

MESOPOTAMIAN AND INDIAN BIRD OMENS

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This paper explores the relationship between bird omens that occur in both the Sanskrit *Gārgīyajyotiṣa* Aṅga 42 and the Akkadian *Šumma Ālu* and related cuneiform tablets. After an overview of the Sanskrit omens and their source, the study proceeds to compare the Indian and Mesopotamian bird omens, with a special focus on crow omens, in an attempt to show that the series of Akkadian prose omens and Sanskrit verse omens share a common conceptual paradigm. An appendix provides an overview of the contents of Aṅga 42.

INTRODUCTION

In this paper, I study two sets of bird omens, one in Akkadian and the other in Sanskrit sources, to ascertain what they have in common and what the differences are between them.¹ Although I am aware of various attempts to find a link between the ancient cultures of Mesopotamia and India,² this study makes no claim of a direct borrowing between the two pieces of literature but aims to show that they share a common conceptual paradigm through six key points of similarity:

1. Their singularity: both have a fixed set of bird and animal omens.
2. Their common grammatical structure: both use a syntax consisting of a protasis and an apodosis.
3. Their common structure of thought: both use a spatial orientation consisting of binary opposites (left-right, front-back, etc.) from the egocentric perspective of the human body.
4. Their common usage: both address travellers, specifically soldiers on the march.
5. Their common linguistic expressions: both use a common stock of words and phrases.
6. Their common underlying principle: both assume that birds and animals transmit the will of the gods.

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² See, in particular, Reade (1966); Pingree (1992; 1998); Falk (2000); McIntosh (2008); Maekawa & Mori (2011); Osada & Witzel (2011); Parpola (1966; 2011); Brown (2018); Ambos (2021).

SINGULARITY OF THE COLLECTIONS

Although the use of birds in divination was known in ancient Greece and Italy, to my knowledge a designated collection of omens dedicated to birds and animals occurs in two literary forms in antiquity. The earliest comprises the Akkadian prose sentences written in cuneiform on clay tablets from Mesopotamia and dating from the second to the first millennium BCE. The other involves Sanskrit verses orally transmitted in the north-western and western parts of the Indian subcontinent from around the beginning of the Common Era and preserved on paper manuscripts that survive from the early nineteenth century. A third version occurs in Arabic, but only from the fourteenth century.

Akkadian prose omens

Although the names and descriptions of birds and their calls were recorded in ancient writings from Mesopotamia as early as 3200 BCE in Nippur, the use of birds for divination is known only from the second millennium BCE. Most of the material comes from the standardised omen series *Šumma Ālu* obtained from the library of Assurbanibal at Nineveh in the seventh century BCE, where Tablets 22–49 deal with animals and tablets 64–79 deal almost exclusively with birds.³ An Arabic version of crow omens attributed to the fourteenth century (Fahd 1961) shows close similarities to the Akkadian; here, however, the focus is on travel in general, including travel for commerce, and the binary opposition is reversed, so that right is auspicious and left is inauspicious.

A different form of bird divination was found at Mari (modern Tell Hariri, in Syria), which was a major trading centre on the Euphrates River, linking north and south, and east and west. The tablets discovered there date from the second millennium BCE, making them one of the earliest surviving texts on bird divination. They reveal that a type of avian physiognomy was practised which entailed the reading and interpretation of the marks on a bird's body. The spatial orientation relied on a left-right, front-back binary opposition, and each set of marks was connected to a deity and bore its name. These were oracles that were used to interpret a king's dreams as auspicious or inauspicious and the king's songs as true or false.⁴

The tablets from ancient Nineveh reveal a different type of bird divination during the first millennium BCE. The texts take the form of omens rather than physiognomic oracles. The omen texts belong to the secret knowledge system of the bird diviner, called the “observer of birds” (*dāgli iššūrī*), who is mentioned along with the scribe (*tupšarru*), the diviner (*bārū*), the exorcist (*āšipu*), and the physician (*asū*), placing these omens in the literary and ritual orbit of medicine and divination.

