

THE SORCERER'S PHARMACY

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ABSTRACT OF THE DISSERTATION

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How do traditions of magic, both practical and literary, interact with texts about plant- and substance-based remedies in ancient Greece and Rome, and what role does genre play in the manifestation and transmission of these traditions? This is the question that my research seeks to answer, through the methods of lexicography, close reading, and comparison of magical texts with pharmaceutical literature from four significant authors. Each chapter represents a case study of one of these authors: Theophrastus and Nicander of Colophon, who wrote in Greek; and Pliny the Elder and Scribonius Largus, who wrote in Latin.

My analysis of the interplay of magic, remedy, genre, and botany in each author has revealed the development, through time, of what I term a pharmaceutical-didactic subgenre, created through the editorial decisions and selective curatorship of writers who sought to educate others in botanical and pharmaceutical topics, and, often, to display their breadth of knowledge in these subjects.

At the heart of this subgenre lies the problem of dangerous or othered information: to what extent is recording it reasonable or unreasonable, ethical or immoral, traditional or subversive? How is it justified or erased, spoken or unspoken? Under what circumstances does an author preserve the sorcerer's pharmacy? It is my hope that this approach will, beyond the limits of this thesis, prove useful for the examination of other authors of this genre in the classical period, and for their reception in the medieval era.

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## INTRODUCTION

In the course of this dissertation, I will explore the influence of ancient magical traditions upon pharmaceutical literature, that is, literature that transmits information about the curative properties of plants and other substances. In doing so, I will argue that over time, the editorial and curatorial decisions of these authors, as influenced by their individual contexts, contributed to the development of a hybrid literary subgenre, comprised of didactic, medical, and magical elements, that I term pharmaceutical-didactic. I will further suggest that this subgenre crystallized around a core problem: how should one treat dangerous information?

I will trace the development of pharmaceutical-didactic through four case studies, including two authors writing in Greek and two in Latin: Theophrastus' *Inquiry into Plants*, Nicander of Colophon's *Theriaka* and *Alexipharmaka*, Pliny the Elder's *Natural History*, and Scribonius Largus' *Compositiones*. Each author's answer to the dilemma of conveying problematic knowledge reveals a different facet of the subgenre, and hints at the social and generic forces that influenced their transmission of magical and pharmaceutical information.

The first chapter, on Theophrastus, will set the stage, investigating the precedent set by the foremost ancient botanist and its impact on the formation of pharmaceutical-didactic. I will provide a study of Theophrastus' treatment of magic through the nine books of the *Inquiry*, including the precepts of the class of herbalists known as *rhizotomoi*, and explore how Theophrastus' concept of rationality affected his transmission of these traditions.



In the second chapter, on Nicander of Colophon, I will trace the influence of literary and practical magic in the poet's texts, focusing on Homer and Theocritus as examples of the former, and the *Papyri Graecae Magicae* and Getty Hexameters for the latter. Nicander, with Hellenistic flair, is the most significant representative of pharmaceutical-didactic poetry, as opposed to prose, and I will explore how his poetic influence allows for, or even encourages, the multiple influences that he incorporates into the genre.

The third chapter jumps forward to imperial Rome; I will examine how Roman concepts of magic and medicine further complicate the development of pharmaceutical-didactic literature, and offer a lexicographical study of Pliny the Elder's magical terminology in the *Natural History*. I will explore how social and legal concerns may have affected Pliny's treatment of dangerous knowledge, and suggest that Pliny, when he transmits magical remedies despite his professed hatred of magic, justifies his curatorial decisions through several factors: pragmatism, warnings, and the gray area represented by beneficial magic.

In the final chapter, I will bring in the perspective of a practicing physician, Scribonius Largus, and examine how his medical ethics and profession affect his treatment of magic. I will argue that Scribonius attempts to erase almost all forms of magic from his *Compositiones*, but not entirely successfully, since the pharmaceutical-didactic tradition cannot easily be separated from the magic that informs many of its remedies and botanical practices; and furthermore, that when his ethics demand that he denounce magic, he is forced to allude to it, in the form of euphemistic language, in order to forbid it.

## Terminology

### *Didactic*

The definition of didactic that I use is broader than, for example, Volk's criteria<sup>1</sup> for didactic poetry, because I often group poetry and prose together. I have chosen to do so because my research is, in part, concerned with the outcome of the borrowing and citation that occurred between poetic and prosaic didactic authors. Therefore, the primary criteria for a didactic text, for the purposes of this dissertation, are first, that the work conveys information and provides instruction on one or more topics, and second, that it either claims to be educational or is received as such.

I categorize the *Iliad*, for instance, as didactic, because of its reception as an important educational text and resource, though it does not have, as Volk puts it, explicit didactic intent; Hesiod's *Works and Days*, on the other hand, both claims to be instructive and is received that way. Under this model, history, in the ancient sense of inquiry, is also didactic,<sup>2</sup> as are practical manuals and technical handbooks. From this very wide range, I narrow down my investigation to those didactic texts that transmit information on substance-based—predominantly herbal—remedies, and the acquisition and application of these materials. I refer to these works as pharmaceutical-didactic literature. The texts that I examine include history (the *Inquiry into Plants* and *Natural History*), hexametric poetry (the *Theriaka* and *Alexipharmaka*), and practical handbooks (the *Compositiones*

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<sup>1</sup> (2002). Namely, explicit didactic intent, the teacher-student constellation, poetic self-consciousness, and poetic simultaneity.

<sup>2</sup> Some tension between poetic and prosaic historical didactic may be detected in Thucydides' and Herodotus' treatment of their poetic counterparts.

and *Natural History*), and individually fall into narrower generic categories, which I consider alongside broad synchronic trends.

### ***Magic***

I alternate between three definitions of magic in the course of this thesis. The first is Graf's definition, namely, that magic is what ancient people defined as magic.<sup>3</sup> The second, a subcategory of the first, represents the ambiguous category of practices that were, *de facto*, magic (appearing in magical handbooks, for example), but which were allowed, in some contexts, the polite fiction that they were not magic. In Chapter 4, I refer to this as "unspoken magic."

The third definition I use is from a more modern perspective, that is, "the invocation of supernatural forces or the intrinsic miraculous properties of substances to achieve a certain outcome." This definition is sometimes at odds with ancient definitions of magic of both types. However, because definitions of magic in antiquity were not themselves monolithic, I find it helpful to establish a baseline for comparison, with the understanding that it will sometimes be anachronistic.

### **Methodology**

The first method I employ in my research is lexicography, derived from the numerical frequency, immediate context, and intertextual precedent of key terms. The second is literary analysis, based on close reading and comparison between technical and literary texts. I have chosen this methodology because language and terminology, as the

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<sup>3</sup> (1997)

vehicles of transmission in didactic literature, can tell us much about synchronic conceptualizations of magic and pharmaceutical remedies.

### **Contributions and Significance of Study**

There are several avenues of inquiry, previously unexplored, that I have undertaken to investigate. The first is a comprehensive study of magic in Nicander's poetry, and of the same in Theophrastus' *Inquiry into Plants*; the scholarship on magic (or "superstition") in the *IP* is largely focused on Book 9, when it exists at all. I have also contributed a lexicographic study of the term *veneficium* in Pliny's *Natural History*, and provided an alternative perspective of Scribonius Largus' treatment of magic, a topic which currently enjoys only one substantial monograph.<sup>4</sup> More broadly, I have suggested a new generic framework with which to approach ancient pharmaceutical literature.

I believe that this approach will help expose the internal logic, tropes, and conflicts of pharmaceutical-didactic texts, including the problems that arise in the transmission of dangerous knowledge, and the different strategies that authors use to address them. In addition to the case studies I offer here, other authors in this vein, such as Celsus, Dioscorides, Galen, Lucretius, Vergil, and the Hippocratic writers, might be productively scrutinized through this lens. Finally, looking forward in time, the subgenre I propose may be used as a springboard for exploring the reception of the pharmaceutical-didactic authors and the development of the herbal in late antiquity and the middle ages.

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<sup>4</sup> Machold (2010)

### **Limitations and Delimitations**

With respect to individual authors, my research has been limited by the dearth of biographical information about Nicander and Scribonius Largus; what little exists is mainly limited to internal evidence from their texts. Additional evidence about their respective professions would provide useful context, but fortunately, it is not vital to this project.

From a wider perspective, the subgenre that I propose is based on commonalities between works that collectively span hundreds of years and encompass three different regions: Athens, Colophon, and Rome. Furthermore, “didactic” itself, as has been much discussed, is an anachronistic concept, and so, of course, is the “pharmaceutical-didactic” subgenre that I suggest. Nevertheless, I have found that these genres offer a helpful critical framework for understanding ancient literature, if one keeps these cautions in mind, and takes care to consider the individual context of each work.

## CHAPTER ONE

### Tracing Magical Traditions in Theophrastus' *Inquiry into Plants*

The *Inquiry into Plants* (*Peri phyton historia*) of Theophrastus of Eresos, as one of the most prominent botanical works in ancient Greek literature, is the root from which many classical pharmaceutical works stem.<sup>5</sup> As such, in order to trace traditions of magic in this genre, it is critical to examine the *Inquiry* both for its own sake and for its role as a frequently cited source and establisher of precedent throughout the classical period. Three major questions, arising from this goal, delineate this chapter: Firstly, how does Theophrastus treat traditions of magic in the *Inquiry*? Secondly, and more broadly, what effect, if any, did Theophrastus' treatment of magic have on later pharmaceutical authors and the extent to which they transmit, interact, and intersect with magical practice?<sup>6</sup>

Finally, since it would not do to only look forward in time and neglect the didactic tradition in which the *Inquiry* was written, the chapter will also touch upon citations within the *Inquiry*, particularly references to poets, and what their inclusion suggests about the position of this work in relation to poetic didactic. This brings us to the most expansive question: is magic a traditional feature of ancient Greek didactic literature?

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<sup>5</sup> For an overview of the development of Greek botany, see Pease (1952). On plant almanacs, see McCarnthey (1924), and on the transmission of herbals into the Middle Ages, cf. Singer (1927), Flood (1976), and Silberman (1996).

<sup>6</sup> Scarborough (1991), in what may be the most robust examination of the magic (or, as he often terms it, folklore) of *IP* 9 and its reception to date, concludes that later authors exaggerated the practices they transmitted from their predecessors; while this certainly happens at times (especially with Roman authors whose translations of the Greek are not entirely accurate), I believe that the parallels between the *PGM* and authors like Pliny and Scribonius, at any rate, show that this was not necessarily the case. For authors of Hippocratic and Platonic attacks on magic sharing beliefs about nature and divinity with the magicians themselves, see Collins (2003).

I will argue that Theophrastus' *Inquiry into Plants*, purposefully or not, helped sustain the transmission of magical traditions in pharmaceutical writing, and contributed to the creation of a subgenre that I term pharmaceutical-didactic, a hybrid of magical and medicinal practices as recorded in ancient Greek and Roman literature. I will further argue that the magico-medical remedy, the *pharmakon*, is a traditional feature of didactic poetry as established by Homer and Hesiod, whose cultural authority set a precedent for, and lent credence to, those authors of ostensibly non-magical didactic who chose to include supernatural elements in their work. Finally, although it has been argued that Book IX of the *IP* may be spurious<sup>7</sup> or written by an anonymous *rhizotomos*,<sup>8</sup> I will follow Einarson<sup>9</sup> and Scarborough<sup>10</sup> in treating it as legitimate, and present my reasoning for doing so.

The treatment of both magic and medicine in Theophrastus' *Inquiry* is based on the inherent properties, or *dunameis*, of plants. Theophrastus considers these properties part of the *phusis*, or nature, of the plant. In this sense, at first glance, his views align with mages such as Empedocles, with their belief in the counterbalancing "Loves" and "Strifes" inherent to the natural world,<sup>11</sup> and differ from many of the spells recorded in the *Papyri Graecae Magicae*, which invoke the gods; but as we will see later, the situation is somewhat more complex than that.

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<sup>7</sup> Stannard (1969).

<sup>8</sup> Bretzl (1903).

<sup>9</sup> (1976).

<sup>10</sup> (1978).

<sup>11</sup> For Empedocles as magician, see Kingsley (1995). For the Loves and Strifes in the context of plants, see Pease (1927).

### Magic or Mendacity?

Theophrastus appears divided on the subject of the validity of plant-based magic, sometimes insisting that it is a fable of *rhizotomoi* (root-cutters) and *pharmakopōlai* (herbalists) designed to exaggerate their craft, and other times deeming it “not unreasonable.” Although his skepticism might lead one to conclude that he does not believe in the validity of any magical remedies, textual evidence from the *Inquiry* suggests that Theophrastus considers some such remedies believable, or at least possessing a grain of truth; and when he does discount them, it is not necessarily on the basis of the invalidity of magic itself, but rather the propensity of ancient pharmacists to exaggerate what can be accomplished with their craft.

Unlike his successor, Pliny the Elder, Theophrastus does not justify his inclusion of the practices of the *rhizotomoi* and other magical remedies by claiming to protect his readership from danger. Theophrastus includes some charms without comment;<sup>12</sup> some he admits have a certain logic to them; and some he dismisses as ridiculous. (It is possible that he includes the latter for the sake of pointing out their inaccuracy, which may *implicitly* help his audience avoid misinformation, but Theophrastus, unlike Pliny, makes no assertion that this is his agenda.)

On the contrary, the following sentence represents the most notable and quasi-programmatic statement on herbal magic to be found in the *Inquiry*. *IP* 9.8.5 best summarizes Theophrastus’ overall stance:

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<sup>12</sup> Other than a distancing *legousi*, “they say” (a very common rhetorical device in the *Inquiry* as a whole, and certainly not restricted to cases of magic).



Ἔτι δὲ ὅσα οἱ φαρμακοπῶλαι καὶ οἱ ῥιζοτόμοι τὰ μὲν ἴσως οἰκείως τὰ δὲ καὶ ἐπιτραγωδοῦντες λέγουσι.

Additionally, these are the sorts of things herbalists (φαρμακοπῶλαι) and root-cutters (ῥιζοτόμοι) say—some of which are close to home, but others melodramatic.<sup>13</sup>

Immediately, Theophrastus creates a distinction between reasonable and unreasonable pharmaceutical practices. This raises the question: what makes a remedy reasonable or unreasonable, from his perspective? The following table, in which I have divided Theophrastus' comments on the *rhizotomoi* and other assorted magical practices mentioned in the *Inquiry* by stated reasonability (I will examine the passage in which he differentiates between the two below), may shed some light on the subject:

<b>Table 1: Reasonability of Magical Practices According to Theophrastus</b>
<b>Reasonable (5):</b>
Standing windward when cutting some roots, like thapsia, and anointing oneself with oil, because one's body will swell up if standing the other way (9.8.5)
Standing windward while gathering the fruit of the wild rose, to avoid danger to the eyes (9.8.5)
Gathering roots at specific times: by day, night, and before the light strikes them (9.8.5)
Eating garlic and drinking neat wine before digging hellebore (9.8.6)
Praying while cutting a plant (9.8.7)
<b>Unreasonable (11):</b>

<sup>13</sup> All translations are my own unless otherwise noted.

Digging the peony up at night, because if it's done during the day and a woodpecker witnesses a man gathering the fruit, he may lose his eyesight, and if cutting the root, experience anal prolapsus (9.8.6)
While cutting feverwort, avoiding the buzzard-hawk <sup>14</sup> to stay unharmed (9.8.7)
Putting an offering of fruits and a cake in place of all-heal in the ground (9.8.7)
When cutting gladwyn, putting cakes made of spring-sown wheat in its place to pay for it (9.8.7)
Before cutting gladwyn, making three circles around it, and cutting it with a double-edged sword (9.8.7)
Holding the first piece of gladwyn cut up in the air while the rest is being cut (9.8.7)
Drawing three circles around mandrake with a sword, cut it facing west (9.8.8)
When cutting the second piece of mandrake, dancing around it in a circle and saying as much as possible about the matters of Aphrodite (NB: Th. compares this practice to that of cursing cumin as it's sown.) (9.8.8)
Drawing a circle around black hellebore and cutting it while facing east and praying (NB: Th. elsewhere notes that the praying part is not unreasonable) (9.8.8)
Looking right and left for an eagle, because if one approaches, one cutting may die within a year (NB: text here is an uncertain reconstruction) (9.8.8)
What is said, in general, about amulets ( <i>periptōn</i> ) and charms ( <i>alexipharmaka</i> ) for the body and home (9.19.2)
<b>Unremarked upon<sup>15</sup> (12):</b>

<sup>14</sup> Pliny relates this as a fact, showing that despite Theophrastus' intentions, his inclusion of certain traditions actually propagated them.

<sup>15</sup> (Again, apart from *legousi* or *legetai*; Theophrastus is neither personally asserting nor denying their veracity.)

