CHAPTER 19

ANIMALS AND DIVINATION

PETER STRUCK

Introduction

Across the whole ancient world, people used a broad array of techniques and disciplines to make themselves attentive to what they thought to be hidden information buried in the events unfolding around them. These practices, classified in Greek as the disciplines of *mantikē* and in Latin as *divinatio*, were utterly common. They were not, for the most part, considered esoteric or occult. The ancients understood that the universe had certain inclinations built into it, which were more or less closely tied to the inclinations of the gods. Like the weather, these were a part of the ancient atmosphere; and throughout the Greek and Roman sources we find people trying to gauge the prevailing winds. They perceived messages in a wide variety of signs, but nearly all of the most prominent and durable of the Greek and Roman systems make use of animals. Aeschylus's overview of the classical terrain, put into the mouth of Prometheus, announces where humans might look to find these hidden indicators, and he gives animals the balance of attention:

> And I marked out the many ways of divination, and among dreams I first discerned which are destined to come true; and I explained to them words overheard by chance and chance meetings. The flight of crook-taloned birds I distinguished carefully—which by nature are auspicious, which sinister—and each has a particular mode of life, some are hostile to each other, and they have affections and favourable positionings in groups; and the smoothness of their entrails, and what colour the gall must have to please the gods, also the speckled symmetry of the liver-lobe; and the thigh-bones, wrapped in fat, and by burning the long loin I set mortals on the right path in an art that is difficult and murky.
>
> (Aeschylus, *Prometheus Bound* 484–98)

Given the functionally infinite range of potential vocabulary for the divine language, it does not simply stand to reason that animals would emerge as such a prominent category. The grounds for this are doubtless manifold. Since prehistory, people were accustomed to making life-critical decisions based on the behaviours of animals in the food supply, and such attentiveness may have become acculturated in stylized and systematized forms. Such a link is already made by Democritus (fifth century BC), who explained divination by entrails as an indication of whether fields will be barren or productive (DK68 A 138). Other possible reasons for the interest in animals can be adduced. It was a part of ancient lore that many animals possessed a certain quickness and acuity of perception that made them able to sense things that humans were not yet able to (*Schol. Aratum* 913; Cicero, *De divinatione* 1.15). Further, the non-discursive modes of thought in which divination is understood to engage align with the instinctive thought processes of non-human animals, where discursivity is non-existent. Ancient observers make such connections explicit (see below). Finally, modes of divination that focus on animals would have provided a means to reconcile two large pieces of human identity that Greeks and Romans typically separated. They configure the world of non-human animals, with which humans' creaturely natures are aligned, to be instrumental to, and not antithetical to, the human intellect, which most ancient observers set apart from our corporeal, animal qualities and align with the divine. Such a focus on animals as a medium to reach the divine accords with a congruent focus in the fundamental religious practice of sacrifice, with which divination is often paired.

Most ancient observers classified divination in two main forms: artificial and natural. In the first category, messages are observed in significant phenomena in the world outside the observer, the meaning of which is determined using empirical methods. The observer correlates the present observation with past records, to see whether it bodes well or ill. In this variety, divine signs are regularly found in animal behaviours and the structures of their bodies or parts. The flight paths of birds, the twitching of entrails, odd actions of large mammals, or the feeding behaviours of chickens are all considered significant over time. According to the second kind of divination, the inward, natural variety, a human being receives a direct inspiration through dreams, visions, or inspired oracular pronouncements, via a distinctive kind of cognitive activity. Even in this variety, centred as it is on subjective human experience, the theme of animals also surfaces. A rich and multivalent tradition of philosophical commentary on divination consistently links it with the creaturely side of the human being. Thinkers often draw connections between divinatory insight and animal instinct. The prominence of women as oracles (Pythias and Sibyls), whom Greek men typically marked as being closer to animal nature, is a noteworthy preliminary indication. One school of thought, the Stoics, achieves a grand unified theory of divine signs via understanding the cosmos as a whole to be a single living animal (*zōon*).

