This is a draft of a chapter/article that has been published by Oxford University Press in the book The Oxford Handbook of Animals in Classical Thought and Life edited by Gordon Campbell, published in August 2014. You can purchase the volume on the Oxford University Press website here: http://ukcatalogue.oup.com/product/9780199589425.do.

Animal Magic

Daniel Ogden, University of Exeter and Research Fellow, UNISA

In antiquity the world of animals and the world of magic intersected in countless ways. Four themes are considered here: the transformation of humans into animals; the exploitation of animals and in particular of animal parts for magical ends; the deployment of magic against animals; and, as a coda to the last, the deployment of magic by animals against man.

One of the most widespread attributes of witches in international folklore is the ability and propensity to transform people into animals (Thompson 1955-8 G263). It is no surprise, then, that this is the featured activity of the first witch in the Greek literary tradition, the Circe of Homer's seventh-century Odyssey. She famously transforms Odysseus' companions into pigs, by means of a potion of maleficent drugs (and eventually back again into humans with a salve). Her purpose in doing this, inexplicit but inevitable, is to eat them, and so she aligns herself strongly with Odysseus' other cannibal opponents, the Cyclopes and the Laestrygones. She has previously transformed other unsuspecting human visitors to her islands into wolves and lions, and these live around her palace, retaining their human tameness (10.133-400 = MWG no. 72; the Odyssey's portrayal of Circe may also be influenced in this regard by the Near-Eastern-derived 'Mistress of Animals' figure). Circe's transformations became a popular theme in archaic and classical art, with many vases showing them in progress: her victims typically sport pigs' heads atop human bodies, occasionally the heads of other animals too (LIMC Kirke passim; cf. Frontisi-Ducroux 2003:61-93). Apollonius of Rhodes, inspired by the art, no doubt, re-imagined these transitional forms as end results, and populated Circe's island with jumbled composites, anticipating the Island of Dr Moreau (Argonautica 4.659-72). The Latin tradition embraced the notion of the witch with the power to transform people into animals eagerly. Ovid's Circe turns Scylla into a composite monster with a fish-tail and dog-heads (Metamorphoses 14.1-74) and Picus into a woodpecker (14.320-416), whilst his drunken old Dipsas transforms herself into a bird (Amores 1.8 = MWG no. 102). Amongst Apuleius' Thessalians, Meroe transforms her victims into beavers, frogs and rams, transformations that reflect wittily upon her victims' original human characters (Metamorphoses 1.9 = MWG no. 104); Pamphile can transform people into asses, and transforms herself into an owl (3.21-4 = MWG no. 107); an unnamed witch transforms herself into a weasel (2.25 = MWG no. 105). Another mainstay theme of international folklore, the werewolf, impacted upon Graeco-Roman culture in numerous ways, and not least upon its notions of magic. It may be significant that the first destination-animal explicitly attributed to Circe's transformations is the wolf (Homer Odyssey 10.212 = MWG no. 72). Herodotus knew that the sorcerer-race of the Neuri transformed themselves into wolves (4.105 = MWG no. 139), whilst Propertius speaks of a witch Acanthis that could do the same (4.5.1-14 = MWG no. 101), as could Virgil's Egyptian sorcerer Moeris (Eclogues~8.95-9 = MWG no. 90). Antiquity's most classic werewolftransformation tale is to be found in Petronius' Satyricon (61-2 = MWG no. 141), where it is diptyched with a tale of witchcraft (63 = MWG no. 106).

What of the use of actual animals in ancient magic? Theocritus' second *Idyll*, written in the 270's BC, takes the form of a monologue by the amateur witch Simaetha and incorporates her artificially elaborate erotic spell against her errant lover Delphis. The spell

section is strikingly articulated around the ten-times repeated refrain, 'Iynx, draw this man to my house' ($Idylls\ 2 = MWG$ no. 89; cf. Gow 1952 ad loc.; for the iynx in general see Gow 1934, Faraone 1993). It seems that by Theocritus' day the term *iynx* had come to signify a small wheel, perhaps usually made of metal, through which a loop of thread was passed so that it could be made to spin vertically between the hands, with the magical effect of attracting a lover. A clear description of a luxury version, decorated with gold and jewels and spinning on a purple thread, features in the *Hellenistic Epigrams* (Anon 35 Gow and Page = MWG no. 225). Images of such objects are found on Classical Athenian vases in the hands of women or of Eros himself (a selection is reproduced at Gow 1934). But the term iynx originally and properly denoted 'wryneck', a small bird of the woodpecker family that performs a highly distinctive twisting and wheeling dance of warning, which the Greeks took rather to be an erotic mating dance (Aristotle *History of Animals* 504a = MWG no. 228). In the early fifth century BC Pindar had supplied an aetiology of the wheel. When Jason needed to seduce Medea in his quest for golden fleece, Aphrodite made him a device to help, yoking the *iynx*, 'the bird of madness, to a four-spoked wheel' (*Pythians* 4.211-50 = MWG no. 224). One of the earliest documents of Greek magic is a remarkable geometric terracotta of ca. 750-700 BC from Phaleron, now in the Boston Museum of Fine Arts (Boston MFA 28.49). It is a model of a four-spoked wheel, 21.5 cm across, around the plate-like edge of which sit eleven stylized but unmistakable wrynecks. The black paint against the terracotta matches the actual bird's colouring well. What does this imply for the history of the magical device and the exploitation of the bird? On the one hand, we may imagine that (initially) live wrynecks, singly or in numbers, were indeed attached to wheels and spun, perhaps to death, for the purposes of erotic attraction. On the other, it may be that Pindar's aetiological myth is simply that, a myth, and that the terracotta is not a model of a magical device, but actually a magical device in its own right: it appears to have perforations through which four strings could be passed permitting it to be hung up and spun around horizontally. It may then be that the actual bird was only ever incorporated into the device in image and name. Indeed, one might suppose that the very reason *iynx* wheels had to be spun was to recreate the erotic wheeling of the bird that was not present in person. But whatever the case, the terracotta represents the earliest demonstrable example of the Greeks' attempting to harness the power of an animal, directly or indirectly, for magical purposes. And the underlying thought-process is simple and self-evident: the strange erotic power resident in the bird is redeployed in the spell-maker's interest.

