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Nature, Cause, and Agency in Greek Magic

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SUMMARY: This paper explores the concepts of nature, cause, and agency as they define Greek magical practice in the Classical period. I seek first to demonstrate that the authors of the Hippocratic and Platonic attacks on magic share basic assumptions about nature and divinity with the magical practitioners themselves. Next, I situate magic within the mechanical, teleological, and volitional modes of Greek causal explanation, demonstrating how these modes can overlap in the explanation of a magical event. Finally, I consider figurines as a test case for concepts of causality in magical action. I argue that figurines, like Greek statues generally, are viewed as social agents capable of causing events to happen in their vicinity. Once we situate the figurines within a network of social relations, new explanations can be derived for the practice of binding and abusing them.

1. INTRODUCTION: THE PROBLEM OF MAGIC

IT HAS ALWAYS BEEN EASIER TO DEFINE ANCIENT MAGIC by contrasts than in its essence.[1] Without a context for magical practices—whether curses, rituals, prayers, the fashioning of figurines or dolls, or the use of pharmaceuticals—we cannot give a full account of what Greeks of the Classical period understood as magic. And even when a context exists for these activities and we appear to be in a better position to analyze magical behavior, serious category confusion persists. Public, state-sponsored curses, for example, seem to defy

[1] The bibliography here is large, but I have found the following works especially helpful in outlining current approaches: Dickie 12–46, Bremmer, Gordon 1999, Graf 1997: 20–60 and 1995, Segal 1995 and 1981, Phillips 1994 and 1986: 2727–32, Versnel 1991, Aune, Nock, Hopfner. Hoffman and Smith 2002 and 1995 (with his focus on ritual) offer useful critiques of earlier scholarly approaches but are not themselves especially fruitful.

a simple "public/private" or "social/antisocial" contrast for magic.[2] Similarly, formularies that employ for their efficacy propitiation, slander, and compulsion of divine[3] forces blur perhaps the most conventional and misleading contrast, that between religion as propitiatory and magic as coercive in their respective attitudes toward divinity.[4] And φάρμακα—here substances intended for erotic or healing purposes—fall within the purview of Athenian law if, but only if, the victim was injured or died (in which case a charge of murder could be raised). In legal terms, the notoriously ambivalent character of φάρμακα is only clarified in the aftermath of damage.[5]

Part of the reason magic has yet to be dissolved as a concept—in the same way that the concepts of kinship and gift-exchange, for example, have been dissolved by anthropologists—and reformulated in terms of social, institutional, symbolic, or other categories,[6] is that there is a fundamental conceptual division between scholars who see the basis of magic as objective and material and those who see it as subjective and psychological;[7] there is no unified concept to dissolve. Moreover, there is a further dichotomy between those who see thought and those who see action as the primary distinction in magic, a dichotomy that is also evident in scholarship on magic in other cultures and periods.[8] But the distinction between thought and action is artificial because the two are not easily separable, since action occurs in a context of culturally specific concepts of cause and agency. "Action" is defined by

[2] E.g., *SEG* 9.3 = Meiggs and Lewis 5–9, no. 5, esp. lines 40–51, which involves curses and wax effigies made by the founders of Libyan Cyrene (late 7th century B.C.E.) on behalf of the community. See further Martinez 345–47 and Faraone 1993. At Teos (Meiggs and Lewis 62–66, no. 30), the so-called Dirae Teorum (*c.* 470 B.C.E.), which were to be recited publicly (B 29–34), specifically prohibited among other things the creation of harmful drugs (A 1–5); see Graf 1997: 35. Fowler 331, 341, 343, oddly argues that magic involves socially disapproved, while religion involves socially approved, behavior, which he then undercuts in his discussion (325–30, 340) of overlooked magical elements in public rituals (e.g., the Panathenaia, the Arrhephoria, and the Arkteia for Artemis at Brauron).

[3] Throughout this paper I use the term "divine" to refer generally to expressions such as θεός, δαίμων, τὸ θεῖον, and so forth, because I am interested in the more general features of their agency. Differences between them, however, do obtain: see Tabornino and esp. François.

[4] For such formularies see, e.g., *PGM* IV.2471–92, XXXVI.138–44.

[5] See now Collins 2001. Examples include Antiphon 1, *Against the Stepmother*, also discussed recently by Faraone 1999: 114–16.

[6] Bourdieu is an exception.

[7] Plato already drew this distinction at *Lg.* 11.932e–933c, on which see Graf and Johnston 1999: 667 and the discussion below.

[8] See Smith 2002: 89 on this distinction and its consequences for scholarship.

what a given culture regards as an "agent"—that is, by the sorts of things that are deemed capable of producing effects in the world. Similarly, causal explanation is not universal: what is an incidental cause for one culture might be an efficient one in another. Until we can describe these concepts for the Greeks, we run the risk of applying contemporary and inappropriate conceptions of agency and cause in our analyses of magic. The same caution applies to the moral universe in which magic is sometimes seen to operate, i.e., the world in which magic is invoked by observers as an explanation for disaster or as a hedge against failure.[9] Until the contours of such moral universes are mapped, however, it is unsafe to assume that magic explains anything. Because there is little agreement on whether magic is to be defined in terms of what individuals do, as opposed to what they or others think about what they do, or whether it should be some combination of these, scholars work at cross-purposes.[10] And despite the flurry of recent publications on ancient magic, there is not even fundamental agreement on what the data are.[11]

Recent attempts at definition have begun reasonably enough by outlining and drawing distinctions among the central concepts of φαρμακεία, γοητεία, μαγεία, and so forth, along with their antecedents.[12] Nevertheless, the results of this exclusively philological approach have been at best mixed. This is because, while scholars have shown that these concepts emerged out of a clash of perspectives between élite intellectuals (especially the Hippocratics and Plato) and the practitioners of magic whom they attacked in the late 5th and 4th centuries B.C.E.,[13] already by the 4th century the concepts themselves were

[9] Cf. Segal 1995: 282. The classic argument for this position is of course Evans-Pritchard.

[10] Perception is not in itself always a reliable guide to defining magic either, since individual practitioners of magic may perceive what is "magical" about their activities very differently, and attitudes within one individual may change over time; see Lewis. (This is a separate issue from the larger problem of labeling behavior as magical by variously-invested groups; see Phillips 1991.) In this presentation I approach Greek magic from two perspectives. In the second section, which treats the Presocratics, Hippocratics, and Plato, I use the term "magic" to refer to what these observers define as magic, which could be taken to mean that here the concept is negatively defined. But my fundamental claim is that one of their theoretical dilemmas—to account for the divine influence in nature—was the loophole exploited by magical practitioners, who readily accepted such influence. There is no contradiction, then, between my use of the term "magic" in this and the third and fourth sections, which address the issues of causality and agency from the point of view of magical practice.

[11] Hence Gager (12) would like, not unreasonably, to eliminate all attempts to define magic. See further Ogden 85–86, with bibliography.

[12] Most recently Dickie 12–46. Other approaches will be discussed below.

[13] See Collins 2001: 482–85 and Dickie 20–21, who follows Graf 1997: 20–35.

generalized to the point of interchangeability.[14] Their explanatory value is therefore limited. Moreover, none of these terms sufficiently illuminates the conceptual processes underlying the concrete practices involved in Greek magic. Thus for Plato to call magic "φαρμακεία" or "μαγγανεία" in the same breath, interesting as that is, does not explain why lead *defixiones* and figurines in lead, clay, and wax, as opposed to other objects or other materials, were employed in magic. To understand Greek magic we must look in my view not only at the Greek terms that refer to fields of activity, but also at the conceptions of causality and agency implied by the magical practices and objects themselves.

To frame the issue in another way, the question that needs to be asked is not "What is Greek magic?" but "When is Greek magic?"[15] When does a magical item such as a bound wax figurine or an incantation actually become magical? Does it "become" magical at all? These are more complex questions than they might at first seem, and I shall offer three different points of entry in trying to answer them.

In section 2 I address the issue of how divine influence was intrinsic to "nature" (φύσις), a concept that preoccupied the Presocratics and was inherited from them by the Hippocratic physicians and Plato.[16] This conception of nature prevented both the Hippocratics and Plato, despite their attempts at criticism, from claiming that magic was not efficacious—even if they could claim that it was illogical or immoral—because such a claim would have been belied by the effects that they knew nature was capable of producing.

In section 3 I examine the mechanical, teleological, and volitional causes that allowed certain events to be perceived as magical. The issue of causality emerges clearly in the Hippocratic and Platonic attacks on magic. But by setting these critiques in the broader context of causal speculation in the 5th and 4th centuries, I argue that the difficulty of reconciling divine causation with more predictable causal factors left the Greeks with a conceptual framework

[14] E.g., at Pl. *Lg.* 932e–933b; see Dickie 44–45.

[15] This question was asked of Western art almost thirty years ago (see Goodman), but it is only recently that attempts have been made to answer it in terms that are now revolutionizing the very notion of "art" (see esp. Gell 1988, 1992, and most importantly, 1998; but see also the important critique of Gell by Weiner, esp. 38). I mention this because such studies have influenced my own approach to Greek magic, and my own view (which I cannot argue here) that many of its practices lie closer conceptually to artistic and technological production than has been recognized.