Instinctive Animal Behaviours as Signs

Birds

Of the animals that are potentially signs in the Classical world, birds take pride of place. In an early indication of this, Hesiod sums up the *Works and Days*, his almanac of how to live, with a final sentence that places bird-reading on a paratactic footing with everything else he has talked about: 'A man is happy and lucky who knows all these things and does his work without offending the deathless gods, who discerns the omens of birds and avoids transgression.' The Greek term for bird of prey (*oiōnos*) becomes elided with the idea of any kind of divine sign (Euripides, *Orestes* 788, Thucicides, 6.27, Aristophanes, *Birds* 719) and the verbal form (*oiōnizomai*) comes to mean 'to read omens' generally. Already in Homer's time birds were looked to in the most important of the divination systems. Calchas is equally a 'mantis' (a 'seer') and 'the most skilled of the bird interpreters by far' (*Iliad* 1.69–92). That bird divination is often understood to be distinctively Greek has contributed to an underdeveloped study of its Near Eastern antecedents. But an interest in birds as divine signs is in evidence in Babylonia, Assyria, and among the Hittites (West, 1997: 47). An early fifth-century inscription from Ephesus expresses rules for bird divination in the distinctive protasis–apodosis style ('if this, then that') characteristic of thousands of Near Eastern divinatory tablets (*SIG* 1167). Why the ancients found birds important is impossible to say with certainty. It is often remarked by scholars, but less often by ancient testimony, that their proximity to the sky put them closer to the divine. Their simple capacity to defy gravity would also have been a potential source of raw wonder, as well as their aural richness, made even more poignant by their appearance and disappearance in conjunction with the seasons. The speed and impulsiveness of their actions is also probably a factor.

Birds of prey are especially important. Their eating of meat deepens their association with the world of animals, down to the level of the sinews, and this may reflect an ongoing importance of corporeal and visceral natures in divinatory practices. Some have suggested that the choice of this class of birds is associated with divination by entrails (extispicy) (Bouché-Leclercq, 1879–82: 129–30). That extispicy was not present in Homer, when birds of prey were already favoured, rules out a straightforward dependency. But it may still be the case that each of these practices reveals a related, deeper habit of divinatory thought, in which insight emerges from the most rudimentary features of organisms. The following are the most important birds, along with the gods, if any, with which they were traditionally associated: the eagle (Zeus), falcon (Apollo), hawk, raven, crow, owl (Athena), hen, heron, and vulture.

While figures such as Calchas and Tiresias are legendary for their acumen, the Greek technique of bird-reading never resided exclusively with any formal or informal social or political group. Anyone was authorized to read birds, and the ability to do so correctly

correlated more closely with social standing than official position. This sets Greek bird-reading in contrast with both prior Near Eastern and later Roman parallel forms, in which the procedure is surrounded by a large bureaucracy. The significant elements are flight path and cries, and, in the poetic tradition especially, a whole range of more exotic happenings, often involving prey (a snake, another bird, even a fawn). The categories of right and left are the most prominent. They can on occasion be lined up with east and west (*Iliad* 12.239–40), which would mean a normative northward facing, but the evidence does not highlight this, suggesting instead that the most relevant data is not cardinal geography but their position with respect to the observer. Typically, some recently initiated or proposed course of action is thought to be endorsed or rejected by the appearance of a bird omen. Observers look for positive or negative readings along a binary scale, with natural behaviours and the right-hand side aligned with positive signs and unnatural or left-hand orientation taken as negative indicators. The hermeneutic system in bird reading never quite becomes reduced to consistent rules, a heterogeneity it has in common with nearly all other divinatory systems.

Among the Romans divination from birds is equally prominent. A summary of the auspices survives in the lexicon of Festus (s.v. *Quinque genera signorum*). He speaks of five kinds. Of the three most important, two varieties focus on birds: in addition to signs from thunder and lightning (*ex caelo*), Romans were particularly interested in avian flight patterns and cries (*ex avibus*), and in the feeding patterns of specially kept chickens (*ex tripudiis*). Of the remaining two types, auspices taken *ex quadrupedibus* were seen in the odd behaviours of mammals (on which more in a moment), and those *ex diris* (sc. *signis*) drew conclusions from odd coincidences and accidents of any kind. As was the case with Greek, the proper Latin term for the observation of birds, *auspicium* (from *avis* + *specio*), comes to mean observation of divine signs in general. Among the Romans, in contrast to the Greeks, a strong social institution, in the form of a *collegium* of augurs, grows up around the auspices to regulate and perpetuate the techniques, and deliver authoritative interpretations. The duty actually to perform the associated rituals fell to other magistrates. All matters of civic consequence required that the augurs be consulted (Livy, 6.41), and holding the office was a mark of high social and political stature. Even Cicero, whose views on divination were extensive, complex, and full of doubts, nevertheless venerated the office as a repository of social capital, and himself held it for a time (Cicero, *De legibus* 2.20–21). Birds whose song was significant were known as *oscines* and those whose flight was were called *alites* (Cicero, *De divinatione* 120).

