All of this strongly suggests that there were no hard-and-fast hierarchies amongst the diviners, beyond the existence of the $rab\ b\bar{a}r\hat{\imath}$, 'chief haruspex.' Even this term is rarely attested in the diviners' writings. It is never found in the

¹² Pečírková 1985: 158 gives some examples.

¹³ That is, one that can be identified in more than three tablets. The one exception is the ordered pairing Marduk-šumu-uṣur — Naṣiru, which is found in six tablets.

Queries but is twice associated in the Reports with Ninuaya (SAA 4: 326; 328) and once found without reference to a personal name (SAA 4: 319). We know that Marduk-šumu-uṣur was a rab $b\bar{a}r\hat{\imath}$ only from the legal document SAA 6: 339, in which he acts as a witness, and from the court roster SAA 7: 7 (Baker 2001: 734 1d). However, it seems that the king exercised strict control over who practised as a diviner; at least, one anonymous courtier sees fit to report an unauthorised scholar to either Esarhaddon or Assurbanipal (SAA 16: 65 o2–14):

Parruțu, a goldsmith of the household of the queen, has, like the king and the crown prince, bought a Babylonian, and settled him in his own house. He has taught exorcistic literature to his son; extispicy omens have been explained to him, (and) he has even studied gleanings from *Enūma Anu Enlil*, and this right before the king, my lord! Let the king, my lord, write to his servant on account of this matter.

As the diviners never give filiations in the Queries and Reports, it is usually impossible to identify blood relationships between them. Yet there are clues that such roles were inherited. We have already seen in SAA 10: 182 one diviner's expectation that his father's patronage relationship with Esarhaddon should be paralleled by him and Assurbanipal. In less fraught circumstances, one Query is carried out by '[NN and N]aṣiru with their sons, (and) Aqaraya' (SAA 4: 142 r15) and one Report by 'Ilu-iṣbatanni son of [...]-bani (and) [PN] son of *haruspex* Marduk-šumu-uṣur' (SAA 4: 334 r3'). Both Dannaya and Assur-da''in-šarru, on the other hand, were eunuchs (SAA 4: 300; 337).

Babylonian and Assyrian diviners worked together. Only around a third of Queries and Reports are in Neo-Assyrian script, the rest in Neo-Babylonian. Because they are typically attributed to groups of diviners it is impossible to tell who actually wrote them—and that might not have been any of the persons named on the tablet. For instance, two of Dannaya's single-authored Reports are in Neo-Babylonian (SAA 4: 286; 303) while another is in Neo-Assyrian script (SAA 4: 300).

The literary text, 'The Sin of Sargon,' written for Esarhaddon's father Sennacherib, is often cited as evidence that diviners routinely worked in competing teams (SAA 3: 33 o13–16 and several parallel passages):

I w[ent and collected the *haruspices*], the courtiers of my palace guarding the mystery of god and king; I split them [into several groups] so that they could not ap[proach or

¹⁴ Presumably this is another reference to Ninuaya, as this tablet (SAA 4: 319) and SAA 4: 326 date to 651/I/ and 651/V/11 respectively. Note, though, that Marduk-šumu-uṣur is lead signatory to SAA 4: 305 on 650/I/23.

speak to one another]. I [investigated] the sins of Sargon, my father, by extispicy, [enquiring of Šamaš and Adad] as follows:

However, the Queries and Reports themselves show no evidence of duplicate questions put to the sungod by rival diviners. Sennacherib's enquiry into the failings of his father was no routine matter, so it is entirely possible that he put special security measures in place for this extispicy: if it were normal procedure, why mention it?

Although the diviners usually worked together in small teams they almost 610 | never, it seems, collaborated with other royal scholars. Twenty-four co-authored scholarly letters to the king are known, from various combinations of astrologers, exorcists, lamenters, and physicians. 15 There is just one possible exception: the astrologer Issar-šumu-ereš consults the Babylonian scholars Bel-epuš and Belnașir (SAA 10: 9). Although Bel-epuš's profession is not stated, he is almost certainly the same diviner for whom we have seen Bel-nasir seeking medical help in SAA 8: 463. However, in this case it is not Bel-epuš's divinatory expertise that Issar-šumuereš needs but rather his knowledge of the correct procedures for funerary rites.

Why this disciplinary isolation? Was it because, as some have suggested, that sacrificial divination was by now an antiquarian irrelevance, of declining importance to the governance of the state (e.g., Pečírková 1985: 163)? Surely the great mass of Queries and Reports on military matters immediately suggests otherwise. In fact, extispicy was the ultimate royal decision-maker. The senior exorcist Adadšumu-usur explicitly refers to its reliability and finality as he flatters the newly appointed Assurbanipal (SAA 10: 226 o5-8):

Aššur, [the king of the gods], called the name of [the king], my lord, to the kingship of Assyria, and Šamaš and Adad, through their reliable extispicy, confirmed the king, my lord, for the kingship of the world.

astrologer Nabu-šumu-iddina).

¹⁵ These are: SAA 10: 209, 221, 231, 256, 259 (from exorcists Adad-šumu-usur and Mardukšakin-šumi); 281 (the same scholars plus exorcist Nabu-nadin-šumi); 205, 212, 232 (Adadšumu-usur and various combinations of the lamenter Urad-Ea and astrologers Issar-šumu-ereš, Akkullanu, and Nabu-mušeşi); 63 (astrologers Balasi and Bamaya); 40, 41, 43, 44, 47, 50, 53, 62, 66 (astrologers Balasi and Nabu-ahhe-eriba); 24 and 25 (Issar-šumu-ereš, Marduk-šakin-šumi, and Adad-šumu-usur or Urad-Ea); 297 (exorcist Nabu-nasir and physician Urad-Nanaya); 1 and 3 (chief scribe Nabu-zeru-lešir and Adad-šumu-uşur, plus Urad-Ea, Issar-šumu-ereš, and

More allusively, the Coronation Hymn of Assurbanipal begins (SAA 3: 11 o1–2):

May Šamaš, king of heaven and earth, elevate you to shepherdship over the four [region]s!

May Aššur, who ga[ve y]ou [the sceptre], lengthen your days and years!

No-one would argue from these lines that Assurbanipal intends to worship Šamaš over Aššur; rather, it is Šamaš—through divinatory messages—who will confirm the new king's appointment, just as he does for senior courtiers, politicians, and cultic personnel (e.g., SAA 4: 149–182; 299–311). Even those conspiring against the king put their trust in divination, as Kudurru finds when he is coerced by plotters into asking Šamaš, 'Will the chief eunuch take over the kingship?' (SAA 10: 179 r4'–5').¹⁶

In more routine circumstances, the other disciplines also deferred to extispicy. For instance, the astrologer Rašil the Older writes, 'The king need not be concerned; let him act according to the exti[spicies, and the king] my lord will become hap[py]' (SAA 8: 402 o5–8). Similarly the chief physician Urad-Nanaya recommends a course of treatment to Esarhaddon, concluding, 'If it suits the king, my lord, let the *haruspices* perform an extispicy on account of this' (SAA 10: 317 o17–19).