[16] The literature on φύσις is large, especially in the context of its relationship to νόμος, which is beyond the scope of the present inquiry. I cite here only Beardslee and Heinimann as useful background.

in which magic remained possible. That is, if an event could be ascribed to both visible and invisible causes, magic could not be eliminated as a cause.

Finally, as test case for concepts of magical causation, in section 4 I discuss figurines.[17] I examine how figurines were perceived to embody social agency and to be situated within a network of social relations. I argue that the agency imputed to figurines—by which I mean their human-like ability intentionally to cause events to happen—must be understood within the wider context of attitudes toward "statuary" in Greece (and beyond), from children's dolls to images of divinities sanctioned by civic cult. From an anthropological point of view, it would be artificial not to locate all of these images on a single conceptual continuum.[18]

2.1 Nature and Divinity

Although one concern of metaphysical speculation from the Presocratics to the Peripatetics was to restrict the imputation of conscious intention to nature, especially with regard to meteorological phenomena, the lingering acceptance of the possibility of divine intervention made it impossible for critics to deny the possibility of magic.[19] The major critics of magic in the 5th and 4th centuries, the Hippocratic authors and Plato, never do deny its possibility, but rather focus their energies on undermining the logical and moral premises upon which magical practitioners supposedly worked.[20] This is not just a rhetorical strategy, but follows directly from the premise that nature and magic could produce indistinguishable effects in the world. Indeed, as Aelian would say many centuries later, φύσις is a φαρμακίς.[21] Such an explicit equation was not, as far as we know, made in the Classical period, yet the foundation for it was already laid in the long-standing Presocratic tradition of

[17] In the context of the present inquiry I have chosen to examine only figurines. In future work I intend to explore the causal relations of other forms of Greek magic such as incantations, φάρμακα, and purifications.

[18] The anthropological point of view being, to my mind, inherently necessary for explaining the nature and function of these objects.

[19] Meteorological phenomena such as thunder, lightning, comets, solar and lunar eclipses, are standard topics in the attempts to curtail the scope of divine influence in nature: some examples include Anaxagoras 59 A 81 D-K, Democritus 68 A 75 D-K, Critias 88 B 25.29–32 D-K, and Theophrastus at *Meteorology* 14.14–29 (Daiber); see Mansfeld 1992: 317–24. As Lloyd (1987: 49 n. 163) notes, the effect of such arguments over time was to offer alternative frameworks for understanding nature, but it is not at all clear that this was their intention.

[20] For Plato this point is noted by Saunders 99.

[21] *NA* 2.14. For more on magic in Aelian see Gordon 1987.

attributing divinity to nature. This section will consider some of the implications of this state of affairs for understanding magic as it emerges in the intellectual critiques of the 5th and 4th centuries. It will be important to note that what these critiques seem to reject is the "popular" anthropomorphic view of divinity, except that in this regard they are not entirely successful. This leaves their own position paradoxically vulnerable to the very critique by which they sought to attack popular practices.

Let us begin with a brief overview of the Presocratic tradition that attributed divinity to nature.[22] Thales of Miletus, for example, is reputed to have thought that everything was full of divinities (δαίμονες), which means that his first principle, water, would also be divine (11 A 1 Diels-Kranz [henceforth D-K] = Arist. *de An.* 1.411a8; 11 A 3 D-K).[23] This same idea is found in Heraclitus who, although grounding the emergence of things in fire, nevertheless felt that everything—i.e., the elemental powers constitutive of everything—was full of δαίμονες as well (22 A 1 D-K = D. L. 9.7).[24] According to Aristotle, Anaximander thought τὸ ἄπειρον to be "divinity" (τὸ θεῖον; 12 A 15 D-K = Arist. *Ph.* 3.4.203b14). Anaximenes, again as reported by later sources, thought air to be divine (Aët. 1.7.13; Cic. *N. D.* 1.10.26 = 13 A 10 D-K), a doctrine that can be related to the idea, attributed to him, that all things present, past, and future, as well as gods (θεοί) and divinity (θεῖα), emerge from air (13 A 7 D-K = Hippol. *Haer.* 1.7).

Such conceptions of divinity were as a rule extended to the arrangement of nature—κόσμος—and then to the totality of the world.[25] Hence Thales could say that κάλλιστον κόσμος· ποίημα γὰρ θεοῦ (11 A 1 D-K = D. L. 1.35), adding that the νοῦς τοῦ κόσμου was also ὁ θεός (11 A 23 D-K = Aët. 1.7.11). For Anaxagoras, of course, the νοῦς itself was not only a god (θεός), but was furthermore κοσμοποιός (59 A 48 D-K = Aët. 1.7.15). Xenophanes is worth mentioning in this regard, not least because his famous attack against the depiction of the gods in Homer and Hesiod (21 B 11 and 12 D-K) was leveled on moral, but certainly not ontological, grounds. For one of his main concerns was to show that the one god (εἷς θεός) that existed was altogether unlike mortals (21 B 23 D-K, with 21 B 14, 15, and 16 D-K), which shows that his real problem was with the poets' anthropomorphism. According to Aristotle, when Xenophanes looked upon the heavens and expressed himself

[22] General background to issues of doxography in Mansfeld 1999.

[23] Cf. Aët. 1.7.11 = 11 A 23 D-K and see Kirk et al. 96–97. On Thales and the problems of doxography see Hankinson 8–9.

[24] So Kahn 261.

[25] For this sense of κόσμος see Finkelberg 106–22.

on nature, he found it unified and divine (21 A 30 D-K = Arist. *Metaph.* 1.5.986b24–25 ἀλλ᾽ εἰς τὸν ὅλον οὐρανὸν ἀποβλέψας τὸ ἓν εἶναί φησι τὸν θεόν; cf. 21 A 31 and 34 D-K).[26] And [Galen] explained that Xenophanes thought that the god inhered in everything (21 A 35 D-K = [Gal.] *Phil. Hist.* 7 ἐδογμάτιζε ... ἓν εἶναι τὸ πᾶν, καὶ τὸν θεὸν συμφυῆ τοῖς πᾶσιν). Along somewhat different lines Parmenides, borrowing from Hesiod (*Th.* 120), postulated a δαίμων, Γένεσις, as the controlling principle of generation (28 B 12 D-K) and something that deemed ἔρως first of all the gods (28 B 13 D-K).[27] But all of this for Parmenides, nevertheless, presupposed a unitary universe (28 B 8.5–6 D-K) in which generation could occur despite the limitations of the senses and of human ability to perceive it. Zeno and Melissus likewise declared that τὸ ἓν καὶ πᾶν was θεόν (29 A 30 D-K = Aët. 1.7.27).

It was not only at the level of the whole that divinity was intrinsic to nature for the Presocratics, but also at the level of the elements of which the whole was composed. Astronomical phenomena were particularly susceptible of characterization as divine. So Aristotle tells us that Alcmaeon, like Thales, Heraclitus, and Diogenes of Apollonia, includes them in the category of the divine: "all divine things also always move continuously: the moon, sun, stars, and the whole heaven" (24 A 12 D-K = Arist. *de An.* 1.405a32–33 κινεῖσθαι γὰρ ... τὰ θεῖα πάντα συνεχῶς ἀεί, σελήνην, ἥλιον, τοὺς ἀστέρας καὶ τὸν οὐρανὸν ὅλον).[28] The comic poet Epicharmus claimed that the winds, water, earth, sun, fire, and stars were gods (199 Kassel-Austin = Stobaeus 4.31a.30).[29] Parmenides, too, thought that his primary elements, fire and earth, were gods (28 A 33 D-K = Clem. Al. *Protr.* 5.64). And Empedocles figures significantly here, maintaining as he did that his four elements or roots—fire, earth, air, and water—were also gods (31 A 32 D-K = Aët. 1.7.28). He even identified these individual elements with specific gods (namely, Zeus, Hera, Hades, and Nestis: 31 B 6 D-K), although the ancient attributions (e.g., 31 A 33 D-K) are questionable.[30]

Such, then, are some of the complex attributions of divinity to nature made by the Presocratics. These views have direct implications for later critiques of magic.

[26] In contradistinction to the plurality of gods in the poets, so Ross *ad* 1.5.986b24.

[27] Calame 237–43, esp. 239.

[28] All translations in this paper are by the author.

[29] Cf. this same view among later Pythagoreans as reported by D. L. 8.27 = 58 B 1a D-K.

[30] Kingsley 47–48.

2.2 Nature and Magic

The most significant attack on magic that we know of from the late 5th and early 4th centuries occurs in the Hippocratic treatise *On the Sacred Disease* (especially at 1.28–30 Grensemann).[31] The polemical nature of the author's attack on μάγοι, καθαρταί, ἀγύρται, and ἀλαζόνες has been well emphasized by scholars and need not be repeated here.[32] Since we have just examined how several Presocratics imputed divinity to meteorological phenomena, I begin by comparing those positions to the following statement (*Morb. Sacr.* 18.1–2 Grensemann):

> αὕτη δὲ ἡ νοῦσος ἡ ἱρὴ καλεομένη ἀπὸ τῶν αὐτῶν προφασίων γίνεται καὶ αἱ λοιπαί, ἀπὸ τῶν προσιόντων καὶ ἀπιόντων καὶ ψύχεος καὶ ἡλίου καὶ πνευμάτων μεταβαλλομένων τε καὶ οὐδέποτε ἀτρεμιζόντων. ταῦτα δ' ἐστὶ θεῖα ...
>
> This so-called "sacred" disease comes from the same causes as others, from what comes to and goes from us, from the cold, the sun, and the changing and never-ceasing winds. For these things are divine ...