It is said to be unsuitable to bring ostrys (hop-hornbeam) into the house, since it is supposed to cause a painful death or labor pangs (3.10.3)
According to Androkydes, because the scent of cabbage is injurious to grapevines and causes the plant to look away from it, one can use cabbage to drive out drunkenness (4.16.6)
It is said that cumin must be cursed and insulted while being sown to be good and plentiful (7.3.3) (Unremarked upon in this context, but compared to criticized practices at 9.8.8)
It is said that if planted before the entrance door of a house, squill is a ward ( <i>alexētērion</i> ) against hostile magic ( <i>dēlēseōs</i> ) which threatens it <sup>16</sup> (7.13.4)
Mandrake root is good for love potions ( <i>philtrā</i> ) <sup>17</sup> (9.9.1)
They say root of cyclamen is good for an amulet ( <i>periapton</i> ) and love potions ( <i>philtrā</i> ) (9.9.3)
Purifying horses and sheep with black hellebore ( <i>melampodion</i> ) while singing an incantation (συνεπάδοντές τινα ἐποδὴν) (9.10.4)
They say if you want to know if a sick person will recover, wash with chamaeleon for three days and if he survives he will recover (9.12.1)
Scorpion-plant (leopard's bane) looks like a scorpion and is good against the stings of scorpions (9.13.6)
They say that if one wears the root of polypody as an amulet, one will not get a polypus (morbid excrescence in the nose). (9.13.6)

<sup>16</sup> From δηλέομαι, Dep.: of persons, to hurt, do a mischief to, Hom.; μή με δηλήσεται (epic for -ηται) Od.; so in Hdt.; **to hurt by magic potions, Theocr. (LSJ).**

<sup>17</sup> *Philtron* from *phileō*; perhaps comparable to *veneficium/venus*, as discussed in Ch. 3.

They say that...the moly mentioned by Homer...is used for spells [ <i>alexipharmaka</i> ] and magic arts [ <i>mageias</i> ], but that it is not, as Homer says, difficult to dig up. (9.15.7)
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It is said that no antidote has been found which can counter wolf's bane (9.16.5)
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Theophrastus lists five reasonable practices, eleven unreasonable ones, and twelve which he does not clearly place in either category. The low number of statements which he considers reasonable may show that he views these practices with great skepticism; but the inclusion of the vast majority—which he either does not clearly approve of or actively disapproves of—again raises the question: why are they in the *Inquiry* at all?

Let us begin by analyzing the five “reasonable” statements of the *rhizotomoi*.

Theophrastus helpfully explains his reasoning regarding the *rhizotomoi*'s advice at 9.8.6:

Καὶ ταῦτα μὲν καὶ τὰ παραπλήσια τούτοις τάχ' ἂν οὐκ ἄλλοτρίως δόξειεν λέγειν· ἐπισινεῖς γὰρ τινων αἱ δυνάμεις· ἐξάπτειν γάρ φασιν ὥσπερ πῦρ καὶ κατακαίειν· ἐπεὶ καὶ ὁ ἐλλέβορος ταχὺ καρηβαρεῖν ποιεῖ, καὶ οὐ δύναται πολὺν χρόνον ὀρύττειν, δι' ὃ καὶ προεσθίουσι σκόροδα καὶ ἄκρατον ἐπιπίνουσιν.

Perhaps it would not seem outlandish to say these and similar things, since the properties of these [plants] are harmful; they say that they take hold like fire and burn; for hellebore also quickly causes heavy-headedness, and they are not able to dig it for long, on account of which they eat garlic and drink neat wine.

The plants that require precautions have harmful properties, causing a burning sensation or lightheadedness, according to Theophrastus. Thus, with the notable exception of praying over a plant,<sup>18</sup> the traditions of the *rhizotomoi* Theophrastus considers reasonable seem to be those which are based on δυνάμεις, the powers or properties of the plant.

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<sup>18</sup> It is difficult to say whether the act of praying while picking a plant would be considered “magical” by Theophrastus. It certainly appears in magical texts, but his approval could equally be based on religious piety (in the form of giving thanks for taking a plant associated with a god, or for the god's protection while

This is not to say that these recommendations are necessarily more practical than more obviously arcane ones. Hellebore is toxic, and skin contact with it can irritate the skin and cause a “burning” sensation (its proximity, however, does not cause heavy-headedness).<sup>19</sup> A logical solution to this problem is to wear gloves, and not ingest any hellebore while handling the plant. There is no reason that eating garlic and drinking wine beforehand would alleviate either problem. If the *rhizotomoi* regularly dug hellebore, they would be aware of this; thus, it might be the case that the drinking of neat wine and garlic actually has a magical basis, and Theophrastus has misunderstood it as a botanical one. This sort of attempt to cherry-pick reason out of ritual or legend is in fact something that Theophrastus hints at in Book IX (9.18.2):

καὶ τὰ μυθώδη δὲ οὐκ ἀλόγως συγκεῖται.

Even fabulous things are not composed without reason.

In the case of the stipulations of the *rhizotomoi*, no doubt there *is* a reason; but that reason may not be directly related to the physical properties of a given plant, and may originate more from magic than from botany.

Because the *rhizotomoi* do, in fact, have botanically accurate stipulations as well (at least one of which Theophrastus correctly identified as such), it seems unlikely that when they deviate from property-based advice, it is out of ignorance, rather than by

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harvesting a plant with harmful properties). Since, in many cases, only context allows a line to be drawn between magic and religion, and the context here is ambiguous, it is hard to draw a firm conclusion about the significance of this precaution.

<sup>19</sup> "*Helleborus niger* - Christmas Rose" (2018). Hellebore can, however, cause vertigo, among other symptoms, if ingested. See Chisholm (1911, pp. 235–236).

design. The following statement on thapsia, for instance, is related in both Pliny the Elder's *Natural History* and Dioscorides' *De Materia Medica*:<sup>20</sup>

κελεύουσι γὰρ τὰς μὲν κατ' ἄνεμον ἰσταμένους τέμνειν, ὥσπερ ἐτέρας τέ τινας καὶ τὴν θαψίαν, ἀλειψάμενον λίπα· τὸ γὰρ σῶμα ἀνοιδεῖν ἐὰν ἐξ ἐναντίας.

They recommend that one cut certain [herbs] standing upwind—just like [cutting] certain others and thapsia—while anointed with oil; for the body swells up if one faces the other way.

*Thapsia villosa*, or deadly carrot, is highly toxic and known to cause severe itching and swelling of the skin.<sup>21</sup> This injunction, then, is entirely reasonable from a non-magical standpoint. The following statement about standing windward may not be, however:

κατ' ἄνεμον δὲ καὶ τοῦ κυνοσβάτου τὸν καρπὸν συλλέγειν, εἰ δὲ μὴ κίνδυνον εἶναι τῶν ὀφθαλμῶν.

And likewise [they recommend that one] collect the fruit of the wild rose upwind; otherwise, there is danger to the eyes.

The fruit of *rosa sempervirens*, like the rest of the *rosa* genus, is not dangerous.<sup>22</sup> Again, it is possible that the reason for standing windward or for standing in a certain direction in this case is more ritual than practical.<sup>23</sup>

The following excerpt (9.8.5) is likewise congruent with magical practice. In all likelihood, this injunction has nothing to do with the properties of the plants in question, so again, Theophrastus may have unwittingly transmitted magical prescriptions which appeared to be non-magical to the layman's eye.

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<sup>20</sup> *NH* 13.124; *DMM* 4.153.

<sup>21</sup> Pammel (1911, p. 857).

<sup>22</sup> Chisholm (1911), "Rose".

<sup>23</sup> Perhaps, since danger to the eyes is mentioned, this is another warning about being spotted picking plants by a dangerous bird.

τὰς δὲ νύκτωρ τὰς δὲ μεθ' ἡμέραν, ἐνίας δὲ πρὶν τὸν ἥλιον ἐπιβάλλειν, οἷον καὶ τὸ καλούμενον κλύμενον.

And [they say] that some [should be collected] by night, some by day, and some before the sun touches them, like the one called honeysuckle.

Picking a plant at a specific time of day is part of the magical acquisition of the plant, in order to avoid retribution from supernatural forces.<sup>24</sup>

Picking a plant by night would allow one to avoid the dangers of being spotted by diurnal birds like an eagle or a woodpecker; Theophrastus, however, considers both of these precautions of the *rhizotomoi* unreasonable.<sup>25</sup> Picking a plant by day would, conversely, allow one to avoid the notice of underworld-associated birds like owls (though this is conjecture, since they are not mentioned here). In general, performing a spell unseen is a common stipulation of ancient magic.<sup>26</sup>

Indeed, Theophrastus' amateur cherry-picking of the traditions of the *rhizotomoi* may have resulted in misunderstandings about their reasoning and misinformation about both the plants they collected and the magic they practiced. This adds another layer of complexity to his transmission of magic: when it does occur, it may not even be particularly accurate, and thus, as later authors continue to cite Theophrastus (with varying levels of accuracy themselves), this confusion contributes to the creation of a distorted pharmaceutical-didactic subgenre.

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<sup>24</sup> Since those forces may include underworld gods, ghosts, or heavenly gods, it is, as usual, difficult to draw a definite line between “religion” and “magic.” The practice of leaving an offering in place of a plant is similarly ambiguous.

<sup>25</sup> The woodpecker and the eagle both have divine connotations, and associations with Zeus in particular. The practice of divination by birds shows that birds were considered agents of the heavenly gods, and to avoid their notice might also help one avoid a god's notice.

<sup>26</sup> Especially in the *PGM*, including a spell at 1.1-42, discussed below, which instructs the caster to “conceal, conceal [the procedure].”

### Plant-Picking in the Greek Magical Papyri

On the subject of the accidental transmission of magic, it will be helpful to compare the treatment of magico-pharmaceutical remedies and rituals in the *Inquiry into Plants* with those among the spells of the *Papyri Graecae Magicae*, a collection of 131 Greek, Demotic and Coptic texts from Greco-Roman Egypt, ranging mainly from the 2<sup>nd</sup> century BCE to the 5<sup>th</sup> century CE. The *PGM* is comprised of magical spells, rituals, prayers, and diagrams.<sup>27</sup>

The very first spell listed in the *PGM* (I.1-42), a rite to summon a *daimon* assistant, includes several elements in common with the practices of the *rhizotomoi* as related by Theophrastus. The ritual performant is told to deify a falcon by drowning it<sup>28</sup> in milk and honey (1-5), drink the milk and honey before the rising of the sun (20), sacrifice to and recite a spell to the bird (25-37), and afterwards walk backwards (38) and conceal the procedure (41).

The bird's role as an agent of the gods or supernatural power (like the eagle or woodpecker one must avoid), the spell that must be performed before sunrise (like the picking of honeysuckle), the specific placement of performant (walking backwards or standing windward), and the necessity of concealing the ritual are all similar to the prescriptions of the *rhizotomoi* discussed above. (With respect to the bird in particular, *PGM* III.263-75 also has a foreknowledge charm with a formula spoken to Helios: "Lord,

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<sup>27</sup> Though the collection is dated later than Theophrastus, it is useful to compare it to the *IP* both for its status as a didactic handbook in its own right, and its similarity to the *rhizotomoi* in various general principles of magic.

<sup>28</sup> See Griffith (1909, 132-4).



if you [wish me to know in advance], let the falcon<sup>29</sup> [descend] onto the tree” (272).<sup>30</sup>

The bird is clearly a messenger of the god in this case.)

As before, it seems reasonable that Theophrastus may have mistaken some of these elements, which could appear practical out of context, for non-supernatural or *dunameis*-based precautions.

The gods, of course, are not only represented by birds. Their sacred plants also feature prominently in the spells of this collection. For example, *PGM* II.64-184, an invocation of Apollo, calls for inscribing the god’s magical names on a sprig of laurel (65), and later, directly addresses the laurel plant in hexameter (81). Thus, the act of picking a plant is potentially one of interacting with a god. Perhaps it is with this in mind that Theophrastus remarks that praying while collecting a plant is not unreasonable (9.8.7).

Indeed, *PGM* IV. 286-95, a spell for picking a plant, could easily be mistaken for a prayer, since it invokes the aid of a god, and in that sense *is* a prayer.<sup>31</sup>

Use it before sunrise. ***The spell to be spoken:*** “I am picking you, such and such a plant, with my five-fingered hand, I, NN, and I am bringing you home so that you may work for me for a certain purpose. I adjure you by the undefiled / name of the god: if you pay no heed to me, the earth which produced you will no longer be watered as far as you are concerned—ever in life again, if I fail in this operation, MOUTHABAR NACH BARNACHŌCHA BRAEŌ MENDA LAUBRAASSE PHASPHA BENDEŌ;<sup>32</sup> fulfil for me / the perfect charm.<sup>33</sup>

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<sup>29</sup> The falcon is an aspect of Horus, the Egyptian sky god, apparently transferred to the Greek sun god Helios by syncretism.

<sup>30</sup> Tr. E.N. O’Neil.

<sup>31</sup> See Pfister (1938, 1446-56).

<sup>32</sup> Perhaps this string of *voces magicae* is meant to represent the “undefiled name of the god.” For more on *voces magicae*, see Versnel (2002).

<sup>33</sup> Tr. E.N. O’Neil

Notably, the spell is meant to be used before sunrise. Since Theophrastus agrees with the *rhizotomoi* that picking certain plants before sunrise is a reasonable measure, this may be evidence of an occasion where he transmits magic in the belief that it is non-magical. Furthermore, the caster threatens the plant, which may be conceptually related to the custom of abusing the crops, mentioned by Theophrastus at *IP* 7.3.3 and 9.8.8. This comparison, however, is more neutral than the previous one, since Theophrastus does not directly comment on the reasonability of the practice.

Returning to the question of genre, since magical spells are themselves a form of didactic writing that instructs the reader in their arts, the parallels I have identified here reveal certain ways in which two didactic traditions may have indirectly interacted and influenced each other's development—and created a hybrid offshoot in pharmaceutical-didactic literature.

### **Homer, Hesiod, and Didactic Authority for Magic**

What do Theophrastus' citations of didactic poetry tell us about the *Inquiry's* position regarding both genre and magic? The following statement that Theophrastus makes in Book IX (9.18.2) helps illuminate Theophrastus' position on myth, which is, with its ambiguously fantastic nature, relevant both to his transmission of magical practice and to his treatment of the magical and mythical aspects of Homer, Hesiod, and other didactic poets.

εἰ δὲ ἀληθῆ τὰ περὶ τὸν σκορπίον ἤδη καὶ τᾶλλα, οὐκ ἀπίθανα τὰ τοιαῦτα. καὶ τὰ μυθώδη δὲ οὐκ ἀλόγως συγκεῖται.

And if those things already [said] about the scorpion are true, then other such things are not unconvincing. Even fabulous things [μυθώδη] are not composed

without reason.

Theophrastus indicates in this passage that he believes there is a grain of truth in μυθώδη. And if he judges that there is some truth in myth, it does not seem unlikely that he also allows for some kernel of truth even in the exaggerations of herbalists. Although μυθώδη may not be precisely equivalent to “what *pharmakopōlai* and *rhizotomoi* say” in his mind, this passage implies that he is willing to entertain a nuanced view of their beliefs, rather than insisting on absolute “truth” or “falsehood.” Theophrastus’ stance on myth, moreover, may account for his willingness to cite poets, the cultural transmitters of μυθώδη, in the prosaic *Inquiry*.

Theophrastus draws from both Homer and Aeschylus as sources on magical plants. The most relevant intersections of magic and poetry which have been imported into his didactic botanical prose occur at 9.15.1 and 9.15.7. The former is an ethnographic description of Tyrrhenia, Circe’s area of Latium, and Egypt, the areas considered most rich in *pharmaka*:

Φαρμακώδεις δὲ δοκοῦσιν εἶναι τόποι μάλιστα τῶν μὲν ἔξω τῆς Ἑλλάδος οἱ περὶ τὴν Τυρρηνίαν καὶ τὴν Λατίνην, ἐν ἧ καὶ τὴν Κίρκην εἶναι λέγουσιν· καὶ ἔτι μᾶλλον γε, ὡς Ὅμηρός φησι, τὰ περὶ Αἴγυπτον· ἐκεῖθεν γὰρ τὴν Ἑλένην φησὶ λαβεῖν "ἐσθλὰ τὰ οἱ Πολύδαμνα πόρεν Θῶνος παράκοιτις Αἴγυπτιή· τόθι πλεῖστα φύει ζεῖδωρος ἄρουρα **φάρμακα**, πολλὰ μὲν ἐσθλὰ τετυγμένα πολλὰ δὲ λυγρά." ὧν δὴ καὶ τὸ νηπενθὲς ἐκεῖνό φησιν εἶναι καὶ ἄχολον, ὥστε λήθην ποιεῖν καὶ ἀπάθειαν τῶν κακῶν. καὶ σχεδὸν αὗται μὲν εἰκόσιν ὥσπερ ὑπὸ τῶν ποιητῶν ὑποδεδεῖχθαι. καὶ γὰρ Αἰσχύλος ἐν ταῖς ἐλεγείαις ὡς **πολυφάρμακον** λέγει τὴν Τυρρηνίαν· "Τυρρηνὸν γενεάν, **φαρμακοποιὸν ἔθνος**."

The *pharmaka*-rich areas outside of Greece seem mostly to be the ones around Tyrrhenia and Latium, where they say Circe herself lived; and even more so, as Homer says, those around Egypt; for he says that Helen took from there “good things which Polydamna, the Egyptian wife of Thon, offered to her; there the life-giving earth grows the most *pharmaka*; many are good, and many harmful.” Among which, he says, was the famous nepenthes, passionless, so that it produces forgetfulness and insensibility of suffering. And these places almost seem as if

they were brought to light by the poets. For Aeschylus too, in his elegies, says that Tyrrhenia is rich in *pharmaka*: “The Tyrrhenian people, a *pharmaka*-producing nation.”