In this light, the diviners' disciplinary isolation and relatively fluid work groupings makes absolute sense: if extispicy was to be seen as $k\bar{e}nu$ 'reliable' then it must also been seen as incorruptible and untainted by contact with the methods it was meant to test. But drawing on work in the philosophy of science (e.g., Hardwig 1991; Lipton 1998) we can also say more than that: extispicy became trustworthy not only through its methods but also through the social status of its practitioners. As highly educated, well-connected men with the pedigree of an elaborate and age-old literate tradition to support them the diviners were likely to be believed by other courtiers as expert witnesses to the divine word because, as Lipton (1998: 10) puts it, in matters of testimony and trust, 'gentlemen prefer gentlemen.' We now turn to how that testimony to divine revelation was constructed.

¹⁶ In this case Kudurru performs lecanomancy with 'two skins of oil', not extispicy, but the same principle of posing a question to the gods and receiving a yes/no answer also operates—and indeed Kudurru explicitly refers to it as an act of *bārûtu* (SAA 10: 179 r19').

Divination in action

Wherever the king went, his diviners were expected to accompany him (SAA 10: 182; Fales & Lanfranchi 1998). There are surviving Queries for royal extispicies performed in Kalhu, Tarbiṣu, and Adian, all by combinations of Marduk-šumu-uṣur, Nadinu, and Tabni (SAA 4: 122; 155; 185), as well as an unassigned Query from Arbela (SAA 4: 196). Even within Nineveh, Queries could be made in the Review Palace on Nebi Yunus (SAA 4: 129, by Marduk-šumu-uṣur and colleagues) as well as in Sennacherib's New Palace (SAA 4: 156, unassigned). Ten of the Reports similarly specify the locations of extispicies: in the New Palace (SAA 4: 279; 280; 296; 419) and in Assurbanipal's new Succession Palace in Nineveh (SAA 4: 283; 326–8), as well as in Arbela (SAA 4: 300; 324). Aššur-da²²in-šarru and Dannaya together took part in rituals at each of these three places, showing that the diviners were still mobile under Assurbanipal. The diviners' letters also tell us that extispicy could take place in the sacred *qirsu* enclosure by the river—and even on the roof of a temple on which an ominous hoopoe had been spotted (SAA 10: 176; 183).

This last letter also addresses the timing of extispicy rituals (SAA 10: 183 r5–8):

[Co]ncerning the roof of the temple of Marduk about which the king, my lord, spoke, it is good to perform (the ritual) there. Elul (VI) is a good month; and the 2nd day is suitable for extispicy. Let it be performed accordingly.

A fragmentary hemerology specifies at least 15 days of a particular month which are all 'auspicious days for performing extispicy' (SAA 8: 235 o12). Divination did not simply happen at the king's whim, then—although he seems always to have had a team at hand just in case.

We have almost no direct evidence on the procurement of sacrificial animals for extispicy: just one very fragmentary letter to the king mentioning a *haruspex* and some sheep (SAA 16: 236). Letters to Esarhaddon from senior cultic personnel, such as Dadi in Assur, show major problems with corrupt shepherds and failure of the supply chain (SAA 13: 19 o6–11):

From the beginning of the month until now the shepherd responsible for the cultic meals has refused to go for his tax collection. I myself am buying sheep from the market (lit. 'The city gate') and fattening them.

Whether the royal diviners were similarly occupied we do not know—but somebody must have been responsible for maintaining a regular source of high-quality animals. Similarly, we know nothing of the mechanics of divinatory slaughter, the disposal of the carcass post-sacrifice, or the preparation and post-ritual clearing up of the sacrificial space. But we must not forget the existence of

such 'invisible technicians,' who, like the support personnel of scientific practitioners in later history, were not documented at the time and thus easily overlooked (Shapin 1989). However, we can at least recover the sex of the sacrificial animals, from the formulaic description of its heart (see below). As we might expect, rams were greatly preferred over sheep: the Queries record 20 rams (UDU.NITA $_2$) and 5 sheep (UDU), the Reports: 12 rams, 5 sheep.

Neither do we know much about the diviners' initial consultation with the king, during which the divinatory question was constructed. While they are heavily formulaic in the Queries (SAA 4: XVIII–XX), the 20 questions that survive reasonably intact on Reports vary greatly in length and complexity. The most formulaic—perhaps because most routine—are the appointment queries. It had to be established whether potential cultic appointments are 'pleasing to your great divinity' and to the deities of the temple concerned (SAA 4: 306; 207; 310), whereas in political appointments, loyalty is understandably the crux of the matter (e.g., SAA 4: 299 r1–7):

Should Assurbanipal, ki[ng of Assyria, appoint] Nabû-šarru-uṣur, [...] of Assurbanipal, [king of Assyria], to the office of Chief Eunuch? If he [appoints him] to (this) posit[ion], will he in his speech and thoughts side with [Assurbanipal, his lord]?

By contrast the Reports' questions about military tactics, while drawing to some extent on the set phrases of the Queries, are much more free-form. It is tempting to read them as Assurbanipal's own utterances, albeit modified for ritual purposes for the diviner (e.g., SAA 4: 282 o18–r9):

[Šamaš]-šumu-ukin, unfaithful brother, who stirred up [the country] and caused a major uprising, [...]... not good—now Assurbanipal, king of Assyria, a king created by you, who is attentive to your gentle breath and whose eyes are set on your personal protection, has heard: "Šamaš-šumu-ukin is fleeing to Elam." Is the rumour true? Is he indeed fleeing to Elam?

Few Reports contain an expiry date or 'stipulated term' (*adannu*) for the validity of the omen, but these seem to have been standardised at one calendar month.¹⁷ They never ask Šamaš to 'disregard' any inadvertent mis-steps in ritual performance—presumably because the text was written as the ritual progressed and thus too late to ask for divine tolerance. Occasionally there are requests to ignore matters concerning the king himself, such as 'that he is apprehensive (and) troubled about

¹⁷ SAA 4: 279; 281; 283?; 284?; 289; 301. See SAA 4: XVII for variation in the length of the *adannu* in the Queries.

going to this campaign' (SAA 4: 324 r2), or potential irrelevancies: 'that [the enemy] is marching but ... does not cross the frontiers (of Assyria)' (SAA 4: 280 r16–19).