3 Freedman 1998: 2; Veldhuis 2004; De Zorzi 2009: 88. Another old Babylonian forerunner to *Šumma Ālu* was studied by Weisberg (1969–1970). It dates from the second to the first millennium BCE at Ur and is currently housed in the British Museum (BM 113915). The tablet records twenty-five omens involving six different birds, with the eagle being the dominant one. The omens concern an army on the march: protases provide various types of bird behaviour, appearance, and especially spatial location as right or left, front or back; and apodotes that concern, among other aspects, poverty or wealth, victory or defeat. Five omens deal with falcons in a way that closely resembles the omens in the *Šumma Ālu*. Likewise, Leichty (1970) and Moren (1980) offer another set of about 170 animal omens on Tablet 19 of the series *Šumma Izbu* from Assurbanibal's library. This is a collection of teratomatic omens dealing with both human and animal malformed fetuses and births. The omens involve domesticated animals: the cow, ox, donkey, and sheep; four of the omens concern the sound of the ox and the donkey. The omens from the sound of the cow, the ox, and the donkey also occur in the verses from Garga, but little else is found in common.

4 Durand 1997.

Crow omens occur as the first series (verses 9–29) in the Sanskrit list and on the Akkadian tablets 67 of *Šumma Ālu* as well as IM 74500⁵ and the diagnostic omens *Sakkiku* 2 13–16. In Mesopotamia, the crow was the archetypical negative bird, while the falcon was its binary opposite and represented the exemplary positive bird. According to Guinan (2018), the crow turned the auspicious into inauspicious. The crow, known as *vāyasa* in Sanskrit and featured as the first in the list of bird omens, provides a convenient point of comparison with the omens involving the *āribu* (crow) in Akkadian.

Sanskrit verse omens

The collection of Sanskrit bird and animal omens bears the colophon “The call of all beings” (*sarvabhūtaruta*), which corresponds to Aṅga 42 in the *Gārgyājyotiṣa*, compiled by a certain Garga probably between the first century BCE and the first century CE.⁶ The colophon implies that the omens focus on the sound made by different animals, including humans. In total, there are 116 omen verses in different metres, which present the system of divination by means of the sound and, to a lesser extent, the behaviour of certain birds, terrestrial animals, and human beings.

The structure of the chapter reveals its threefold composition: an introduction or benedictory verses (1–6), omen verses (7–92), and concluding verses (93–116) aimed at providing the epistemological basis of the omens’ interpretation and other omens and elements pertaining to a successful military campaign. The beginning and end of the Aṅga frame the omen series in a martial context. Verses nine to twenty-nine are omens that deal with the birds called *ariṣṭa* and the *vāyasa*, being found in the section called “the call of the crow” (*vāyasaruta*). The omen bird called *ariṣṭa* is perhaps another name of one of the Corvidae, principally known as giving omens. The word *vāyasa*, which is commonly used for the crow, occurs in only two verses (15–16). Otherwise, the bird is called *ariṣṭa* (eleven verses: 9, 11–14, 17, 20, 21–24, 29) and *kālakanṭha*, “dark-necked” (one verse: 18). Dave (2005: 510) identifies *vāyasa* as the house crow. He does not mention the word *ariṣṭa* as a specific bird but identifies the *ariṣṭa-kaṅka* as the Brahminy kite, whose family of birds closely resembles species of birds in the family of falcons. Therefore, the exact identification of the *ariṣṭa* is uncertain, but being in the group of omen verses dealing with the crow, it probably refers to one or several of the Corvids.⁷

Both collections of omens place emphasis on corvids, expressed by the crow in both Mesopotamia and Northwest India. In addition, both the Akkadian and Sanskrit omen series predict the outcome of events in a human habitat and on a journey, especially a military campaign.⁸

5 Fawiz 1978: 61–65.

6 Mitchiner 2002: 16; Zysk 2016: 56.

7 The word *ariṣṭa*, coming from the root $\sqrt{riṣ}$, “to injure”, means “not injurious”, and is found in both the masculine (*ariṣṭaḥ*) and neuter (*ariṣṭam*) in medical contexts; the latter is a “sign of imminent death” and the former masculine form is a type of medicinal alcohol; alternatively, according to the Maheśvara Kavi’s early twelfth-century *Viśvaprakāśa*, it is one of two kinds of birds, either *kāka* (the crow) or *kaṅka* (the kite) (Śkd 1: 95). Although its correct identification is uncertain, most Indian sources define it as the crow, which was known as the omen bird that portended (imminent) death. If it means a kind of predatory bird, like the kite, it harmonises well with the falcon in the Akkadian omens of the *Šumma Ālu*. Among its meaning in Pāli, *ariṭṭha*, like Sanskrit *ariṣṭa*, in the neuter means “a sign of death” and in the masculine “a kind of liquor”; cf. “crow” in lexicons (CPD 1.9: 424; CDIAL 609: 27; see also Zysk 2016: 12).