In this excerpt, Theophrastus seems to accept the authority of Homer and Aeschylus on the subject of lands which produce *pharmaka*, and the historicity of Circe and Helen, quoting the two poets directly as evidence.<sup>34</sup> If anything, he grants to the poets a particular expertise on the subject of foreign places rich in *pharmaka*, since they allegedly first brought them to light.

Theophrastus does not, however, uncritically accept every statement of the poets, as illustrated in the followed passage, 9.15.7:

Ἡ δὲ πανάκεια γίνεται κατὰ τὸ πετραῖον περὶ Ψωφίδα καὶ πλείστη καὶ ἀρίστη. τὸ δὲ μῶλυ περὶ Φενεὸν καὶ ἐν τῇ Κυλλήνῃ. φασὶ δ' εἶναι καὶ ὅμοιον ᾧ ὁ Ὅμηρος εἴρηκε, τὴν μὲν ρίζαν ἔχον στρογγύλην προσεμφερῆ κρομύφ τὸ δὲ φύλλον ὅμοιον σκίλλῃ· χρῆσθαι δὲ αὐτῷ πρὸς τε τὰ **ἀλεξιφάρμακα** καὶ τὰς **μαγείας**· οὐ μὴν ὀρύττειν γ' εἶναι χαλεπὸν, ὡς Ὅμηρός φησι.

All-heal grows among the rocks around Psophis most abundantly and best, and moly around Pheneos and [Mt.] Kyllene. They say that the latter is like that [moly] of which Homer spoke, with a round root resembling an onion and a leaf like squill; and that it is used for both warding charms and magic; but that it is not truly difficult to dig up, as Homer says.

Significantly, Theophrastus does not object to the idea that moly is used for *alexipharmaka* and *mageia*, or transmit others' objections (if they existed), but rather cites those people who say that moly is not actually difficult to dig up. Thus, he seems to confirm, first, that a semi-mythical plant exists; second, that it is used for magic and warding charms; and finally, that it is easy to dig up, despite what Homer says.

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<sup>34</sup> Circe is also mentioned at 5.8.3.

The statement that moly is used for magical purposes does not necessarily mean that Theophrastus believes it is effective, or that he concedes the existence and problem of *alexipharmaka* and *mageia*, but the lack of defensiveness in the passage is notable; there are no insults against what he perceives as the exaggerations of pharmacists in other excerpts, nor does Theophrastus claim that Homer is misled, as Pliny the Elder does.<sup>35</sup> This could be out of respect for Homer's reputation, yet the relatively comparable Hesiod does not escape criticism, as we see in 9.19.2-3:<sup>36</sup>

Ἀλλὰ τάδε εὐηθέστερα καὶ ἀπιθανώτερα τὰ τε τῶν περιάπτων καὶ ὅλως τῶν ἀλεξιφαρμάκων λεγομένων τοῖς τε σώμασι καὶ ταῖς οἰκίαις. καὶ ὡς δὴ φασὶ τὸ τριπόλιον καθ' Ἡσίοδον καὶ Μουσαῖον εἰς πᾶν πρᾶγμα σπουδαῖον χρήσιμον εἶναι, δι' ὃ καὶ ὀρύττουσιν αὐτὸ νύκτωρ σκηνην πηξάμενοι. καὶ τὰ περὶ τῆς εὐκλείας δὲ καὶ εὐδοξίας ὁμοίως ἢ καὶ μᾶλλον· εὐκλειαν γὰρ φασὶ ποιεῖν τὸ ἀντίρρινον καλούμενον...εὐδοξεῖν δὲ καὶ ἐάν τις τοῦ ἐλειοχρύσου τῷ ἄνθει στεφανῶται μύρω ῥαίνων ἐκ χρυσοῦ ἀπύρου...τὰ μὲν οὖν τοιαῦτα, καθάπερ καὶ πρότερον ἐλέχθη, συναύξειν βουλομένων ἐστὶ τὰς ἑαυτῶν τέχνας.

But the things that are said about amulets and, in general, about charms for the body and the home, are very silly and extremely unconvincing. Thus, they say that tripolion, according to Hesiod and Musaeus, is useful for every important thing, on account of which they dig it up by night, after pitching a tent. And the things [they say] about glory and good repute are likewise [silly] or even more so; for they say that the [plant] called snapdragon produces glory...and also that one gains good repute if crowned with the flower of the goldflower, sprinkling it with sweet oil from a piece of unfired gold...Such things, then, as previously stated, originate from people who want to exaggerate their own crafts.

Theophrastus' uncritical citation of Homer on the matter of moly, a markedly magical plant in the context of the *Odyssey*, suggests that the former's statement that "the things

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<sup>35</sup> See Ch.3.

<sup>36</sup> Theophrastus also quotes Homer at 3.1.3 (agreeing), and Hesiod at 3.7.6 (doubtful/disagreeing), 7.13.3 (agreeing), and 8.1.2 (agreeing). In general, then, Theophrastus considers Homer a more accurate source than Hesiod, but only slightly so.

said of amulets and, in general, of charms for the body and the home are very silly and extremely unconvincing” should be qualified.

What is said *in general* (ὄλως) about amulets and charms he considers ridiculous, but there are *specific cases*, as noted above, which are not. In the context of Theophrastus’ statement that myths have a reason behind them, the stance being developed in the *Inquiry* is that many, if not most, magical traditions are inflations of the truth, but some, particularly those backed by distinguished authorities, are not. If this is the case, it might be one reason that Theophrastus includes even those traditions he does not believe are accurate in the *Inquiry*: on the off chance that there might be a kernel of truth in them.<sup>37</sup>

### **Genre and the Reception of Theophrastus**

Whatever his reasons, Theophrastus’ willingness to include certain magical traditions in his work had far-reaching consequences, due to the *Inquiry*’s status as an authoritative botanical text. His successors inherited the thorny and ambiguous questions surrounding the *pharmakon*. Nicander of Colophon, Pliny the Elder, and Scribonius Largus, and their part in the transmission of pharmaceutical-didactic literature, will be discussed in more depth in subsequent chapters, but an illustration of Theophrastus’ influence will be useful here.

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<sup>37</sup> This explains the existence of the third category identified in the table above: those magical practices which Theophrastus relates without commenting on their accuracy or lack thereof. Most are qualified with a third person verb of speaking, usually *legein*, which puts some distance between the assertion and the author, but not outright denouncement. This category, perhaps, is comprised of those practices about which Theophrastus is uncertain. They are included because they might be true, and do not seem to be ridiculously exaggerated enough to require a disclaimer.

The transmission of the magical properties of the squill plant is one notable example of the *Inquiry*'s reception by several of Theophrastus' successors. Theophrastus says of the squill (7.13.4):

λέγεται δὲ καὶ πρὸ τῶν θυρῶν τῆς εἰσόδου φυτευθεῖσαν ἀλεξητήριον εἶναι τῆς ἐπιφερομένης δηλήσεως.

And it is even said that, planted before the doors of the entrance, it is a ward [ἀλεξητήριον] against impending ruin [δήλησις].

There are clearly apotropaic elements present in this description of squill. The word δήλησις may not necessarily mean *magical* ruin, yet its source verb, δηλέομαι, is used as such in Theocritus, where it means “to hurt by magic potions.”<sup>38</sup> The term ἀλεξητήριον is similarly ambiguous; I will argue for its use as a magical term in the works of Nicander in Chapter 2.

Pliny the Elder, citing Pythagoras as his source, does seem to interpret the squill as a protection against magical potions (20.39):

*Pythagoras scillam in limine quoque ianuae suspensam contra malorum medicamentorum<sup>39</sup> introitum pollere tradit.*

Pythagoras relates that squill, suspended on the threshold of a door, is effective against the entrance of harmful potions.

It is curious that Pliny chooses to cite Pythagoras rather than Theophrastus, though the sense is almost exactly the same as the information reported in the *Inquiry*. It is possible that this was a common enough belief about squill that Pythagoras did report it independently, or perhaps Pliny wished to absolve Theophrastus of magical beliefs, of

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<sup>38</sup> “Δηλέομαι.” (*LSJ*).

<sup>39</sup> For more on *mala medicamenta*, see Ch.4.

which Pliny disapproved, and Pythagoras, who was widely considered a magician in the ancient world, served as a convenient scapegoat.<sup>40</sup> The term *medicamentum*, admittedly, is ambiguous, but in a similar way to δήλησις. It is not as distinctly magical as, for instance, *veneficium*, but a *medicamentum amatorium* is a philter or love potion;<sup>41</sup> accordingly, a *malum medicamentum* could easily refer to a harmful magical potion.

The apotropaic qualities of the squill plant are also related in the *Materia Medica* of Dioscorides, a first-century CE medical writer (2.202):

ἔστι δὲ καὶ ἀλεξιφάρμακον ὅλη πρὸ τῶν θυρῶν κρεμαμένη.

It is also an *alexipharmakon*, when it is hung up whole in front of the doors.

Dioscorides does not overtly cite Theophrastus, but the similar word choice, between ἀλεξιφάρμακον and ἀλεξητήριον, should be noted. Again, the context and language suggest that the squill is an apotropaic charm.<sup>42</sup>

The reception of the squill plant as a protection against hostile magic in these later authors shows that, despite the potential ambiguity of Theophrastus' language, or his authorial intentions, this alleged property of squill was interpreted as magical in nature. This is another means by which the pharmaceutical-didactic subgenre was formed.

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<sup>40</sup> For Pythagoreanism and magical texts, see Burkert (1972, p.109ff).

<sup>41</sup> Suetonius, *Caligula* 50: *creditur potionatus a Caesonia uxore amatorio quidem medicamento*.

<sup>42</sup> I will discuss the magical nature of the term ἀλεξιφάρμακον in Chapter 2.



### On the Legitimacy of Book Nine

The apotropaic squill's placement in the seventh book of the *Inquiry* argues, I believe, for the inclusion of the ninth book as Theophrastus' own work, or at least nullifies one argument against it—namely, that the relaying of the *rhizotomoi*'s traditions does not match the other books.<sup>43</sup>

Indeed, the repellent quality of the squill, clearly received as magical by Pliny and Dioscorides, is not the only such instance in the first eight books of Theophrastus' work. Though the bulk of magico-medical material is found in the last book, there is a modest amount in the earlier books as well, and additionally, various references to mythology, religious ritual, and divination.

I have compiled these in the following table:<sup>44</sup>

<b>Table 2: Magico-Medical Material Outside of <i>IP</i> Book Nine</b>
<b>Mythology:</b>
Plane tree in Crete under which Zeus lay with Europa, which never loses its leaves (1.9.5)
In India ivy appears on the mountain called Meros, whence, they mythologize, Dionysus came. (4.4.1)
Long-lived plants witnessed by mythology: the olive at Athens, the palm in Delos, the wild olive at Olympia, from which the wreaths for the games are made; the Valonia

<sup>43</sup> For a useful overview of the difficulties surrounding the number of books in Theophrastus' *IP*, see Sollenberger (1988).

<sup>44</sup> The translations quoted or paraphrased in this table are by Arthur F. Hort.

oaks at Ilium, planted on the tomb of Ilos; some say that Agamemnon planted the plane at Delphi, and the one at Kaphyai in Arcadia. (4.13.2)
The district called by Circe's name is, it is said, a lofty promontory, but very thickly wooded, producing oak, bay in abundance, and myrtle. There, according to the natives, dwelt Circe, and they shew Elpenor's tomb, on which grow myrtles like those used for garlands... (5.8.3)
<b>Religious Ritual:</b>
And some of the Aeolians say that [sea-bark oak ( <i>haliphloion</i> )] are the only oaks which are struck by lightning, although they are not lofty; nor do they use the wood for their sacrifices. (3.8.5)
The juice [of the elder] is like wine in appearance, and in it men bathe [ <i>baptontai</i> ] their hands and heads when they are being initiated into the mysteries. (3.13.6)
In Pontus about Panticapaeum neither [bay nor myrtle] grows, though they are anxious to grow them and take special pains to do so for religious purposes [ <i>tas hierosunas</i> ]. (4.5.3)
The willow at Philippi which grew again had had its branches lopped off, but the trunk had not been hewn. A certain seer persuaded the people to offer sacrifice and take care of the tree, since what had occurred was a good omen. (4.16.3)
<b>Divination:</b>
There is a peculiarity special to the olive, lime, elm, and abele: their leaves appear to invert the upper surface after the summer solstice, and by this men know that the solstice is past. (1.10.1)

<p>Soothsayers [<i>manteis</i>] read sudden changes in plants as portents (2.3.1) but they do not take notice of ordinary changes (2.3.2)</p>
<p>The willow at Philippi which grew again had had its branches lopped off, but the trunk had not been hewn. A certain seer persuaded the people to offer sacrifice and take care of the tree, since what had occurred was a good omen. (4.16.3)</p>
<p>For often some part of the tree itself is absorbed by the rest of the tree which has grown into it...this happened with the wild olive in the marketplace at Megara; there was an oracle that, if this were cut open, the city would be taken and plundered, which came to pass when Demetrius took it. (5.2.4)</p>
<p>Some woods, such as prickly cedar, exude moisture, and, generally speaking, so do those whose sap is of an oily character; and this is why statues are sometimes said to 'sweat'; for they are made of such woods. That which seers call the menses of Eileithuia, and for the appearance of which they make atonement, forms on the wood of the silver-fir when some moisture gathers on it... (5.9.8)</p>
<p><b>Magical and Wondrous Properties:</b></p>
<p>It is said to be unsuitable to bring ostrys (hop-hornbeam) into the house, since it is supposed to cause a painful death or labor pangs (3.10.3)</p>
<p>They also report a more marvelous thing than this [<i>thaumasiōteron</i>]; they say that there are certain tree-like growths...and some of them, if they are cast on a fire, become red-hot like iron, but recover when they cool and assume their original color. (4.7.3)</p>
<p>According to Androkydes, because the scent of cabbage is injurious to grapevines and causes the plant to look away from it, one can use cabbage to drive out drunkenness (4.16.6)</p>

Ivy and bay are also hot [ <i>thermon</i> ] woods, and so in general are those used for making fire-sticks; and Menestor adds the wood of the mulberry. The coldest [ <i>psychrotata</i> ] woods are those which grow in water and are of succulent character. (5.3.4)
It is said that cumin must be cursed and insulted while being sown to be good and plentiful (7.3.3)
It is said that if planted before the entrance door of a house, squill is a ward ( <i>alexētērion</i> ) against hostile magic ( <i>dēlēsis</i> ) which threatens it (7.13.4)
Others are found in fewer forms, as strykhnos, which is a general name covering plants that are quite distinct; one is edible...and there are two others, of which the one is said to induce sleep, the other to cause madness, or, if it is administered in a larger dose, death. (7.15.4)

This table excludes the many examples of herbal medicine in Books 1-8 that do not appear to have supernatural elements (and thus are not featured in this chapter), but these mundane remedies are nonetheless indicative of Theophrastus' interest in herbal medicine, and, by extension, magical remedies. As Scarborough writes,<sup>45</sup>

Whatever one may believe about the authenticity of Book IX of the *Historia Plantarum*, there is ample evidence in the rest of the work, and in *De Causis Plantarum*, that attests to Theophrastus's great interest in medicinals, and plant medicinals in particular. Omitting *Historia Plantarum* IX from consideration of the Theophrastean *corpus* does grave injustice to the history of ancient botany and ancient pharmacy: here are medicinals, derived from plants - and one animal.

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<sup>45</sup> (1978).

Adding to this, I have argued that where there are medicinal herbs, often an overlapping thread of magic may be found. Most of the examples of magic in the *Inquiry* that I have discussed, admittedly, are from Book IX, but the squill, with its apotropaic qualities, is from Book VII, and thus represents a magical charm beyond Book IX.

The other examples found outside of Book IX tend to fall into the category of plants with supernatural properties, except for cumin, a plant which requires a ritual (cursing and insulting during planting) to flourish. The instance from Book IV, the cabbage that can drive out drunkenness because it is injurious to grapevines, is an example of Empedoclean strife, that is, natural substances that have an inherent aversion or enmity toward one another.<sup>46</sup> Such a remedy, based on the properties of a plant, would not necessarily have stood out to Theophrastus as magic, yet this medicine by antipathy shares much with concepts of herbal magic.

The intermittent references to myth and various forms of magic in Books I-VIII indicate that it is not completely out of character for Theophrastus to have included a collection of more-or-less magical or mythical remedies in his *Inquiry* (and, arguably, any truly comprehensive inquiry would not be complete without them).

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<sup>46</sup> That Theophrastus refers to the concept of antipathy is made clear in its reception by Pliny, who translates it as *odium*, hatred: *odium is cum vite maximum, refugitque iuxta satos*. “There is a great antipathy between [the radish] [Pliny’s mistranslation of *ράφανος*, cabbage] and the vine; which last will shrink from the radish, if sown in its vicinity” (*NH* 19.26, trans. John Bostock). See also: *Olfactatrix enim intellegitur et tingui odore mirum in modum, ideo, cum iuxta sit, averti et recedere saporemque inimicum fugere. hinc sumpsit Androcydes medicinam contra ebrietates, raphanum manducari praecipiens*. “For the vine may reasonably be looked upon as possessed of the sense of smell, and affected by odours in a singular degree; hence, when it is near a noxious exhalation, it will turn away and withdraw from it. It was from his observation of this fact that Androcydes borrowed the radish [again, Pliny’s mistranslation of *ράφανος*] as his antidote for drunkenness, recommending it to be eaten on such occasions” (*NH* 17.37, trans. John Bostock).