Even once the animal was dead and cut open for inspection, reading omens was not a mechanical process. First the diviner had to identify what he saw, and determine whether he was looking at an ominous feature or not. This was not straightforward—even Marduk-šumu-uṣur sometimes struggled: 'As Dannaya checked his exta with him, they added two unfavourable omens' (SAA 4: 308 r5'-7'). Then (or simultaneously) an appropriate omen had to be identified, and its favourable or unfavourable nature determined. Perhaps this was not always obvious either. For instance, from our perspective at least, the following omen is not self-evidently negative: 'If above the 'increment' there is a 'request'-mark: the man will request some property (?) from the god' (SAA 4: 320 o10'-11'). Nineteen surviving Queries and four Reports describe themselves as 'second extispicies' or 'check-ups' (*piqittu*), and a further six Queries and two Reports are characterised as 'third extispicies.' Given the fragmentary nature of the evidence, the actual number of re-takes must have been even higher.

A total of 76 formal extispicy reports from Assurbanipal's reign are at least partially extant, which allow us a window into the omen-taking process (SAA 4: 279–354). As Starr (SAA 4: XXXIX) has explained, the Reports typically begin by describing all the ominous features observed in the entrails of the sacrificed animal, beginning in detail with the liver, then the lungs, followed by the breastbone, vertebrae, ribs, and colon, ending with the heart (e.g., SAA 4: 280; 296; 306; 317; 320). Thus not every internal organ was a bearer of signs: the kidneys, for instance, are never mentioned in the diviners' Queries or Reports. That did not mean that kidneys were never ominous to others: the lamentation priest Pulu twice notified Esarhaddon about absent or defective kidneys in sacrificial sheep at Kalhu and offered them to him for inspection (SAA 13: 131; 133).

The diviner's observations were recorded as the examination proceeded—presumably by a team member whose hands were not bloodied by contact with the animal's organs. On the face of it, we might expect this job to have fallen to the 'reporter'—but, as we have already seen, it is not as simple as that. Sometimes

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 $^{^{18}}$ Starr did not translate *mim-ma* NÍG.GÁ; I tentatively understand the logogram as a variant of NÍG.GA, for *makkūru*, *namkūru*, etc.

¹⁹ Check-ups: SAA 4: 16; 31; 35; 41–3; 56; 73; 87; 96; 100; 105; 130; 131; 152; 154; 287; 290; 320. Second extispicies: SAA 4: 20; 64; 77; 233. Third extispicies: SAA 4: 2; 16; 77; 95; 234; 270; 284; 335.

the diviner and reporter were one and the same; often there was more than one reporter; tablets attributed to the same reporter might be written in different scripts. Whoever the scribe was, the diviner noted most features by means of the protases of omens but gave others as entire omens. Compare for instance these lines from a Report concerning an illness of Assurbanipal (SAA 4: 317 o9–10):²⁰

If the 'path' on the left of the gall bladder and the 'base of the throne' are present. If the 'increment' is normal.

If there is a 'foot'-mark in the middle of the middle surface of the 'finger,' it is the foot-mark of an ecstatic of the enemy's country.

What are we to make of this? In fact, clear patterns can be detected. Some Reports conclude with a simple statement that the outcome is 'favourable' or 'unfavourable;' others repeat the fully-cited omens—this time without their apodoses—and tally them up (e.g., SAA 4: 280 o14–19):

If the 'paths' are two, the left 'path' is located on the right 'path.'

If the 'strength' is absent. If there is a hole in the right of the 'station.'

If the back of the lung is smashed.

If the 'outside' rides upon the 'cap.'

There are 5 unfavourable omens in the extispicy.

There are no favourable omens.

Nineteen surviving Reports preserve both a summary and at least one full omen. The number in the summary (if there is one) always matches the number of omens quoted (or exceeds it in the case of damaged tablets) and in 17 cases (90%) the outcome is deemed unfavourable.²¹ Thus it seems that only unfavourable omens were of any real interest to the diviners. But where did they look for them?

In all 22 surviving Reports (many of which are very fragmentary) quote a total of 50 different omen apodoses, only three of which occur twice and further two three times. A full 26 of the 56 instances are for the liver (46%), 18 for the lungs (32%), 3 for the breastbone (5%) and 1 each for the ankle, colon, ribs, and vertebrae (total 7%). The remaining 5, very damaged omens cannot be attributed to a particular part of the animal's anatomy.

²⁰ Starr never translates BE (*šumma*), 'if,' at the start of the protasis-only statements, but they are systematically present.

²¹ Unfavourable: SAA 4: 280–2; 284; 288; 296; 200; 310; 304–6; 309; 310; 316; 317; 319(a); 320. Favourable: SAA 4: 307; 341.

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Looking more closely at the liver, we see that omens are cited for a total of eight different ominous zones of the dozen or more available to them, following the standard order of inspection (Table 1).²² Six of these omens also concern fortuitous markings: Foot marks on the Finger; a Filament on the Station; a HALsign on the Well-being; and a Request and a Weapon mark on the Increment (SAA 4: 317; 320; 339; 341).

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Akkadian term	Starr's translation	Number of attestations	Publication
manzāzu	Station	3	SAA 4: 296; 324; 339
padānu	Path	5 (3 different omens)	SAA 4: 317; 324; 325 [two]; 338
naṣraptu	Crucible	1	SAA 4: 340
šulmu	Well-Being	4	SAA 4: 317; 320; 332; 338
martu	Gall Bladder	1	SAA 4: 320
nīd kušî	Base of the Throne	1	SAA 4: 309
ubānu	Finger	8 (7 different omens)	SAA 4: 310 [two]; 317; 320 [two]; 332 [two]; 337
šibtu	Increment	3	SAA 4: 306; 320; 341

Table 1: Features of the liver considered ominous in the Neo-Assyrian Reports

The lungs are treated similarly, with just a few of their many potentially ominous features attracting full omens: the upper and lower parts, back, right, and left, as well as the Cap, Lift of the Head, and Middle Finger.²³ Fortuitous markings include a Cross, a Weapon and a Design (SAA 4: 308; 320; 342).

After the lungs, the condition of the breastbone was usually reported (in 29 extant Reports). Usually it was non-ominously thick (*ebû*) but on nine occasions it was in unfavourable condition: split (SAA 4: 282; 295; 317), perforated (SAA 4: 282; 296), blunted, (SAA 4: 290; 296), trimmed (SAA 4: 311), curled (SAA 4: 301), or lying on its back (SAA 4: 305). Only three of these events are accompa-

²² See e.g., Koch-Westenholz 2000: 45; SAA 4: LXI; http://knp.prs.heacademy.ac.uk/downloads/liver.gif (Radner & Robson 2007–08) for diagrams of the liver on which the ominous zones are marked. Not surprisingly, their terminology and meanings changed over time.