8 *Šumma Ālu*, Incipit to Tablet 67: “If the army goes on campaign and a crow is repeatedly calling in front of the army, the army that went on campaign will not return” (Freedman 1998: 22); for Garga 42.6–8, see below.

COMMON GRAMMATICAL STRUCTURE

The grammatical structure of both sets of omens utilises the protasis-apodosis construction. The Akkadian verb form in the protasis is usually preterite and the Sanskrit verb is often in the optative mood, expressing possibility, or in the present indicative. The Akkadian omens always have the particle *šumma*, “if”, most often written logographically with the sign DIŠ; in Sanskrit, the equivalent particle *yadi, ced, yatas* is optional, being implied by the use of the optative mood (i.e. “should such and such be the case or take place”). The most common Akkadian verb in the apodosis is durative, indicating both present and future time; in Sanskrit, it is again either optative or present indicative, with or without the corresponding conditional particle: *tathā, tatas*, etc. (i.e. “then such and such would be the result”). The inclusion or exclusion of the particles is probably due to the constraints of metre.

COMMON STRUCTURE OF THOUGHT: SPATIAL ORIENTATION

In the protasis, both sets of omens rely on spatial orientation based on the right-left or front-back binary opposition that is egocentric, taking its point of departure from the human body rather than from a fixed spot and utilising the cardinal and ordinal directions.

In the case of the crow, which is the focus in this paper, left is auspicious and right is inauspicious in both series.⁹ There is also movement from left to right and right to left in a circle, which may be either auspicious or inauspicious, depending on the bird involved. The auspiciousness or inauspiciousness of a direction in the Akkadian omens is implicit, but in the Sanskrit series it is explicit.

One should pay attention to birds individually from either the right or the left side. For him who has set out [on a journey], if the omen-bird called *ariṣṭa* is on the left, there is the accomplishment of the objective; but on the right side, it causes the objective to be lost.¹⁰

When located on the left, it indicates an auspicious outcome; it is an inauspicious outcome when on the right when starting on a journey. However, when returning, the reverse is true, so that the bird is auspicious on the right and inauspicious on the left.

Of him being led into [i.e. re-entering] his town, village, or house, if [the bird] is on the right, the outcome is auspicious; it is inauspicious. if it is from the left.¹¹

It is explicit in the Sanskrit verses that the crow is auspicious on the left when going forth and on the right when returning.

⁹ In ancient Greek augury, right is generally auspicious and left is inauspicious while facing north; in Roman augury, it is the reverse, being the case while facing south (Fahd 1961: 48–49, see also Maul 2015 and Starr 1983).

¹⁰ Garga 42.9:

*dakṣiṇād vāmbhāgād vā nibodheta pṛthag dvijān/
ariṣṭo nāma śakuniḥ prasthitasya yathā bhavet/
vāmato 'rthakaraḥ sa syād dakṣiṇo 'rtho vināśayet//*

¹¹ Garga 42.10:

*puraṃ praveśamānasya grāmaṃ vā yadi vā grhaṃ/
dakṣiṇe śobhano 'rthaḥ syād vāmatas tu vigarhitah//*

COMMON USAGE: TRAVEL OMENS

The subject matter and specialised terminology of both sets of bird omens, especially that of the crow, reveal that many were meant to be used by travellers, specifically during military campaigns. The Sanskrit series also mentions caravans, indicating travel for trade and commerce. Moreover, the egocentric rather than the topographical employment of directional terms is particular to individuals who are constantly moving rather than stationary in villages and towns, where the topographical terminology includes cardinal and ordinal directions.¹²

COMMON LINGUISTIC EXPRESSIONS: COLLECTIONS OF WORDS AND PHRASES

I offer, by way of example, a set of words and phrases common to the crow omens in Sanskrit (S) and Akkadian (A), for which I have provided the English (E) equivalents. The Akkadian text is normalised for ease of reading, being a version where the logograms, syllabograms, and phonetic complements are removed.