Furthermore, Scarborough notes that in Homer and Empedocles, plant magic and weather magic are often found together.<sup>47</sup> This also seems to be the case in Theophrastus, if one considers the magical/prophetic implications of his work *On Weather Signs*. The latter text has been discussed in detail in the dissertation of Britta Ager.<sup>48</sup>

### Closing Thoughts

Having examined how Theophrastus treats traditions of magic in the *Inquiry*, how he cites magic from earlier sources, and how he is cited in turn, it is time to return to the final, overarching question: is magic a traditional feature of ancient Greek didactic literature?

This is a question which requires another dissertation to answer in full, but within the scope of this chapter, I argue that it is a traditional aspect of didactic *poetry* (but not prose), and of pharmaceutical-didactic; I have discussed the means by which the latter was able to occur. As for the former, in the sense that Homer and Hesiod represent a font for traditional didactic, the inclusion or exclusion of magic in their work is one potential measure of its status as tradition (though it does not necessarily mean that it continued to be passed down as such).<sup>49</sup>

I have not found convincing evidence for the presence of magic in general in the *Works and Days*; but one specific form of magic that appears in both Homer and Hesiod is the *pharmakon*. It is evident that Homer's *pharmaka* are magical, in the sense that they

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<sup>47</sup> (1991).

<sup>48</sup> (2010).

<sup>49</sup> The most prominent magical episodes, of course, occur in the *Odyssey*: Circe's potion (10.233ff), Odysseus' necromancy (11.20), Helen's potion (4.219ff), etc.

achieve a desired result by means of the mystical properties of herbs; Hesiod's *pharmakon* is more ambiguous. If anything, the latter more closely resembles the divinatory weather forecasts in Theophrastus' *On Weather Signs* than Helen's miraculous drug, Circe's transformation of men into swine, or Odysseus' apotropaic moly:

εἰ δέ κεν ὄψ' ἀρόσης, τόδε κέν τοι φάρμακον εἶη:  
 ἦμος κόκκυξ κοκκύζει δρυὸς ἐν πετάλοισι  
 τὸ πρῶτον, τέρπει δὲ βροτοὺς ἐπ' ἀπείρονα γαῖαν,  
 τῆμος Ζεὺς ὕοι τρίτῳ ἡματι μὴδ' ἀπολήγοι,  
 μήτ' ἄρ' ὑπερβάλλων βοὸς ὄπλην μήτ' ἀπολείπων:  
 οὕτω κ' ὀψαρότης προφηρότη ἰσοφαρίζοι.

But if you plow late, may this be a *pharmakon* for you:  
 When the cuckoo cries cuckoo in the oak's leaves  
 For the first time, and gladdens mortals upon the endless earth,  
 Then does Zeus rain on the third day, and he does not desist,  
 Either when overflowing an ox's hoof, or subsiding:  
 In this way may the late-plower be equal to the early-plower (*Works and Days*  
 480-90).

The purpose of this *pharmakon* is to allow someone who is late to the plowing season to catch up to others who started earlier. This is accomplished by taking note of a bird sign—the first time a cuckoo cries out from an oak tree in the spring—in order to predict the weather. The presence of the oak leaves, the symbol of Zeus, among which the cuckoo sits, followed by the god's sending rain, suggests that the cuckoo is conceptualized here as a messenger of Zeus.

In this respect, the *pharmakon* resembles the traditions of the *rhizotomoi*, when they connect the presence of certain birds<sup>50</sup> with danger for a plant-picker.<sup>51</sup> However, Hesiod's *pharmakon*, despite its agricultural setting and the significance of the oak tree,

<sup>50</sup> Possibly in their capacity as spies or messengers of the gods. See *IP* 9.8.6, 9.8.7, and 9.8.8.

<sup>51</sup> Also, loosely, bird magic in the *PGM*.

is not about acquiring a plant, as the stipulations of the *rhizotomoi* are; nor does not rely on the intrinsic supernatural properties of a substance to the extent that the *pharmaka* of Homer and later authors do. As such, perhaps it should be categorized as divination rather than plant magic.

Regardless of the specific categories under which Homer and Hesiod's *pharmaka* fall, however, I think it is likely that the mere presence of these magical or quasi-magical remedies<sup>52</sup> in such authoritative works lent credibility to later authors who included supernatural elements in their didactic works—whether they wished to do so, or felt obligated to include them as a traditional trope, despite disapproving of them or doubting their efficacy. Nicander, the subject of the next chapter, appears to be an example of the former.

Returning to Theophrastus and his pharmaceutical-didactic prose, the influence that Homer and Hesiod exert on the *Inquiry* is strong, as the latter's many citations of both poets attests. Theophrastus' stance on myth, that it grows from a seed of truth, and his inclusion of various myths and charms in his work, further demonstrates his willingness to follow their example, though he generally falls into the camp of skepticism regarding magic. But regardless of his intentions, when Theophrastus, in turn, became a venerated didactic authority cited by many successors, he simultaneously became an important link in the chain of the transmission of magic in pharmaceutical literature.

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<sup>52</sup> Or curses, in Circe's case.



## CHAPTER TWO

### **Apotropaic Remedy in Nicander's *Theriaka* and *Alexipharmaka***

While Theophrastus and Pliny the Elder approach magic with skepticism, Nicander's approach is far less cautious. The self-styled "Homeric" poet's work is imbued with magical and religious undertones in its subject matter, its remedies and warding charms, its vocabulary, and its emulation of Homer in myth and magic. Poetry itself has a certain inherent magic, as speech that sets itself apart from daily life,<sup>1</sup> as does music, though sung poetry was not the rule by the Hellenistic period. Nicander, as he expounds charms and remedies in meter, manipulates the metapoetic implications of the song-as-remedy.

Magic and religion intersect in Nicander's poetry, most notably in allusions to the cult of Apollo, who was the patron god of Claros, Nicander's home.<sup>2</sup> Nicander's dedication to Apollo is apparent in the extant fragment of his *Ophiaka*, which describes the god's banishment of snakes from Claros.<sup>3</sup> The *Alexipharmaka* and *Theriaka*, too, are Apollonian in nature, with remedies and serpents as their subjects, composed in the oracle's meter, the hexameter. Apollo is often invoked in apotropaic spells and phylacteries,<sup>4</sup> and both the *Alexipharmaka* and *Theriaka* have an inherent warding function, I will argue, because they protect their audience from illness, venom, and poison. Nicander's work is partly religious, partly magical, partly poetic virtuosity.

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<sup>1</sup> The same category as Graf's "reversal" ritual (1997)—defined as a spell in a foreign language, rather than the vernacular—applies to poetry, as language set apart from quotidian speech by the constraints of meter and vocabulary.

<sup>2</sup> Potter (2015).

<sup>3</sup> Fragment 31 (Gow & Scholfield), discussed below.

<sup>4</sup> For amulets invoking solar deities, see Gager (1992).

Unlike Theophrastus and Pliny, Nicander does not grapple with the truthfulness of his remedies. They are presented with unadulterated confidence, as if there is no place for hesitation in the poetic domain; yet Nicander invokes no Muse but himself. Since Nicander does not self-consciously draw a line between the supernatural and the scientific, this chapter will focus directly on the transmission of magical remedies in his corpus, and its interplay with didactic, epic, and bucolic poetry, on the one hand, and magical practice, on the other.

### **Nicander of Colophon: Life and Works**

The most difficult limitation for any scholarship on Nicander is our lack of contemporary evidence about him; his dates, as proposed by scholars, range from the third to second century BCE. This lack of consensus stems from contradictions in the existing (late) information found in various *vitae Nicandri* and the scholia.

Furthermore, the authorship of the wide range of works attributed to Nicander is uncertain. Their subject matter, which includes topics from beekeeping to poison to history, has troubled scholars with its breadth and diversity. Pasquali (1913), followed by other scholars,<sup>5</sup> has suggested that there may have been two poets named Nicander, likely related. If this were the case, the elder would have lived in the mid-third century BCE, and written the historical poetry for which we only have titles (including a *Europia*, *Thebaica*, *Sicelia*, *Aitolica*, *Cimmerioi*, and *Colophoniaca*). The younger would then have written the remaining works (*Theriaka*, *Alexipharmaka*, *Georgika*, *Heteroeumena*, *Ophiaka* and *Melissurgika*) during the second century BCE.

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<sup>5</sup>Fornaro (1999); Fantuzzi (2000); for an overview of the two-Nicander theory see also Overduin (2015, 9).

If, on the other hand, there is one Nicander, his dates could range from the third century to the second century BCE.<sup>6</sup> Internal evidence in the form of allusions in Nicander's poetry indicates that he wrote at some point after Aratus, Apollonius and Callimachus. Since I do not see sufficiently concrete evidence to support the two-Nicander theory over the one Nicander in ancient sources, and I do not find the wide range of works attributed to him problematic for a Hellenistic poet, I will proceed with the assumption that there was one Nicander; or rather that, if there were two, only one was a famous poet.

Little is known about Nicander's life. The clearest internal evidence about his profession and birthplace comes to light in the *Alexipharmaka*, where he refers to himself as a *hymnopolos*, or hymn-wright, (A. 629) who comes from Claros, by the tripods of Apollo (A. 9-11). The latter has inspired the theory that Nicander was a priest of Apollo,<sup>7</sup> corroborated by the aforementioned *Ophiaka* fragment that relates the story of Apollo banishing the snakes and other poisonous creatures from his shrine. (The unusual choice of the word *hymnopolos* might also support this theory, since a *hymnos* was usually composed in praise of a god or hero.)<sup>8</sup>

The evidence from antiquity regarding Nicander's profession is mixed. On the one hand, Cicero's comment that Nicander, though he is *ab agro remotissimum*, skillfully writes rustic poetry,<sup>9</sup> suggests that Nicander's interest in pharmacology was more a

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<sup>6</sup> See Gow & Scholfield (1953, 4-8); Overduin, 10-11.

<sup>7</sup> As early as Dionysius of Phaselis' extrapolations in the scholia on the *Theriaka* (*Vita Nicandri* A).

<sup>8</sup> See Overduin, 5.

<sup>9</sup> *Etenim si constat inter doctos, hominem ignarum astrologiae ornatissimis atque optimis versibus Aratum de caelo stellisque dixisse; si de rebus rusticis hominem ab agro remotissimum Nicandrum Colophonium poetica quadam facultate, non rustica, scripsisse praeclare, quid est cur non orator de rebus eis eloquentissime dicat, quas ad certam causam tempusque cognorit? De Oratore* 1.69

poetic coup than practical—and that the *Alexipharmaka* and *Theriaka* are two pieces out of a range of “rustic” works for which he was known in Cicero’s day, including his *Georgika*, *Melissurgika*, and *Ophiaka*.<sup>10</sup> On the other hand, an anonymous poem in the *Greek Anthology* suggests that he was highly respected for his medical knowledge, and Pliny often quotes him on toxicology.<sup>11</sup> His reception in Apuleius suggests that he was known for poisons and potentially, to the general public, magic.<sup>12</sup>

The prevailing trend in Nicandrian scholarship is to approach the *Theriaka* and *Alexipharmaka* as strictly literary texts. Effe (1977) argues that Nicander’s subject matter is nothing more than a vehicle for the poet’s art; Crugnola (1971) concentrates on Nicander’s Homeric language, and Magnelli (2006) and Wilson (2018) on his intertextuality, especially when it manifests as snake allusions. Overduin (2015) argues that the *Theriaka* should be read as art, and not “the result of a doctor venturing on poetry,” and Toohey (1996) focuses on the literariness and ironic playfulness of Nicander’s language. Spatafora (2005) admires the aesthetic beauty of his passages about nature, and Sistakou (2012) discusses Nicander’s skillful depiction of horror.

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<sup>10</sup> This could be evidence for the two-Nicander theory, but it could also simply be the case that Nicander was mainly famous for his bucolic works, or that his more conventional poems would not make a suitable example for Cicero’s purposes.

<sup>11</sup> *Greek Anthology* 9. 211. The date and name of this epigram’s author are unknown. Nevertheless, Nicander’s association with the most famous medics of antiquity suggests that medicine was an important part of his reception.

Smith (1873): “[Nicander’s] works are frequently quoted by Pliny *Plin. Nat.* 20.13, 96, 22.15, 32, 26.66, 30.25, 32.22, 36.25, 37.11, 28), Galen de Hippocr. et Plat. Decr. 2.8, vol. v. p. 275, de Locis Affect. 2.5, vol. viii. p. 133, de Simpl. Aledicam. Temper. ac Facult. 9.2.10, 10.2.16, vol. xii. pp. 204, 289, de Ther. ad Pis. cc. 9, 13, vol. xiv. pp. 239, 265, Comment. in Hippocr. " De Artic." 3.38, vol. xviii. pt. i. p. 537), Athenaeus (pp. 66, 312, 366, 649, &c.), and other ancient writers; and Dioscorides, Aetius, and other medical authors have made frequent use of his works.”

<sup>12</sup> The Apuleius passage in question is discussed below.

Jacques (2002), however, argues in his recent edition that Nicander should be viewed equally as a poet and a doctor, and notes that poison was a very real danger in antiquity, in which he is followed by Clauss (2006).<sup>13</sup> To this point I would add that magic that was based on herbs or other *materia*, and often conflated with poisoning, was also an omnipresent concern in the ancient world. Nicander's poetic topics, which may seem, from a modern perspective, of little interest outside of the history of toxicology, zoology, botany, and pharmacy, have far different connotations in a world where one must protect oneself from hostile *pharmaka* and *veneficium*.

Of all the poems attributed to Nicander, only the *Theriaka* and the *Alexipharmaka* are fully extant. They are accompanied by a series of fragments; the most substantial among these belong to Nicander's *Georgika*. Both the *Theriaka* and *Alexipharmaka* are written in dactylic hexameter. The *Theriaka* is 958-line poem whose subject is the identification and banishment of venomous animals, and the treatment of their bites or stings. The majority of these *theriaka* are snakes, though some amphibians and arachnids are also mentioned. The *Alexipharmaka* is shorter, at 630 lines, and details the antidotes for, and protections against, poisonous substances. These substances are primarily, but not entirely, plant-based.

There are extant scholia on both the *Theriaka* and *Alexipharmaka*. Nicander's own sources may include Apollodorus of Alexandria (fragmentary, found in the scholia on Nicander, Pliny, Aelian and Athenaeus), Aristotle (for spiders), Theophrastus (for plants

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<sup>13</sup> In this summary of Nicandrian scholarship I am indebted to Overduin (2-3).

and animals), Numenius' *Theriaka* (for recipes), the *Rhizotomikon* of Diocles of Carystus, and the *Therapeiai* of Praxagoras of Cos (Overduin 7).<sup>14</sup>

Since it is impossible to confirm Nicander's profession with so little evidence, his reception, which will be discussed at the end of this chapter, may provide a more fruitful avenue of inquiry. I will, however, consider some biographical information as I highlight the strong Apollonian themes in Nicander's extant poems and fragments. Whether or not Nicander was a priest, one can see the influence of Apollo's cult in his works.

I would also like to note that two poems about medicine, out of such a broad range of poetic topics, do not necessarily make Nicander a doctor, any more than the *Georgika* and *Melissurgika* necessarily make him a farmer or a beekeeper; and the people who had the time and leisure to write elaborate hexameter poetry were often not synonymous with the people doing the actual labor those topics entailed. We can only say with certainty that Nicander was a poet.<sup>15</sup>

### *Non-Apollonian Magic*

I have observed two broad categories of magical influences in Nicander: those which are not directly connected to Apollo, like Theocritean witchcraft, and those which are strongly Apollonian in nature, like the Getty tablet's warding charms. *Pharmaka*, the

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<sup>14</sup> The theory that Apollodorus was Nicander's main source was established by O. Schneider (1856), but has since been contested by Knoefel & Covi (1991), Touwaide (1991), and Jacques (2002).

<sup>15</sup> The topic of poison and magic would indeed be extremely relevant to a poet in the court of a paranoid (perhaps rightly so) ruler. Indeed, Nicander has been associated with Attalids of Pergamon on account of the so-called "Hymn to Attalus" preserved in the scholia on the *Theriaka* (fr. 104 Gow & Scholfield). For the question of which Attalus the fragment is addressing, see Gow & Scholfield, 6. Jacques (2002) further suggests that Nicander was a θηριακός, a specialist in poison, connected to the court at Pergamon.

subject of the *Alexipharmaka*, fall under both categories, together with *rhizotomia*, whereas serpents, the subject of the *Theriaka*, are most relevant to Apollo's cult.