²³ SAA 4: 296; 300; 301; 304; 307; 308; 310; 316; 320; 342; 351. For the terminology of the ominous parts of the lung, see Koch 2005: 76–83.

nied by an omen apodosis, but they all feature in the summaries of unfavourable features.

By contrast, the vertebrae are rarely mentioned (in 5 reports), apparently only when ominously unfavourable: they might be recessed (SAA 4: 293; 352; 354) or visible (SAA 4: 317). No omen apodoses are quoted with these instances. The ribs, similarly, get just three surviving mentions, all unfavourable: two floating ribs on the left; a right rib missing; and a right rib trimmed (SAA 4: 290; 293; 306)—but a full omen is quoted only for the latter. Ankles are mentioned twice, both concerning unfavourable holes (SAA 4: 301; 313). The latter instance is given as a full omen.

Normally the diviners counted the coils of the colon (in 31 surviving Reports, 26 of which preserve the number). Almost half report 14 coils and a further third have 16; these are considered normal. The remaining Reports mention 10, 12, 18, and even 24 coils, usually without further comment, but only one has an odd number, 15—an explicitly unfavourable omen (SAA 4: 305 o8'). A damp colon is also unfavourable and is given an omen apodosis (SAA 4: 306 o11).

Finally, seventeen Reports mention the heart, which is invariably described as *salim* 'normal' or 'healthy.'

Thus we see several different strategies for dealing with the minor exta: the condition of the breastbone, colon, and heart seem to have been noted routinely, even though their state was usually (or invariably) non-ominous. The vertebrae, ribs, and ankle were described only when unfavourable features were observed. Omen apodoses could be cited on the occasion of unfavourable observations, but usually it was enough simply to report their existence through protases.

It seems, then, that the whole process was biased towards reporting unfavourable outcomes: healthy, normal, or routine features were non-ominous and did not count towards the final tally of significant observations. Indeed, of the 37 Reports whose summary sections survive (with or without extant omens), fully 30 of them (81%) report unfavourable extispicies; a further two are 'indecisive' (SAA 4: 318; 326). Unfortunately the meagre five favourable extispicies are mostly too damaged to allow a confident identification of the characteristics that distinguish them from the unfavourable ones (SAA 4: 283; 288; 307; 319b; 341). However, if Starr's restoration of the summary line of SAA 4: 288 is correct, favourable omens could on occasion be fully cited and count towards the final interpretation.²⁴

²⁴ For a counterexample, see SAA 4: 280 o6, where the apparently favourable omen, 'If the left of the gall bladder is attached: your expeditionary force will slay the enemy,' is not recapitulated in the summary section. Further, as we have seen above, the summary explicitly states that 'there are no favourable features' (o19).

As far as the unfavourable omens went, it was only their negative character that counted: the circumstantial detail of their apodoses, and their relationship to the king's question, could be ignored.²⁵ For instance, in answer to Assurbanipal's question, 'Should Bani be appointed as priest of Anu?,' the diviners identified the following four omens, all unfavourable. None of them has anything directly to say about cultic matters (SAA 4: 306 o 4–5, 7–8, 11–12):

If the right side of the 'increment' is split: the owner of the sacrificial sheep will lose [his] posses[sions].

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If the back of the lung is split: retreat of [my] ar[my]. The enemy will see the back of my army.

If the coils of the colon are damp: disease. Downfall of the army.

If the right rib is trimmed: the prince's land will diminish.

How, then, did the diviners choose the relevant omens? How did omens make the transition from theoretical statements of traditional knowledge to vital evidence for or against a particular course of action? The fact that so few made that transition suggests that it was not solely a matter of recall. We shall return to this question below.

The final stage of the divinatory process—presentation and discussion with the king—is almost entirely lost to us. This must have happened face-to-face as a matter of course, for there is no evidence of the diviners asking permission for an audience with the king as other scholars did (e.g., SAA 10: 240; 276; 315, from exorcists and a physician). However, on one occasion Marduk-šumu-uṣur tells the king that the employer of a privately-engaged diviner is waiting to be seen (SAA 10: 175 o7–r9):

Concerning the *haruspex* appointed to the service of Arbayu who last year made a report to the king, [my] lord, and said: "When A[rbayu] comes, [let them question him] and decide about [the re]port [concerning him]," Arbayu is now here—let the king question [him] and decide about the report of his servant.

Bārûtu in the library

The senior diviners not only had access to the royal library but they also contributed to its editorial activity. Marduk-šumu-uṣur, Naṣiru, and Tabni together write to Esarhaddon (SAA 10: 177 o15–r5):

²⁵ See already Oppenheim 1977: 215. Fourteen Reports preserve both the question and the resulting omens: SAA 4: 296; 300; 301; 304; 306–10; 316; 317; 320; 324; and 332.

The series should be rev[ised]. Let the king command: two 'long' tablets containing explanations of antiquated words should be removed, and two tablets of the *haruspices*' corpus should be put (instead).

However, they did not have an entirely free run of the library. On another occasion, Marduk-šumu-uṣur, Naṣiru, and Aqaraya collectively remind the king that (SAA 10: 176 o8–r6):

We have rites to perform in the *qirsu*. Let the king, our lord, give an order to Sasi (that) they should let us go. Nobody will release us, and we cannot go out.

It is not immediately obvious here that the diviners are being detained by library duties. However, we know that Sasi oversaw captive Babylonians who were copying in the library (SAA 11: 156; SAA 16: 17); perhaps he exercised some control over the local scholars' editorial work too.

There was much to be done. As Parpola (1983: 6) has shown, in 647 BC the royal libraries acquired at least 135 writing boards of bārûtu from private libraries, many of them from Bīt Ibâ, a centre of Babyonian rebellion (Parpola 1983: 11). This well-documented incident is but the most famous of Assyrian forced acquisitions of cultural booty in the eighth and seventh centuries (Frame and George 2005); we have just noted Sasi's management of enforced scribal labour during the reign of Esarhaddon. Fincke (2004) estimates that 3700 tablets in Assurbanipal's library are in Neo-Babylonian script, about one-seventh of its total surviving holdings. There was also a great deal of local production too, to judge from the large number of extant Assurbanipal colophons, as well as the assimilation of older libraries such as Nabu-zuqup-kena's (Koch-Westenholz 2000: 28-30). As it was extremely rare for individuals to own complete sets of any scholarly work at this time (Parpola 1983: 7), we can imagine that individual manuscripts from a variety of sources needed to be compiled into series, and then collated and checked against each other. As Parpola (1983: 7) notes, we cannot even be certain that these activities always resulted in complete compositions for the royal library. Whether or not we can usefully talk about an 'Assurbanipal edition' of the sacrificial omens (compare Jeyes 1997; Koch-Westenholz 2000: 27-31), there was surely more to royal library activity at this time than the passive reception of a closed tradition.