It is useful to divide divination in a Roman context into two classes, one that officially and formally seeks out omens (impetrative), and a second that reads unsolicited omens (oblative) (Cicero, *De legibus* 2.21). The oblative category is familiar from the Greek materials, where the typical bird sign arrives spontaneously. The Romans' impetrative versions are strikingly more developed than the Greeks'. In official state functions, when considering or commencing any course of action, auspices were taken to determine whether the gods favoured it. The person charged to carry out auspices *ex avibus* would mark out a sacred quadrant of the sky using a wand (*lituus*), then pitch a tent in a position to observe the heavens. The whole area was then made sacred by a

ritual. The seat and the designated region of the sky were known as the *templum*. After the ceremony began any birds (or lightning) appearing in this screen were understood to be a divine omen. Every military camp established a *templum* for official use (Tacitus, *Annals* 2.13, 15.30) and the city of Rome itself maintained a permanent one on the top of the Capitoline Hill. The region of the sky was important enough that any building that occluded a part of it could be ordered to be torn down. (Cicero, *De officiis* 3.16) For auguries taken *ex tripudiis*, the Romans observed how a select group of chickens ate their grain. If they ate greedily, such that grain fell from their mouths, it was considered a positive sign; the reading was negative if they refused to come out of their cages, did not eat, made a cry, beat their wings, or flew away (Livy, 10.40; Cicero, *De divinatione* 2.72–3). The sound and force of the grain hitting the ground was of particular interest. The ceremonial chickens were kept in cages for the purpose, and were tended by a special expert in such matters known as a *pullarius*.

The Romans understood divine signs as rendering judgment on the timing, not the content, of the action proposed. The ceremony could be repeated to achieve the desired message. Signs were valid for one day only, and the judgment they rendered could be supplanted by another ceremony on the next day. Roman auspices did not indicate the future, only divine approval or disapproval for the proposed course of action. The kinds of bird behaviour observed—especially impulsive, darting movements and sounds—are of a piece with a certain brittleness to the procedure, made all the more so under the weight of the heavy systematization that the Roman custom supported. The auspices required strict silence (*silentium*), and anything that broke it or otherwise disturbed the ceremony was called a defect (*vitium*) that could render the sign void. These aspects underscore a strong degree of impetuousness to the knowledge retrieved, opening up a further association, at a larger structural level, between divinatory knowledge and animal instinct.

Other Animal Behaviours

There is further interest shown in a range of different animals and their behaviours, which are either signs themselves or are closely connected with divination. In examples of the latter, Apollodorus records a legend that the famous Greek seer Melampus gained his acute power to understand the significance of bird cries from having snakes lick his ears (1.9.11). Iamus is made capable of speaking prophetically when two snakes feed him with bee's honey as an infant (Pindar, *Olympians* 6.46–54). Socrates reports a legend that swans sing louder just before their deaths as if prescient of their fates (Plato, *Phaedo* 84e–85b). Frogs and other creatures were noted to be aware of coming weather conditions (Cicero, *De divinatione* 1.15). Distinctions between such behaviours and divination are often murky (Cicero *De divinatione* 1.118, Iamblichus, *De mysteriis* 3.26; cf. Seneca, *Naturales Quaestiones* 2.32–51).

Among the Romans, strange births of all kinds could be divine signs. Over this class the professional *haruspices* (see below) had a particular expertise. Animals with deformities are important, particularly those with too many limbs or feet (Livy, 30.2.11, 31.12.7, 32.1.11, 42.20.5). A prominence is given to those that cross species, especially humans with non-humans: as, for example, in the case of women giving birth to other species of animals (Julius Obsequens (Obseq.), 57, Pliny, *Natural History* 7.34, Appian, *Bella Civilia* 1.83), or to offspring that are mixtures of humans and animals (Livy, 27.11.5, 31.12.7, 32.9.3), or animals born to a different species (Livy, 23.31, Aelian, *Varia Historia* 1.29, Josephus, *Bellum Judaicum* 6.5.3).

Coincidences and strange behaviours involving four-footed animals (*ex quadrupedibus*) made up another category of auspices for the augurs to consider. Suetonius relates that as Caesar's death approached a herd of horses that he turned to the wild by the Rubicon in dedication to the river refused to graze and wept copiously (*Life of Caesar* 1.81). Cicero relates many comparable anecdotes in his *De divinatione*, as when, for example, a general and his horse accidentally fall (1.77), or mice are observed to have eaten through shields for battle (1.99), or a mule, a creature sterile by nature, gives birth (1.36; cf. Appian, *Bella Civilia* 1.83), or a monkey goes berserk and upsets a lot-drawing ceremony (1.76).