The directional terminology and the expressions of behaviour in the protases and the auspicious and inauspicious words and expressions in the apodoses are the same or express the same meanings. Their nuances tend to reflect the particular cultural and social contexts for the omens.

The Akkadian prose versions that correspond to the Sanskrit verses come mainly from *Šumma Ālu* Tablet 67 (crows in front of an army); Tablet 72 (birds entering a city); IM 74500 (crows in a human habitat), which is similar to the *Ālu* series; and *Sakkiku*, a collection of diagnostic omens from the second millennium BCE. The Sanskrit metrical versions are verses 6–29 from Aṅga 42 of Garga’s collection. The edition and translation of *Šumma Ālu* Tablet 67 is under preparation by Freedman, who kindly provided the text for the words and phrases listed below. The text and translation of *Sakkiku* 2 13–16 come from Guinan (2018: 20). While there is no direct one-to-one correspondence of any one omen, the structure and elements of the protasis and apodosis taken individually provide a stock of common words and phrases, around which nuanced versions were preserved in prose in Akkadian and in verse in Sanskrit. The nuances are culturally and geographically specific and indicate considerable adaption over the course of a long transmission process. The lists are divided into protasis and apodosis, which are further divided into auspicious and inauspicious results.

Common stock of words and phrases I: Crow

Protases

Client and Purpose

A: *šumma ummānu ḥarrāna illik-*¹³

E: If an army starts/sets out on the path

S: *pravṛttasya... pathe*¹⁴

E: Of him who has set out on the path

12 The two types of directional orientations also occur in two other omen texts: the chapter called “The call of the crow” (*vāyasaruta*) in the Sanskrit Buddhist text *Śārdūlakarṇāvadāna* (Mukhopadhyaya 1954: 175–180) and Aṅga 19, “The knowledge of the crow” (*vāyasavidyā*), in the *Gārgīyajyotiṣa*. Critical editions and translation of both are under preparation.

13 Tablet 67.8; cf. incipit to 67: *šumma ummānu ḥarrana illik-ma āribu*, “If an army went on the road and a crow” (Freedman 1998: 22). Here, “go on the road” is also the idiom for to “go on a (military) campaign”.

14 Garga 42.8, 9, 26.

A: *suhhurur*¹⁵
 E: circles
 S: *paridayant/samapari-dayant/paridīya*¹⁶
 E: circling

Location

A: *ina muḥḥi ūr bīt amēli*¹⁷
 E: on the roof of a man's house
 S: *grhasyopari*¹⁸
 E: upon the house
 S: *grhe valīka*¹⁹
 E: projecting section of the thatched roof

Behaviour

A: *iṣtanassi*²⁰
 A: variant: *iṣtassi*²¹
 E: calls/cries repeatedly
 S: *vaded bhṛśam*²²
 E: speaks repeatedly
 S: *vadet*,²³ *abhivadet*,²⁴ *vadan*,²⁵ *bhāṣā*,²⁶ *bhāṣate*,²⁷ *vāseta*,²⁸ *vāsate*,²⁹ *pravāsate*³⁰
 E: talks, speaks, calls
 S: *āravaṃ kurvan*³¹
 E: making a cry

Apodoses

Auspicious

A: *salīmu*³²
 E: peace/tranquillity
 S: *kṣema*³³
 E: (state of) peace/tranquillity

15 Tablet 67.13.

16 Garga 42.20, 23–24.

17 IM 74500: 1.

18 Garga 42.18.

19 Garga 42.19.

20 Tablet 67.1–2. But here the more correct form would be the preterite in the protasis, as is found in the following variant.

21 IM 74500:1

22 Garga 42.13.

23 Garga 42.13, 17, 19.

24 Garga 42.12.

25 Garga 42.27.

26 Garga 42.25.

27 Garga 42.15, 28.

28 Garga 42.14.

29 Garga 42.16, 22–23.

30 Garga 42.18.

31 Garga 42.26.

32 IM 74500: 38.

33 Garga 42.7, 12, 12, 20.

*Inauspicious*A: *mimmuša iḫalliḳ*³⁴

E: his possessions will disappear.