In the Neo-Assyrian court, the word *bārûtu* was not the name of the standard series of sacrificial omens, as it became in later Babylonia (Koch-Westenholz 2000: 25–27). Rather, it was the collective name for the concerns of the *bārû*, from sacrificial prayers and rituals (e.g., Lambert 1997; 1998; 2007) to the omen series of

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course, but also including a wide range of commentaries and organ models (Koch 2005). It also meant the act of divination itself, whether extispicy or lecanomancy (SAA 10: 179; and see note 16 above). The omens themselves were organised as a sequence of ten related sub-series, each with its own name (Table 2). In addition, every sub-series was accompanied by a thematically arranged *mukallimtu* commentary, which collect and interpret protases that describe the same observed phenomena (Koch-Westenholz 2000: 31–36).

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	Series	Subject matters	Size and publications
1.	šumma isru	Bones (vertebrae, ribs, breastbone, etc.)	4 tablets (see Starr 1992)
2.	šumma tīrānū	Coils of the colon	8 tablets (see Starr 1992)
3.	šumma manzāzu	} Features on	6 tablets (Koch-Westenholz 2000: 79–183)
4.	šumma padānu	} the right side	6 tablets (Koch-Westenholz 2000: 184–266)
5.	šumma pān tākalti	} of the liver	15 tablets? (Koch-Westenholz 2000: 267–435)
6.	šumma martu	Gall bladder	10 tablets
7.	šumma ubānu	Left side of liver	11 tablets
8.	šumma kakku	Fortuitous markings	8 tablets
9.	šumma hašû	Lungs	14 tablets
10.	multābiltu	Commentary and analysis	17 tablets (Koch 2005: 85–271)

Table 2: The standard order of sacrificial omens in the Neo-Assyrian tradition (after Maul 2003: 72–73)

Assuming an average of 90–100 omens per tablet, based on the figures for extant manuscripts given by Koch-Westenholz (2000), the whole super-series comprised some 8,000 omens. This is substantially more than the diviners ever used. Koch-Westenholz (2000: 80–82, 184–186, 273–282) identified 48 Reports which use omens from the series *Manzāzu*, *Padānu*, and *Pān Tākalti*. Using her figures (I have not rechecked them), 75 different omens are cited a total of 126

times, from a total of around 2700 to choose from—roughly a 3% take-up rate.²⁶ However, this number includes the many omens which are cited only as protases. If we look just at the 56 instances of fully quoted omens, just 16 of them (14 different omens) can also be found in *Manzāzu*, *Padānu*, and *Pān Tākalti*, or can be expected to be found there when more is recovered.²⁷ That is, there is direct evidence that only about 0.5%—roughly 1 in 200—of the omens available to the diviners were actually treated as ominously significant. That number roughly doubles when we factor in those damaged Reports whose summary sections (containing only apodoses of significant omens) survive but which are lacking the initial enumeration of exta. Of course, we must be wary of these figures: much is missing from the three series, just as much is missing from the Reports. Nevertheless, even in the unlikely event that the real omen usage-rate was ten times greater than estimated here, that would still mean that only 1 in 10 omens was actually used in the Reports.

Further, on closer inspection, individual omens were not consistently considered significantly ominous. For instance, SAA 4: 296 o1–3 tells us: 'If the middle of the Station is effaced: Ištar is filled with anger at the man. For the sick man: his illness will linger,' just as in *Manzāzu* Commentary 2:18 (Koch-Westenholz 2000: 154). This is counted amongst the five unfavourable omens at the end of the Report. However, the apodosis alone, 'If the middle of the Station is effaced,' is also found in six other Reports, only one of which lists it amongst the unfavourable omens in the summary (SAA 4: 290; cf. SAA 4: 279; 286; 293; 299; 318).

In fact, that *Manzāzu* Commentary 2, a *mukallimtu*, provides essential evidence for helping us to understand how the diviners negotiated the overwhelming mass

²⁶ These figures include omens that Koch-Westenholz cannot place exactly in the series, but are attested in commentaries and extract tablets, or which almost certainly belonged in particular chapters because of their subject matter. There is still much to recover of these three omen series.

²⁷ Namely, SAA 4: 196 o1–3 = *Manzāzu* Commentary 2: 18; SAA 4: 306 o4 = *Pān Tākalti* Tablet 12, unplaced; SAA 4: 309 o2–3 = *Pān Tākalti* Tablet 9, unplaced; SAA 4: 317 o1–6 = *Padānu* Text 9 (Tablet 2?): 3–5; o8 = *Pān Tākalti* Tablet 6: 5; SAA 4: 320 o3'–4' = *Pān Tākalti* Tablet 6: 66; o10'–11' = *Pān Tākalti* Tablet 12, unplaced; SAA 4: 324 o4–5: *Manzāzu*, unplaced; o6–7 = *Padānu* Tablet 3: 25; SAA 4: 325 o2'–3' = *Padānu* Tablet 3: 25; o4'–6' = *Padānu*, unplaced; SAA 4: 332 o1' = *Padānu* Text 9 (Tablet 2?): 3–5; o3'–4' = *Pān Tākalti* Tablet 6: 12; SAA 4: 338 o1'–2' = *Padānu* Tablet 3: 25; o3'-4' = *Pān Tākalti* Tablet 6: 18; SAA 4: 340 o1–4 = *Pān Tākalti* Tablet 2: 1; SAA 4: 341 o6–7 = *Pān Tākalti* Tablet 8, unplaced.

of omen material at their disposal. The full *mukallimtu* context of the omen just cited reads (after Koch-Westenholz 2000: 154–155):²⁸

- If the middle of the Station is effaced: idle weapons, unfavourable.
- If, secondly, the Station is long and is effaced in its middle: the days of the prince will come to an end.
- If, thirdly, the middle of the Station is effaced: Ištar is filled with anger at the man. For the sick man: his illness will linger.
- If, fourthly, the Station is divided and its middle is effaced: a canal will be blocked.
- If, fifthly, the Station is like the HAL-sign: the mood of the land will change. HAL means 'to divide,' 'to select,' 'to efface.'
- If, sixthly, the middle of the Station is effaced: an unclean person has touched the sacrifice.