The Structure of Animal Parts as Signs

Entrails

Observers in classical antiquity also saw divine signs in the movements, colour, size, shape, and texture of the internal organs of the animals they sacrificed to the gods. Divination from entrails is not disconnected from divination from birds. That birds of prey are favoured as sign-givers already highlights the connection with animal meat, and Greek tragedians make the link with extispicy. When in Sophocles' *Antigone* Tiresias gets a negative signal from both his sacrifices and strange bird behaviours, he explains that the whole food chain has been polluted by the birds feasting on tainted carrion introduced into the food chain from the unburied corpse of Polynices (1005–13). Prometheus's punishment stands as an iconic connection between the two practices. For refusing to give Zeus information, he is punished by having the archetypal bird of divination, Zeus's eagle, repeatedly eat out his own liver, the central organ in extispicy (Aeschylus, *Agamemnon* 1021–5). That the entrails as a whole were also a part of human physiology is presumably not far from the surface of the consistent fascination with these organs. It may also help to explain the greater salience of divination from entrails in military contexts, where the human version of such organs would have been easily observable. Examples of the so-called 'Humbaba face' make the point graphically. These representations of human-looking faces fashioned out of animal intestines are found in multiple places in Mesopotamia, and in a temple on the acropolis at Gortyn on Crete, probably dating from the archaic period (Burkert, 1992: 49).

The liver receives the most attention of the organs (Aristophanes, *Wasps* 831, cf. Schol. *ad loc*; Cicero, *De divinatione* 2.28). Its health is taken as a sign that the god was present in it (Jastrow, 1907: 122–3). Anatomically, it was commonly thought to be the source of blood for the body, and so had a fundamental role in determining the vitality of the organism (Empedocles, DK31 B 150, 31 B 61.15; Hippocratic Letter, 23.7; cf. Aristotle, *Parts of Animals* 666a24–36; Jastrow, 1907: 121). The liver sits as a locus of the emotions, analogous to the position the heart takes in later European traditions. In the case of the liver, there is a particular prominence of the emotions of anger, grief, fear, and anxiety (Democritus, DK68 C 23.7; Archilochus, fr. 234; Aeschylus, *Agamemnon* 432, 792, *Eumenides* 135; Sophocles, *Ajax* 938; Euripides, *Suppliant Women* 599). And in the magical tradition, a target's liver is subject to attack in the case of erotic spells (*PGM* IV.117, 1530; VII 992; PDM xiv.657). Other organs of interest are the heart and lungs.

The Greeks borrowed the idea of the significance of entrails from the cultures of the ancient Near East, where it is in evidence in among the Assyrians, Hittites, and Mesopotamians. The practice is very old. A clay representation of a divinatory liver that survives from Mesopotamia dates from the eighteen century BC, and reveals a discipline already developed enough by then to produce a relatively elaborate and inscribed practical model. Comparable model livers show up around the Near East and also in the Classical period near Rome. The bronze liver of Piacenza dates from the late second century BC. About the size of a fist and elaborately inscribed, its affinities with the Mesopotamian models that predate it by a millennium indicate a clear line of influence from the Near Eastern to the Italian practices. The ways in which the Piacenza liver is stylized depart from actual anatomy in ways that parallel the Mesopotamian versions (Burkert, 2005: 48).

Homer speaks of divination from animal parts, but only in a circumscribed way. He refers to a certain kind of sacrificing priest (*thuoskoos*), who is apparently interested in gauging whether the burned sacrifices have been accepted by the gods or not (*Iliad* 24.221, *Odysssey* 21.145; 22.318, 321). The distinction between this practice and the more elaborate examination of aspects of the entrails themselves is preserved in the *Prometheus* text with which we began, where divination from the thigh-bones wrapped in fat is treated as a separate category from divination from the smoothness, colour, or symmetry of the organs. We have evidence of both kinds in the Classical period. The testimony of Sophocles' *Antigone* mentioned above shows the main question to be whether the sacrifice is accepted by the divinity, indicating divine favour or disfavour. On the other hand, Plato assumes a rich set of hermeneutical possibilities built into the liver in his discussion of the organ in the *Timaeus* (71c). A section in Euripides' *Electra* also indicates the fuller range: Aegisthus disembowels a calf, takes the entrails in his hands, and on inspection sees that the liver is lacking a lobe, portending trouble, and the portal vein and gall bladder reveal oncoming threats (826–9). There are some twenty representations of liver inspection on Attic vases from 530 to 490 BC, indicating a well-developed interest, which probably accrued some complexity and detail. In historical accounts, we find mainly simpler descriptions, without the anatomical specifics, of an omen from sacrifice being favourable or unfavourable (Herodotus, *Histories* 6.76, 6.112, 9.45, 9.61–2; Xenophon, *Anabasis* 1.8.15, 2.2.3).