### ***Pharmaka*, Fire, and Theocritean (Literary) Witchcraft**

*Pharmaka*, herbs with magical, medical, and poisonous properties, are a good place to begin, since they are integral to both the *Alexipharmaka* and the *Theriaka*. Their status as *materia magica* is both literary and practical, and at least as old as Homeric epic, which showcases the infamous witch Circe, dubbed πολυφάρμακος.<sup>16</sup> In practical magic, they represent a large number of spell ingredients in the *Papyri Graecae Magicae*, and are a source of power and livelihood for the *rhizotomoi*. In Nicander's poetry, they are prescribed in remedies either on their own or combined with snake body parts (and sometimes other animal- or mineral-based ingredients, such as deer marrow or sulphur).

In the previous chapter, I analyzed the traces of magical uses for herbs in Theophrastus, preserved (intentionally or not) in Theophrastus' herb lore and in his reported "superstitions" of the *rhizotomoi*. Theophrastus was, of course, one of Nicander's sources, but I would like to turn to a more poetic source, the *Idylls* of Theocritus. As the founder of the pastoral poetic genre, and a Hellenistic poet, Theocritus was likely one of Nicander's influences in the writing of, as Cicero put it, rustic poetry. *Pharmaka* are explicitly associated with witchcraft in Theocritus' *Idyll 2*, which depicts the performance of a love spell.<sup>17</sup> I will aim to demonstrate that some of Theocritus'

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<sup>16</sup> Odyssey 10.276

<sup>17</sup> Though *Idyll 2* is now considered an urban mime, not bucolic (see Burton 1995), Nicander, in the *Theriaka* and *Alexipharmaka*, seems to have displaced the (magical) dangers of Theocritus' town into the bucolic sphere. In a similar vein, Toohey calls Nicander's poetry "a rural fantasy for Hellenistic urbanites" (242).

language on magic, and conception of witchcraft, as depicted in his second *Idyll*, is replicated in the *Alexipharmaka* and *Theriaka*.<sup>18</sup>

The literary archetype of the witch, and the ingredients that a stereotypical witch would use, are a good starting point. At *Idyll* 2.15-16, the witch Simaetha calls upon Hecate to make her spell powerful, like those of famous witches:<sup>19</sup>

φάρμακα ταῦτ' ἔρδοισα χερείονα μήτέ τι Κίρκης  
μήτέ τι Μηδείας μήτε ξανθᾶς Περιμήδας.

Making these *pharmaka* weaker neither than any of Circe  
nor of Medea<sup>20</sup> nor of golden-haired Perimede.<sup>21</sup>

Medea, as the granddaughter of the god Helios, the niece of the witch Circe, and a powerful sorceress in her own right, embodies the confluence of magic and myth, and is the ultimate user of *pharmaka*.<sup>22</sup> Nicander not only mentions Medea; he claims to know the cure to her *pharmakon*, “the hateful fire of Colchian Medea, that one should designate ‘autumn crocus’...” (*Alexipharmaka* 249).<sup>23</sup> Nicander recommends as remedies, among other things, oak leaves and milk, but most interestingly, “the giant fennel,<sup>24</sup> which took upon itself the fraud of Prometheus’ theft”—that is, fire (*Al.* 272-3). Since there is such a

<sup>18</sup> For parallels between Hellenistic hexametric binding spells and *Idyll* 2, see Faraone (1995).

<sup>19</sup> Translations are my own unless otherwise noted.

<sup>20</sup> Medea’s role in Nicander’s work will be discussed in greater detail below.

<sup>21</sup> According to the scholia on *Idyll* 2, she is the same person as Homer’s Agamede, a woman with knowledge of all the *pharmaka* that the wide earth grows (*Iliad* 11.740-741). She is also called Perimede by Propertius (*Elegies* 2.4).

<sup>22</sup> She also has some connection to snakes, as when she departs Colchis in a chariot drawn by winged serpents at the end of Euripides’ *Medea*.

<sup>23</sup> ... τὸ Μηδείης Κολχηίδος ἐχθόμενον πῦρ/κεϊνὸ τις ἐνδέξεται ἐφήμερον...

*Colchicum autumnale*, also known as meadow-saffron, though it is neither a crocus nor saffron. It is highly poisonous due to the level of colchicine it contains. Interestingly, but perhaps coincidentally, Nicander compares its symptoms to another magical plant, the squill, which “reddens” (inflames) the skin—another connection with fire.

<sup>24</sup> *Ferula communis*



strong correlation between Medea's crocus and fire, there is a sympathetic logic in the use of the fennel-stem, which stole fire, to remove the burning symptoms of the poison.<sup>25</sup>

Another connection between magic, *pharmaka*, and fire appears in Nicander's description of the salamander, a creature that is both magical itself and a spell ingredient. At *Theriaka* 818, Nicander states that he has knowledge of this creature, and that one should avoid "the salamander, a treacherous beast, ever hateful, which even, making its way through an unquenchable flame, darts out untasting [of the fire] and without pain; the unquenchable blaze does not harm its wrinkled skin and the ends of its limbs at all."<sup>26</sup> The salamander's resistance to flame, as it appears, was considered a magical property, its own natural *alexipharmakon*.<sup>27</sup> At the same time, its body contained a terrible poison. According to Nicander, if one suffers from the *πότος δυσάλυκτος*, "hard to cure drink," of the salamander, symptoms include inflammation of the tongue, chills, trembling of the joints, livid welts, and lack of mental lucidity (Alex. 537-41).<sup>28</sup>

Nicander directly links the salamander to witchcraft in the *Alexipharmaka* (537ff), calling it the "sorceress' lizard," or *φαρμακίδος σαύρη*, "which the smoky flame of fire does not mutilate." The *φαρμακίς*, the feminine form of *φαρμακεύς*, poisoner/sorcerer, and the figure Nicander associates with the salamander, is a type of magician or witch

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<sup>25</sup> Colchicine poisoning can, in fact, cause a burning sensation and fever.

<sup>26</sup> *σαλαμάνδρα*, ἡ, A. salamander, *S. vulgaris*, a kind of newt, supposed to be a fire-extinguisher, Arist.HA552b16, Thphr.Ign.60, Sign.15, Dsc.2.62, Ael.NA2.31, Philum.Ven.34. (*LSJ*).

<sup>27</sup> According to Pliny the Elder, Magi believe that the salamander is the only animal that extinguishes fire, though he disputes this fact himself, on the basis that, if it were true, it would already be known in Rome (*NH* 29.23).

<sup>28</sup> One of Nicander's suggested remedies includes the boiled limbs of a mountain tortoise, "which gracious Hermes made voiced, though voiceless" (Alex. 559-61). The mention of Hermes may point back to the god's role in the *Odyssey*, when he told Odysseus of the magical plant moly, which had the power to protect him from Circe's potion.

who works with herbs, perhaps similar in some ways to a *rhizotomos*, or a sorceress like Circe, whose epithet in the *Odyssey* is πολυφάρμακος.

LSJ suggests that φαρμακίς is an adjective meaning *poisonous* or *venomous* only at *Alexipharmaka* 538, translating φαρμακίδος σαύρης as “of the poisonous lizard” rather than “of the poisoner/sorceress’ lizard.”<sup>29</sup> However, in the context of a passage explaining the remedy for a potion, likely prepared by a poisoner/sorceress—given that one generally does not accidentally drink a deadly brew of salamanders, and it’s doubtful that they are a threat outside of the danger posed by maleficent humans—proposing an alternate adjectival form seems unnecessary. The opening lines of the *Alexipharmaka*, in which Nicander claims that he can easily tell the addressee, one Protagoras, protections against poisoned/charmed drinks (ποσίεσσιν ἀλέξια φαρμακοέσσαις) further indicate that the poet is concerned with deliberate human machinations when he offers these remedies (*Alex.* 4).

That the word φαρμακίς is feminine here is unsurprising, given the (largely inaccurate) literary stereotypes of the female poisoner/witch.<sup>30</sup> In the *Suida*, Medea herself is called φαρμακιστόταται γυναικῶν, “the most sorcerous of women.”<sup>31</sup> Although Nicander does not directly connect Medea and the salamander, it seems likely that she qualifies as a φαρμακίς, and might be thought of as using salamanders in her potions; additionally, Medea and the salamander share a common element, fire.

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<sup>29</sup> Φαρμακίς, ἴδος, fem. of φαρμακεύς, *A.sorceress, witch*, D.25.79, Arist.HA577a13, A. R.4.53:— as Adj., “γυνή φ.” Ar.Nu.749; irreg. Sup., “φαρμακιστόταται γυναικῶν” J.AJ17.4.1, cf. Suid. s.v. Μήδεια. Π. fem. Adj., *poisonous, venomous*, “σαύρα” Nic.Al.538. (*LSJ*).

<sup>30</sup> For this disparity, see Graf (1997, Ch. 6).

<sup>31</sup> Cf. Suid. s.v. Μήδεια.

Returning to Theocritus, the word *φαρμακεύς* is related to *φαρμακεύτρια*, used to mean “witch” in the second *Idyll*. The connection between herb-witch and lizard appears here as well, as does the witch’s affinity for fire. The *σαύρα* in question appears in Theocritus’ *Idyll* 2.58 as an ingredient in a love potion:<sup>32</sup>

σαύραν τοι τρίψασα ποτὸν κακὸν αὔριον οἰσῶ.

Having ground down a lizard, I will bring you an evil draft tomorrow.

If the salamander is the lizard of the *φαρμακίς*, it follows that it may also be the lizard of the *φαρμακεύτρια*; and if Theocritus’ *σαύρα* is in fact a salamander, this supports the theory that the salamander was a stereotypical ingredient for magical concoctions. It does not seem unlikely that a creature with apparently magical apotropaic properties would be used for magical purposes.

The *πότος κακός* of Theocritus in some ways resembles one of Nicander’s recipes: specifically, a charm against ruin.<sup>33</sup> After the potion-maker has thrown mating snakes, taken from the crossroads, into a cauldron, and gathered other ingredients, the recipe calls for them to be ground with a pestle and stirred together with the serpents (*Theriaka* 108-110). The pestle and the reptilian ingredient are common elements of Simaetha’s potion and Nicander’s warding charm, despite their very different purposes.

The association of fire with witchcraft, and the principle of sympathetic magic, are also prominent in *Idyll* 2.<sup>34</sup> They are present in the caster, the victim, and the

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<sup>32</sup> For the Roman conflation of magic, love potions, and poison in the word *veneficium*, see Chapter 3.

<sup>33</sup> Discussed in greater detail below, in the section on snakes.

<sup>34</sup> For fire magic in *Idyll* 2, see Cholmeley (1901).

ingredients alike, most notably at lines 23, 28, and 33, as the witch Simaetha incants her spell:

Δέλφις ἔμ' ἀνίασεν: ἐγὼ δ' ἐπὶ Δέλφιδι δάφναν  
αἶθω: χῶς αὐτὰ λακεῖ μέγα καπυρίσασα  
κῆξαπίνας ἄφθη, κούδὲ σποδὸν εἶδομεν αὐτᾶς,  
οὔτω τοι καὶ Δέλφις ἐνὶ φλογὶ σάρκ' ἀμαθῦνοι.

Delphis has tormented me: but I kindle against Delphis  
bay laurel: and as it crackles, utterly enflamed,  
and suddenly is consumed, and we see not even its ashes,  
so too may Delphis' flesh be reduced to dust in fire. (2.23)

At 23, there are three elements in sympathy: Simaetha, the witch, burns with unfulfilled desire for Delphis; the bay laurel in her spell burns with actual fire; and her spell attempts to transfer this burning to Delphis, transmuted into an answering desire, or annihilation. Perhaps this concept, in addition to the physical symptoms, is what Nicander implies when he describes Medea's *pharmakon* as "hateful fire."

At 28ff, Simaetha uses a similar technique with a wax image, followed by another burnt offering:

ὡς τοῦτον τὸν κηρὸν ἐγὼ σὺν δαίμονι τάκω,  
ὡς τάκοιθ' ὑπ' ἔρωτος ὁ Μύνδιος ἀντίκα Δέλφις.  
χῶς δινεῖθ' ὄδε ρόμβος ὁ χάλκεος ἐξ Ἀφροδίτας,  
ὡς τῆνος δινόϊτο ποθ' ἀμετέραισι θύραισιν.

[...]

νῦν θυσῶ τὰ πίτυρα. τὸ δ' Ἄρτεμι καὶ τὸν ἐν Ἄϊδα  
κινήσαις ἀδάμαντα καὶ εἴ τί περ ἀσφαλὲς ἄλλο.  
Θεστυλί, ταὶ κύνες ἄμμιν ἀνὰ πτόλιν ὠρύνονται.  
ἀ θεὸς ἐν τριόδοισι: τὸ χαλκίον ὡς τάχος ἄχει.

As this wax [figure] I melt with the goddess [Hecate],  
So may he melt under the power of Eros, immediately, Mydian Delphis.  
And as this brazen wheel is turned by Aphrodite,  
So may he turn to my doors.

[...]

Now I will burn the bran. And you, o Artemis, may move even

the adamant in Hades, and anything else, however immovable.  
 Thestylis, the dogs are howling for us through the city.  
 The goddess is at the crossroads: sound the cymbal.

The melting wax represents Delphis submitting to Eros, and the turning wheel stands for Delphis turning to Simaetha's dwelling. Simaetha invokes the aid of Hecate and Aphrodite, and finally, Artemis. She asks that the goddess move the immovable, that is, by implication, Delphis' affections: another example of sympathy.

As befits a spell that invokes Hecate, who presides over crossroads (as her epithet, τριοδίτις, implies), that is where Simaetha performs her ritual. Hecate is not mentioned by name in Nicander's works, but the poet uses the same epithet Theocritus gives her at *Idyll* 2.14, δασπλητίς (frightful), to describe two serpents: δασπλητε δράκοντε (Th. 609). This adjective also is used of an Erinys at *Odyssey* 15.234. It seems possible that Nicander is alluding to both Theocritus and Homer, simultaneously linking the snakes to two frightening chthonic beings. To add another layer of mythic allusion, the snakes themselves, in the context of the passage, are actually Cadmus and Harmonia, who were metamorphosed into serpents. The irises growing by the river Naron, within their pasturage, are one of the ingredients Nicander recommends for warding off snakes.

Another element in Nicander that evokes Hecate is, again, his remedy against ruin at *Th.*98-100, which calls for snakes taken from the crossroads:

Εἴ γε μὲν ἐκ τριόδοιο μεμιγμένα κνώδαλα χύτρω  
 ζῶα νέον θορνόντα καὶ ἐν **θρόνα** τοιάδε βάλλης,  
 δήεις οὐλομένησιν ἀλεξήτηριον ἄταις...

If you throw mating wild snakes from a crossroads into a clay pot,  
 Alive, freshly mounting, and such [*throna*] in it,  
 you will find a protective charm [*alexētērion*] against accursed ruin...

Added to the semantic weight of the crossroads as signifier of a magical ritual is the word *θρόνα*, which Nicander uses in several places in his work, though it is a rare term in general. *Θρόνον* means either “flowers embroidered on cloth” or “herbs used as drugs and charms.”<sup>35</sup> Clearly, in this context the meaning is not embroidery.<sup>36</sup> The word again parallels Theocritus’ *Idyll 2*, which uses *θρόνα* at line 59:

Θεστυλί, νῦν δὲ λαβοῖσα τὸ **τὰ θρόνα** ταῦθ’ ὑπόμαζον  
τᾶς τήνω φλιᾶς καθ’ ὑπέρτερον, ἃς ἔτι καὶ νύξ,  
καὶ λέγ’ ἐπιφθύζουσα: ‘τὰ Δέλφιδος ὅστια μᾶσσω.’

But now you, Thestylis, taking these [*throna*], smear them across the top of his doorposts, while it is still night, and spitting, say: “I smear these, the bones of Delphis.”

Here Simaetha directs her assistant, Thestylis, to smear the ashes of her spell, which is a cross between a love potion and a burnt offering. The theme of fire returns once more as she says in line 3 φίλον καταθύσομαι ἄνδρα, “I will incinerate my dear man [as a sacrificial offering].” As previously noted, the burning *θρόνα* represent Delphis in this violently coercive spell.

In Nicander’s crossroads remedy, however, the word *θρόνα* seems to refer to the magical ingredients themselves, thrown into a cauldron and boiled, not burned; therefore, as far as he is concerned, this term is not restricted to the ashes of a burnt concoction. At *Theriaka* 493-4, Nicander writes:

<sup>35</sup> *Θρόνον*, τό, only in pl. *θρόνα*, A. *flowers embroidered on cloth*, “ἐν δὲ θρόνα ποικύλ’ ἔπασσε” *Il.*22.441, cf. *Sch.Theoc.*2.59, and v. *τρόνα*. II. *herbs used as drugs and charms*, *Theoc.*2.59, *Nic.Th.*493,936, *Lyc.* 674, *Aglaias* 7; used in sacrificial offering, *UPZ96.4* (ii B.C.). (*LSJ*).

<sup>36</sup> I wonder if there is a semantic connection between the two very different seeming definitions, in that they are both related to magic performed by women, since weaving is also represented as a quasi-magical act when performed by figures like Helen and Circe in Homer. Petropoulos (1993, 53) suggests that the epithet *poikilothronos* in Sappho 1.1 evokes *throna*, in the sense of magical herbs or flowers; Nagy (1996) associates the term with weaving, rendering it “with varied pattern-woven flowers” in his translation.

Τῶν μὲν ἐγὼ θρόνα πάντα καὶ ἀλθεστήρια νούσων  
 φύλλα τε ῥιζοτόμον τε διείσομαι ἀνδράσιν ὥρην...