By the later first century AD the Greeks and Romans had developed a sophisticated culture of animal-deployment in magic, as is clear from the elder Pliny's *Natural History*, which devotes much space to the animal-part recipes of the 'mages'. Who were these mages? The likeliest conjecture is that they were the sponsors of a body of wisdom developed in the Pythagorean tradition out of the work of the second-century BC Hellenised Egyptian Bolus of Mendes, who had written under the name of Democritus. Pliny has a love-hate relationship with his mages. Whilst he characteristically derides them as frauds, the expansiveness of his accounts of their prescriptions speaks of an underlying respect (for his programmatic history of the mages, see 30.1-20 = MWG no. 45). These accounts show that the mages sat upon a vast body of detailed, systematic, exhaustive and flexibly articulated wisdom about the world's flora and fauna. And this, after all, was what Pliny, in his own way, was trying to encompass in his own massive work. The unsniping introduction to his principal discussion of quartan agues perhaps reveals the value of their work to him: 'In the case of quartan agues clinical medicine is almost completely ineffectual. For this reason we will lay out several of the cures of the mages, beginning with their instructions for amulets...' (30.98).

One of Pliny's most elaborate treatments of the mages' prescriptions is his report of the uses to which they put the hyena in all its parts, and this deserves special attention (28.92-

106 = MWG no. 47). Pliny's artfully rambling discussion initially disguises the fact that the material conveyed can be reordered and reformed into a structured system, in which, almost as if in a butcher's shop, the animal is reduced to its constituent parts and a different function, sometimes more than one, is assigned to each. For each of these functions a specific mode of application, one of four, is prescribed, as are any additional ingredients needed. The four modes are: in amulet, in salve, by ingestion and by fumigation. In this case the prescriptions are articulated first in terms of the source-animal from which the magical material is derived, but the flexibility of the mages' wisdom is indicated by the fact that elsewhere in his work Pliny can articulate it in terms rather of the magic's mode of application, as in his general discussion of mages' animal-product amulets (30.98-104), or in terms of the magic's function, as in his discussion of the mages' animal-product cures for toothache (30.21-7).

The functions ascribed to the hyena's parts are overwhelmingly medical. This may reflect a degree of selection on Pliny's part, not least since the treatment features in one of his books devoted to medicine. Or it may be that medical uses predominate among all potential uses simply because the myriad parts of a (large) animal's body lend themselves to richly differentiated use in the addressing of the similarly myriad varieties of medical complaint it is possible for humans to experience. Nonetheless there is plenty to address the wider world of magic: the engendering of erotic desire (28.99, 101, 106), the aversion of magical attack (102, 104-5), aversion of the evil eye (101), aversion of night-time terrors and the fear of ghosts (98), aversion of hallucinations (102), aversion of dog-barks (100), promotion of success in court and with superiors (106), the promotion of household harmony (99), moral improvement (106), the enabling of accurate spear-throwing (100), the engendering of hatred (106), murder (103) and divination or cursing (105). It is not surprising that the engendering of erotic desire should be the second most popular function, for in the vast corpus of Roman Egypt's Greek Magical Papyri (largely deriving from the late-antique period) erotic curses and charms and recipes for them predominate heavily: this was certainly the primary interest of the consumers of that particular magical tradition.

In most prescriptions it is clearly conveyed that one is to apply the hyena material in one (or more) of the four modes mentioned. It is difficult to give a precise breakdown of the numbers between the modes prescribed across Pliny's discussion because of some overlaps and uncertainties, but hyena material is to be deployed in amulets perhaps 30 times here (I include, hesitantly, under this heading the cases in which one is instructed simply to touch a hyena part against one's own affected body part); it is to be ingested, either in solid or liquid form, perhaps 24 times; it is to be used as a salve perhaps 17 times; and it is to be used in fumigation perhaps 11 times. A pseudo-medical or, as it were, pharmaceutical, mode of explanation can appear to us to lurk behind the prescriptions for ingestion and some (hardly all) of the salves and fumigations. But this may be misleading, and we should not lose sight of the fact that the most favoured mode of application remains that of the amulet. It is noteworthy that a body-part's physical nature does not seem to present any obstacle to its deployment within any of the four given modes of application. When one has to use a backbone or a pastern bone in a salve, one must burn it to ashes first and then mix it with other substances (96, 105). One is told both to ingest and to fumigate with a jawbone; in both cases it must be ground up and mixed first (100). When one is told to fumigate with an eye, skin (98) or male genitals (103), one is presumably to desiccate and powder them first. We are not told how one fumigates with a rib-bone (104). Disgustingness does not prevent (perhaps it rather encourages) the prescription of substances for ingestion: urine (103-4), genitals (99), faeces (105). It is clear that the mode of application is a crucial determinant of function, and that a change in mode of application leads to radical and unpredictable changes in function. Hyena's eyes cure barrenness if ingested (97), insanity if used in fumigation and worn as amulets (98) and engender hatred if applied in a salve (106). Backbone marrow in a

salve cures sinew pain (96), but in an amulet averts hallucinations (102). The liver in a salve cures glaucoma (95), ingested cures quartan ague (96) and in fumigation and in amulet cures insanity (98). The male genitals ingested stimulate desire for men (99), in amulet form cure spasms (102) and in fumigation cure bleary eyes (103). Bowel faeces in the form of an amulet cure dysentery, ingested function as an antidote to an evil potion and in salve cure rabies (105).