S: *artho vināśayet*³⁵

E: cause the objective/wealth to be lost/to disappear.

A: *gilittu*³⁶

E: danger/fear/terror

S: *bhaya*³⁷

E: danger/fear/terror

Common stock of words and phrases II: Falcon and crow

This section includes omens involving the falcon (*surdū*) in Akkadian and the *ariṣṭa* bird (i.e. crow) in Sanskrit. Again, the structure of both sets of omens exhibits common words and phrases. The Akkadian sources for these examples come from *Šumma Ālu* Tablet 66 (falcons in a human habitat), Tablet 79 (falcons in front of an army), and BM 108874 (falcons that cross over a man on a journey), which could be a misplaced tablet from the *Ālu* omens.

Protasis*Direction*A: *ištu imitti amēli ana šumēli amēli*³⁸

E: from right to left of a man

A: *ištu šumēli amēli ana imitti amēli*³⁹

E: from left to right of the man

S: *pariḍayan vāmadakṣiṇatas*⁴⁰

E: circling from right to left

S: *samapariḍayan vāme*⁴¹

E: circling on the left

*Location*A: *ina muḫḫi gapni raṭbi ašib*⁴²

E: sits upon a green tree/a tree with fresh fruit

S: *phalitaṃ vṛkṣam...vāsate*⁴³

E: calls in a fruiting tree

34 IM 74500: 41.

35 Garga 42.9.

36 IM 74500: 32, 58.

37 Garga 42.14–15, 18, 27.

38 BM 108874: 1–2, 5–7, 12–13, 17, 19, 21.

39 BM 108874: 4, 8, 14–16, 18, 20, 25.

40 Garga 42.20.

41 Garga 42.23.

42 Tablet 79.79; see Leichty & Kienst 2003: 268. Here, the Akkadian *raṭbi/u* from *raṭābu*, “to be damp” (for example “fresh” dates) suggests that the tree has fresh fruits (see CAD R: 218–219), which is expressed as *phalita*, “fruitful”, “fruit-bearing”, in Sanskrit.

43 Garga 42.22.

*Behaviour*A: *kappīšu usallil*⁴⁴

E: flaps its wings

S: *dhunvan pakṣau*⁴⁵

E: flapping its two wings

S: *pakṣau vitatya samkṣipyā*⁴⁶

E: extends and contracts its two wings

Apodoses*Auspicious*A: *nēmēlu*;⁴⁷ *zittu*⁴⁸

E: objective/benefit/gain/profit

S: *artha*⁴⁹

E: objective/benefit/gain/profit

A: *šibūssu*⁵⁰

E: his desire/wish

S: *arthakam abhīpsitam*⁵¹

E: desired objective

A: *šibūssu ikaššad*⁵²

E: he attains his desire/wish

S: *arthasiddhi*⁵³

E: attainment of (his) objective

S: *arthasādhaka*⁵⁴

E: fulfilling the objective

S: *arthasampad*⁵⁵

E: fulfilment of (his) objective

A: *šubta nēhta*⁵⁶

E: restful/peaceful dwelling/place/state

S: *suptikam*⁵⁷

E: restful/peaceful dwelling/place/state

44 Tablet 79.16f; see Leichty & Kienst 2003: 262.

45 Garga 42.23.

46 Garga 42.18.

47 BM 108874: 2.

48 BM 108874: 3, 4, 8.

49 Garga 42.11, 12, 13, 20, 22.

50 Tablet 79.3, 5, 16, 23 (Leichty & Kienst 2003: 260–262).

51 Garga 42.11.

52 BM 108874: 1.

53 Garga 42.21–22.

54 Garga 42.12.

55 Garga 42.13

56 Tablet 79.9, 10; see Leichty & Kienst 2003: 261: KI. DÚR NE. 𒀭.

57 Garga 42.17.

*Inauspicious*A: *nakru*⁵⁸

E: foreigner/enemy

S: *para*⁵⁹

E: foreigner/enemy

In addition to this collection of common words and phrases, the Akkadian expression *šī šī*, “go, go”, as the call of both the stork and partridge harmonises with the Sanskrit *gaccha gaccha*, “go, go”, in connection with the *ariṣṭa* bird.⁶⁰

COMMON UNDERLYING PRINCIPLE

The notion that birds transmit the will of the gods is the common principle underlying both sets of omens. In the case of the Mesopotamian omens, it is clearly expressed in the so-called “birdcall text” from the first millennium BCE, which was studied by W.G. Lambert (1970). The text reveals that each bird had a corresponding deity, which in turn had a specific call that conveyed the dictum or will of the god.