In other words, as Koch-Westenholz (2000: 31–36) explains, the *mukallimtu* brings together all the omens with equivalent protases from across the *Manzāzu* series. In this case there are six variants: the diviners need only one. In the context of SAA 4: 296, quoted above, the third alternative came to the diviner's mind. But in some of the other Reports that cite this protasis, the diviner may have had one of other five apodoses in mind and considered it non-ominous in the context of the divinatory question under scrutiny. This is, of course, only the beginnings of an answer as to how the Neo-Assyrian court diviners reduced and managed the enormous and unwieldy omen tradition at their disposal; as more of the omen series gets published in due course, the more closely and confidently we will be able to chart the ways in which individual omens were privileged, ignored, or re-purposed to the diviners' needs.

We do know, however, that Neo-Assyrian diviners took an active interest in *mukallimtu* commentaries. While the majority of Neo-Assyrian *bārûtu* colophons do not mention individual copyists, one of the few personal ones is on a *mukallimtu* commentary belonging to 'Nabu-ušallim, son of Nabu-pašer, *bārû*' (CT 31: 49; Hunger 1968: no. 503). Of course, we cannot tell whether or not this is the same Nabu-ušallim who wrote divinatory Queries with Šumaya, Bel-ušallim, and Bel-epuš (SAA 4: 5; 74; 77; 108; 137; 152), even though it is tempting to make the link.

Finally, we should consider what other scholarly activities, if any, the Neo-Assyrian court diviners were involved in. The royal library acquisition records show that $b\bar{a}r\hat{u}s$ privately owned manuscripts of the omen series $\check{S}umma$ $\bar{A}lu$,

²⁸ I have modified Koch-Westenholz's translation slightly, primarily for compatibility with Starr's technical terminology.

Šumma Izbu, Sakikkū, Alandimmû and *Zāqīqu* as well as various ritual texts (Parpola 1983: 8). And in a petitionary letter to Esarhaddon, the outcast lamenter Marduk-šapik-zeri lists a multi-talented diviner amongst the scholars he could bring with him if he were to return to royal service (SAA 10: 160 r13–14):

Kudurru [is] a refugee from Ass[yria]; he is a competent [haruspex] and has read exorcism and scribal lore; he is use[ful to the king], my lord.²⁹

But how much of this other learning did the diviners actually put into practice on official court business? Although Leichty (1970: 8–12) assumed that the $b\bar{a}r\hat{u}s$ were also concerned with omens from ominous births,³⁰ the epistolary evidence suggests otherwise, at least in the Neo-Assyrian court. Assurbanipal's library at Nineveh held at least four (partial) sets of the twenty-four tablet omen series $Summa\ Izbu$, along with two different commentaries (Leichty 1970: 21–23; Maul 2003: 62–64). There are seven surviving scholarly reports on exceptional births, mostly unassigned (SAA 8: 237–242), but one is by the astrologer Nergal-ețir (SAA 8: 287). Birth omens are also mentioned in three scholarly letters, by the astrologers Balasi (SAA 10: 60) and Bel-ušezib (SAA 10: 120) and the $\bar{a}sipu$ Nabu-nadin-šumi (SAA 10: 276). Likewise, when the king wants scholarly advice on the appearance of ominous animals—the province of $Summa\ \bar{A}lu$ —it is the astrologers who respond (SAA 10: 33, about a mongoose, by Issar-šumu-ereš; SAA 10: 58 about a raven, by Balasi; SAA 8: 243, listing snake omens, unassigned).

Similarly, when we look astrological reports that may have been written by diviners, the evidence is equivocal. Marduk-šumu-uṣur is the co-author of a short and fragmentary missive to the king published as SAA 8: 476. But as none of its surviving text mentions anything to do with celestial divination, its status as astrological report is doubtful. SAA 8: 473, by Bel-ušallim, is similarly fragmentary and its identification inconclusive. Other instances of apparent disciplinary crossover may be by different persons with the same, common names: the Nadinu who co-authored five divinatory Queries (SAA 4: 3; 82; 114; 122; 151) may not be the same Nadinu who wrote three astrological reports (SAA 8: 486–8). Likewise, the Šumaya who co-authored nine divinatory Queries (SAA 4: 5; 9; 12; 45; 59; 74; 76; 77; 152) cannot be both, and is probably neither, of the Šumayas who wrote nine astrological reports (SAA 8: 168; 175–80 in Neo-Babylonian script; SAA 8: 498–9 in Neo-Assyrian). The necessity for disciplinary isolation,

²⁹ This is presumably not the treacherous diviner Kudurru of SAA 10: 179 (see above).

³⁰ Similarly Maul (2003: 63), on the basis of an oath taken by $b\bar{a}r\hat{u}s$ at OB Mari. But there is no reason to suppose that the same situation pertained a millennium later.

which ensured reliability and trustworthiness, as we have already seen, presumably precluded the court diviners from operating outside their disciplinary niche.

Conclusions

This close analysis of the Neo-Assyrian royal *bārûs*' day-to-day writings—their letters, Queries, and Reports—brings a new perspective on the practice of extispicy in seventh-century Nineveh. We have seen that the diviners were bound to their patron the king through a network of obligations and favours, just like many other scholars and courtiers. The necessity of absolute loyalty to the crown likely precluded rival institutional affiliations such as temple posts. This was particularly vital to the diviners' position compared to other scholars, because of their role as adjudicators of the veracity of divine messages sent by other, less intrinsically trustworthy, media and messengers. That confirmatory role also excluded the diviners from close collaboration with the other learned disciplines on which the king relied. A divinatory team was always on hand, wherever the king travelled, to help him manage the complexities of governance and decision-making.

Given that extispicy, as practiced, tended to privilege unfavourable readings of the sacrificial animal, the formulation of the divinatory question was of vital importance. Even by weighing the question to be asked, and how it should be posed, the king moved closer towards reaching a conclusion. Appointment queries, for instance, could equally well be framed in terms of expectations of loyalty or disloyalty: compare, for instance SAA 4: 299 ('will he in his speech and thoughts side with [Assurbanipal, his lord]?') with SAA 4: 305 ('If he appoints him, will he [...] become hostile to Assurbanipal, [king of Assyria], his lord?'). Yet the random element—the possibility of an unexpected favourable or indeterminate outcome—could also force the complete rethinking of an intractible problem, or allow for the divination to be re-done.

The ritual itself was performed by a team of up to half a dozen, sometimes even more, and often in public space, to judge by the fact that Šamaš was regularly exhorted (e.g., SAA 4: 149 o12–r1):

Disregard that a clean or an unclean person has touched the sacr[ificial] sheep, [or blocked the way of the sacrificial sheep.

Disregard that an unclean man or woman has come near the place of the extispicy and made it unclean.