The significance of this statement, although it does not reflect the views of all Hippocratic treatises, should not be underestimated. For example, it has been observed about this passage that the author makes no detailed attempt to support his claim that the elements are divine, which suggests that such a belief is taken for granted and does not need defense.[33] The implication is that the causal agents of disease, the elements, while they may have their own properties and effects—i.e., their own φύσις,[34] which can be manipulated—nevertheless retain their connection with a more abstract conception of divinity.

Accordingly, if the sacred disease comes to us from the same divine, elemental causes as all other diseases, then our author can deny his adversaries' claim that this disease is more divine than others. He continues (*Morb. Sacr.* 18.2 Grensemann):

> ταῦτα δ' ἐστι θεῖα ὥστε μὴ δεῖν ἀποκρίνοντα τὸ νόσημα θειότερον τῶν λοιπῶν νομίζειν, ἀλλὰ πάντα θεῖα καὶ πάντα ἀνθρώπινα, φύσιν δὲ ἕκαστον ἔχει καὶ δύναμιν ἐφ' ἑωυτοῦ, καὶ οὐδεν ἄπορόν ἐστιν οὐδ' ἀμήχανον.

[31] Except where noted, for convenience all other Hippocratic texts are cited from the Loeb edition.

[32] See Collins 2001: 483–85.

[33] Edelstein 210.

[34] A detailed study of φύσις in the Hippocratic corpus, with bibliography, can be found in Pérez 419–36.

> For these things are divine, so that it is not necessary for one distinguishing to consider the disease more divine than the others, but all are divine and all are human. Each has a nature and force of its own, and none is unmanageable and without remedy.

Diseases have both divine and human aspects. They are divine in that the divine elements are ultimately responsible for their occurrence, and they are human inasmuch as each disease has its own nature and course, which can be manipulated by the physician.[35] There are many statements to this effect scattered throughout the Hippocratic texts.[36] At the end of the section from which the above passages are taken, which concludes *On the Sacred Disease*, the author argues that what cures the disease is not purifications (καθαρμοί) and magic (μαγίη), but the physician's knowledge of how to create moisture or dryness, heat or cold to correspond allopathically with the disease, which had been created by the opposing element.

One of the author's arguments against the μάγοι, καθαρταί, ἀγύρται, and ἀλαζόνες who offer their services in the treatment of epilepsy is that they claim a purely divine origin for the disease, even to the point of identifying certain symptoms with certain divinities (1.33–38), which makes their remedy of purification an illogical response. Purification assumes a prior defilement (μίασμα), blood guilt (ἀλαστορία), bewitchment (πεφαρμακεῦσθαι), or some other unholy deed (ἔργον ἀνόσιον)—none of which is relevant to epilepsy—and in any event, our author maintains, victims are neither taken to the temples of the gods thought responsible, nor are the offscourings from purification dedicated to those gods (1.39–43). Though critical of the practitioners of magic, however, our author rejects neither purification nor anthropomorphism (*Morb. Sacr.* 1.45–46 Grensemann):

> τὰ γοῦν μέγιστα τῶν ἁμαρτημάτων καὶ ἀνοσιώτατα τὸ θεῖόν ἐστι τὸ καθαῖρον καὶ ἁγνίζον καὶ ῥύμμα γινόμενον ἡμῖν, αὐτοί τε ὅρους τοῖσι θεοῖσι τῶν ἱερῶν καὶ τῶν τεμενέων ἀποδείκνυμεν, ὡς ἂν μηδεὶς ὑπερβαίνῃ ἢν μὴ ἁγνεύῃ, ἐσιόντες τε ἡμεῖς περιρραινόμεθα οὐχ ὡς μιαινόμενοι, ἀλλ' εἴ τι καὶ πρότερον ἔχομεν μύσος, τοῦτο ἀφαγνιούμενοι.

[35] Nörenberg 49. On the connection of this conception of φύσις with Heraclitus (22 B 1 D-K) and Democritus (68 B 176 D-K) see Nörenberg 56.

[36] E.g., *Nat. Mul.* 1.1 περὶ δὲ τῆς γυναικείης φύσιος καὶ νοσημάτων τάδε λέγω. μάλιστα μὲν τὸ θεῖον ἐν τοῖσι ἀνθρώποισι αἴτιον εἶναι. ἔπειτα αἱ φύσιες τῶν γυναικῶν καὶ χροιαί; *Prog.* 1.19 γνῶναι οὖν χρὴ τῶν τοιούτων νοσημάτων τὰς φύσιας, ὁκόσον ὑπὲρ τὴν δύναμίν εἰσιν τῶν σωμάτων ἅμα δὲ καὶ εἴ τι θεῖον ἔνεστιν ἐν τῇσι νούσοισι; *Vict.* 1.11.11: νόμον μὲν ἄνθρωποι ἔθεσαν αὐτοὶ ἑωυτοῖσιν, οὐ γιγνώσκοντες περὶ ὧν ἔθεσαν, φύσιν δὲ πάντων θεοὶ διεκόσμησαν.

> Indeed divinity purifies and sanctifies and is the thing that cleanses the greatest and most unholy of our sins. We ourselves mark the boundaries of the sanctuaries and sacred precincts of the gods so that no one will traverse them unless he is pure; when we enter we besprinkle ourselves, not as defiling ourselves, but to wash away any defilement that we have previously acquired.[37]

Purification is clearly appropriate to specific, anthropomorphic deities, and has a place in civic cult.[38] At bottom, then, this critique turns out not to be an attack on the efficacy of magic, but on its practice outside the boundaries of civic cult. It is not even clear that there is anything distinctive about magical practice that can be refuted, because to do so would be to deny the validity of those same practices when they take place in the context of civic worship.

Exactly what magic means to the Hippocratic authors becomes still harder to define if we examine the range of practices that they considered acceptable in the course of treatment. As one example, dream interpretation is considered a necessary skill for a physician because dreams that are divine (as opposed to those that are not) indicate bodily disorders (*Vict.* 4.87).[39] For some disorders prayer is recommended: when the signs are good, prayer to Helios, Zeus Ouranios, Zeus Ktêsios, Athena Ktêsiê, Hermes, and Apollo is required; if the signs are bad, prayer to the "averters of evil" (ἀποτρόπαιοι), to Gê, and to the Heroes is recommended instead (*Vict.* 4.89). Divine agents clearly have a role to play in the treatment of disease, and constitute one component of a more extensive regimen.[40] For at least some of the Hippocratics, then, there was no radical discontinuity between mechanical and divine causes of bodily ailments. Nature incorporates divine forces, and even if some physicians tried to understand the mechanical processes of disease, it is mistaken to claim that what separates "magical medicine" (*Zaubermedizin*) from the Hippocratic approach is the former's belief in personal divine influence. [41]

[37] Cf. the critique of Heraclitus (22 B 5 D-K) that purification through bloodshed is a contradiction "as if one who stepped in dirt washed himself off with dirt."

[38] Cf. Jouanna 192–93.

[39] Discussion of this position, including Aristotle's support of some of the same premises, in Lloyd 1987: 30–37.

[40] Cf. *Vict.* 4.87 "Prayer is good, but it is also necessary for a man calling on the gods to help out."

[41] Thus Furley 82 n. 9, "Doch scheinen mir die Erklärungsmodelle der Zaubermedizin einerseits und des Hippokratikers andererseits in *De morbo sacro* grundsätzlich verschieden. Der Zaubermediziner glaubt an ein persönliches Eingreifen übergeordneter göttlicher Mächte, während der Hippokratiker wenigstens versucht, ein wissenschaftliches System aufzustellen, das auf göttliches Eingreifen verzichtet." Cf. Graf 1997: 32. Except for the association of magic with the irrational, I still find Lloyd's (1979: 49) position tenable: "No straightforward account, in which 'science' and 'philosophy' together and in

Plato was similarly adamant about the role divinity played in nature. In the context of the Athenian stranger's arguments in the *Laws* for the existence of divinity, the atomists Leucippus and Democritus are singled out (though unnamed) for attack because they denied any role for the gods (10.889a–c). Nor did these thinkers allow a role for reason (νοῦς) in existence, the Anaxagoran view, because they held φύσις, τύχη, and τέχνη alone to be sufficient. But for Plato, as for the Hippocratics and the preponderance of the Presocratic tradition, φύσις incorporates the gods (10.889e, 890d).[42]

And as in the Hippocratic treatise just discussed, so for Plato φύσις also provides the mechanical basis of magic. In his view, one type of magic "creates harm by means of matter against matter according to nature" (*Lg.* 11.933a1 σώμασι σώματα κακουργοῦσά ἐστι κατὰ φύσιν), while his second type, including ἐπῳδαί and καταδέσεις, operates through persuasion (*Lg.* 11.933a2–b5, where note πείθειν and δόγμα). Plato's analogy is similar to what Gorgias describes in the *Helen*, where the power of the word acts on the arrangement of the soul, just as the arrangement of φάρμακα acts on the nature of bodies (82 B 11.14 D-K τὸν αὐτὸν δὲ λόγον ἔχει ἥ τε τοῦ λόγου δύναμις πρὸς τὴν τῆς ψυχῆς τάξιν ἥ τε τῶν φαρμάκων τάξις πρὸς τὴν τῶν σωμάτων φύσιν).[43] When either type of magic occurs, Plato remarks further, "it is not easy to recognize how it happens" (*Lg.* 933a6–7 οὔτε ῥᾴδιον ὅπως ποτὲ πέφυκεν γιγνώσκειν, where note the verb φύω), nor to persuade others if one does recognize it. Apparently the magical practitioners and victims whom he criticizes did not bother with his typological distinction, nor should too much weight be given to it in the *Laws*. Elsewhere, in fact, Plato mentions the use of his second type of magic (ἐπῳδαί) as if its efficacy were assumed; he offers no psychological interpretation or rebuttal to the exaggerated claims of its practitioners, as he does in the *Laws*, nor to its basis in nature.[44] Nevertheless, that nature does lie at the bottom of at least one type of magic, however constituted, and that nature incorporates divinity, seems beyond dispute for Plato.

unison stand opposed to 'magic' and the 'irrational,' can be sustained in the face of the evident complexities both *within* and *between* the theory and practice of medicine on the one hand and those of the investigation concerning nature on the other" (italics in original).