In the Sanskrit, this same principle is stated up front, where it is said that the birds and animals speak for the gods. They are the gods’ mouthpieces on earth.

Therefore, first, hear from me the decree of the gods with respect to the progression (or march) [of a man or men]. [For this purpose,] the gods employ different kinds of animals and birds. Since the [divine decree] communicates all [the states of] war and peace as either auspicious or inauspicious, I shall therefore recount the true meaning of animals and birds that announce the arising of the auspicious or inauspicious results for him who sets out from or returns to the border of the village, who is in the forest, or who is on the road.⁶¹

Both the Sanskrit and Akkadian omens relied on the same fundamental oracular principle of an earthly medium between men and gods. The Sanskrit version, however, provides a clear statement of it at the beginning of the omen series.

DIFFERENCES BETWEEN MESOPOTAMIAN AND INDIAN BIRD OMENS

Although the six points of similarity suggest a shared paradigm, the nuances in the Sanskrit verse omens reveal important differences between the two sets. Perhaps the greatest difference between the Sanskrit and Akkadian omens is their respective modes of preservation and transmission. All the Sanskrit omens were composed in verse and transmitted orally, while the Akkadian omens were written in prose, using a large number of logograms. Furthermore, the Sanskrit verses provide a rich vocabulary of synonyms and expressions to accommodate different metrical structures, which in turn gave rise to more nuances and variations based on

58 BM 108874: 10–11.

59 Garga 42.19

60 Lambert 1970: 112–115; Garga 42.21.

61 Garga 42.6–8:

*tasmān me devavihitaṃ cārataḥ prathamam śṛṇu/
mṛgā nānāvidhā devaiḥ pakṣiṇāś ca prayojitāḥ//
yathā tat sarvam ākhyāti yogakṣemaṃ śubhāśubham/
tasmāt tad vartayīṣyāmi mṛgānām atha pakṣiṇām//
tattvārtham āvedayatām śubhāśubhaphalodayam/
pravṛttasya nivṛttasya grāmānte vā vane pathe//*

local conditions, environment, and social customs. Closely related to the linguistic difference is an opposition between sound and behaviour. The Sanskrit omens emphasise the place from where the bird's sound originates, while the Akkadian omens focus on the location of its action and behaviour. The speakers' predominant use of an oral rather than written form of literary transmission on the Indian subcontinent could have turned his focus more to a bird's or animal's sound than to its action or behaviour.

Another major difference is the inclusion of botanical information about the birds' roosts in the Sanskrit omens, which is largely absent in the Akkadian omens. This difference could derive from poetry that utilised the terminology of both the indigenous flora and fauna. The interest in local flora is present in Sanskrit literature from the time of the Vedic Hymns or *Samhitās*.⁶² Similarities also occur between the Sanskrit and Arabic version studied by Fahd (1961). It would appear that the Arabic version also relied on a paradigm represented in the Akkadian *Šumma Ālu*. Like the Sanskrit omens, the Arabic omens were transmitted orally.⁶³ While the Arabic includes an extensive list of reasons for travel, it shares a common purpose with the Sanskrit, namely, travel for commerce. Likewise, the Arabic has the opposition between the dying (withered) tree, expressed in Sanskrit as a "withered tree" (*śuṣke...vṛkṣe*), and the living (green) tree, or "fruiting tree" (*phalitam vṛkṣam*).⁶⁴ The Arabic's green tree could have derived from Akkadian "green tree" or "tree with fresh fruits" (*ina muḥḥi gapni raṭbi*).