I will explain to men all the [*throna*] and remedies for these illnesses,  
 the plants, the root-cutting, and [its] time...<sup>37</sup>

In these lines, the θρόνα apparently are the plants and roots (which, as discussed in the previous chapter, must be cut at a specific time, for botanical and ritual reasons).

Elements of Theocritus' literary magic, including the association of malevolent magic with fire, the salamander, the crossroads as a magical site, the rare term θρόνα, and the sympathy between the ingredients and the effects of the charm or remedy, are scattered through the *Theriaka* and *Alexipharmaka*. And yet, despite the similarities between Theocritus' witchcraft and Nicander's, there is one major aspect of Simaetha's spell that Nicander's instructions lack, and that is its repeated incantations—unless the *Alexipharmaka* and *Theriaka* can be taken themselves, metapoetically, as hexameter incantations. I will discuss this possibility below, in the section on the Getty Hexameters.

What are we to take from these parallels? Is there a larger picture, or is Nicander alluding to Theocritus, as he does with other poets? I suggest that these allusions, if that is what they are, beyond their immediate poetic wink to the learned reader, double as an assertion of Nicander's authority on magical topics. As such, he is truly able to teach the reader every type of remedy against poison or venom, and every kind of ward against dangerous beasts or magical ruin.

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<sup>37</sup> Another interesting word in this couplet is ἀλθεστήρια, which appears only in this instance and is defined as “remedies.”

It may appear to be stating the obvious, to argue that Nicander is influenced by the literary magic of his predecessors,<sup>38</sup> yet, as with Theophrastus, few scholars<sup>39</sup> have viewed Nicander's corpus from this angle—preferring either a literary-stylistic or allusive approach, or a purely scientific medicinal/chemical approach—much less embarked on an intensive study.

An approach to Nicander's works devoid of magical context, however, will render an incomplete image. For example, *LSJ* removed the figure of the φαρμακίς from the *Alexipharmaka* in favor of suggesting a unique adjectival form meaning “poisonous” for that line alone, most likely based on the assumption that Nicander must be describing a poisonous lizard, not a witch's lizard. In the context of the salamander's magical properties and association with witchcraft, however, the usual meaning of φαρμακίς is perfectly logical. In this way, if magical tradition is overlooked, interpretations of Nicander and other pharmaceutical authors risk distortion.

### **Literary Magic: Homeric Nicander**

In light of Nicander's strong self-alignment with Homer, it will be helpful to examine his reception of the *Odyssey* in the context of magic. Many scholars have noted how Nicander uses epic vocabulary, seriously or playfully, to accomplish his poetic goals.<sup>40</sup> I suggest that he has emulated his epic predecessors not only in words but also in

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<sup>38</sup> It should be noted that, though I have used the categories of literary and non-literary magic for the sake of organization, it is doubtful that Nicander himself would have made any such distinction, due to the syncretic nature of ancient magic.

<sup>39</sup> One exception is Scarborough (1991), though he only briefly mentions Nicander, focusing more on Book 9 of Theophrastus' *HP*.

<sup>40</sup> For Homeric vocabulary, see especially Crugnola (1971). For Nicander's “ironically” playful language, see Toohey (1996).



the tradition of supernatural incidents (for which the poets were derided by prose historians like Thucydides).<sup>41</sup>

Homeric magic is most noticeable in several character's use of *pharmaka*, though this is not the only type present; Odysseus uses a spoken charm and arguably performs necromancy,<sup>42</sup> while Circe's magic is comprised of several elements besides the *pharmaka* themselves.<sup>43</sup> Most famously, in the *Odyssey*, Hermes teaches Odysseus to protect himself from the Circe's magic with the plant moly.<sup>44</sup> As a plant which is used as a remedy for hostile magic, moly can certainly qualify as an *alexipharmakon* in this case.<sup>45</sup> When Circe transforms the swine back into men, she does so with φάρμακον ἄλλο, another *pharmakon* (*Odyssey* 10.392). Afterwards, the porcine traits caused by the φάρμακον οὐλόμενον (accursed *pharmakon*) fall away (10.394).

In Nicander's crossroads snake charm, the "accursed ruin" warded off is also called *oulomenē*; perhaps Nicander subtly implies that he is not only able to repel Medea's magic, but even Circe's. (Or, perhaps, the ruinous venom of snakes is so terrible that it is likened to an adjective describing, at various points in Homer, the rage of Achilles, Clytemnestra, from her murdered husband's perspective, and Circe's *pharmakon*.)<sup>46</sup> Parallel with the implication that one who has ingested a brew of salamanders has been deliberately poisoned/charmed by a φαρμακίς, it is possible that the

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<sup>41</sup> *History of the Peloponnesian War* 1.21.

<sup>42</sup> For necromancy and ghost evocation in the *Odyssey*, see Ogden (2002).

<sup>43</sup> Potentially including her wand (*rhabdos*), her singing, and her weaving.

<sup>44</sup> *Odyssey* 10.305

<sup>45</sup> As previously discussed, Theophrastus may even have agreed.

<sup>46</sup> *Iliad* 1.2, *Odyssey* 4.92, and *Odyssey* 10.394, respectively.

information that a remedy contains the magical ingredients called θρόνα, as the crossroads charm does, implies that it is counter-spell to malicious magical attacks.

The magical fumigation Odysseus performs at *Odyssey* 22.480 has parallels in Nicander's warding remedies as well. It is one of the subtler forms of Homeric magic, which would not necessarily register as such, unlike Circe's *pharmaka*.

“οἷσε θέειον, γρηϋ̃, κακῶν ἄκος, οἷσε δέ μοι πῦρ,  
ῥφρα θεειώσω μέγαρον:”

“Bring sulfur, old woman, remedy of evils, and bring me fire,  
so that I may fumigate the hall:”

Nicander includes sulfur among various ingredients to be burned in order to “drive out the hot, injurious doom of snakes” (*Th.* 35, 43). The latter is not only a potential allusion to the *Odyssey*, but also reminiscent of Simaetha's burning spell—this time as an antidote for evil, rather than the cause of it. Once again, the danger of the deadly reptile, like the salamander, is associated with heat.

As is so often the case, the practical nature of the act of fumigation is inextricable from its magical connotations—much as the quite real and dangerous symptoms of the toxic autumn crocus are conceptualized by Nicander as the hateful burning magic of Medea, which might be cured by the fire-storing fennel of Prometheus. There is little doubt that Nicander takes advantage of this intersection of myth, magic, and practicality for poetic effect; but this does not mean that he does not believe it practical to defend oneself from hostile charms as well.

Another important Homeric figure who appears in the *Theriaka* is Helen, who, of course, famously uses *pharmaka* to soothe the sorrows of the survivors of the Trojan

War.<sup>47</sup> This episode, and the lines that mention the knowledge of *pharmaka* she learned in Egypt,<sup>48</sup> imply that she, like Circe, is πολυφάρμακος. Nicander's anecdote about Helen in the *Theriaka*<sup>49</sup> portrays her as a frightening and perhaps divine or semidivine figure. Nicander refers to her as "Dread Helen" (Αινελένη) at *Theriaka* 310. In this episode, Helen, having stopped by the Nile on the way back from Troy, angrily steps on a snake that struck and poisoned her helmsman Canobus. When she steps on the serpent in anger and breaks its spine, she does not just injure one snake, but two entire species—the Blood-flowing snake and the Cerastes—so that they move in a crooked path, giving her act etiological power.

Though Helen is not using *pharmaka* in this scene, they are ever in the background, since she is in Egypt, where, according to the *Odyssey*, she learned about *pharmaka*; and, like Apollo, she is a divine figure who banishes dangerous snakes—with equal violence.

Dread Helen seems to stand somewhere between Apollo, the warder of snakes, and Circe, the πολυφάρμακος—ambiguous as ever. This may be why Nicander mentions this mythological incident outside of the context of remedies (it is part of the description of the Blood-flowing snake); she is simply too dangerous to invoke for aid. Regardless, these Homeric echoes show that Nicander imitated the supernatural nature of the *Odyssey* along with its vocabulary.

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<sup>47</sup> *Odyssey* 4.219ff.

<sup>48</sup> *Odyssey* 4.227ff.

<sup>49</sup> *Theriaka* 309-319.

### Practical Magic: Nicander and *Rhizotomia*

Is Nicander’s transmission of magic purely literary? I would argue that it is not, and much like Theophrastus’ work, includes elements of magical practice, particularly *rhizotomia*. We have seen that *pharmaka* appear in “scientific” didactic in arguably magical contexts, and as spell ingredients in the *PGM*; in both cases, they should be acquired with caution and invocation of divine aid. The time and circumstances involved with acquiring a plant for medicinal/magical purposes are clearly crucial to the user’s success.

Nicander does not directly mention the *rhizotomoi* or their traditions as reported by Theophrastus, but he does refer to ῥιζοτόμον τε...ῶρη, the “root-cutting...and [its] time.” Theophrastus’ *rhizotomoi* are similarly concerned with the correct time to acquire plants, as is the plant-picking spell from the *Papyri Graecae Magicae*.

Τῶν μὲν ἐγὼ **θρόνα** πάντα καὶ **ἀλθεστήρια** νόσων  
 φύλλα τε **ῥιζοτόμον** τε διείσομαι ἀνδράσιν **ῶρην**,  
 πάντα διαμπερέως καὶ ἀπηλεγές, οἷσιν ἀρήγων  
 ἀλθήση νόσοιο κατασπέρχουσιν ἀνίην.

I will explain to men all the charms and remedies for these illnesses,  
 the plants, the root-cutting, and [its] time,  
 entirely deeply and carefully—[those] with whose help  
 one may heal the urgent distress of sickness. (*Theriaka* 493-5).<sup>50</sup>

The correct time or season is, of course, a practical concern—certain plants are only in bloom, for instance, for a limited amount of time every year—yet this seems less practical and more ritual in the case of remedies which call for the roots or leaves of

<sup>50</sup> Could Nicander’s boasts be connected to the magical/poetic boasting tradition? He repeatedly claims that he can “easily” (ῥεῖα) ward off danger, and that he knows how to cure Medea’s sorcery, which seems similar to this trope. For boasting in magical verses, see Faraone & Obbink (2013, Ch. 3).

plants which are not in bloom, and probably available most of the year, especially in a mild Mediterranean climate.

Nicander goes on to instruct the reader to pick fresh-cut herbs “in a place where snakes feed in the dense forest” (*Theriaka* 499). Looking for herbs in a place where snakes congregate hardly sounds like a practical idea for someone trying to avoid or alleviate a snake bite! It does, however, point to magical/medical sympathy: the best place to find herbs to heal snake bites must be a place where snakes are wont to bite.<sup>51</sup>

The best remedy, according to Nicander, is the root of Chiron, that is, the all-heal. There are several plants called all-heal, associated with Asclepius, Hercules, and Chiron. Nicander calls it both “the healing root of Chiron” (*Th.* 500), and *panakeion*, “all-heal” (508).<sup>52</sup> With such strong supernatural associations and properties, perhaps the *panakeion* should be considered a *pharmakon*. It is, according to Nicander, a *rhizon*—of Chiron, no less—and therefore, collecting it presumably falls under the umbrella of *rhizotomia*. Theophrastus, further, seems to associate all-heal with moly, reporting the latter’s usage in *alexipharmaka* and *mageia* in the same paragraph (9.15.7).

In addition to these parallels, Nicander prescribes two of the plants Theophrastus’ *rhizotomoi* associate with dangerous birds, hellebore and peony, as a counter-remedy against ruin. A plant that is so assiduously guarded by a bird would likely be a *pharmakon* and/or θρόνον; and, as it turns out, Nicander does call these ingredients θρόνα in his recipe:

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<sup>51</sup> Also relevant to the ingredients from the pasturage of Cadmus and Harmonia.

<sup>52</sup> See Dioscorides 3.50, Galen 12.95.

Ὅφρα δὲ καὶ πάσησιν ἀλεξητήριον ἄταις  
 τευξάμενος πεπύθιοιο, τό τοι μέγα κρήγυον ἔσται  
 ἦμος ὅτε **θρόνα** πάντα μῆ ὑπὸ χειρὶ ταράξης...  
 ...σὺν δὲ τε ρίζεα χαῦνα νεωρυχέος γλυκυσίδης  
 κάρφεά τ' ἐλλεβόρου μελανόχροος, ἄμμιγα δ' ἀφρός  
 λίτρου...

And so that a defense against all disasters  
 you may learn to make, which will be greatly useful  
 when you stir all the [*throna*] together by hand...

[...]

...and with these also the spongy roots of fresh-dug peony  
 and stalks of black hellebore, and mixed-in native sodium  
 carbonite... (*Th.* 934-42).

Once again, the term *θρόνα* represents the ingredients, and the actual remedy or warding charm is called an *ἀλεξητήριον*. And like the crossroads snakes recipe, this is a remedy against a generic word for ruin, not a specific medical problem, lending further evidence to the theory that the “ruins” (*ἄταις*) might include malicious magical attacks as well as snake attacks.

The term *ἀλεξητήριον* also appears at *Th.* 714,<sup>53</sup> and in Theophrastus' *IP* 7.13.4, in the context of the squill plant protecting the home from ruin, or *δήλησις*.<sup>54</sup> The question of whether *δήλησις* refers to *magical* ruin arose in the previous chapter. In addition to the attested use of *δηλέομαι* to refer to magical harm in Theocritus, the magical term *θρόνα* describing the ingredients in the *Theriaka* warding charm suggests that this *ἀλεξητήριον* is a form of magic, presumably apotropaic in nature; and though

<sup>53</sup> Καὶ τάδε μὲν τ' ὀφίεσσιν ἀλεξητήρια δήεις.

And these you will find [are] wards against snakes.

<sup>54</sup> λέγεται δὲ καὶ πρὸ τῶν θυρῶν τῆς εἰσόδου φυτευθεῖσαν ἀλεξητήριον εἶναι τῆς ἐπιφερομένης δηλήσεως. And it is also said that, planted before the doors of the entrance, [squill] is a ward [*ἀλεξητήριον*] against impending ruin [*δήλησις*].

that does not necessarily mean that it is a counter-spell, it does point to a magical context for δήλησις here, and perhaps in the *IP* as well.<sup>55</sup>

But what practical reason might the poet have to transmit apotropaic charms? Nicander, in the programmatic opening of the *Theriaka*, offers his audience knowledge to protect themselves against unpredictable forces and creatures, through the didactic formula of the single addressee, Hermesianax. The knowledge he offers will, ostensibly, win Hermesianax respect from rural laborers who are at risk from venomous creatures' bites.

Easily, to be sure, of the forms and deadly harms of wild beasts  
Striking unforeseen, and the **counter-strengthening release from woe** [λύσιν  
ἔτεραλκεία κήδευς],  
Dear Hermesianax, most honored of many in-laws,  
I might soundly speak; and the hardworking plowman  
And cowherd would respect you and the mountain-worker, when in the wood  
Or even upon him as he plows, it flings its deadly bite,  
**Since you are knowledgeable about such charms against sicknesses**  
[ἀλεξητήρια νούσων]. (*Theriaka* 1-7)

The indirect recipient of Nicander's work, the woodsman or *oreitupos*, "mountain-worker," might be thought to desire protection against hostile *mageia*, as a laborer in the wilder areas where *pharmaka* would be acquired, and where sudden, unforeseen dangers abound—especially snakes and other biting beasts. All these belong to the "ruin" that Nicander's ἀλεξητήρια protect against.

Though the most prominent god in Nicander's poetry is Apollo, the agricultural setting of the *Theriaka* naturally evokes the goddess Demeter as well. Nicander duly

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<sup>55</sup> And, as demonstrated above, Nicander tends to use Theocritean terms for magic.

mentions Demeter, at *Th.* 483,<sup>56</sup> alluding to the grieving goddess' transformation of the rude boy Ascalabus into a gecko.<sup>57</sup> The charms against sickness and ruin found in the *Theriaka* and *Alexipharmaka* are also characteristic of the goddess, according to her *Homeric Hymn*. I suggest that she may even be using *rhizotomia* of a sort herself, when the bereaved goddess offers to care for the baby Demophon:

θρέψω κοῦ μιν, ἔολπα, κακοφραδίησι τιθήνης  
οὔτ' ἄρ' ἐπηλυσίη δηλήσεται οὔθ' ὑποταμνόν·  
οἶδα γὰρ ἀντίτομον μέγα φέρτερον ὑλοτόμοιο,  
οἶδα δ' ἐπηλυσίης πολυπήμονος ἐσθλὸν ἐρυσμόν.