[42] Mannsperger 56–58, who also discusses the important passage at *Sph.* 265c. Consider further Plato's discussion of ψυχή as among the first existences, and therefore "natural" (*Lg.* 10.892a–c).

[43] Discussion in Furley 85–86. Note that Gorgias can also describe ἐπῳδαί as ἔνθεοι διὰ λόγων (82 B 11.10 D-K), which seems to imply a divine influence in their effect.

[44] E.g., *Tht.* 149c–d, *Chrm.* 155e5–8. Thus I disagree with Graf 2002: 98 when he suggests that Plato's theory is merely psychological and that magic would cease to exist if the effects ascribed to it were properly explained.

The view that magic is intrinsic to nature can also be found outside of the Hippocratic authors and Plato, of course. In literature and myth, for example, the common trope of divinities giving magical aids to mortals, such as Hermes to Odysseus (*Od.* 10.302–6), Aphrodite to Jason (Pi. *P.* 4.217–19), and so forth, seems to acknowledge that magic has both a natural and a divine origin. Similar traditions about figures such as the Telchines and Idean Dactyls providing mortals with knowledge of metalworking, statuary, and amulets fit the same pattern.[45] Nor is it just archaic myth and anthropomorphized divinities that give evidence of a belief in magical efficacy. By the 5th century we must also consider the developing interest in marvels (θαύματα), portents (τέρατα), and paradoxes (παράδοξα)—phenomena showing nature's inexhaustible ability to produce the inexplicable—because portents and marvels at least could be considered magical.[46] That is, nature and magic could produce effects that were indistinguishable. Because such phenomena were possible in the context of nature, even if they came to be considered by some in the 4th century as subject in principle to mechanical causes, the efficacy of magic remained at least provisionally admissible.[47]

For contemporary scholarship there are consequences that result from this classical Greek view. It is common to read definitions of magic that depend upon some notion of the "supernatural."[48] The term is rarely defined, however, and terminology is not all that is at issue here. Although expressions in Greek such as ὑπερφυής may mean "overgrown"[49] or "extraordinary,"[50] and

[45] For the Telchines see Σ Pi. *O.* 7.95; for the Idean Dactyls, see Hes. fr. 282 Merkelbach-West, D. S. 5.64.4–7, and the discussion of Graf 1999.

[46] For the 5th century Herodotus is crucial; see Thomas 135–67, with further bibliography at 154 n. 57. For extensive treatment of these phenomena see Gordon 1999: 168–78.

[47] On the 4th century see Lloyd 1979: 51–52, citing Arist. *Ph.* 199b4–5 and *GA* 770b9–14.

[48] Examples include: Fowler 317, Faraone 1999: 16, Versnel 1996: 909 and 1991: 187, Jordan 151, Segal 1981: 368, Aune 1515, Nock 315, Halliday 10. The issue of whether a natural/supernatural division in phenomena was relevant to cultures studied by anthropologists was much debated in the 1960s. See Wax and Wax 1963. For example, although I distance myself from their dated notions of "power" and "magical world view" as too monolithic, cf. Wax and Wax 1962: 182–83, "We Westerners tend to see Power as referring to something awesome and wonderful like a miracle, involving a force superior or contrary to the 'laws of Nature.' Viewed by a person in the magical world, Power is awesome and wonderful but, at the same time, it is an intrinsic feature of the natural order, manifesting itself in much of what we (but not he) would consider 'common' or 'ordinary.'" Johnston's 1994: 101–2 position on this point is very close to my own.

[49] A. fr. 227.

[50] Hdt. 8.116, 9.78, etc.

παρὰ φύσιν in the 4th century still means "monstrous,"[51] neither these expressions nor any others imply that nature has been overcome by some force outside or beyond it.[52] Unless classes of natural phenomena were believed to have determinate causes only, which would mean that divine interference was always a suspension of nature's workings or a supervention of them, it is misleading to suggest that nature is contained and can be acted on by forces "outside" it.[53] To paraphrase the words of one anthropologist, we cannot have a discussion about what is supernatural for a culture until we know what that culture perceives as natural.[54] It is hoped that in this section we have made some headway toward defining what is natural, thereby making it possible to say that Greek magic operates by natural means, with all that this entails.

3. CAUSALITY AND MAGIC

When we inquire into the causes of an event, we are confronted with a myriad of possibilities, and the more a situation is analyzed into its constituent parts, the more the causal possibilities multiply. Contemporary Anglo-American jurisprudence singles out the proximate cause, that is, a necessary cause near enough to the target "event" (viz. damage, injury, loss, etc.) in space and time to be considered a sufficient one.[55] This convention helps to guide the court in the determination of moral responsibility. The argument is traceable through Francis Bacon's famous maxim *in jure non remota sed proxima causa spectatur* (*Maxims of the Law*, Regula 1), but can already be found in a non-legal context in Aristotle (*Ph.* 2.3.194b24–195b30, 2.5.197a21–5; *Metaph.* 5.2.1013b28–1014a7; cf. *EN* 3.1–5). Even in the contemporary legal context, however, the spatial metaphor underlying proximate cause is generally regarded as inadequate to serve as a main criterion of responsibility.[56] In antiquity the argument of proximate cause was even less salient.

[51] Arist. *Ph.* 197b35.

[52] Cf. Lloyd 1979: 27, "Even when we have to deal with the divine, the divine is in no sense *super*natural" (italics in original). Luckmann argues briefly (678) that the opposition between the supernatural and the empirical is a pernicious legacy of 19th-century scientism, though his distinction between "ordinary" and "extraordinary" reality may simply reinscribe the same opposition.

[53] Collins 2002: 480, following Lloyd 1979: 31–32. A clear break, extending beyond Aristotle, appears to have been made by Theophrastus in *Meteorology* 14.14–29 (Daiber), according to which divinity is responsible for order in the world, and nature itself is inherently disorderly. See Mansfeld 1992: 318–20.

[54] Crick 116.

[55] Hart and Honoré 1956 and 1959.

[56] Hart and Honoré 1959: 81–82.

The problem of causality in situations of injury or illness was acute for the Greeks of the 5th and 4th centuries, when we witness several attempts by intellectuals (including tragedians, historians, orators, and physicians) to understand it.[57] Their explanations are revealing both in the attempt itself and by virtue of the fact that determination of cause often implies competing, and at times utterly incompatible, views of agency. Agency, in fact, was continually at issue.

This period is important in the present connection because it is also when magic first emerges as an object of critique, mainly in the Hippocratic authors and Plato. Yet the intellectuals' critiques had no discernible influence on magical practice, even if they can be located within a much wider trend toward rationalistic inquiry into nature.[58] In my view, there are several reasons for this: first, magical causation was difficult to distinguish from divine agency, whose influence could not be excluded from pre-Aristotelian attempts to rationalize causality.[59] Magic, like divinity, operated according to the principle of *actio in distans*—for example, a *defixio* buried in a well could bind the tongue of an orator in court—making it impossible to exclude it as a cause even when other more "immediate" and visible causes for an event could be found.[60] Second, magic was based in volition; that is, a person used magic to achieve a desired outcome. While magic might combine mechanical and teleological processes within it, volitional causation was not in principle incompatible with these processes.[61]

Some examples of causal explanation in the 5th and 4th centuries will demonstrate the complexities of the issues in cases of injury, illness, or death. These passages do not concern magic, but can be used to study how causal explanation proceeded and where it foundered.

We begin with Thucydides' account of the Athenian plague in 430 (2.47–54). The year had been unusually free from disease, he says, and yet men, from no apparent cause (πρόφασις[62]), who were otherwise in good health, suddenly fell ill (2.49.1–2). Attempts at warding off the disease were unsuccessful (2.47.4):

[57] Useful discussions of the development of mechanical cause in Hankinson 51–83 and Vegetti.

[58] Lloyd 1987: 10–58.

[59] Collins 2001: 482.

[60] I use the medieval scholastic phrase metaphorically; I do not imply that the concomitant natural philosophy underlay ancient magic.

[61] This means that an approach to magic such as Ritner's (46), which relies on "simple laws of cause and effect," even acknowledging as he does that such a view is serviceable from a Western cultural perspective, is inadequate because more than one causal process has to be accounted for.

[62] Vegetti (287 n. 11) argues that πρόφασις means "pretext" rather than "mechanical cause," but the argument seems strained.