Behind, some, by no means all, of the prescriptions there is a notion that a human part is cured or conditioned by the application of the corresponding hyena part: head skin for headache (94), teeth for toothache (95), palate for halitosis and mouth-ulcers (100), sinews for sinew pain (102), loin meat for loin pain (97), heart for palpitations (97), spleen for spleen pain (102), bladder for incontinence (103), womb for womb ailments (102), and faeces for dysentery (105). Otherwise the choice of hyena part seems to be determined rather by its symbolic value. The forehead skin may avert the evil eye, a form of cursing caused and effected by envy, over which the originator does exercise complete control, because of the wrinkling of the forehead in envy (101). The eye may engender hatred again by appeal to the affliction of blight by the evil eye (106). The palate may avert dog barks because dogs bark with their mouth (100). Male genitals stimulate desire for men and female genitals for women (99) for obvious symbolic reasons. Female genitals may promote household harmony by means of a mild version of erotic magic, persuading a husband to take a fond attitude to his wife (99). Breast meat may avert miscarriage because it salutes the breast from which a successfully delivered baby will suck (98). But often there is no (to us, at any rate) discernable relationship between the body part and its use. Why should eyes cure barrenness (97) or insanity (98), why should teeth cure arm pain or stomach ache (95), why should neck meat cure loin pain (101), backbone gout (96), lungs stomach ache (96), liver glaucoma (95) male genitals spasms (102) or bleary eyes (103), why should the end of the intestine promote success in court (106), why should anus hairs chasten dissolute men (106), why should the pastern bone of the left foot promote hatred (105), why should a foot help a parturient woman (103)?

Is magical power resident or latent in the various parts themselves, or is it rather something essentially external to the parts that comes about only when the part is manipulated in the due ritual way, in combination with other items as necessary? The opening of Pliny's account here and his words on the hyena elsewhere imply the former, with the hyena projected as an inherently magical animal in its own right. It changes sex every year, and it imitates the human voice to summon shepherds from their cottages so that it can devour them (8.105-7; in fact the genitals of the female spotted hyena have a strongly male appearance, and African folk traditions accordingly hold that it can sire and bear offspring alternately). It has the power, by veering right, to inflict madness on its hunter. It freezes in its tracks any animal at which it gazes three times (28.93). And Pliny implies two direct links between the living animal's powers and those of its parts. The living animal strikes dogs dumb when it touches them with its shadow, whilst its palate, worn in the shoe, has the same effect (100). The living animal inflicts terror upon the panther, whilst its pelt does the same, even to panther pelts (93). On the other hand, the notion that power is bestowed upon the parts only by the context of their manipulation seems to be implicit in the prescription that the creature must be caught when the moon is in Gemini for its parts to be efficacious (94; in sub-Saharan Africa the spotted hyena has a mythological relationship with the moon, both being regarded as hermaphroditic; does the mages' Gemini in this context again refract the motif of hermaphroditism, at once one and two?).

It is not always clear whether the substances to be combined with the hyena part in the various recipes function merely as carriers for the hyena part, or as necessary catalysts for its efficacy or indeed as effective agents in their own right, as is evidently the case in its

combination with the Assos stone to cure gout (28.96). It is easy to imagine that when olive oil or goose fat is added to a salve its function is merely to produce a useable cream (96, 105). But given that one is asked to ingest faeces neat and without any masking substances (105), it seems unlikely the prescription to add honey to genitals before eating them in the erotic spells is designed to ameliorate the taste (99). More probably it forms part of the syntax of the magical message sent: women are told that the male genitals they are devouring are sweet like the honey they devour with it. The Egyptian comfrey to be taken into the mouth three times together with the desiccated hyena palate may serve to sweeten the breath by symbolic as much as physical means (100).

Although this material has been filtered to Pliny through a learned tradition, its several striking correspondences with modern folk traditions about the nature and magical uses of the hyena (spotted or striped) in west Africa and the Middle East indicate that its ultimate roots lie firmly in ancient folk tradition, which indeed is true of most ancient magical lore. As with Pliny's treatment, the uses to which hyena parts are devoted in these societies are primarily medical and erotic (the principal reason for the hunting of striped hyenas in contemporary Afghanistan is to sell its parts to magicians).

Two ancient parodies of the culture of animal-part magic deserve attention. First, the often contradictory thinking that underpinned the use of animal amulets was parodied by the Greek satirist Lucian in his ca. 170's AD *Philopseudes* (7). The sceptical Tychiades stumbles into a dinner conversation between a group of credulous philosophers about the best cure for their host's gout. The Peripatetic Cleodemus maintains that one should pick up from the earth with one's left hand the tooth of a shrew-mouse killed in a specified fashion and bind it to the legs in the skin of a recently flayed lion. The Stoic Cleodemus insists rather that it should be the skin of a female deer, a virgin still unmounted, on the basis of its swiftness of foot. Cleodemus then seemingly wins his point against Dinomachus by pointing out that lions are faster than deer, because they catch them. Two logics are at play: that of Cleodemus is rooted, albeit half-heartedly, in the observable physical properties of animals; that of Dinomachus is rooted in the symbolic values ascribed to them: a lion may be faster than a deer, but nonetheless the deer is emblematic of speed, whereas the lion is emblematic of a rather a different range of properties.