I will raise him, and I do not expect that, by the poor understanding of his nurse,  
either bewitchment or undercutting<sup>58</sup> will harm<sup>59</sup> him:  
for I know a powerful counter-cutting, better than the [undercutter],  
and I know a good protection against harmful bewitchment.  
(*Homeric Hymn to Demeter* 227-30)

Though the text has ὑλοτόμοιο, “woodcutter,” at line 229, I suggest that ὑλοτόμοιο is a corruption of an otherwise unattested ὑποτόμοιο\*—a human who employs the ὑποτομεύς, an instrument that cuts plants at the base.<sup>60</sup> Thus, it would correspond to ὑποτάμνον in the previous line, just as ἐπηλυσίης corresponds to ἐπηλυσίη, fulfilling the formulaic ritual repetition more effectively than ὑλοτόμοιο.<sup>61</sup> The hypothetical ὑποτόμοις\* would then be an *undercutter*, “a person who cuts plants at the base (or the

<sup>56</sup> Ἐνθα καὶ οὐτιδανοῦ περ ἀπεχθέα βρύγματ' ἔασιν /ἀσκαλάβου· τὸν μὲν τε ῥέει φάτις οὔνεκ' Ἀχαιή /Δημήτηρ ἔβλαψεν ὄθ' ἄγεα σίνατο παιδὸς /Καλλίχορον παρὰ φρεῖαρ, ὅτ' ἐν Κελεοῖο θεράπναις /ἀρχαίη Μετάνειρα θεῖην δεῖδεκτο περίφρων.

There is also the hateful biting of the gecko, /though it is harmless; /and the story goes, how Grieving /Demeter injured it when she marred the limbs of it, a boy, /beside the /well Callichorum, when in Celess' dwelling /perceptive old Metaneira had received the goddess.

<sup>57</sup> The story is recounted in Ovid *Met.* 5.444ff.

<sup>58</sup> ὑποτάμνον: a plant cut from underneath, or perhaps in malice (underhandedly?)

<sup>59</sup> Δηλέομαι, the same verb used of magical harm in Theocritus and (I argue) Theophrastus.

<sup>60</sup> See also ὑποτομή, Theophrastus *HP* 9.2.7.

<sup>61</sup> The word ὑποτάμνον (228) itself has been translated as “the Undercutter” (cf. Foley 1994, 14), but I prefer the impersonal “[act of] undercutting” because it is more equivalent to ἐπηλυσίη in the same line. Either way, if my conjecture is correct, line 229 echoes 228.



roots?), possibly with malicious intent”—essentially, a *rhizotomos* (or even a φαρμακίς). Alternatively, if the reading ὕλοτόμοιο is correct, I will follow Richardson’s commentary in suggesting that “woodcutter” may be an alternate term for “root-cutter,” with “wood” used in a more generic sense for “plants.”<sup>62</sup>

*Rhizotomoi* are the subject of a lost play by Sophocles, which, based on Macrobius’ description of the play in his *Saturnalia*, suggests that they had a reputation for magic. In this summary, Medea is depicted cutting herbs with a bronze sickle—could this implement be a ὑποτομεύς?<sup>63</sup>

*Sophoclis autem tragoedia id de quo quaerimus etiam titulo praefert, inscribitur enim Ριζοτόμοι’: in qua Medeam describit maleficas herbas secantem, sed aversam, ne vi noxii odoris ipsa interficeretur, et sucum quidem herbarum in cados aeneos refundentem, **ipsas autem herbas aeneis falcibus execantem.***

Moreover, a tragedy of Sophocles offers, even in its title, that about which we inquire, for it is entitled Root-Cutters: in which he describes Medea cutting noxious herbs, but turned away, lest by the force of the harmful odor she herself be destroyed, and pouring the juice of the herbs into bronze jars, **cutting off the herbs themselves, meanwhile, with a bronze sickle.** (5.19.9)

*Rhizotomia* cannot easily be severed from *mageia*, and Nicander must have been aware of this, and perhaps capitalized on it. Much like his predecessor, some of Nicander’s remedies may make perfect sense from a magical perspective, at times when they seem nonsensical from the perspective of modern medicine. The crossroads snake recipe, in particular, is completely logical if viewed as an apotropaic charm, while extremely

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<sup>62</sup> (1974, 230).

<sup>63</sup> A passage from Aeschylus’ *Agamemnon* contains another possible connection between counter-charms and herb-cutting. ὅταν δ’ αἰδεῖν ἢ μινύρεσθαι δοκῶ, ὕπνου τόδ’ ἀντίμολπον ἐντέμνων ἄκος, Whenever I think to sing or hum, cutting this counter-song remedy for sleep (16). The “counter-song remedy” could potentially be a high-register tragic periphrasis for “singing to keep oneself awake,” but ἐντέμνων is unusual, perhaps signifying a magical counter-cutting, like Demeter’s ἀντίτομον.

dubious from a medical perspective. Yet in addition to this practicality, *rhizotomia* is haunted by the figures of Medea, Circe, and the φαρμακίς; and so, like the goddess Demeter, the reader of Nicander's poem will know the counter-charms and protections against sudden misfortune.

### *Apollonian Magic*

Demeter, of course, is not the only god with a grudge against reptiles. Nicander's second major theme, repelling and curing the bites of venomous beasts, venerates Apollo, slayer of the Python and father of Asclepius, whose healing temples famously kept tame snakes. In Nicander's *Theriaka* and *Alexipharmaka*, snakes represent both a threat that must be warded off and ingredients that may be used in healing and apotropaic magic.

Snakes and *pharmaka* are a natural pair.<sup>64</sup> Like herbs, whose properties may be medicinal or harmful, the serpent represents harm in the form of its venom, and renewal and immortality in the form of its shed skin. Their chthonic associations are clear in myth, as many vengeful underworld gods are described as serpent-haired, including the Furies, and, most famously, the Gorgons. Hermes' caduceus is depicted as a winged staff entwined with two snakes, and the rod of Asclepius is a staff twined with a single serpent. The mystical symbolism of snakes is similarly found in the myth of Tiresias, who was said to have struck mating snakes with a staff and subsequently been transformed into a woman by a displeased Hera.

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<sup>64</sup> For the *Theriaka* and *Alexipharmaka*'s composition as a diptych, see Overduin.

Nicander's crossroads warding remedy in the *Theriaka*, previously discussed in the context of θρόνα, is reminiscent of the myth of Tiresias, though the (intended) outcome is much more favorable. Its magical connotations have been discussed above, but in practical terms, what might "accursed ruin" mean in the context of snakes? It could be that Nicander represents this remedy as a type of all-heal against venomous creatures' bites, or even as an ancient equivalent of pesticide. This section of the *Theriaka* precedes Nicander's descriptions of specific snakes and other venomous beasts, and later, lists methods of "driv[ing] out the hot, injurious bane of snakes" (35). This is a little more specific than "accursed ruin," though it is still unclear whether the bane is the snakes themselves or their venom. The word "hot," however, seems likely to refer to the effects of the venom on the hypothetical victim (though, through metonymy, the venom itself could potentially represent the snakes as well).<sup>65</sup>

How does this warding remedy function to repel the snakes? In Nicander's work, the bodies of snakes can be used as the source of their own prevention, a concept which rather neatly parallels the usage of a snake's venom for formulating an antidote in modern medicine.<sup>66</sup> Some of Nicander's other remedies, similarly, prescribe plants that resemble the dealer of a wound. At *Theriaka* 642, while expounding upon roots that are helpful against snakes, the poet recommends viper's bugloss, a plant that produces nutlets shaped like a viper's head, and at *Theriaka* 885, he prescribes the root of the plant

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<sup>65</sup> Similar to the "fire" of Medea's autumn crocus?

<sup>66</sup> The use of bodily fluids in remedies appears in Pliny's *Natural History* 28.2.

scorpius, which, according to Nicander, people compare to the scorpion's venomous sting.<sup>67</sup>

At *Theriaka* 622, Nicander says that in many cases, the liver of the snake [which bit the victim] in wine, or its head in water or wine, will be helpful as an escape [φύξις] and protection [ἀλκή] from death (588). The remedy is derived from the dead body parts of the specific offending creature, unlike the generalized crossroads recipe, which calls for (initially) living snakes that have not attacked the maker of the concoction. It seems to be the difference between a prophylactic charm, which wards off any sudden disaster, and so can use any snakes, as long as they are taken from the correct magical context, and a counter-charm, which corrects harm that has already happened, and so relies on *materia* from the specific attacker. The body parts of the dead, especially the untimely dead, were widely thought to have magical properties in antiquity (since the corresponding ghost would be forced to enact the spell).<sup>68</sup> Perhaps the remedy is conceived of upon these lines: the untimely death of the snake(s) will help power the charm.<sup>69</sup>

### **Aspects of Apollo in Nicander's Poetry: Snakes, Medicine, and Music**

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<sup>67</sup> Although an in-depth study of natural philosophy in conjunction with magic is beyond the scope of this project, its influence should nonetheless be noted. I have said much about sympathy in the context of Nicandrian and Theocritean magic, but the Empedoclean philosophy of sympathies and antipathies, Loves and Strifes, is also an important precedent. There is a sort of elemental theory posed in the *Alexipharmaka*; Poseidon "enslaved" the sea to the winds, for fire is vanquished by wind and the sea trembles before the winds, the sea lords it over ships and men, and the forest is ruled by fire (170ff). This bears some resemblance to four elements theory attributed to Empedocles, with the elements represented as wind, fire, water, and earth (forest).

<sup>68</sup> Ogden, 118.

<sup>69</sup> On the other hand, the power of the untimely dead might only apply to humans.

One of the few pieces of internal evidence about Nicander is his statement that he comes from Claros, by the tripods of Apollo. The proem of the *Alexipharmaka* introduces Nicander and his home thus:

But I [dwell] where the children of enviable Creusa  
divided among themselves the most fertile share of the mainland,  
making their seat beside the Clarian tripods of the Far-Shooter. (9-11)

The *Theriaka* and *Alexipharmaka*, in the context of a town famous for its cult of Apollo, might even be seen as reenacting the actions of the god, on more than one level; first, in his capacity as banisher of snakes, and second, in his role as healer of sickness and protector against evil. Apollo's role as banisher of dangerous creatures is highlighted in a fragment of Nicander's unfortunately non-extant *Ophiaka*.<sup>70</sup> The fragment, as reported by Aelian, depicts the expulsion of deadly snakes from Apollo's shrine under the compulsion of the god:

Ael. *N.A.* x. 49: Νίκανδρος · λέγει δὲ  
οὐκ ἔχῃς οὐδὲ φάλαγγες ἀπεχθέες οὐδὲ βαθυπλήξ  
ἄλσεσιν ἐνζώει σκορπίος ἐν Κλαρίοις,  
Φοῖβος ἐπεὶ ῥ' αὐλῶνα βαθὺν μελίησι καλύψας  
ποιηρὸν δάπεδον θῆκεν ἐκάς δακετῶν.

And Nicander says:

No viper, nor hateful spiders, nor deep-striking  
scorpion lives in the [sacred] groves of Claros,  
since Phoebus, having hidden its deep glen with ash trees,  
set its grassy ground far from biting beasts.

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<sup>70</sup> Fr. 31 Gow & Scholfield. The existence of an *Ophiaka* further highlights the importance of snakes, and the banishing thereof, to Nicander. Apollo is also, of course, famous for slaying the Python at Delphi.

In this fragment, Apollo is warding the glades of Clarus with plants, just like Nicander wards the reader with his poetry, through the instrument of the knowledge it contains.

Apollo, as the god of healing, naturally presides over remedies, and Nicander mentions him in conjunction with various plants, connected to him by mythical and medicinal properties. At *Theriaka* 685, Nicander prescribes “Phlegyan all-heal, which in fact Paieon first picked beside the edge of the river Melas, tending to the wound of Iphicles son of Amphitryon, when with Heracles he was cauterizing the evil Hydra.”

Overduin identifies Paieon as the god of healing, mentioned in Homer and Hesiod, rather than Apollo’s son Asclepius or Apollo himself, who both share the epithet (112).<sup>71</sup> In light of Nicander’s Homeric aspirations, this may be the case; but even so, the name inevitably evokes Apollo, whom Nicander also brings up in his self-introductions.

Furthermore, the name Paieon occurs in the context of Heracles and Iphicles banishing a snake, which, as Nicander’s *Ophiaka* demonstrates, is very much in Apollo’s milieu. On the other hand, the other appearance of Paeion in Nicander depicts the god fostering a dragon in an oak tree (*Th.* 439). This, if anything, points to Asclepius, whose symbol was a snake, and in whose temples tame snakes were kept; but without further knowledge about the myth to which Nicander alludes, it is difficult to say.

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<sup>71</sup> Pindar describes another son of Apollo, Iamus, who was brought up by snakes and bees. Incidentally, honey, “the wealth of bees,” is one of the remedies Nicander offers for the salamander’s poison.

...τῆ μὲν ὁ Χρυσοκόμας / πραῦμητίν τ’ Ἐλεϊθίαν παρέστασέν τε Μοίρας: / ἦλθεν δ’ ὑπὸ σπλάγγων ὑπ’ / ὠδίνος τ’ ἐρατᾶς Ἴαμος / ἐς φάος αὐτίκα. τὸν μὲν κνιζομένα / λείπε χαμαί: δύο δὲ γλαυκῶπες αὐτὸν / δαιμόνων βουλαῖσιν ἐθρέψαντο δράκοντες ἀμεμφεῖ / ἰῶ μελισσᾶν καδόμενοι. (Pindar *Olympians* 6.41-47)  
 ...By her side the Goldenhaired /set Eleithuia of gentle counsel and the Fates:/ and Iamos came from her/ womb and pleasant pangs/ immediately to the light. Rattled, she left him/ on the ground: but two gleaming-eyed serpents,/ by the plans of the divinities, nourished him with the blameless/ venom of honeybees, solicitous.

At *Theriaka* 903, Nicander prescribes the seed of the hyacinth, “whom Phoebus mourned,” and briefly recounts the etiological myth in which Apollo accidentally kills Hyacinth with a discus (though the myth’s fame is sufficient that the poet does not bother to include the part where Hyacinth’s blood metamorphoses into the eponymous flower). Other plants Nicander associates with Apollo include daphne, “which first crowned the Delphian hair of Phoebus” (*Alex.* 200), and which Nicander prescribes as a remedy for hemlock poisoning, and “tears [resin]...of the mourning pine, where Phoebus stripped the skin [lit. foliage] from the limbs of Marsyas” (*Alex.* 301). Apollo’s prophetic abilities also come up briefly; at *Theriaka* 613, Nicander describes the tamarisk as a prophet (*mantis*) among mortals, “in which Apollo of Corope established oracular arts and decree over men.”

Finally, Apollo is the god of music—or, more accurately given the narrower modern definition of music, the arts of the Muses, including poetry. As such, Nicander connects himself with the god through the act of composing poetry. Music also serves as an instrument with which Apollo, and certain mortals, can cure sickness. Returning briefly to Theocritus, we will find the most famous attestation of music as a remedy for an incurable sickness—Eros—in *Idyll* 11:

οὐδὲν ποτὶ τὸν ἔρωτα πεφύκει φάρμακον ἄλλο  
 Νικία οὔτ’ ἔγχριστον, ἐμὴν δοκεῖ, οὔτ’ ἐπίπαστον,  
 ἢ ταὶ Πιερίδες· κοῦφον δέ τι τοῦτο καὶ ἀδὺ  
 γίνετ’ ἐπ’ ἀνθρώποις, εὐρεῖν δ’ οὐ ῥάδιόν ἐστι.  
 γινώσκειν δ’ οἶμαί τι καλῶς ἰατρὸν ἔοντα  
 καὶ ταῖς ἐννέα δὴ περιλάμενον ἔξοχα Μοῖσαις.

There exists no other *pharmakon* for Eros,  
 Nicias—neither ointment, it seems to me, nor plaster—  
 than the Pierides: a light thing this, and sweet  
 it is to mortals, but to find it is not easy.

But you, I think, know this well, being a doctor,  
and especially beloved of the nine Muses. (11.1-6)

In this sense, Nicander's poetry about remedies is a cure both through its Musical status and through the medical knowledge it contains. Theocritus' use of the term *pharmakon* allows for a magical interpretation of the Muses' remedy as well. As such, the concept of the counter-charm, counter-song, and counter-remedy cannot be entirely separated; they are the nexus of Apollo's arts at which the *alexipharmakon* is situated, and consequently, at which the *Theriaka* and *Alexipharmaka* are situated.

### **The Getty Hexameters: *Alexima Pharmaka***

A similar locus of Apollo's skills, and a connection between Apollo, magical practice, and Nicander's poetry, appears in the Getty Hexameters, a ritual and magical text whose date and origin are uncertain, but are theorized to be from late 5<sup>th</sup> century BCE Selinus.<sup>72</sup> These verses frequently invoke the aid of Paeon, who "sends averting charms (*alexima pharmaka*) in all directions," and mention "far-shooting Apollo."

Though some scholars<sup>73</sup> have proposed that the tablet is Orphic, or produced by a cult of Hecate, I find Radcliffe Edmonds' connection of the text with Apollo Paeon more convincing, based on my research into Nicander's magic and its Apollonian influences:<sup>74</sup>

However, the examples of the text that have survived to the present day, whether or not they came originally from a mystery cult, do not appear in a mystery cult setting. The hexameter verses of the *Ephesia Grammata* are used in the epigraphic texts as warding magics, as *alexikaka*, *Alexipharmaka*, or, as the Getty tablet has it, *alexima pharmaka*. The earliest versions seem to deploy the formula against harmful creatures or magical attacks, whereas, in the later versions and in most of the testimonia, the hexameter verses that begin with *aske kata skieron*

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<sup>72</sup> Faraone and Obbink (2013, 1).

<sup>73</sup> Particularly Bernabé (2013).

<sup>74</sup> Though Persephone, Demeter, and Hecate are all mentioned in the text, none of them are represented as actually speaking the averting charms.