> οὔτε γὰρ ἰατροὶ ἤρκουν τὸ πρῶτον θεραπεύοντες ἀγνοίᾳ, ἀλλ᾽ αὐτοὶ μάλιστα ἔθνῃσκον ὅσῳ καὶ μάλιστα προσῇσαν, οὔτε ἄλλη ἀνθρωπεία τέχνη οὐδεμία· ὅσα τε πρὸς ἱεροῖς ἱκέτευσαν ἢ μαντείοις καὶ τοῖς τοιούτοις ἐχρήσαντο, πάντα ἀνωφελῆ ἦν, τελευτῶντές τε αὐτῶν ἀπέστησαν ὑπὸ τοῦ κακοῦ νικώμενοι.
>
> For neither did the physicians, treating it at first in ignorance, ward off (*sc.* the disease), indeed they themselves died most inasmuch as they were most exposed to it, nor did any other human skill. However much they supplicated sanctuaries or used oracles and things like that, all were useless. Finally they desisted from these things, overcome by the evil.

Thucydides' account here and later, when he adopts an explicitly empirical approach toward the symptoms of the outbreak (2.49–50), is usually taken as an instance of the rationalism characteristic of the 5th century, typical of the attitude found in the Hippocratic authors.[63] Although he is not a doctor,[64] and although he himself declines to give an explanation for the disease (2.48), he is dismissive toward the traditional ("popular") approaches to managing the plague, which included supplication and oracles,[65] but he nevertheless reports that oracles testifying to foreknowledge of the plague were in circulation (2.54). It is more likely that these teleological explanations for the disaster grew and declined in importance over the course of the outbreak than that they were dispensed with altogether, as Thucydides suggests.[66]

Thucydides' empirical description of the disease is perhaps most informative for our purposes where it fails. He tells us that the disease appeared suddenly (2.48.2 ἐξαπιναίως, 2.49.2 ἐξαίφνης, etc.), which means that it happened with no antecedent signs or evident cause. It is therefore not surprising that one explanation for the outbreak, given that the Piraeus was the first area to be affected, was that φάρμακα had been put into Athenian cisterns by the Peloponnesians.[67] The term φάρμακον here refers to poison, not "magical drug," but what is significant is that the φάρμακον is conceived of as an

[63] E.g., Hankinson 52.

[64] He does, however, command a technical knowledge of medical terminology; see Gomme *ad* 2.48.3.

[65] A note of hyperbole can be detected in "they desisted from these things, overcome by the evil" and the several other statements to the effect that the Athenians became careless of sacred law (2.52.3), or that piety and impiety were adjudged equally (2.53.4).

[66] Cf. Pericles' willingness to have women hang an amulet around his neck, so badly was he suffering from the plague (Plu. *Per.* 38 = Thphr. *Ethics* L21 Fortenbaugh).

[67] According to Thucydides, there were no springs yet in the Piraeus (2.48.2), whose water had to be supplied from elsewhere. It is not clear how the Peloponnesians entered Attica on this invasion (see Gomme *ad* 2.47.2), but they penetrated as far south as Laurium (2.55.1), and therefore had ample opportunity to reach the Piraeus.

invisible cause that could produce sudden deleterious effects.[68] Moreover, the disease affected people differently: some died, others did not, irrespective of the nature of the treatment (2.51.1–3). Thucydides himself suffered from the disease for a time but recovered (2.48.3). The disease, that is, could be described, but not fully explained: spontaneous outbreak, irregular response to treatment, and general unpredictability derail the empirical account.

The same dilemma over causation often occurs in the Hippocratic authors when they are faced with unpredictability in their patients.[69] Divine influence could, at times, especially in the case of spontaneity (τὸ αὐτόματον), be posited as the responsible agent for disease; this was in fact the preferred explanation for epilepsy (*Morb. Sacr.* 1.10–12 Grensemann), no doubt in part because of its unpredictable onset.[70] But opinion on this point was not consistent, and other Hippocratic authors could write that "the spontaneous" would disappear once the underlying causes were found (*de Arte* 6.14–18).[71] Aristotle later analyzes τὸ αὐτόματον as an incidental effect produced by an agency without deliberate choice, while τύχη, conceived of as a subset of incidental effects, occurred when such a result was produced by a being capable of choice (*Ph.* 197b19–23).[72] Of τύχη, he remarks, popular opinion holds that there is something θεῖον and δαιμονιώτερον in it, making it inscrutable to human intelligence (*Ph.* 196b6–8).[73] Empirical observation is thus confounded when effects are produced from invisible causes. For as the Hippocratic author of *On Regimen* remarks, "men do not know how to observe the invisible through the visible" (1.11.1–2).

Matters were equally complicated when a plurality of causes, invisible or otherwise, was thought responsible for a given effect. The famous late 5th-century case of the javelin-thrower is an especially good example.[74] An athlete had killed a man with a javelin, and we are told that Pericles and Protagoras spent an entire day discussing whether the javelin, the one who hurled it, or the judges of the contests, "in the most correct sense" (κατὰ τὸν ὀρθότατον λόγον), ought to be considered the cause of death (αἴτιος; Plu. *Per.* 36.3). This

[68] On φάρμακον see Collins 2001: 481 with n. 31.

[69] A brief comparison between Thucydides and the Hippocratics, in respect of their general views of divinity, can be found in Jouanna 191–92.

[70] See Edelstein 216–17.

[71] The argument, however, is sophistic and rhetorical rather than empirical. If τὸ αὐτόματον operates, as the author claims, "through something" (διά τι), then spontaneity is a mere name and has no essential reality (*de Arte* 6.17–18).

[72] See further Hankinson 135–40.

[73] Cf. the hostile attitude towards τύχη in the Hippocratic corpus; see Villard.

[74] Brief discussion in Hankinson 71–72.

case is presented by Plutarch as an example of sophistry: Pericles' son, Xanthippus, we are told, broadcast this story in an attempt to bring discredit on his father (*Per.* 36.2; note λοιδορέω). But the case was of more than merely sophistic interest. A similar case is at issue in Antiphon's *Second Tetralogy*, where the further possibility is considered that the deceased himself was responsible in that he ran into the path of the javelin (3.2.4–5). An additional factor raised, but not considered in any depth, is that the boy's trainer had called him onto the field at the fatal moment, a point that would shift responsibility perhaps to the trainer (3.3.6, 3.4.4). None of these issues is resolved, of course, since this speech is an exercise, but a further possibility beyond human action is also indirectly suggested. The father of the dead boy remarks that it would not be just to acquit the javelin-thrower merely because of the misfortune of his error (3.3.8),

> εἰ μὲν γὰρ ὑπὸ μηδεμιᾶς ἐπιμελείας τοῦ θεοῦ ἡ ἀτυχία γίγνεται, ἁμάρτημα οὖσα, τῶι ἁμαρτόντι συμφορὰ δικαία γενέσθαι ἐστίν· εἰ δὲ δὴ θεία κηλὶς τῶι δράσαντι προσπίπτει ἀσεβοῦντι, οὐ δίκαιον τὰς θείας προσβολὰς διακωλύειν γίγνεσθαι.
>
> for if on one hand the misfortune occurs without divine influence, being a (mere) error, then it is just for there to be negative consequences for the person who errs. But if on the other hand divine punishment falls on someone who acted impiously, it is not just to hinder divine retribution.

The consideration of empirical causality here does not exclude divine influence. Indeed it raises the possibility that "mere" human error may be implicated in an invisible network of divine retribution, and that the effects of human error and divine retribution may appear the same.

Perhaps the best-known instance of unintentional homicide in the 5th century comes not from Greek history or law but from tragedy, from Sophocles' *Oedipus* plays. Many of the points already made, from the sudden onset of plague to the inscrutability of τύχη, all of which are reducible to human actions whose causes are unknown and yet are divinely foreordained, can be found thematized by Sophocles. So much is straightforward. But for our purposes it is worth underscoring the temporal and spatial aspects of causality emphasized by these plays. In Oedipus' words (*OC* 969–73),

> ἐπεὶ δίδαξον, εἴ τι θέσφατον πατρὶ
> χρησμοῖσιν ἱκνεῖθ' ὥστε πρὸς παίδων θανεῖν,
> πῶς ἂν δικαίως τοῦτ' ὀνειδίζοις ἐμοί,
> ὃς οὔτε βλάστας πω γενεθλίους πατρός,
> οὐ μητρὸς εἶχον, ἀλλ' ἀγέννητος τότ' ἦ;

then tell me, if some prophecy reached my father
through an oracle that he was to die at the hands of his children,
how could you justly reproach me with this,
who had yet no birth from a father
or mother, but was at the time unborn?