The technical vocabulary that Greeks and Romans use for labelling the significant portions of the liver is shared with the ancient Near East. In each tradition observers could see a 'gate', 'path', 'river', and a 'head' or 'lobe'. Even some of the particular interpretive moves show a measure of overlap that cannot be coincidental. A missing 'lobe' or 'head' is taken to mean disaster for the king, and multiple such lobes mean a rivalry for power (Burkert, 2005: 50). Overall the language points to increments along a binary logic of auspicious and inauspicious. A normal, healthy-looking liver was a good sign. Bad signs are seen in plugged up pathways, non-standard colour, and especially deformities—the more dramatic the more significant. Beyond this basic architecture, the Romans leave behind more evidence of a system than the Greeks. Both Cicero and Livy speak of a *pars hostilis* and a *pars familiaris* (Cicero, *De divinatione* 2.28; Livy, 8.9.1). This adds a further layer of interpretive possibilities, with the *pars hostilis* being a negative twin of the other, and allowing for another doubling of significant criteria.

The Piacenza liver confirms this and gives fascinating further information. It is an Etruscan product, inscribed elaborately with Etruscan names of gods. In its shape, it has a clear left/right split indicated by a cleft, and exaggerated protuberances standing for the gall bladder, portal vein, and caudate lobe. The inscriptions are nearly all on the visceral side. A band of markings around the perimeter divides it into sixteen sections, each inscribed with the name of a god (or sometimes two). Several sources indicate that the Etruscans divided the heavens into sixteen regions, with each of them being the house of a different god (Cicero, *De divinatione* 2.42, Servius ad *Aeneid* 8.427; Martianus Capella, 1.45). We do not have evidence of such an understanding of the heavens outside the Etruscan world. This indicates that observers would correlate conditions in the microcosmic areas of the liver with macrocosmic regions of the skies and the gods that lived there. Divination by entrails becomes intertwined with observation of the skies—whether lightning, or birds, or of the heavens more generally. The model, then, functioned as a portable instrument. Given the degree of stylization, it would be more likely to be the tool of an expert than a non-expert. Within the perimeter are twenty-four interior quadrants, with further names inscribed. The interpretive possibilities with forty total regions overlaid by overall binary aspects are exponentially large. In this greater degree of elaboration, the Roman system is more like Near Eastern precedents than the Greek evidence shows.

As was the case with divination from birds, the Romans regulated and maintained the reading of entrails within a social institution. Roman extispicy was overseen by a *haruspex*, and the augurs appear to have had nothing to do with it. The institution of the *haruspices* had a less strict and systematized character than that of the augurs. Not quite an office, and not formed into a college until the late republic, the *haruspex* was most often an independent expert drawn from the local Etruscan population (Beard, North, and Price, 1998, vol. 1: 20). According to legend the technique was handed down from one Tages, an Etruscan dwarf who emerged from a farmer's furrow in Roman mythic times. *Haruspices* could render an official opinion on the meaning of entrails only upon being asked by a body of magistrates. They provided responses that were then accepted or not (Cicero, *De legibus* 2. 21, *De haruspicum responsis*). Their expertise also

covered prodigies and lightning. It is noteworthy that the Romans both abundantly consulted entrails and also consistently ascribed the practice to the Etruscans. In a cultural trope that is historically common, reminiscent of the stylized views of Native Americans among culturally dominant groups in North America, the Romans saw in a conquered local people a distinctive and exotic religious expertise. In a telling hyperbole, Livy tells us that the Etruscans were the 'nation more than any other devoted to religious rites' (5.1.6). This social position of exoticism simultaneously provides a distinctive power and raises a potential hostility among interested clients. The rage that Gracchus expresses upon receiving an unwelcome judgment, insulting the *haruspices* as foreigners, cannot have been idiosyncratic to him (Cicero, *De natura deorum* 2. 11). While governmental mechanisms existed to consult the *haruspices*, they maintained a certain distance from the state apparatus (Yébenes, 1991: 186). Private *haruspices* were under the employ of generals and magistrates (Sallust, *Bellum Iugurthium* 63.1; Plutarch, *Marius* 8.8; Cicero, *De divinatione* 1.72; Plutarch, *Sulla* 9.6; Cicero, *In Verrem* 2.3.28). It is the *haruspex* Spurinna who, upon observing a sacrificial beast missing a heart, and then on the next day seeing a liver missing its head, warns Julius Caesar to beware the Ides of March (Cicero, *De divinatione* 1.119; Suetonius, *Life of Caesar* 12.81; Plutarch, *Caesar* 63.3; Valerius Maximus, 8.11.2).

Two ideas competed to explain the emergence of divine signs in the entrails. Some thought the god intervenes at the moment of the sacrifice and places a stamp on the innards (Cicero, *De divinatione* 1.118; Pliny, *Natural History* 28.11). Others found this idea unappealing since it made the divine out to be a kind of busybody, with time enough to do menial work. A second idea suggests that the divine is involved by guiding the selection of which animal is sacrificed (Cicero, *De divinatione* 1.118, cf. Seneca, *Naturales Quaestiones* 2.32.4). We also have testimony that divination from entrails was connected with an additional important method. It formed a preliminary ritual before the delivery or oracles at Delphi (Plutarch, *De defectu* 435c, 437b).