Secondly, in his 65 AD *Pharsalia* the Latin poet Lucan describes the reanimation by ghost re-insertion of a soldier's corpse by the horrid Thessalian witch Erictho. To this end she pumps fresh blood and moon-juice into the corpse, and the latter is said to contain foam of the rabid dog, guts of lynx, hump of hyena, the bone-marrow of a deer fed on snakes, the ship-stopper fish (echenais), eyes of snakes, stones incubated by an eagle, Arabian flying snakes, the pearl-guarding Red Sea viper, slough of Libyan horned snake and ashes of the phoenix (Lucan *Pharsalia* 6.667-80 = MWG no. 155). In this passage, the inspiration for the Macbeth witches' famous ghost-summoning spell, 'Eye of newt and toe of frog (etc.)' (Macbeth IV.i.14-19), Lucan plays a number of literary games, not least in relation to naturalhistorical notes in Herodotus (2.73-5), combining ingredients theoretically, at least, obtainable, with impossible ones derived from mythical creatures. But the degree of parody may not be quite as strong as first appears, for ancient magicians did of their own accord produce magical ingredient lists with just sort of flavour, though things were not necessarily as they seemed. A fourth-century AD grimoire in the Greek Magical Papyri collection includes an entry that gives us a seemingly random list of animal-, human- or humanoidbased magical ingredients that similarly blends the theoretically obtainable with the bizarrely unobtainable, including head of snake, tears of baboon, seed of lion, blood of Hephaestus, seed of Hermes ($PGM \times II.401-44 = MWG$ no. 156). However, as the entry explains, these names are actually code-names for other ingredients developed by the sacred scribes of ancient Egypt to prevent the common multitude from meddling in their magical craft. The

terms in reality refer to a relatively banal and easily obtainable selection of materials, almost all of them pharmacological rather than animal based: respectively, leech, dill juice, human seed, wormwood and dill. This entry is a fairly lonely voice in our evidence for ancient magic, but its implication, if read aright, is that the degree of actual animal-part exploitation – certainly of exotic animal-part explanation, was much less than first appears. We may think here too of the fabled erotic-magical substance *hippomanes*. The literary sources for it are torn between the notion that it was a mythical gland attached to the head of a foal at birth (Aristotle *History of Animals* 572a, 577a, 605a = *MWG* no. 231, Virgil *Georgics* 3.274-83 = *MWG* no. 230) and the notion that it was an Arcadian plant (Theocritus *Idyll* 2.48-51 = *MWG* no. 89, Servius on Virgil *ad loc*.).

Brief mention may be made of three ways in which animals were used in magic that were not specific to their own natures or to the powers of their constituent parts. First, perhaps their commonest use of all in connection with magic would have been as sacrificial victims. Many magical rites required sacrifices to gods of various kinds, or required blood to conciliate or even bestow a physical dimension upon the ghosts that were going to give one a prophecy or enact one's curse for one. The sacrifice of black cattle, typically sheep, is accordingly a commonplace of literary descriptions of necromantic consultations from the Odyssey onwards (e.g. Homer Odyssey 10.521-9, 11.29-36 = MWG no. 144, Aeschylus Psychagogoi F273a TrGF = MWG no. 25, Aristophanes Birds 1553-64 = MWG no. 26, Horace Satires 1.8 = MWG no. 91, Virgil Aeneid 6.245-53, Seneca Oedipus 556-8, Statius Thebaid 4.443-50, Plutarch Moralia 109b-d = MWG no. 149, Lucian Menippus 9 = MWG no 148; however, Pythagoreans could find ways to perform necromancy without blood sacrifice, Philostratus Life of Apollonius 4.11). If one needed to locate the corpse of a troubling ghost hidden in the ground without marker, the sacrificial sheep could come in useful here too: one would allow them to wander first, and they would throw themselves down on the spot, where one would duly sacrifice them (Diogenes Laertius 1.110 [Epimenides] = MWG no. 9, Suda s.v. $\psi \nu \chi \alpha \gamma \omega \gamma o i = <math>MWG$ no. 29).

Secondly, animals could serve as *kolossoi* or 'voodoo dolls' for cursing purposes. Usually such dolls would be disfigured human figures made from lead, but occasionally we hear of mutilated animals serving this function. Ovid tells of an old witch teaching young girls a spell to bind the tongues of enemies. It centres on the roasting of a fish head, the mouth of which is multiply sealed, first by sewing, next with pitch and then with a needle pushed through (Fasti 2.572-83 = MWG no. 103). A recipe from another fourth-century AD grimoire from amongst the Greek Magical Papyri instructs one to smear one's lead curse tablet in bat's blood, roll it up and sow it into the stomach of a frog, and then to hang if from a reed by the hairs from the tip of a black ox's tail (PGM XXXVI.231-55). The fourthcentury AD rhetorician Libanius recounts how he was brought to a state of physical collapse by recurring headaches (1.243-50 = MWG no. 247). Eventually the cause was discovered: a chameleon had been secreted in the classroom in which he taught. It had been decapitated and the head placed between its hind feet. One of its forefeet closed its mouth, whilst the other was missing. Libanius recovered upon the chameleon's discovery and removal. The significance of the decapitation and the closure of the mouth for a spell against a rhetorician is self-evident. The missing foreleg may have represented the right arm with which an ancient orator would gesticulate. A second-century AD grave in Aquitania in Gaul was found to have contained a lead curse-text against legal opponents Lentinus and Tasgillus, which evidently originally accompanied a puppy voodoo-doll: '... Just as the mother of this puppy could not defend it, so may their advocates be unable to defend them, so may these enemies be turned away from this case. Just as this puppy is turned away [its head wrenched backwards?] and cannot get up, so may they not be able to do so either. So may they be transfixed, just like this puppy...' (DT nos. 111-12 = MWG no. 336). In this connection, since voodoo dolls and