Unique to the Sanskrit series is a mention of inference as the epistemological basis for the interpretation of the omens, which, to my knowledge, is missing from either the Akkadian or the Arabic omen series; these may be found in one or several commentaries to the Akkadian text, which I did not examine. Between the Arabic and Sanskrit, there could well have been a version in the Persian "Book of Manners" (*Ā'īn-nāma*), translated into Arabic in the eighth century CE.⁶⁵

CONCLUSIONS

This study is but a starting point for further reflection on possible ideas and useful information transmitted in antiquity. The evidence suggests that bird omens, especially involving crows from the Akkadian omen series *Šumma Ālu* and related series, including medical texts, shared a common conceptual paradigm with the Sanskrit omen series "The calls of all beings" (*sarvabhūtaruta*).

The six basic elements common to the two sets of omens (i.e. singularity, grammatical structure, structure of thought, usage, linguistic expressions, and underlying principle) point to something more than the same thought arising in two different places at two different times. Instead, we witness in these two collections of omens a shared paradigmatic structure, content, and ideological basis in relationship to divination specifically by means of birds and animals.

The paradigm was not communicated as a one-to-one translation of one text in one language into another text in another language but was rather transmitted in at least two literary forms from its prose origins in Mesopotamia to its versification in north-western regions of the Indian subcontinent in antiquity. The transmission evolved over a considerable period and was charac-

62 Zysk 1996: 219, 221, 250.

63 Fahd 1961: 46–47.

64 Fahd 1961: 34; Arabic omens 6 and 7; see Garga 42.22, 27 below.

65 Fahd 1961: 54; Tafazzolī 1984: 691.

terised by significant adaptation to specific cultural contexts. The result was a nuanced Sanskrit version of travel omens involving birds and animals. Just as bird divination along with hepatoscopy travelled from the Near East to the Greeks and Etruscans in antiquity,⁶⁶ so also it could have journeyed eastwards via the Silk Road to Iran, Afghanistan, and eventually to the north-west of the Indian subcontinent along with invading armies and traders. Some time before the beginning of the Common Era in the north-western and western regions of South Asia, a versified series of bird and animal omens was assembled as “The calls of all beings” and introduced into the earliest collection of Indian astral science, the *Gārgīyajyotiṣa*, along with an ideology and epistemology reflective of brahmanical cultural values and norms. We do not know the immediate predecessors of its omens but could speculate that the transmission of the paradigm passed through several Middle Eastern languages before being rendered into Sanskrit.

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APPENDIX

This appendix supplements Mitchiner’s summary of the contents of Aṅga 42 based on Ms D of the *Gārgīyajyotiṣa* with a more comprehensive (albeit still tentative) overview of the Sanskrit omens (Mitchiner 2002: 123). The information is divided first according to the colophons found in the manuscripts, where alone C numbers them from 114–139. Where colophons are wanting, the content is identified according to subject matter. This brief synopsis allows the reader a quick overview of the chapter and the compiler’s system or organisation of the material. At first glance, it appears to be a compilation from more than one source, which consists of three parts, where the introduction and conclusion represent a later Hindu veneer superimposed on a older collection of omen verses.

Based on the content of this chapter, I would like to make a few observations on the importance of “The call of all beings” to the history of science. As a book of science, it shows a more than passing knowledge of the biology, behaviour, and sounds of animals and birds, such that one can easily imagine that they were observed and studied over a period of time, illustrating an early form of Indian empirical thought. The Sanskrit omens clearly build on pre-existing structural and ideological foundations of knowledge. The protasis contains a good deal of information about the divinatory process, and especially the physical location, direction, and in some cases behaviour of the animals and birds. The bird’s or animal’s position is recorded as being on the right or the left of the man, in front of or behind him, or circling round him. In the case of a bird, it could rest on the ground, in the water, in a tree, on the roof or on a corner of a roof, or in a doorway.

Likewise, since the method by which knowledge was transmitted in ancient India was by word of mouth, it is not surprising that these Sanskrit omens emphasise the sounds of birds and animals, which are sometimes mimicked through the use of Sanskrit syllables. Their appearance and behaviour are sometimes also noted. The information accumulated from the omen’s protasis for each bird corresponds to the basic data that one could find in a modern ornithologist’s field guide. While the modern textbooks emphasise “scientific” data (e.g. size of bird, mating and migration habits, ecological habitats, etc.), the ancient books stressed the calls and sounds of different birds for the purpose of divination rather than taxonomic identification.