Disregard that an unclean person has performed extispicy in this place.

The procedure was thus open to courtly scrutiny and witness, further encouraging trust in the reliability of the outcome amongst those closest to the

king. It thereby solemnised and legitimated the royal decision, through spectacle and performance, and through drawing on a highly respected and antiquated literate tradition of learning, thus diffusing dissent within the king's entourage.

However, as we have seen, the diviners not use the full complexity of the sacrificial omen series but negotiated a path through it by means of *mukallimtu* commentaries and substantial truncation of the mass of data it contained. First, they focused their observations on a small number of features on the liver and lungs, paying less attention to other exta and bones. Second, they usually recorded and counted only unfavourable omen apodoses, counting just their general ominous character and not the particular outcomes they predicted. The letters and Reports give us hints of the discussions and negotiations amongst the divinatory team about the identification and significance of ominous markings: consensus was needed before the Report could be summarised and a verdict presented to the king.

In the late 1980s and 90s there was vigorous discussion about the extent to which sacrificial divination should be considered a 'science' based on its similarity or dissimilarity to modern ways of thinking (e.g., Larsen 1987; Jeyes 1991–92; Bottéro 1992: 125–137). The debate fizzled out, and I do not propose to revive it here. Rather, I want to suggest that it is not particularly helpful to assess the truth value of ancient knowledge systems in order to accept or reject them as rightful subjects of the history of science. As I have recently argued elsewhere (Robson 2008), taken to its logical conclusion this strategy excludes much scientific thought of the recent past that is now considered 'wrong' by contemporary practitioners, and is entirely contingent on which practices and ideas are currently thought to be 'correct.' That surely cannot be a coherent or defensible historiographical stance. If, however, we abandon value judgements and accept that the past had different ways of knowing about and understanding the world, we can focus more clearly on how learning was constructed, practiced and theorised—on how it was valued and received and put to work.

As I have already hinted, the Assyrian court diviners functioned institutionally like many other bodies of learned practitioners through the ages. If we look at them simply as a highly trained, well funded, and exclusive group of élite men who operated within highly constrained codes, languages and practices to gain better understanding of the natural or created world, then they have as many similarities as differences to the gentlemen of the Royal Society in seventeenth-century London or the high-energy physicists of 1980s Tokyo (Shapin 1994; Traweek 1988). In this view, we see Assyrian courtly extispicy neither as outmoded superstition nor as a failed and premature gesture towards modernity. As the anthropologist George Park wrote almost half a century ago, 'developed

systems of divination should not be regarded as mere excrescences on the body politic, doing none of its work; the diviner does in a controlled way intervene in and affect the social processes with rather definite and socially useful results' (Park 1963: 195). By acknowledging the distinction between learned traditions and day-to-day practices, and by focusing on extispicy's meanings and value for clients as well as professionals, we can understand it afresh as a means by which imperial governance sought both an intellectual base and consultation mechanism that did not undermine royal authority.³¹

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Bibliography

- Asch, R.G. & Birke, A.M. (eds). 1991. *Princes, patronage, and the nobility: the court at the beginning of the modern age, c. 1450–1650*, Oxford: Oxford University Press.
- Baker, H.D. (ed.). 2001. *The prosopography of the Neo-Assyrian empire, volume 2, part II: L-N,* Helsinki: The Neo-Assyrian Text Corpus Project.
- Bernards, M. & Nawas, J. (eds.). 2005. *Patronate and patronage in early and classical Islam*, Leiden, Boston, and Tokyo: Brill Academic Publishers.
- Bottéro, J., 1992. *Mesopotamia: writing, reasoning, and the gods*, Chicago: University of Chicago Press.
- Brentjes, S. 2009. "Patronage of the mathematical sciences in Islamic societies," in: E. Robson and J. Stedall (eds.), *The Oxford handbook of the history of mathematics*, Oxford: Oxford University Press, 301–328.
- Brown, D. 2000. *Mesopotamian planetary astronomy-astrology* (Cuneiform Monographs, 18), Groningen: Styx.
- Dahan, A. & Bottazzini, U. (eds.). 2001. *Changing images of mathematics in history. From the French revolution to the new millennium*, London: Harwood Academic Publishers.
- Fales, M. & Lanfranchi, G. 1997. "The impact of oracular materials on the political utterances and political actions of the Sargonid dynasty," in: J.-G. Heintz (ed.), *Oracles et propheties dans l'antiquité*, Paris: de Boccard, 99–114.

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- Fincke, J.C., 2004. "The British Museum's Ashurbanipal Library Project," Iraq 66, 55-60.
- Frame, G. & George, A. 2005. "The royal libraries of Nineveh: new evidence for their formation," *Iraq* 67, 265–284.
- Hardwig, J. 1991. "The role of trust in knowledge," Journal of Philosophy 88, 693-708.
- Heeßel, N. 2000. *Babylonisch-assyrische Diagnostik* (Alter Orient und Altes Testament, 43), Münster: Ugarit-Verlag.
- Hunger, H. 1968. Babylonische und assyrische Kolophone (Alter Orient und Altes Testament,2), Kevelaer and Neukirchen-Vluyn: Butzon & Bercker and Neukirchener Verlag des Erziehungsvereins.
- ——. 1992. *Astrological reports to Assyrian kings* (State Archives of Assyria, 8), Helsinki: Helsinki University Press.
- Jean, C. 2006. La magie néo-assyrienne en contexte: recherches sur le métier d'exorciste et le concept d'āšipūtu (State Archives of Assyria Studies, 17), Helsinki: The Neo-Assyrian Text Corpus Project.
- Jeyes, U. 1991–92. "Divination as a science in ancient Mesopotamia," *Jaarbericht Ex Oriente Lux* 32, 23–41.
- ———. 1997. "Assurbanipal's bārûtu," in: H. Waetzoldt & H. Hauptmann (eds.), Assyrien im Wandel der Zeiten (Heidelberger Studien zum Alten Orient, 6), Heidelberg: Heidelberger Orientverlag, 61–65.
- Koch-Westenholz, U. 1995. *Mesopotamian astrology: an introduction to Babylonian and Assyrian celestial divination* (Carsten Niebuhr Institute Publications, 19), Copenhagen: Museum Tusculanum Press.
- ———. 2000. Babylonian liver omens: the chapters manzāzu, padānu and pān tākalti of the Babylonian extispicy series mainly from Assurbanipal's library (Carsten Niebuhr Institute Publications, 25), Copenhagen: Museum Tusculanum Press.
- Koch, U. 2005. Secrets of extispicy: the chapter multābiltu of the Babylonian extispicy series and niṣirti bārûti texts mainly from Assurbanipal's library (Alter Orient und Altes Testament, 326), Münster: Ugarit-Verlag.
- Lambert, W.G. 1997. "Questions addressed to the Babylonian oracle: the *tāmītu* texts," in: J.-G. Heintz (ed.), *Oracles et propheties dans l'antiquité*, Paris: de Boccard, 85–98.
- . 1998. "The qualifications of Babylonian diviners," in: S.M. Maul (ed.), *tikip* santakki mala bašmu: Festschrift für Rykle Borger (Cuneiform Monographs, 10), Groningen: Styx, 141–158.
- ———. 2007. *Babylonian oracle questions* (Mesopotamian Civilizations, 13), Winona Lake, MD: Eisenbrauns.
- Larsen, M.T. 1987. "The Mesopotamian lukewarm mind: reflections on science, divination and literacy," in: F. Rochberg-Halton (ed.), *Language, literature and history: philological studies presented to Erica Reiner*, New Haven, CT: American Oriental Society, 203–225.