the curse tablets with which they were intimately related were generally to be enacted by restless (human) ghosts, we may wonder whether these mutilated animals were expected to produce ghosts useful for magical purposes. It seems to be implicit that there were such things as animal ghosts already in the *Odyssey*'s *Nekyia*, where the ghost of Orion hunts animals in the underworld (11.572-5). The subject of the ironic pseudo-Virgilian *Culex* is a complaint about deprivation of burial by the restless ghost of a gnat. In speaking of the dangerous ghosts of the Marathon battlefield, Pausanias tells that the battle one could hear them continuing to fight by night included the sounds of horses neighing (1.32.4-5 = *MWG* no. 113). We perhaps find animal ghosts being exploited for magical purposes in another spell from one of the fourth-century AD Greek Magical Papyri grimoires mentioned above. The spell centres on a wax Eros doll that will go and fetch a love-object for the spell-maker. One is to sacrifice a series of birds to the doll by throttling them in such a way that their breath passes into the doll. This is, no doubt, both to animate the doll and also to give it wings to fly off and do its job (*PGM* XII.14-95 = *MWG* no. 245; cf., importantly, Lucian *Philopseudes* 13-15 = *MWG* no. 244; discussion at Ogden 2007:112-14, 2008:119-21).

Thirdly, one of the impacts of Judaeo-Christian traditions upon Graeco-Roman magic was the introduction of a variety of exorcism spell in which possessing demons were cast out of people and into animals. Jesus' expulsion of 'Legion', the demons of Gerasa, into a herd of two-thousand pigs that then drown themselves in a lake, to the understandable dismay of their owners, is well known (Mark 5.1-20 = MWG no. 128; cf. Luke 8.26-39). The spell-text of first or second-century AD Greek amulet against migraine from Altenburg in Austria is incompletely preserved but, fascinatingly, can be reconstructed from closely aligned Byzantine-Christian spells (Kotansky 1994 no. 13 [with important commentary] = MWG no. 260). The text comprises a historiola, a short paradigmatic narrative. It tells how Antaura, a migraine demoness in the form of an evil wind, came out of the sea in order to enter half of someone's head (the experience of migraine is acutely observed). But she was confronted by Artemis, who prevented her from entering the human head and compelled her rather to enter the head of a bull in the mountain.

So much for the exploitation of animals or their parts for magical ends. What of the use of magic upon living animals? In general, there seems to have been a notion that the varieties of magic that could be applied to humans could be equally well applied to animals. Just as Medea was able to rejuvenate human beings by hacking them up and boiling them in a cauldron with her magical herbs, so she was able to rejuvenate a ram into a lamb too. And this she did to demonstrate her powers to the mistrustful old Pelias, before proceeding to the same task, but omitting the vital herbs (the most is elaborate account is that of Ovid Metamorphoses 7.297-351 = MWG no. 69; the ram's rejuvenation is first attested on pots of ca. 520 BC, for which see LIMC Peliades 4-10, Pelias 10-19). Just as one could inflict binding curses on people, so one could inflict them on animals too. Amongst the rich series of circus curses that survive, we find curses aimed not just against the charioteers but also against their horses, sometimes even by name, as in a fine imperial-period example from Carthage, which incidentally serves to give us an informative selection of horse names, such as Servator, 'Saviour', Zephyrus, 'West Wind', Blandus, 'Tame', Dives, 'Rich', and Rapidus, 'Quick' (DT no. 237 = CT no. 8). An expansive fourth-century AD 'Sethian' circus curse from Rome is illustrated with, inter alia, a fine horse-headed demon, evidently an appropriate specialist (Wünsch 1898 no. 16 = DT no. 155 = MWG no. 173). Like humans, animals could also fall victim to the sort of curse that proceeded from the evil eye. The Telchines, a mythical race said once to have lived on Rhodes were held to have been the archetypal manipulators of the evil eye and were said to destroy plants and animals with it (Strabo C654 = MWG no. 23). Virgil's shepherd Menalcas complains that his sheep have been reduced to emaciation by an evil eye (Eclogues 3.103 = MWG no. 194: oculus... fascinat). One of

Pliny's healing prescriptions from the hyena is said to apply to animals and humans alike: the left half of the brain, mixed into a salve with the heart, is to be smeared onto the nostrils to cure 'serious diseases' in both (*Natural History* 28.101).

Unsurprisingly, most animal-specific magic seems to have been addressed to what might be termed pest-control, and sought to avert dangerous or troublesome creatures from persons or from places. As to the former, a joking exchange in Aristophanes' Wealth of 388 BC implies that it was possible and perhaps even usual to buy an amuletic ring for the relatively cheap price of one drachma to protect oneself against the bite or sting of a certain creature. It is not clear what the creature would have been, since the joke supplants its name with the term 'sycophant' (sycophantes, a variety of legal pest). Perhaps it was a wasp, the name of which, sphēx, was vaguely homophonous with sycophantes. In this case, the ring would have carried the inscription, 'Against the sting of a wasp' (Aristophanes Wealth 883-5 = MWG no. 337). The loadstone or 'iron stone' (lithos sidēritis), discussed in Pliny (Natural History 37.58, 176, 182) and the various lithica (Orphic Kerugmata 16, Orphic Lithica 357-97, 418-60, Damigeron-Evax 16) repels snakes if worn as an amulet, and cures snakebites if ground up and spread over them. Another fourth-century AD grimoire from the Greek Magical Papyri includes a recipe for the manufacture of an amulet against 'demons and wild beasts' by inscribing three verses of Homer onto an iron tablet (PGM IV.2145-2240 = MWGno.273).