Divine Insight and Animal Ways of Knowing

Just as animals are a prominent theme in the study of divinatory practice, so too in ancient divinatory theory. There are three main currents of philosophical thought on divination, and, counterintuitively, when thinkers draw the connecting line of communication between the gods and us, they consistently construct the path via the realm of animals. The first two schools of thought, coming from Plato and Aristotle, understand divinatory insights to be tied with animal instinct, and to belong to a fringe form of cognition that is specifically connected with humans' animal natures. The Stoics, by contrast, embrace divination as an important piece of their understanding of the cosmos as a whole, and of humans as part of it. To explain divine signs they centrally appeal to

the principle that the cosmos is itself a living animal (*zōon*). The idea pre-exists in Plato's *Timaeus*, but they develop it much further, proposing that because the cosmos is a single creature, it must course through and through with interconnections by which otherwise hidden conditions can be observed. The theories vary from thinker to thinker, but in each case they have to do not with abstractions or the disembodied realms philosophers customarily linked with the divine. Rather they are anchored in the creaturely side of the human and the corporeal dimensions of the world.

According to Plato, there is a portion of the human soul that is identical with the soul of animals, and it is specifically to this part that divinatory insight belongs. While he regularly references divination as a literary motif—making it an emblem of non-discursive knowledge and referencing it in a variety of tones, sometimes mocking (*Euthyphro* 3e, *Meno* 92c), sometimes neutral (*Laws* 634e, 694c; *Symposium* 192d), sometimes with a rather profound sincerity (*Republic* 523a, 505e; *Philebus* 64a)—divination as a topic in its own right interests him in the *Timaeus* (69b–72d). This dialogue is distinctive in the corpus for being anchored on the concept of the animal (*zōon*). To a unique degree here, he understands the *anthrōpos* as an animal (90e) or a creature (*thremma*; 30d1) among the others. He entertains broad discussions of such matters as anatomy, reproduction, digestion, and metabolism, and treats our corporeal, creaturely natures as a consequential piece of what it is to be human. Plato speaks of the creation of the universe itself as a cosmic living animal (*zōon empsuchon*; 30b8) and narrates that a race of human animals was fabricated in its image (27c–41d). Further, he claims that non-human animals are then directly derived from humans. The original race of men was given a three-part soul, with a highest divine part, reason, housed in the head. It rules over the lower parts, including the lowest one, which is placed below the midriff in the lower trunk. It has a sinister, animalistic cast; the creators had to 'bind this one down there like a wild beast' where it is 'constantly grazing at its manger' (70e). In addition to these pungent metaphors, he explicitly equates this part of the human soul with the souls of animals. Humans are the original race of creatures. Through reincarnation, the first race of men bequeath their souls to following generations. Those among them who did not keep the highest parts of their souls robust, were reborn as creatures equipped only with the lower orders of soul and these became the non-human animals (90e–92c). This zoogony puts a finer point on the animalistic side of the human soul: more than just being animal-like, it is actually *not distinguishable from* the soul of an animal.

Now, all three parts of the soul, even the lowest, engage in distinctive cognitive activities. These are related to their internal movements. The rational intellect operates like our internal gyroscope, spinning in alignment with the motion of the fixed stars, and the soul's lowest, animal part mostly lurches about and produces only appetitive desires (44b, 90d). But occasionally during sleep, when most of the soul is dormant, the animal part can become soothed and begin to spin in alignment (71d). When it does it is able to achieve its own kind of insight, divination through dreams, which he calls a phantom image of daytime intellectual activity. Plato further deepens the animalistic and corporeal character of this cognition and, in a bold move, links it directly to divination by the liver (71a–e). He tells us that the gods created the organ of the liver as a safeguard that

soothes the lower soul when its animalistic desires get out of hand. The liver mirrors images from our upper soul that either calm or frighten the lower soul into submission. Plato elaborates that this is why this organ in recently slain animals contains the signs it does, though he plays down their usefulness. The gods granted this capacity to the very lowest part of our soul as a compensation to it, he says. They 'rectified the vile part in us by establishing divination there, so that it might in some degree lay hold of the truth'.