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- Leichty, E. 1970. *The omen series Šumma Izbu* (Texts from Cuneiform Sources, 4), Locust Valley, NY: Augustin.
- Lipton, P. 1998. "The epistemology of testimony," *Studies in History and Philosophy of Science* 29, 1–33.
- Löhnert, A. 2007. "The installation of priests according to Neo-Assyrian documents," *State Archives of Assyria Bulletin* 16, 273–286.
- Maul, S.M. 1994. Zukunftsbewältigung: Eine Untersuchung altorientalischen Denkens anhand der babylonisch-assyrischen Löserituale (Namburbi) (Baghdader Forschungen, 18), Mainz am Rhein: Philipp Von Zabern.
- . 2003. "Omina und Orakel. A. Mesopotamien," Reallexikon der Assyriologie 10, 45–88.

- Oppenheim, A.L. 1977. *Ancient Mesopotamia: portrait of a dead civilization,* rev. ed., Chicago and London: University of Chicago Press.
- Park, G.K. 1963. "Divination and its social contexts," *Journal of the Royal Anthropological Institute of Great Britain and Ireland* 93, 195–209.
- Parpola, S. 1970–83. *Letters from Assyrian scholars to the kings Esarhaddon and Assurbanipal* (Alter Orient und Altes Testament, 5), 2 vols., Kevelaer: Butzon & Bercker.
- ———. 1983. "Assyrian library records," Journal of Near Eastern Studies 42, 1–29.
- . 1993. *Letters from Assyrian and Babylonian scholars* (State Archives of Assyria, 10), Helsinki: Helsinki University Press.
- Pečírková, J. 1985. "Divination and politics in the Late Assyrian empire," *Archiv Orientální* 53, 155–168.
- Radner, K. & Robson, E. 2007–08. *Knowledge and power in the Neo-Assyrian empire,* Leeds: Higher Education Academy, http://knp.prs.heacademy.ac.uk.
- Robson, E. 2008. "Mesopotamian medicine and religion: current debates, new perspectives," *Religion Compass* 3 (online only). DOI: 10.1111/j.1749-8171.2008.00082.x
- Rochberg, F. 2004. *The heavenly writing: divination, horoscopy, and astronomy in Mesopotamian culture*, Cambridge: Cambridge University Press.
- Shapin, S. 1982. "History of science and its sociological reconstruction," *History of Science* 20, 157–211.
- ———. 1989. "The invisible technician," *American Scientist* 77, 554–563.
- ———. 1994. A social history of truth: civility and science in seventeenth-century England, Chicago: Chicago University Press.
- Starr, I. 1990. Queries to the Sungod: divination and politics in Sargonid Assyria (State Archives of Assyria, 4), Helsinki: Helsinki University Press.
- ———. 1992. "Chapters 1 and 2 of the *bārûtu*," State Archives of Assyria Bulletin 6, 45–54.
- Steinkeller, P. 2005. "Of stars and men: the conceptual and mythological setup of Babylonian extispicy," in: A. Gianto (ed.), *Biblical and Oriental essays in memory of William L. Moran* (Biblica et Orientalia, 48), Rome: Pontifical Biblical Institute, 11–47.

- Traweek, S. 1988. *Beamtimes and lifetimes: the world of high-energy physicists*, Cambridge, MA: Harvard University Press.
- Veldhuis, N. 1995/96. "On interpreting Mesopotamian *namburbi* rituals," *Archiv für Orient-forschung* 42–43, 145–154.
- Wallace-Hadrill, A. (ed.). 1989. *Patronage in ancient society* (Leicester-Nottingham Studies in Ancient Society, 1), London: Routledge.
- Westbrook, R. 2005. "Patronage in the ancient Near East," *Journal of the Economic and Social History of the Orient* 48, 210–233.

Abbreviations

- SAA 3 A. Livingstone, 1989. *Court poetry and literary miscellanea* (State Archives of Assyria, 3), Helsinki: Helsinki University Press.
- SAA 4 Starr 1990, above.
- SAA 6 T. Kwasman & S. Parpola, 1991. *Legal transactions of the royal court of Nineveh, part I: Tiglath-Pileser III through Esarhaddon* (State Archives of Assyria, 6), Helsinki: Helsinki University Press.
- SAA 7 F.M. Fales & J.N. Postgate, 1992. *Imperial administrative records, part I:*Palace and temple administration (State Archives of Assyria 7), Helsinki:

 Helsinki University Press.
- SAA 8 Hunger 1992, above.
- SAA 10 Parpola 1993, above.
- SAA 11 F.M. Fales & J.N. Postgate, 1995. *Imperial administrative records, part II:*Provincial and military administration (State Archives of Assyria, 11), Helsinki:
 Helsinki University Press.
- SAA 13 S.W. Cole and P. Machinist, 1998. Letters from Assyrian and Babylonian priests to kings Esarhaddon and Assurbanipal (State Archives of Assyria, 13), Helsinki: Helsinki University Press.
- SAA 16 M. Luukko and G. Van Buylaere, 2002. *The political correspondence of Esarhaddon* (State Archives of Assyria, 16), Helsinki: Helsinki University Press.
- SAA 17 M. Dietrich, 2003. *The Neo-Babylonian correspondence of Sargon and Senna*cherib (State Archives of Assyria, 17), Helsinki: Helsinki University Press.
- SAA 18 F.S. Reynolds, 2003. The Babylonian correspondence of Esarhaddon and letters to Assurbanipal and Sin-šarru-iškun from northern and central Babylonia (State Archives of Assyria, 18), Helsinki: Helsinki University Press.
- As of March 2009, volumes 1, 3–5, 8–10, 13, 15, and 16 can be found at SAA online, http://cdl.museum.upenn.edu/saa/.