As to the latter, places could be protected from snakes and other venomous creatures by fumigations and by sealing the area in question off within a protective magic circle. We have noted the claim of Pliny's mages that one could put snakes to flight by burning the fat of the hyena (*Natural History* 28.100; at 24.54 he notes too that one can fumigate against snakes by burning juniper). The second-century BC Nicander's *Theriaca* offers a list of no less than twelve pungent substances that could be burned to fumigate against snakes, including sulphur and the horn of a stag, deer being held to be supremely toxic and otherwise dangerous to snakes (35-56; for deer horn cf. also Aelian On Animals 2.9). Lucan tells how members of the magical African race of the Psylli, snake-specialists, protected Cato's camp against the terrible snakes of Africa during the Civil War by carrying a number of burning substances around its perimeter, again including deer-horn (Pharsalia 9.915-21). Lucian in the Philopseudes (12 = MWG no. 49) provides us with a supposedly tall tale of how a Chaldaean cleansed a farm of its troublesome snakes by going out to it dawn, reciting seven sacred names from an old book and fumigating it with a sulphur torch, encircling it three times. He then called out all the reptiles within its boundaries and the incantation drew to him all the snakes within the circle. When they were all assembled, he blew upon them and burned them up with his breath, human breath like the breath of, again, deer, being held toxic to snakes (Lucan 6.491 knows that Thessalian witches too could destroy snakes simply by blowing upon them; for deer breath see Pliny Natural History 11.279). An Apollonius scholium offers a distinctive rationalisation of the effectiveness of fumigation against snakes: as narrow creatures, they have only a narrow passage for breathing and smelling, and so choke easily when confronted with the pungent smell of burning deer-horn (on Argonautica 2.130-31a).

It was also held that the soils of certain islands were toxic or aversive to snakes. The soil of Crete was fatal to venomous snakes (Aelian *Nature of Animals* 5.2), that of the island of Astypalaea (5.8) and of the Balearic island of Ebesus (Pliny *Natural History* 3.11, Pomponius Mela 2.7) averted them, whilst that of the Tunisian island of Galata averted scorpions (Pliny *Natural History* 5.7). Sicilian stones deprived scorpions of their venom, whilst Sicilian achate stones in particular cured the wounds inflicted by spiders and scorpions (37.54). Lemnian soil had cured Philoctetes' famous snakebite (Philostratus *Heroicus* 6.2), could do the same for others too (Galen *De Simplicium Medicamentorum Temperamentis ac Facultatibus* xii.169 Kühn), and could even function as an emetic for those who had

swallowed venom-like poisons (Dioscorides 5.113). A Christian tradition first attested in the third century AD tells that the soil from around the tomb of Jeremiah at Daphnae in Egypt had been useful for aversion and cure too, but that Alexander had seized the prophet's remains and arranged them in a circle around his new city of Alexandria in order to protect it from venomous snakes ([Epiphanius] *De prophetarum et obitu* first recension p.9 Schermann, second recension pp.61-2 Schermann; *Chronicon Paschale* p.293 Dindorf). These are examples of a widespread folk belief, and the phenomenon is known to folklorists as 'Irish earth' in tribute to St Patrick's work in Ireland. (In fact the snake-repellent effects of the soil of Ireland are attested long prior to first the attestation of St Patrick's snake-cleansing, already in Bede's *Ecclesiatical History of the English People*, 1.1, completed ca. 731 AD.)

What, finally, of the deployment of magic by animals against man? We have noted the hyena's use of maddening magic against its hunter (Pliny *Natural History* 28.92-3). But it was the ever-fascinating snake that was most strikingly associated with the practice of magic against humans: this creature had reply to match all the magic man deployed against it. The ps.-Aristotelian *Mirabilia*, a text incorporating material originating up until perhaps the second century AD, preserves a brief but rich narrative of a Thessalian woman's battle with a terrible 'sacred snake' (*hieros ophis*):

In Thessaly they say that the sacred snake kills all not just if it bites people, but even if it just touches them. Therefore, whenever it appears and they hear its voice (and it appears only rarely), the snakes and the vipers and all the other beasts flee. In size it is not great but moderate. They say that once in Tenos, the city in Thessaly, a sacred snake was killed by a woman. The killing took place in the following fashion. The woman drew a circle, laid down herbs (*pharmaka*) and entered the circle, together with her son. Then she imitated the voice of the creature. The creature sang in response and approached. As it sang, the woman felt sleepy, and then it came closer still, with the result that she was not able to resist sleep. But her son, lying beside her, roused her by pummelling her, at her own bidding, for she had explained to him that if she fell asleep, both she herself and he would perish. But, she had explained, if she compelled and drew on the beast, they would be delivered from it. And when the beast came into the circle, it was immediately drained of moisture.

[Aristotle] Mirabilia 845b

There are some now familiar themes on the human side here: protective circles, incantations, and the burning up of the snakes. There is no Tenos in Thessaly. No doubt the role of the witch in the story has attracted it to that region, given the emphatic association of witches with Thessaly. The tale will have been associated in origin with the familiar island of Tenos, which (real) Aristotle knew to have once been named Ophioussa, 'Snake-land' (Aristotle F595 Rose, apud Pliny Natural History 4.66 and Stephanus of Byzantium s.v. Τῆνος). There is a nice symmetricality in the powers deployed in this narrative, which becomes explicit in the snake's singing of its own incantation in response (antaidein). We might further note that sleep-casting was a magical process more familiarly attempted by humans against snakes, and an impressive power it was too, given that snakes (which are in fact unable to close their eyes) were regarded as naturally unsleeping, which is why they were held to make ideal guards. So it was that Medea deployed her drugs to cast sleep on the Colchis dragon that guarded the golden fleece, with the episiode first being attested in art from ca. 380-60 BC (LIMC Iason 38 [ca. 360 BC], 39, 40 [ca. 380-60 BC], 41-3, 46, 47b; it is also possible that LIMC Iason 37 [ca. 415 BC] means to show Medea drugging the dragon) and in literature from Apollonius (Argonautica 4.145-66; so too Ovid Metamorphoses 7.149-58, Valerius Flaccus 8.68-94, [Apollodorus] Bibliotheca 1.9.23, Hyginus Fabulae 22). And so it was too

that the canonical snake-mastering races, the African Psylli and the Italian Marsi, possessed magical ways to inflict sleep on snakes, the former typically achieving it by means of touch, the latter by means of incantation (Marsi: Tibullus 1.8.20, Virgil Aeneid 7.758, Pliny Natural History 25.11, Aulus Gellius Attic Nights 16.11.1-2, Silius Italicus Punica 8.495-99; Psylli: Agatharchides of Cnidus F21a [= Pliny Natural History 7.14], F21b [= Aelian Nature of Animals 16.27; cf. 1.57], Cinna F10 Courtney apud Aulus Gellius 9.12.12, Silius Italicus Punica 1.411-13, 3.300-2, 5.352-5, Cassius Dio 51.14).