The nexus of cause and effect here does not depend on contiguity in time or space. Oedipus' dilemma is not much different from that of Croesus, whose envoys were told by the Pythia that the fall of the Lydian empire was repayment for a religious sin committed by an ancestor five generations earlier (Hdt. 1.91.1; note ἁμαρτάς). Thus to the general problem of the plurality of causes, some of which may or may not be visible, we have also to add the protracted way in which effects could occur. Of course a temporal disjunction between cause and effect is usual in the context of curses and divination, which as we saw earlier in the case of the Athenian plague often involves understanding some present misfortune in the context of a past prophecy.[75]

To summarize: within this flexible system of causality, so much at issue among intellectuals of the Classical period, an event can be caused by factors invisible and visible, human and divine, present and past, as well as proximate and remote. All of these causal conditions might hold true for a given event at the same time because they are not mutually exclusive. Accordingly, to take the Athenian plague, an event can result from the intersection of mechanical (φάρμακα), teleological (fulfillment of Athenian and Spartan prophecies), and volitional (harm intended by the Peloponnesians) causes—indeed, it is important to see that a mechanical cause can result from both teleological and volitional processes.[76]

The relevant point for classical Greece is that because these processes can and do overlap, magic, which assumes that volition can cause events removed in time and space, remains a possible explanation for certain types of event. We owe to Frazer the idea that magic operates according to a mistaken notion of empirical (mechanical) causality, but this does not mean that there is no causal process in magic. With the possible exception of Tambiah (1985), Frazer's students (including Malinowski) failed to see that magic can be causal in a very different way: magic can be understood as an expression of desire, and therefore implies volitional causation.[77]

[75] I have written further on this, in the context of bird divination, in Collins 2002: 22–26.

[76] This is a point made by Russell 206–8.

[77] As Gell 1998: 101 writes, "Magic registers and publicizes the strength of desire."

The recipes in the Graeco-Egyptian magical papyri amply testify to the volitional nature of magic. Many of the recipes have titles or state explicitly the end for which they are to be used (περί + genitive,[78] rarely ἐπί + genitive[79]). One employs the spell because one desires to achieve a certain end. Many of the recipes in fact use the verb ἐθέλω in directing the practitioner. The beginning of the following spell is a good illustration (*PGM* VII.407–8): "If you want (ἐάν ... ἐθέλῃς) to appear to someone at night in dreams, say to the lamp in use by day, say many times ... ." Similarly, another spell (*PGM* III.495–96) claims that it is a procedure "for every [rite], for everything, for whatever you want" (περὶ ὧν ἐὰν θέ[λῃ]ς).

Other examples could be cited, but it is already clear that the recipes are composed with a view toward realizing the practitioner's intentions.[80] The necessary corollary is that the person who is affected by magic is affected because s/he is the target of others' intentions.[81] The practical effects of this view are not hard to understand: if I desire to surpass a fellow blacksmith in business, and so deposit a *defixio* in the Agora, then if my business does excel his, can I be sure that my intention did not cause it?[82] Or, as Plato has Socrates ask his companions in the *Phaedo* (98c–99b), is he sitting in jail because his body is composed of sinews and joints, which contract and relax in a particular way, or is he there because he, as a desiring agent, thought it better to submit to the penalties imposed upon him by the Athenians than to run away?[83] Both mechanical and volitional causes play a part in this scenario. Exactly when to distinguish between these causes to explain a given event is largely a matter of cultural convention, and it is their non-exclusivity in the Greek world that makes magic possible.

Plato seems to have understood this, at least in part. In a passage that we have already discussed briefly, he speaks of two types of magic (φαρμακεία). The first involves harm caused by drinks (πώματα), foods (βρώματα), or unguents (ἀλείμματα). This type of magic, although it is mechanical for Plato because it involves "harm by means of matter against matter according to nature" (*Lg.* 11.933a σώμασι σώματα κακουργοῦσά ἐστι κατὰ φύσιν), nev-

[78] E.g., *PGM* III.162 and 495.

[79] *PGM* VII.405 and 661.

[80] For other examples see *PGM* IV.1266 and 1720, XIII.239, 260, 275, 283, 321, etc.

[81] These intentions are not entirely reducible to envy or malice (φθόνος), "ce moteur de la sorcellerie," as Bernand 85–105 (quotation on 86) would have it, but at least his approach correctly situates Greek magic within a volitional context.

[82] I am thinking here of a *defixio* such as that at Jordan 159, no. 20.

[83] Gell 1998: 101 offers a similar example: if a boiled egg sits before someone ready to be eaten, is it there because of the mechanical processes of heat applied to a pan containing the egg and water, or is it there because that person wanted to eat a boiled egg?

ertheless incorporates a notion of intention.[84] But his main point is that mechanical agents have mechanical properties that, when they interact, produce expected results.[85] In addition to the substances listed by Plato, we can place purifications and φάρμακα in this category of magic.

The second type of magic for Plato is based on the anxieties and fears produced in its victims. Plato, it would seem, suggests that this kind of magic (γοητεία[86]) operates on primarily psychological grounds and is at bottom a matter of belief (*Lg.* 933a–b):

> ἄλλη δὲ ἣ μαγγανείαις τέ τισιν καὶ ἐπῳδαῖς καὶ καταδέσεσι λεγομέναις πείθει τοὺς μὲν τολμῶντας βλάπτειν αὐτούς, ὡς δύνανται τὸ τοιοῦτον, τοὺς δ' ὡς παντὸς μᾶλλον ὑπὸ τούτων δυναμένων γοητεύειν βλάπτονται. ταῦτ' οὖν καὶ περὶ τὰ τοιαῦτα σύμπαντα οὔτε ῥᾴδιον ὅπως ποτὲ πέφυκεν γιγνώσκειν, οὔτ' εἴ τις γνοίη, πείθειν εὐπετὲς ἑτέρους· ταῖς δὲ ψυχαῖς τῶν ἀνθρώπων δυσωπουμένους πρὸς ἀλλήλους περὶ τὰ τοιαῦτα οὐκ ἄξιον ἐπιχειρεῖν πείθειν, ἄν ποτε ἄρα ἴδωσί που κήρινα μιμήματα πεπλασμένα, εἴτ' ἐπὶ θύραις εἴτ' ἐπὶ τριόδοις εἴτ' ἐπὶ μνήμασι γονέων αὐτῶν τινες, ὀλιγωρεῖν πάντων τῶν τοιούτων διακελεύεσθαι μὴ σαφὲς ἔχουσι δόγμα περὶ αὐτῶν.
>
> The other type is that which, by means of enchantments and spells and so-called bindings, persuades those attempting to harm their victims that they can do so, and persuades the victims that they really are being harmed by those capable of bewitching (γοητεύειν). With respect to this and all such matters, it is neither easy to recognize what has happened, nor, if one knows, is it easy to persuade others. With regard to men's souls, it is not worth trying to persuade those who are suspicious of one another about such things, if some of them see molded wax images either at their doorways or at the places where three roads meet or on the tombs of their ancestors themselves, nor to admonish those who do not have a clear belief about all such things to make light of them.

Plato characterizes the efficacy of magic as based on mistaken belief and suggests, not unlike many modern scholars, that at least his second type of magic would disappear if its practitioners understood (mechanical) causality.[87] But this fails to take into account volitional cause, which as we have seen is so common that it can be misrecognized for mechanical cause. Recognizing

[84] The language (*Lg.* 11.932e3–4 ἐκὼν ἐκ προνοίας) recalls the Athenian homicide law against poisoning (D. 23.22).

[85] Cf. *Lg.* 10.889b on the interactions of hot and cold, dry and moist, soft and hard.

[86] For more on γοητεία and the γόης see Johnston 1999: 102–23, though I stress again that by the 4th century terminological distinctions are largely lost.

[87] Clark's (441) critique of Evans-Pritchard (63–83, 99–106), who was also susceptible to this prejudice, is instructive in this regard.

"what has happened," as Plato puts it, is insufficient because it assumes that only one (mechanical) causal system can be operative at a time. And yet an individual who died "because" of a magical φάρμακον can also have died "because" an adversary intended him harm and arranged for the φάρμακον to be administered. So let us complete the causal nexus in Plato's example: the molded wax images are visible reminders to "those who are suspicious of one another about such things" that injurious or harmful intentions have been expressed. Causes, which can be separated in space and time, have the potential to be plural, and multiple causal processes (mechanical, teleological, volitional) can produce the same event. This means that, in the end, when something does go wrong for the person who is the target of the wax figurine, visible, immediate, mechanical causes of the event may be compatible with, and explicable in terms of, the harmful intentions of the adversary who made the figurine or had it made. It is crucial to see that in magic, as in other areas of life, these causal processes need not be at odds with one another.

4. AGENCY AND FIGURINES

I propose now to approach more directly the operation of magical figurines. In order to do so, however, I must first briefly explain the concept of agency that I will be using here. I will argue that it is agency, and especially social agency as understood by the Greeks, that makes the figurines efficacious in magic. The Presocratic philosophical tradition again offers us a productive route into these issues, but in order to elucidate the magical practices themselves, we will also need to incorporate some anthropological theory.

We can best approach the issue of agency by way of the magnet. This stone was already of interest to Thales of Miletus (11 A 22 D-K = Arist. *de An.* 1.2.405a19–21[88]):

> ἔοικε δὲ καὶ Θαλῆς, ἐξ ὧν ἀπομνημονεύουσι, κινητικόν τι τὴν ψυχὴν ὑπολαβεῖν, εἴπερ τὸν λίθον ἔφη ψυχὴν ἔχειν ὅτι τὸν σίδηρον κινεῖ.
>
> Thales, too, seems, from what they record, to have supposed that the soul was something motive, since he said that the stone [i.e., the magnet] has a soul because it moves iron.

The magnet continued to be a subject of interest to Presocratic physicists, including those, like Empedocles, who claimed a specific interest in magic.[89]

[88] My arguments being heuristic only, doxographical intrusion does not affect them.