Aristotle thinks that people can achieve insights in their dreams that are unavailable to their higher intellects and, using his own distinctive intellectual resources, he also maps these cognitive capabilities onto the parts of our souls, those that we share with animals. The most important treatise on the topic, his *On Divination by Dreams*, claims that only people who have atrophied higher intellects are able to achieve such insights. He speaks of vibrations from faraway events that move through the air at night, when it tends to be still, and are then assembled into a prescient dream image by the soul. To account for that assembly, he rules out appeals to the highest, discursive, self-aware part of the soul, for that is precisely what is dormant during sleep. And it is especially dormant among those who have very little of it to begin with. Simpletons, the melancholic, the talkative, and those out of their wits are better able to see what comes next in their nocturnal visions because they are most easily pulled along the vector towards which the external vibrations are proceeding. In this way they get a vision that correlates to the way events in the outside world are tending. He connects this kind of cognition directly with animal instinct.

It is counterintuitive for Aristotle that empty-headed people should have insights to which those with robust intellects are blind, and he tries to explain how lower-level cognitive operations achieve some intellectual gain. In the *Eudemian Ethics* he links accurate dreamers with another strange group, which he also observes strictly among dim-witted people: those with consistent good luck (*Eudemian Ethics* 8.1247a–1248b). Both these groups benefit from a rudimentary form of cognition that we share with animals (and in fact all things with souls). Consistently across his corpus, Aristotle divides the soul's functions into three main layers: all living things have the nutritive capacity, which regulates the powers to grow and reproduce; a smaller group, the subset of animals, are in addition capable of perception; and within this group a further subset (humans) have an even higher capacity on top of that and are capable of reason. Our reasoning is by far the most advantageous information-processing centre, but the lower orders produce incremental good outcomes as well. He links both the psychic assembling of prescient dreams and the spontaneous actions that result in good luck to the most rudimentary of the psychic functions. He claims they emerge from a class of psychic movements beneath our awareness that characterize the nutritive soul. They go under the technical term of *hormai*, or impulses. The *hormai* are unselfconscious inclinations to do things, below the level of thought and even of conscious desire. They are involuntary activities, such as those that result in digestion and gestation, which produce obviously good things happening for each creature. They manifest a core Aristotelian principle that Nature always, or for the most part, reaches for the better (*On Generation and Corruption*, 336b27–28). He invokes the principle specifically in consideration of lowly creatures: 'But perhaps

even in inferior creatures there is some natural good stronger than themselves which aims at their proper good' (*Nicomachean Ethics*, 1173a4–5). Both the lucky and those who get warnings in their dreams are operating according to these impulses, and achieve their good outcomes via this lowly information-processing centre. Just as it steers even rudimentary forms of life towards what is good for them, so it is humming away inside humans as well. The empty-headed are especially attuned to it, because their internal dialogue, which in intellectually sound people is busy working towards more complex good things, is so faint. While they cannot achieve the magnificent insights of which fully realized humans are uniquely capable, they can achieve uncanny good results via their attunement to the incremental benefits achieved by the rudimentary systems. Aristotle thereby aligns divinatory insight with animal instinct.

For both Plato and Aristotle, divination is a fringe phenomenon, and is explicable as an alternative form of cognition, which shows affiliations with how animals think. In the case of the Stoics, the basic premises are quite different. Divination is a core piece of their basic theological positions, is embedded in their principles of physics and cosmology, and is affiliated not with a lower form of cognition, but is an expression of what they understood to be the one, single form of it. Their distinctive views on theology, cosmology, and physics, and their monistic psychology, yield a cosmos with quite a different shape from that of either Plato or Aristotle. Given the degree of this difference, it is all the more noteworthy that the category of the animal again emerges as a central one. They straightforwardly claim that the signs percolating through the cosmos, including those that emerge in dreams or oracles, operate based on the physiological structures of a living organism, in their case the relevant animal is the cosmos itself.

The Platonic idea that the cosmos is a single creature takes on an entirely new pertinence for the Stoics. For them it is not a metaphor, but a statement of fact; and their larger philosophical system has unique resources for thinking it through (Long and Sedley, 1987: 47C, 54A, B, F). In Stoic understanding, all things that exist in the universe are material. They are a composite of two kinds of matter: the inert kind, or *hulē*, and an active divine vapour, evanescent but still material, called *pneuma*. This is the case for every discrete entity in the cosmos, from planets, to people, to grains of sand. The *hulē* gives a thing bulk and the rarified fiery internal *pneuma* provides it with its qualities, characteristics, and energy. Different degrees of *pneuma* result in different orders of these characteristics (Long and Sedley, 1987: 47P, Q, 53A). Inanimate things are held together by a degree of *pneuma* called *hexis* ('tension'); plants and non-mobile living things like a fetus are held together by *physis*; animals are held together by soul, or *psychē*, which they understand to be the particular form of *pneuma* that provides for perception and self-propulsion; and rational self-propelled living things, that is humans, have a *logikē psychē*. Further, the *pneuma* that permeates each individual thing is entirely contiguous with the *pneuma* in each adjacent thing, including the *pneuma* that courses through the atmosphere around us and beyond into the fiery regions of the heavens. So, the *pneuma* as a whole is a synthesizing breath that suffuses every nook and cranny of the cosmos and links each part of it to every other part in a non-mysterious, entirely materialist mode. They

claim the *pneuma* as a whole is coextensive with the divine, and finally that it is the soul of the cosmos, which they understand to be a single animal.