The intersections between the world of animals and the world of magic were many and diverse, and do not admit of simple summation. There is, however, one implicit notion that underpins all the evidence reviewed here, Greek or Roman and irrespective of age, and that is the notion of a deep sympathy between the natures of man and animal.

Suggested Reading

Many of the texts, literary and documentary, cited here may be found in translation in Ogden 2009 (*MWG*), with commentaries and parallels. The Greek Magical Papyri are edited by Preisendanz and Henrichs 1973-4, and translated in their entirety in Betz. Gager 1992 renders accessible a good selection of interesting curse texts.

Transformation into animals. For the Circe narrative and its tradition see Yarnall 1994 and Ogden 2008:7-27. Marinatos 2000:32-45 contextualises her against Mistresses of Animals. For the iconography of her transformations see Canciani 1992 and Frontisi-Ducroux 2003:61-93. For Apuleius' Thessalians see Ruiz-Montero 2007 and Frangoulidis 2008. For werewolves in antiquity see Buxton 1987; for their broader role in international folklore see Otten 1986.

The exploitation of animals or animal parts in magic. For the iynx see Gow 1934 (with a good selection of vase images) 1952 (on Theocritus Idyll 2), Vermeule 1979:199 (with an image of the Boston terracotta) and Faraone 1993. For an introduction to Pliny's Natural History see Beagon 1992. Dickie 1999 discusses the origins of Pliny's mage traditions. For a fascinating collection of modern Asian and African lore on the hyena, with a number of striking parallels to Pliny's material, see Frembgen 1998, esp. 334 and 340 for the comparisons noted above. For the evil eye see Dickie 1991 and 1995. For Lucian's Philopseudes see the commentaries of Schwartz 1951, Ebner et al. 2001 and the discussions in Ogden 2007. For Lucan's Erictho see Gordon 1987, Korenjak 1996 and Ogden 2001:202-5. For hippomanes see Stadler 1913 and Tupet 1986:2653-7. For animal sacrifice in necromancy, see Ogden 2001:171-4. For voodoo dolls or kolossoi in general see Gager 1992, Dickie 1996 and Ogden 1999:71-9; Faraone 1991 incorporates a catalogue of ancient voodoo dolls, though important new groups have been discovered in the intervening two decades, not least in Rome and Mainz. Bonner 1932 remains the standard discussion of Libanius' chameleon. For the wax Eros doll see Ogden 2007:112-14, 2008:119-21. For exorcism see Thraede 1967, Twelftree 1993 and Kotansky 1995.

The deployment of magic against animals. For the earliest traditions of Medea's ram, see Gantz 1993:366-7 and Ogden 2008:27-35. For amulets see Bonner 1950, Waegeman 1987 (on *Cyranides*, particularly interesting for animals), Kotansky 1994, and Michel 2001. For Nicander's *Theriaca* see Gow and Schofield 1953 and Jacques 2002; the latter cites, at 81-4, many parallels from the iological literature for the toxicity of deer to snakes. For the international folklore concept of 'Irish earth' see Hasluck 1909-10 and Krappe 1941 and 1947. For the Marsi see Tupet 1976:187-9 and Dench 1995:154-74. For the Psylli see Phillips 1995, with care. For the symmetrical battle between man and snake, see Ogden 2007:79-86.

Abbreviations

CT

DT Audollent 1904

LIMC Lexicon Iconographicum Mythologiae Graecae 1981–99

MWG Ogden 2009

PGM Preisendanz and Henrichs 1973–74

TrGF Snell *et al.* 1971-2004

References

Audollent, A. 1904. Defixionum Tabellae. Paris.

Beagon, M. 1993. Roman Nature. Oxford.

Betz, H.D., ed. 1992. *The Greek Magical Papyri in Translation, Including the Demotic Spells*. 2nd ed. Chicago.

Bonner, C.A.1932. 'Witchcraft in the lecture room of Libanius' TAPA 63, 34–44.

——. 1950. *Studies in magical amulets, chiefly Graeco-Egyptian*. Ann Arbor.

Buxton, R.W.B. 1987. 'Wolves and werewolves in Greek thought' in J. Bremmer ed. *Interpretations of Greek mythology*. London. 60–79.

Canciani, F. 1992. 'Kirke' LIMC vi.1, 48-58.

Dench, E. 1995. From Barbarians to New Men. Oxford.

Dickie, M.W. 1991. 'Heliodorus and Plutarch on the evil eve' CP 86, 17–29.

——.1995. 'The Fathers of the Church and the evil eye' in H. Maguire ed. 1995. *Byzantine Magic*. Washington, DC. 9–34.

——. 1999. 'The learned magician and the collection and transmission of magical lore' in D.R. Jordan, H.Montgomery and E. Thomassen, eds. 1999. *The World of Ancient Magic*. Papers from the Norwegian Institute at Athens 4. Bergen. 163–94.