[89] Empedocles elaborates a theory of effluences (ἀπορροαί) to explain the magnet (31 A 89 D-K), which is then taken over by Democritus and integrated into his explanation of the evil eye as εἴδωλα that emanate from the eye (68 A 77 D-K = Plu. *Mor.* 682F–83A).

But what concerns us at present is the observation of motion, which Thales explains by the presence of a soul (ψυχή) within the rock. The fact that the magnet causes iron to move—σίδηρον κινεῖ— indicates to Thales that it possesses agency, or, as he puts it, a soul.[90]

The example of the magnet is only one instance of a much wider generalization that Thales makes: all objects capable of motion or of causing motion can be viewed as containers that house souls, and can act on the world around them by virtue of this motive agency.[91] Furthermore, agency is not aimless but directed. "Direction" here means that objects capable of motion or of creating it must possess intention or will. According to Thales, it is not objects that are self-animated and self-directed but the souls within them. Agency in this sense, then, is ascribed to objects that intentionally cause events in their vicinity.[92] Of course stones in the natural world are for the Greeks only one of many things possessing or housing agency, including animals, plants, people, and anything else capable of intentionally causing events.[93]

But agency also has a social dimension. As the anthropologist Alfred Gell has argued, any object, whether from our point of view animate or inanimate, that acts or is treated like a person can be considered a social agent. This definition has a surprisingly wide and occasionally counter-intuitive application. Stones that are anointed with oil and wrapped in wool,[94] for example, are social agents, because to anoint and clothe them is to treat them like people.[95] An especially vivid example is found in Pausanias' description of the Bouphonia before the altar of Zeus Polieus at Athens. After allowing the ox to feed on the

[90] See further Hankinson 12–13.

[91] Hence his famous claim that "everything is full of gods" (11 A 22 D-K = Arist. *de An.* 1.5.411a7). Other physicists offer modified versions of this panpsychist claim, and attribute agency to particular natural elements (the planets, stars, wind, heat, cold, moisture, etc.); see further below.

[92] I rely heavily on Gell 1998: 16–21, 134 and *passim* for this and the following discussion.

[93] By "cause" here I mean "volitional cause," a cause that is perceived to be intentional, and not a cause in the (Western) sense of purely mechanistic, empirically verifiable laws.

[94] For example, the famous stone at Delphi, witnessed by Pausanias (10.24.6). As Faraone 1992: 5–6 has shown, such practices with stones (whether meteors or otherwise) were widespread throughout the Mediterranean.

[95] In this paper I treat social agency as if it were monolithic. Of course it is not, because not all social agents are of equivalent status. Stones wrapped in wool, for example, may be treated like babies (cf. the stone swaddled by Gaia to replace Zeus in Hes. *Th.* 485), while other objects may be treated like adults, and so forth. Further work could be done to show how groups of social agents are aligned with one another.

barley and grain at the altar, one of the priests kills the ox with an axe and then departs. "The other priests then bring the axe to trial, as though they do not know the man who committed the deed."[96] What is of interest in the present context is not the aetiology of the ritual or Pausanias' explanation of it, but rather that, at the moment of "trial," the axe acts like a person, like a social agent with moral responsibility.[97] It might be objected at this point that to "treat" an object like a person is different than for that same object to "act" like a person, as if the distinction were between passivity and activity, but this is a problem more terminological than real. According to Gell's theory, from the point of view of a given culture, the objects in question are social entities, which means that from an outsider's viewpoint they are both treated and act like people.

We can illustrate social agency further by looking at the treatment of effigies.[98] To make offerings to statues, such as the monthly food offerings set out before the statuettes of Hecate,[99] is to treat them in significant respects like people.[100] ξόανα[101] were regularly cleaned and dressed in new robes, a practice that was preserved in the Panathenaic procession, in which a new πέπλος was presented to the statue of Athena. Prayer was addressed to cult statues (Hdt. 6.61) because direct communication with divinity could take place through them (A. *Eu.* 242).

But we need not limit our examples to a specifically religious, or Greek context. Despondency over the loss of Helen led Menelaus to take no pleasure in well-formed statues (κολοσσοί), according to the chorus in *Agamemnon* (415–16); as Fraenkel saw, these could well be κόραι adorning the palace grounds.[102] Yet it is possible that such statues offered more than merely aesthetic interest: consider the practice of the Egyptian king Mycerinus,

[96] Paus. 1.24.4–5. A more elaborate and aetiological account is given in Porph. *Abst.* 2.29–30. In Porphyry, we are told that each priest was charged and then given the opportunity to defend himself, while the axe was convicted of murder because it could not respond.

[97] Cf. Katz 171–77.

[98] Background in Burkert 88–95; briefer treatment in Faraone 1992: 28–29, with n. 86. For the approach taken here, I have derived much from Spivey 47–51, Elsner, and Gordon 1979.

[99] Ar. *Pl.* 594–97, with Σ 594.

[100] General background on food and other types of offerings, either as first fruits or votives, are discussed by Burkert 66–70, who rightly does not draw a sharp distinction between them (68).

[101] A brief survey of the Greek terminology for statuary can be found in Spivey 45–46.

[102] Fraenkel *ad* 416, with Ducat 249.

son of Cheops, who liked to keep wooden κολοσσοί of his concubines, in the form of naked women, in a special chamber (Hdt. 2.130).[103] Menelaus' κολοσσοί could be social agents of this same general type. In later antiquity, we find many related examples (e.g., Lucian *Syr. D.* 36–7, Paus. 3.16.7–11) of Greek statues treated like (erotic) social agents, none of which can be more striking than the traditions of individuals actually conceiving a passion for and having sex with statues, sometimes successfully.[104] In the same vein are the numerous ancient stories about Daedalus' sculptures, which were legendary because they were for all intents and purposes alive.[105] This is not to confuse the development of realism or naturalism in Greek statuary with its "religious" functions, but rather to see that, in respect of social agency, there is no sharp dividing line between them.

Greek cenotaphs offer another example. Often these would contain stone or clay effigies of individuals who had either died away from home or whose bodies were otherwise irrecoverable.[106] For example, according to Herodotus, when Spartan kings were slain in war, images (εἴδωλα) of the king were made, carried out on a bier for all to see, and then buried (Hdt. 6.58). The effigies are treated like real bodies and in this sense could be said to substitute for them.[107] But the notion of "substitute" can be misleading and is in any case inadequate. From the point of view of social agency these effigies *are* the dead individuals, not substitutes.

The fashioning of mummies in Egypt, as recounted by Herodotus (2.85–89), offers another instance, insofar as mummies involve making a once-living body into a hollow image of itself. At least among the wealthy, such embalmed mummies were enclosed in wooden coffins and kept inside their homes for a time leaning against a wall (2.86). Here again the dividing line between living human being and image remains indeterminate. And the Egyptians were keen to keep that shifting boundary in mind. According to another report by

[103] Cf. Childs 35–36, 42, who argues that statues lose their "aura de magie" in the 5th century. This is clearly not the case for the "popular" perception of statuary.

[104] Ath. 605f–606b: examples include Cleisophus of Selymbria's attempt to sleep with a statue of Parian marble in Samos, and the anonymous θεωρός who visited Delphi and slept with a stone image of a boy there, for which he left a wreath as the "price of the intercourse." The Delphians consulted the oracle and found Apollo to be forgiving. In Pliny (*Nat.* 36.21) we hear of man who fell in love and slept with the statue of Aphrodite on Cnidus, leaving a stain as a *cupiditatis index*.

[105] Detailed discussion of these traditions in Frontisi-Ducroux 100–108.

[106] Kurtz and Boardman 257–59, with examples from Cyprus, Thera, Athens, and Locri in South Italy. See also Faraone 1991a: 183–84.

[107] The issue of statues as substitutes is dealt with by Ducat.

Herodotus, at the banquets of wealthy men, after the meal a man carried round a carefully carved wooden image of a corpse in a coffin, one or two cubits long, and exhorted each banqueter: "while looking on this, drink and enjoy; for such shall you be when dead" (2.78). It is worth asking oneself how far the Egyptians intended this remark to be taken literally.[108]

Finally I turn to dolls (κόρη, -ος; νύμφη; Latin *puppa*; cf. *mania, bulla, effigies, imago*) in Greek and Roman antiquity, which offer a more precise comparison to human beings. Many examples of ancient dolls have been found, made of wood, bone, wax, fabric, clay, precious metal, and other materials.[109] The care that is often given to their clothing, hair, lips, and adornment generally may be taken as further evidence of the effort made to endow them with social agency, although little evidence survives for the manner in which they were used by children in play.[110] Be that as it may, it would be a mistake to think that Greek and Roman children "played" with dolls in a manner totally unlike adults, or that doll "play" has nothing to do with the ritual treatment of cult or funerary statues—in terms of social agency, cult statues are big dolls.[111] As an example of how ritual and play involving dolls can overlap, consider the tradition, first attested in Herodotus (2.48), of mechanical dolls operated with strings (ἀγάλματα νευρόσπαστα) and carried by Egyptian women through their villages during the festival of "Dionysus." Apart from minor differences in detail, these dolls are indistinguishable from the mechanical dolls mentioned by Plato, which puppeteers manipulated with strings on stage.[112] Certainly, cult statues are images of divinities, whereas ancient dolls, like the ones represented in the hands of little girls on Attic grave reliefs, are not.[113] But social agency is not a function of the ultimate identification or reference of a given object, nor of its nature, but of its being treated like a human being. Some ancient evidence, however, does in fact point to an explicit connection between dolls and cult, and a rather serious one at that,

[108] Lloyd 1975–88 *ad* 78 gives examples of excavated figurines that resemble Herodotus' description. Cf. Ritner 51, "Gods, humans, animals, objects, actions, and words are all part of a fluid continuum of projected divine images without sharp divisions."