The flow of energy that vivifies the cosmic creature, via the *pneuma*, they label with the technical name *sympatheia*. Sympathy, literally 'co-feeling' in Greek, is a centrepiece of their explanations for divinatory signs (Cicero, *De divinatione* 2.34) and it is anchored in a notion of the cosmos as an organism. The term pre-exists in the Hippocratic medical tradition and in physiology (*On Nutriment* 23; Aristotle, *Parts of Animals* 653b, 690b). It articulates the interconnection of body parts that, while distant from each other, may well be interconnected. A flush in the face might be linked with a fever produced by an infection in the toe. The concept sets the operation of divinatory signs within a powerfully physiological context. That unseen conditions in the cosmos will be made manifest by visible parts of it is for them as sure as the idea that organisms manifest signs of their conditions in visible symptoms. Such divine signs are an integral part of their physics and theology. The Stoics tie the very existence of the divine to the existence of divine signs, an argument all the more powerful since atheism is a near absurdity in antiquity (Cicero, *De divinatione* 1.82–3).

The significance of categories related to animals, even in this abstract arena, further underscores the broad relevance of such themes to divination in general. Each of these thinkers, in their different ways, configures the study of divination as an investigation into a more or less distinctive way of knowing—they attempt to discern how certain people are able to know things in ways that stretch our customary cognitive abilities. To do this they begin with an understanding of divination as an emergent insight, which bubbles up from knowledge directly embedded in organisms. The salience of animal themes suggests a larger habit of thought around animal nature, beyond merely the kinds of signs observers look to—whether birds, beasts, or entrails. More than placing humans in conversation with their gods, the practices of divination place humans in conversation with the creaturely dimensions of their experience. Within the Classical context, human intellects and corporeal bodies—animals and humans alike—sit in sometimes strident opposition. Via divination they find a medium in which they can collaborate.

Suggested Reading

The best source for ancient ideas and practices of divination is to be found in Cicero's *De divinatione*, which passes on important Stoic and Peripatetic ideas, and aims to aggregate many earlier schools of thought. Animals figure commonly in his considerations. Multiple commentaries illuminate the text. In English, those of Arthur Stanley Pease (1969) and David Wardle (2006) are the best guides. Auguste Bouché-Leclercq's (1879–82) four-volume overview of the *Historie de la divination dans l'antiquité* has not been surpassed for its thorough documentary coverage of the topic. There is a welcome contemporary revival of interest as shown in the articles of Derek Collins (2002, 2008) and in Sarah Ilse Johnston's *Ancient Greek Divination* (2008).

References

Beard, M., J. North, and S. Price (1998), *Religions of Rome*, 2 volumes, Cambridge, Cambridge University Press.

Bouché-Leclercq, A. (1879–82), *Histoire de la divination dans l'antiquité*, 4 volumes, Paris, E. Leroux.

Burkert, W. (1992), *The Orientalizing Revolution: Near Eastern Influence on Greek Culture in the Early Archaic Age*, trans. M. Pinder and W. Burkert, Cambridge, MA, Harvard University Press.

—— (2005), 'Divination', *Thesaurus Cultus et Rituum Antiquorum* 3, 1–51.

Collins, D. (2002), 'Reading the Birds: Oionomanteia in Early Epic', *Colby Quarterly* 38(1), 17–41.

—— (2008), 'Mapping the Entrails: The Practice of Greek Hepatoscopy', *American Journal of Philology* 129(3), 319–45.

Jastrow, M. (1907), 'The Liver in Antiquity and the Beginnings of Anatomy', *Transactions of the College of Physicians of Philadelphia* 29, 117–38.

Johnston, S.I. (2008), *Ancient Greek Divination*, Oxford, Wiley-Blackwell.

Long, A.A. and D.N. Sedley (1987), *The Hellenistic Philosophers*, Cambridge, Cambridge University Press.

Pease, A.S. (1969), *M. Tulli Ciceronis, De Natura Deorum*, New York, Arno Press.

Wardle, D. (2006), *Cicero: On Divination, Book 1*, Oxford, Clarendon Press.

West, M.L. (1997), *The East Face of Helicon: West Asiatic Elements in Greek Poetry and Myth*, Oxford, Oxford University Press.

Yébenes, S.P. (1991), 'Haruspex legionis', *Gerión* 9, 175–193.