Ebner, M., H. Gzella, H.-G. Nesselrath and E. Ribbat 2001. *Lukian. Die Lügenfreunde*. Scripta antiquitatis posterioris ad ethicam religionemque pertinentia (SAPERE) iii. Darmstadt.

Faraone, C.A. 1991. 'Binding and burying the forces of evil: the defensive use of "voodoo" dolls in ancient Greece' *CA* 10, 165–205.

——. 1993. 'The wheel, the whip, and other implements of torture: erotic magic in Pindar *Pythian* 4:213–19' *CJ* 89, 1–19.

Frangoulidis, S. 2008. *Witches, Isis and Narrative. Approaches to Magic in Apuleius'* Metamorphoses. Berlin.

Frembgen, J.W. 1998. 'The magicality of the hyena. Beliefs and practices in west and south Asia' *Asian Folklore Studies* 57, 331–344.

Frontisi-Ducroux, F. 2003. L'homme-cerf et la femme-araignée. Paris.

Gager, J.G. 1992. Curse Tablets and Binding Spells from the Ancient World. Oxford.

Gantz, T. 1993. Early Greek Myth. A guide to literary and artistic sources. 2 vols. Baltimore.

Gordon, R. 1987b 'Lucan's Erictho' in M.Whitby, P. Hardie, and M.Whitby eds. *Homo viator: Classical Essays for John Bramble*. Bristol. 231–41.

Gow, A.S.F. 1934. 'IYNX, RHOMBOS, rhombus, turbo' JHS 54, 1–13.

——. 1952. *Theocritus*. Edited with an introduction, translation, and commentary. 2 vols. Cambridge.

Gow, A.S.F., and A.F. Scholfield 1953. *Nicander. The Poems and Poetical Fragments*. Cambridge.

Hasluck, F.W. 1909-10. 'Terra Lemnia' ABSA 16, 220-31.

Jacques, J.-M. 2002. Nicandre, Oeuvres. ii. Les Thériques. Paris.

Korenjak, M. 1996. Die Ericthoszene in Lukans Pharsalia: Einleitung, Text, Übersetzung, Kommentar. Frankfurt.

- Kotansky, R. 1994. *The Greek magical amulets. The inscribed gold, silver, copper and bronze lamellae*. Part 1. *Published texts of known provenance*. Papyrologica Coloniensia Vol. 22. 1. Opladen.
- ——. 1995. 'Greek exorcistic amulets' i M. Meyer and P.Mirecki, eds. 1995. *Ritual power in the ancient world*. Leiden. 243–78.
- Krappe, A.H. 1941. 'Irish Earth' Folk-Lore 52, 229-36.
- 1947. 'St Patrick and the snakes' *Traditio* 5, 323-30.
- Lexicon Iconographicum Mythologiae Graecae 1981–99. 8 vols. Zurich.
- Marinatos, N. 2000. The Goddess and the Warrior: the Naked Goddess and the Mistress of Animals in Early Greek Religion. London.
- Michel, S. 2001. Die Magischen Gemmen im Britischen Museum. 2 vols. London.
- Ogden, D. 1999. 'Binding spells' in V. Flint, R.L. Gordon, G. Luck, and D. Ogden *The Athlone History of Magic and Witchcraft in Europe*. vol. 2. London. 1–90.
- ——. 2001. *Greek and Roman Necromancy*. Princeton.
- ———. 2007. In Search of the Sorcerer's Apprentice. The Traditional Tales of Lucian's Lover of Lies. Swansea.
- ——. 2008. Night's Black Agents. Witches, Wizards and the Dead in the Ancient World. London.
- ——. 2009. *Magic, Witchcraft and Ghosts in the Greek and Roman Worlds. A Sourcebook.* 2nd ed. New York.
- Otten, C.F. ed. 1986. A Lycanthropy Reader. Syracuse, NY.
- Phillips, O. 1995. 'Singing away snakebite: Lucan's magical cures' in Meyer, M., and Mirecki, P. eds. *Ancient Magic and Ritual Power*. Leiden. 391-400.
- Preisendanz, K., and A. Henrichs, 1973–74. *Papyri Graecae Magicae. Die griechischen Zauberpapyri*. 2nd ed. 2 vols. Stuttgart.
- Ruiz-Montero, C. 2007. 'Magic in the ancient novel' in M. Pascahlis et al eds. *The Greek and Roman Novel: Parallel Readings*. Ancient Narrative Supplement 8. Groningen. 38-56.
- Schermann, T. 1907. Prophetarum vitae fabulosae. Leipzig.
- Schwartz, J. 1951. Lucien de Samosate. Philopseudès et De morte Peregrini. Paris.
- Snell, B., R. Kannicht and S. and Radt *eds.* 1971-2004. *Tragicorum Graecorum Fragmenta*. Göttingen,
- Stadler, H. 1913. 'Hippomanes' *RE* viii.2, 1879–82.
- Thompson, S. 1955-8. Motif Index of Folk Literature. 6 vols. Copenhagen.
- Thraede, K. 1967. 'Exorzismus' *RAC* 7: 44–117.
- Tupet, A.-M. 1976. La magie dans la poésie latine. i. Des origins à la fin du règne d'Auguste. Paris.
- ——. 1986. 'Rites magiques dans l'antiquité romaine' ANRW ii.16.3, 2591–2675.
- Twelftree, G.H. 1993. *Jesus the Exorcist. A Contribution to the Study of the Historical Jesus.* Tübingen.
- Vermeule, E. 1979. Aspects of Death in Early Greek Art and Poetry. Berkeley.
- Waegeman, M. 1987. Amulet and Alphabet: Magical amulets in the first book of Cyranides. Amsterdam.
- Wünsch, R. 1898. Sethianische Verfluchungstafeln aus Rom. Leipzig.
- Yarnall, J. 1994. The Transformation of Circe. History of an Enchantress. Urbana.