Verses	Title
1–29	Crow (<i>vāyasa</i> with <i>ariṣṭa</i>)
1–8	Introduction (no colophons)
1–4	Praise of King Hariścandra
5	The proper function of a king
6	The will of the gods transmitted by birds and animals
7–8	Animal calls indicate both auspiciousness and inauspiciousness
30–36	Peafowl (<i>śatapatra</i>)
30–31	Little grebe (?) (<i>vañjula</i>)
37–43	Indian roller (<i>cāṣa</i>)
44–49	Red-billed blue magpie (<i>pūrṇak/aūṭa/ā</i> or <i>kaṭapūṭī</i>) (colophon only in Mss BhR)
44–47	Crested bunting (<i>tirīṭī</i>)
50–52	Saru crane (<i>sārasa</i>)
53	Indian barn owl (<i>pesaka</i> (<i>pecaka</i>))
54–55	Common myna (<i>śarkarikā</i>)
56	Peafowl (<i>mayūra</i>)
57	Peafowl (?) (<i>visphoṭī</i>)
58	Common magpie (<i>ciri/cirinī/ciraṇī</i>)
59–61	Skylark (<i>bhāradvājī/a</i>)
62	Pigeon or dove (<i>kapoṭī</i>)
63	Koel (<i>kokila</i>)
64	Omen birds (?) (<i>śakuna</i>)
65	Vulture (<i>mahāśakuna</i>)
66	Indian barn owl (<i>ulūka</i>)
67	Spotted owl (<i>piṅgalā</i>)
68–69	Peafowl (<i>nartukā/narttukā/narttakā</i>)
70	Peafowl (<i>sundarikā</i>)
71	Black francolin (<i>tittiri</i>)
72–76	Groups of omen birds (?) (<i>śakuni</i>)
72	Curkar (<i>cakora</i>), roller (<i>cāṣa</i>), cuckoo (<i>parabhṛtā</i>), and peafowl (<i>barhin</i>)
73	Adjutant stork (<i>baka</i>); swans, geese, ducks (<i>haṃsa</i>), roller (<i>cāṣa</i>), humans (<i>nara</i>), and other birds (<i>pakṣin</i>)
74–76	General statements (no colophon)
77–79	General statements about the calls of omen birds (no colophon)
80–84	Birds of prey (esp. the vulture) (<i>grdhra</i>)
85	The call of village animals (<i>grāmyamṛga</i>)
86	Leopard cat (<i>biḍāla</i>)
87	Hare (<i>śaśa</i>)
88	Onager or Asiatic ass (<i>gardabha</i>)
89	Indian jackal (<i>lomāśa</i>)
90	Zebu or bull (<i>vṛṣabha</i>)
91	Bush quail (<i>lopā</i>) (missing in Mss BhRC)
92	Black buck (<i>pṛṣata</i>)
93–98	Groups of animals in herds and packs, etc.
92–95	Black bucks (<i>eṇa</i>), wild boars (<i>varāha</i>), zebus or bulls (<i>vṛṣabha</i>)

Verses	Title
96	Black bucks (<i>mṛga</i>), jackals (<i>sṛgāla</i>), desert cats (<i>śārdūla</i>), leopards (<i>biḍāla</i>), onagers (<i>gardabha</i>)
97	Elephants (<i>kañjara</i>)
98	Horses (<i>haya</i>), elephants (<i>gaja</i>), men (<i>manuṣya</i>), Gaur/Indian bison (<i>gaus</i>), and musical instrument (<i>vāditra</i>)
99–116	Miscellaneous military omens and rituals (no individual colophons)
99	Auspicious signs at departure
100	Auspicious signs on the campaign
101	Signs of victory
102–104	Inauspicious signs in battle
105	Battle cries in front and behind
106	Auspicious utterances on campaign
107	Inauspicious sights and sounds on campaign
108	Inauspicious bodily movements, behaviour, and bodily conditions on campaign
109–110	Astrological signs
111–112	Epistemology
113	Divinatory astrology and benedictions
114	Praise of victors and their leader
115	Birds and animal omens in a Śaiva context
116	Birds and animals help men to be vehicles for gods and ancestors on earth “The calls of all beings” (<i>sarvabhūtaruta</i>) represents the final colophon.