[109] Hurschmann is brief but helpful.

[110] Hurschmann 601–2.

[111] Gell 1998: 134.

[112] Pl. *R.* 514a–515a. In *Lg.* (644d), Plato uses the puppet manipulated by strings as a metaphor for man's relationship to the gods. These and other examples are discussed by Wagner-Holzhausen. The tradition of self-propelled marionettes or αὐτόματα (e.g., Arist. *GA* 734b10, *Metaph.* 983a14–15) may also be brought up in this connection; see Wagner-Holzhausen 603.

[113] Hurschmann 602.

insofar as κόραι were dedicated to Artemis by girls preparing for marriage (*AP* 6.280), *pupae* were dedicated to Venus by unwed girls in Rome (Pers. 2.70, Var. *Men.* 4), while boys, for different reasons, dedicated *bullae* to the Lares (Pers. 5.31; cf. Hor. *S.* 1.5.65–66).[114] From the point of view of ritual and social agency, then, there is no clear distinction between children's dolls and the divinities, embodied in statuary form, to whom they were dedicated.

We can now locate "magical" figurines within this nexus of social agency. (I put "magical" in quotation marks because by this point I hope to have established that the social agency of objects is not limited in Greek, Roman, and other Mediterranean cultures to what those cultures, let alone a modern observer, might consider "magical." Social agency is a much wider notion and the use of figurines in magic can be seen as one expression of it.) Christopher Faraone has recently synthesized the evidence for figurines in lead, clay, and wax that were employed in magic throughout the Mediterranean basin from the second millenium B.C.E. down to the 6th century C.E.[115] As is well known, these figurines often give visible expression to the action of binding, and hence are usually classed with other types of *defixiones*. In an intuitive series of associations of great importance for the present discussion, Faraone situates the binding of these figurines in a wider context that includes both mythical stories that involve the binding of divinities (e.g., Ares) and cult statues (e.g., Enyalius) that are chained or in some manner tied down. Numerous examples of such bound statues are attested later, for instance by Pausanias.[116]

The answer given to the question why the figurines and statues are bound usually invokes Frazerian "sympathy" together with Stanley Tambiah's definition of magical speech as "persuasive."[117] Tambiah's approach avoids the Frazerian mistake of viewing magic as founded on false views of causation, but he relies still too heavily on analogical thinking.[118] The ancient Greek treat-

[114] Cf. the tradition on the eve of the Compitalia, when dolls of both male and female form, said to indicate free citizens, while balls (*pilae*), said to indicate slaves, were also dedicated to the Lares; see Böhm 808–10.

[115] Faraone 1991a. Brief discussion also in Gager 14–18.

[116] E.g., Paus. 3.15.7, 3.15.11, 9.38.5, 10.35.10; see Frontisi-Ducroux 102–3. Cf. Pl. *Men.* 97d on the need to bind the statues of Daedalus to keep them from fleeing.

[117] E.g., Faraone 1991a: 169 n. 11, on the statue of Ares at Syedra. He concludes later (193) that containment or restraint of enemies is the goal of both the bound effigies and civic statues. Tambiah's most important essays are reprinted in his 1985 book. A more forceful statement of Faraone's reliance on Tambiah for the explanation of figurines can be found in Faraone 1991b: 8. A sharp critique of Tambiah's approach can be found in Gardner, who argues that Tambiah relies too heavily on speech and does not sufficiently account for ritual.

[118] This point and others are drawn out in the critique of Frazer and Tambiah by Taussig 47–58.

ment of statuary, as Plato understood, depends not on an analogy, implicit or otherwise, between the statue and what it represents, but on a view of statues as themselves capable of agency.[119] In language that recalls Thales' description of the magnet, Plato remarks that the ancient laws concerning the gods are twofold (*Lg.* 931a). Some of the gods that men honor are evident to the senses, he says, but of others,

> εἰκόνας ἀγάλματα ἱδρυσάμενοι, οὓς ἡμῖν ἀγάλλουσι καίπερ ἀψύχους ὄντας, ἐκείνους ἡγούμεθα τοὺς ἐμψύχους θεοὺς πολλὴν διὰ ταῦτ' εὔνοιαν καὶ χάριν ἔχειν.
>
> setting up statues as images, we worship them *although they lack souls*, and believe that thanks to them the "ensouled" gods are kindly disposed and gracious to us.

I would argue that the qualification I have italicized suggests that, whatever Plato's own view, his contemporaries regarded statues, not as vehicles or mere representations, but as agents, that is, as objects possessing a ψυχή.[120] Recalling the connection between souls and motion, we may infer that statues were bound not as an analogical gesture but to prevent them from moving.[121]

In my opinion, we should take seriously this view, as well as the implications of treatments of statuary, and suggest that in the creation of magical figurines there is nothing fundamentally "sympathetic" or persuasive at issue. Nor is there anything "symbolic" at issue: it is not for the sake of symbolism that one feeds figurines, as is required at Cyrene by the instructions for fashioning κολοσσοί against a hostile visitant,[122] but because that is how they eat. That is, the binding of a figurine *is* the binding of its agency, not a symbolic or persuasive act, whether that agency is actualized in movement or in some other form. Magical figurines are possible because they are situated within a pre-existing network of social relations that already contains effigies generally. Their ability to cause events in their vicinity is implied by this network, an ability I can illustrate further with one final example.

[119] For background on Plato's general views on images see Childs.

[120] Before Plato, Heraclitus (22 B 5 D-K) had also attacked the worship of ἀγάλματα "as if one were conversing with houses, not recognizing what gods and heroes are."

[121] This is not to deny that analogies were sometimes created. We have binding formulae, for example, both on tablets and in literature, where the voice of the *defigens* can claim something on the order of, "As this lead is cold and useless, so may X be cold and useless." See Faraone 1991b: 8, Theoc. 2.28–29.

[122] *SEG* 9.72.111–21, with Faraone 1992: 82.

The 5th-century athlete Theagenes of Thasos was renowned in antiquity for his intimate relationship to bronze statues.[123] Recognition of Theagenes' extraordinary strength began in his youth when he carried a bronze cult statue from the marketplace to his house and back again (Paus. 6.11.2–3). After his death, according to Pausanias, a bronze statue in his image was erected, which one of his enemies repeatedly flogged each night as if it were Theagenes himself. "But the statue stopped the outrage by falling on him, and the sons of the man who had died prosecuted the statue for murder" (6.11.6). The prosecution of the statue immediately reminds us of the axe tried for murder by priests administering the Bouphonia at the altar of Zeus Polieus at Athens (Paus. 1.24.4–5). As social agents, both the axe and the statue of Theagenes can be held legally and morally responsible for their actions. But what is more striking is that Theagenes' statue is capable of responding to the outrage committed against it by falling on the abuser, which is exactly what we might expect from an injured social agent. Thus statues and magical figurines, because they are social agents, are capable of causing events to happen in their vicinity, just as their capacity for retributive action can be motivated by binding or abusing them, as is suggested also by the next stages in the story of Theagenes' statue. Found guilty of murder, the statue was exiled into the sea. Famine then racked the Thasians, who were told by the Delphic oracle to retrieve their exiles, which eventually, by way of a second Delphic oracle, was correctly interpreted to include the statue of Theagenes. Fishermen recovered the statue in their nets, and the Thasians set it up in its original position and thenceforth sacrificed to it as to a god (Paus. 6.11.6–9). Once again, abuse, here in the form of exile, is met with retribution, here in the form of plague. The story further suggests that the common practice of burying or disposing of "magical" figurines in wells, graves, or the earth is meant to ensure that once their retributive capacity has been activated by abuse it will remain in effect, since with the figurine hidden its abuse cannot generally be undone. Theagenes' statue, after all, had to be retrieved from the sea before its anger could be appeased.[124] If this inference is correct, it is the perpetual rather than a momentary arousal of anger or retribution in the "magical" figurines that is harnessed and targeted at the intended victim. In any case, through social agency and the treatment of Greek statuary we derive a more coherent picture of why figurines are bound and buried than by attributing these practices to causal processes peculiar to an ill-defined notion of "magic."

[123] Paus. 6.11.2–10. Cf. D. Chr. *Or.* 31.95–99, Eus. *PE* 5.34; see Elsner 527–28.

[124] Note that the legal banishment of "inanimate objects" (τὰ ἄψυχα) convicted of murder is attributed by Pausanias to Draco (6.11.6).

5. CONCLUSION

I have argued that the social practice of magic in Greece, especially in the 5th and 4th centuries B.C.E., depends on a conception of nature animated by divinity both abstract and anthropomorphized; on overlapping mechanical, teleological, and volitional causes for events; and on agency both as a general feature of nature and as a specific social conception, illustrated here in the context of figurines. None of these conditions is peculiar to magic and none can therefore be used to isolate distinctive features of this elusive phenomenon. I have not included all types of Greek magic in the discussion, but what I hope to have shown is that Greek magic is derivative of other processes and concepts in Greek culture, each of which should, in principle, be definable in historical and culturally specific terms.[125]

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