*oreon* or the collection of six words, *aski*, *kataski*, *aix*, *tetrax*, *damnameneus*, and *aision*, have become a more general protective spell, good especially against daimonic attack (98).

This grouping together of harmful creatures and magical attacks as a collective threat, to be warded off with a single spell, is exactly what I have identified in Nicander's ἀλεξητήρια, particularly, those that are meant to protect the creator from ruin. The term the poet uses, ἀλεξητήριον, also shares the ἀλεξ- prefix with *alexima*.<sup>75</sup> Though it is tempting to compare *Alexima Pharmaka* directly with the title *Alexipharmaka*, it seems likely that Nicander did not himself come up with this title. He never uses the word *alexipharmakon* in the text,<sup>76</sup> and the scholia, *varia lectio*, title it *Antipharmaka* (*Counter-pharmaka*)<sup>77</sup> and *Peri thanasimōn pharmakōn* (*On deadly pharmaka*).<sup>78</sup> Regardless of the poet's intentions, however, the titles given to the work upon its reception do neatly mirror *Alexima Pharmaka*.

In the context of the Getty Hexameters, *alexima pharmaka* are magical words; to speak them is to perform the spell. As Edmonds puts it,

The verses themselves must be classified as *pharmaka*, but not the kind of *pharmaka* that are baneful poisons; rather, they serve as protection against harm (98-99).

This, naturally, raises questions about the metapoetic implications of Nicander's work. Is his poetry itself meant to be an *alexētērion*, even as it explains how to make them? Nicander's famous acrostic, which spells out his name at *Theriaka* 345ff, is evidence that

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<sup>75</sup> And *alexia*, at *Alexipharmaka* 4, *Theriaka* 702 (as *alexion*).

<sup>76</sup> Though he does use *pharmakon*.

<sup>77</sup> If the English "charm" conveyed the ambiguity of the Greek *pharmakon*, I would translate this *Countercharms*.

<sup>78</sup> *Et.M.*241.12, 256.55

he is fond of wordplay. Unusual arrangements of words, too, are a staple of ancient Greek magic; they fall under the category of spell that Graf calls “reversal.”<sup>79</sup> Though many scholars have lamented and lambasted Nicander’s “contorted style and fantastic vocabulary,”<sup>80</sup> could there be more to it than what has previously been considered incompetence or bad taste on his part? The arts of the Muses, as we have seen, are both the remedy for the incurable sickness of Eros and a counter-charm to avert evil. Further, music and *pharmaka* are the domain of Apollo Paeon, and *alexipharmaka*, *alexētēria*, and *alexima pharmaka* lie squarely at the crossroads of these arts. To compose poems about *alexeteria*, which are themselves *alexētēria*, by right of their arcane, difficult language, oracular meter, and subject matter, seems exactly the type of work to which a poet of Claros would aspire.

Whether or not Nicander had directly read incantations of this nature or had them in mind as he composed, a comparison between the themes and language of the Getty Hexameters and the *Theriaka* and *Alexipharmaka* will be valuable in unearthing the influence of magical traditions on Nicander’s corpus.

The effectiveness and comprehensiveness of Nicander’s remedies is one quality that he frequently asserts, and this is also found in the Getty text:<sup>81</sup>

...καὶ οὐκ ἀτέλεστ’ ἐπ[α]εῖδω.  
 ὅστις τῶνδ’ ἱερῶν ἐπέων ἀρίσημα καλ<ύ>ψ<ει>  
 γράμματα κασσιτέρωι κεκολαμμένα λαός ἐν οἴκωι,  
**οὔ νιν πημανέουσιν ὅσα τρέφει εὐρεῖα χθῶν**  
**οὐδ’ ὅσα πόντωι βόσκει ἀγάστονος Ἀμφιτρίτη.**

<sup>79</sup> 1997, Ch. 7.

<sup>80</sup> Gow & Scholfield, vii.

<sup>81</sup> Trans. Jordan and Kotansky.

Παιήων, σὺ δὲ πάντοσ' ἀλέξιμα φάρμακα πέμπεις  
καὶ τάδ' ἐφώνησας ἔπε' ἀθάνατα θνητοῖσιν...

...and I sing incantations that are not ineffective.

Whoever hides in a house of stone the notable letters

Of these sacred verses inscribed on tin,

**As many things as broad Earth nourishes shall not harm him  
Nor as many things as much-groaning Amphitrite rears in the sea.  
Paeon, for in every direction you send averting charms,  
And you spoke these immortal verses to mortal men...(1-7)**

This passage is particularly relevant to the *Theriaka*, which contains both land- and sea-creatures, and wards against them. If Apollo's protection against dangerous beasts extends to every species, and not just snakes, that could partly explain why Nicander included arachnids, amphibians, and marine animals in the *Theriaka*, albeit in far less detail or quantity than the snakes. (The poetic reason, of course, is to showcase his knowledge and his ability to convey it in verse.)

The next invocation of Paeon in the Getty hexameters is also interesting:

[Παιήων,] σὺ γὰρ αὐτὸς ἀλέξιμα φάρμα[κα πέμπεις]  
[c.6-7]γου κατάκουε φ[ρ]ασὶν γλυκὺν ὕ[μνον]

[Paeon,] for you yourself [send] averting charms,  
Give ear in your mind to sweet h[ymnic song]! (23-24)

The presence of Apollo (and Paeon) is, as demonstrated previously, characteristic of the *Theriaka* and *Alexipharmaka*. Furthermore, the Getty verses ask Paeon to listen to “hymnic song,” and Nicander refers to himself by the rare word *hymnopolos*. It may be that the force of *hymnos* is lost from this word by Nicander's time, but if not, his use of the term may hint at a similar religious/magical purpose for his poetry. The apotropaic power of the *Theriaka* and *Alexipharmaka* stems, at least by implication, from the

protection of Apollo in his role as healer; this power from the heavenly god counteracts the chthonic power of malevolent sorcery or *rhizotomia*.

The setting in which the Getty verses protect the caster is also similar to the agricultural backdrop of the *Theriaka and Alexipharmaka*.

[c.6 ἀ]νθρώποισιν ἐπιφθέγγεσθαι ἄν[ωγα]  
 [c.5-6]ωι κἄν εὐπολέμωι καὶ ναυσίν, ὅτα[ν κήρ]  
 [c.7 ἀ]νθρώποις θανατηφόρος ἐγγύ[θεν ἔλθηι]  
 [c.6-7]ι προβάτοις καὶ ἐπὶ τέχναισι βροτ[ο] [c.4-5]  
 [...]

[Παιήων, σὺ δ]ὲ πάντοσ' ἀκεσσοφόρος ἐσσι καὶ ἐσθ[λός]

I command you to utter for mortals...

Whenever [doom] among the...good-at-war, and the ships  
 [comes] near bringing death to mortals.

...[and] near the flocks-and-herds and the handiworks of mo[rtals] (25-28)

[...]

[Paeon, for you] in every direction are cure-bringing and exce[llent] (32)

One source of doom for mortals is that “near the flocks-and-herds,” which is the area that Nicander claims to protect in the opening of the *Theriaka*—the domain of the cowherd, the plowman, and the woodsman.

Finally, there are the shared mythological references to Apollo between the three texts:

υἷω]νός τε Διός· μνηῆσαι δ' Ἐκάτοιο Φ[οίβου]  
 [c.7-8]ε[ι]ς τόξων, καὶ Ὑδρης πολυ[- - -]  
 [Πα]ι[ή]ων, ὁ γὰρ αὐτὸς ἀλέξιμα φάρμακα πέ[μπει,]  
 [οὐ]κ ἂν δ<η>λήσαιτ' οὐδεις {ουδαι} πολυφαρ[μακ - - -]

Of the [so]n of Zeus. And be mindful of the Far-Shooting A[pollo]...

...with your bow...and of the Hydra, many-...

[Pa]e[a]n, for he himself [sends] averting charms,

Nor would anyone harm [us?] armed with powerful dr[ugs]<sup>82</sup>...(47-50)

Both Nicander and these verses use the epithet Far-Shooting (*Alex.* 11) and mention the Hydra (*Th.* 688). Though these are both common signifiers of Apollo, they contribute to the similarities in vocabulary between the two texts.

Though the *Alexipharmaka* and *Theriaka* are likely not primarily intended as *alexima pharmaka*, interwoven elements of these warding charms lend them, whether purposefully or inadvertently on Nicander's part, a place in magical didactic, in addition to their status in medicine, zoology, and toxicology.

### Looking Forward

How was all of this received in Hellenistic Greece and Rome? Nicander's influence in antiquity was greater than one might expect, based on his modern reputation. He was acknowledged for his medical and poetic skill, and his knowledge of agricultural topics. Apuleius and Pliny also hint, albeit uneasily, at the magical side of Nicander's corpus and subject matter, respectively.

An epigram from the *Greek Anthology* indicates Nicander's renown in medicine, and also associates him with Paieon:

Παιήων, Χείρων, Ἀσκληπιός, Ἴπποκράτης τε:  
τοῖς δ' ἐπι Νίκανδρος προφερέστερον ἔλλαχεν εὐχος.

Paieon, Chiron, Asclepius, and Hippocrates:  
After them, Nicander won surpassing glory. (*Greek Anthology* 9.211)

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<sup>82</sup> If this word is, as it appears, *polypharmakos*, Apollo gains another connection with herbal witchcraft via the epithet shared with Circe.

Nicander is also mentioned by two Roman orators. Cicero uses him as an example of writing well on a subject one is not inherently familiar with:

*Etenim si constat inter doctos, hominem ignarum astrologiae ornatissimis atque optimis versibus Aratum de caelo stellisque dixisse; si de rebus rusticis hominem ab agro remotissimum Nicandrum Colophonium poetica quadam facultate, non rustica, scripsisse praeclare, quid est cur non orator de rebus eis eloquentissime dicat, quas ad certam causam tempusque cognorit?*

And indeed, if it is agreed among learned men, that a man ignorant of astrology, Aratus, spoke about heaven and the stars with the most ornate and best verses; if a man most distant from a farm, Nicander of Colophon, wrote poetry about rustic matters with a certain skill, not rustic, but illustrious, then what reason is there that an orator could not speak most eloquently about those things with which he has become familiar for a certain purpose and time? (*De Oratore* 1.69)

And Quintilian identifies Nicander as a worthy exemplar for two Roman poets, Vergil and Aemilius Macer:

*Nicandrum frustra secuti Macer atque Vergilius?*

Did Macer and Vergil follow Nicander without reason? (*Institutio Oratoria* 10.1.56)

In context, it is clear that the answer to Quintilian's rhetorical question is no; that is, both poets had good reason to follow Nicander.

Aemilius Macer, who died in 16 BCE, wrote a *Theriaca* and an *Ornithogonia*, neither of which survive, unfortunately. Nicander's influence on Vergil, however, is apparent in several of the latter's works, especially his *Georgicon*, which boasts almost the same title as Nicander's mostly-lost work.<sup>83</sup> Vergil also follows Nicander's lead in imitating Theocritus; his *Eclogue* 8 remixes Theocritus' *Idyll* 2 with a more Roman

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<sup>83</sup> For a Nicandrian snake allusion in Vergil's *Georgics*, see Thomas (1988).

interpretation of a love spell, including references to incanting crops from others' fields—a crime of magic in the Twelve Tablets—picking *venena* (and by implication, performing *veneficium*), and drawing the moon from the sky, a popular trope associated with witches in ancient Rome.<sup>84</sup> Vergil's depiction of both pastoral magic and practical farming topics mirrors the similar dichotomy, and convergence, of the two in Nicander's *Theriaka* and *Alexipharmaka*.

An interesting Roman take on the magical, or at least quasi-magical reputation of Nicander may be found in Apuleius' *Defense Against Magic*:

*Nunc praeterea uide, quam ipsi sese reuincant; aiunt mulierem magicis artibus, marinis illecebris a me petitam eo in tempore, quo me non negabunt in Gaetuliae mediterraneis montibus fuisse, ubi pisces per Deucalionis diluuia repperientur. quod ego gratulor nescire istos legisse me Theophrasti quoque περί δακέτων καὶ βλητῶν et Nicandri θηριακά; ceterum me etiam ueneficii reum postularent; at quidem hoc negotium ex lectione et aemulatione Aristoteli nactus sum, nonnihil et Platone meo adhortante, qui ait eum, qui ista uestiget, ἀμεταμέλητον παιδιὰν ἐν βίῳ παίζειν.*

Now, meanwhile, see how they disprove themselves; they say that I sought a wife, by magical arts—marine charms—at a time when, they did not deny, I was in the inland mountains of Gaetulia, where fish will be discovered [only] through Deucalion's floods. But I am glad that those people do not know that I have read Theophrastus' *Peri daketōn kai blētōn* and Nicander's *Theriaka*; otherwise they would also claim that I am guilty of *veneficium*; but in fact, I acquired this undertaking from the reading and emulation of Aristotle, and to some extent at Plato's urging, who says that he who investigates these things “plays in his life a game that should not be repented of” (41).

Apuleius argues that to claim he is a magician who uses oceanic charms based on his dissection of a fish is the equivalent of accusing him of *veneficium* for having read Theophrastus and Nicander.<sup>85</sup> He frames this as ridiculous, but quickly takes care to

<sup>84</sup> Lines 99, 94, and 69, respectively.

<sup>85</sup> Pliny the Elder, as it happens, mentions a certain fish, the echeneis, which is used for both love charms (*amatoriis ueneficiis*), and, appropriately enough, success in court (*NH* 9.41).

attribute his knowledge to two (relatively) less problematic authorities, Aristotle and Plato. One might be inclined to translation *veneficium* as “poisoning,” in the context of the two named works about venomous animals, but in the context of a defense against magic, the word’s more magical connotations are most relevant. In any case, poisoning and magic were closely linked concepts in ancient Rome; I will discuss the intersection of the two in the term *veneficium* in the next chapter.

Nicander does, in fact, seem to refer to an equivalent of *veneficium* in the *Alexipharmaka*, when he advises that his audience “not let some accursed chameleon-thistle draft slip by your lips through deceit” (279), and, of course, when he offers protection against Medea’s autumn crocus and the φαρμακίς’ lizard, the salamander. Though Nicander’s poetry is allegedly meant to impress agricultural laborers, this preoccupation with hostile poisoning and/or magic seems like more of a politician’s concern.<sup>86</sup>

Nicander’s ἀλεξητήρια against serpents in the *Theriaka* likewise reek of *veneficium*. Indeed, Pliny the Elder mentions the remedies against snakes promoted by Magi, and dismisses them as *veneficia*:

*quae coarguisse non minus referet quam contra serpentes remedia demonstrasse, quoniam et haec illorum veneficia sunt.*

It is no less pointless to argue against these [lies of Magi that they can make people invincible] than to demonstrate their remedies against serpents, since these too are the charms [*veneficia*] of those men. (*NH* 29.20)

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<sup>86</sup> Again, see Jacques (2002) on Nicander’s possible court connections.



Considering how widely Pliny draws on Nicander as a source in his *Natural History*, it appears that the *veneficium* of a Greek didactic poet is far more acceptable in his eyes than the *veneficium* of a Persian *magus*. To Apuleius and Pliny, highly educated Romans, Nicander and Theophrastus do not teach magic (the arts of Magi), but the skeptical and learned perspective of these men may in fact be less accurate than the insight of the common people who perceived the strands of magical didactic shot through Nicander's work. It is no surprise that Apuleius would make such a comparison, even if he disingenuously presents it as ridiculous.

Though Nicander's fame has largely not persisted to the modern day, he passes down the sorcerer's pharmacy of his predecessors—particularly Homer, Theocritus, and Theophrastus—to his Roman successors, including Pliny, Vergil, and Macer.<sup>87</sup> This pharmacopeia includes, on the literary side, Homeric and Theocritean magic, and on the practical side, *rhizotomia* and apotropaic Apollonian charms.<sup>88</sup>

Yet in the end, Nicander would be pleased to know that he did accomplish Homeric fame, at least in one epigram (*Greek Anthology* 9.213):

καὶ Κολοφῶν ἀρίδηλος ἐνὶ πόλινεσσι τέτυκται,  
δοιοῦς θρεψαμένη παῖδας ἀριστονόους,  
πρωτότοκον μὲν Ὅμηρον, ἀτὰρ Νίκανδρον ἔπειτα,  
ἀμφοτέρους Μούσαις οὐρανίησι φίλους.

And Colophon has become illustrious among cities,  
After raising two sons of excellent wisdom,  
Homer, the first-born, but Nicander second,  
Both of them beloved by the heavenly Muses.

<sup>87</sup> And, to a lesser extent, Scribonius Largus, the subject of Chapter 4.

<sup>88</sup> A caveat: we have to rely on secondhand sources about the *rhizotomoi*, so they occupy a space perhaps best delineated as *practical magic described by literature*.

## CHAPTER THREE

### **Magic, Medicine, and Remedy in the *Natural History* of Pliny the Elder**

The ambiguous treatment and complex transmission of magical traditions in ancient Greek pharmaceutical literature is also present in the work of Roman encyclopedists. Prominent among these is Pliny the Elder, who writes with especial distaste for magicians and doctors alike,<sup>1</sup> yet includes reams of medicinal remedies in his *Natural History*; many of them, furthermore, draw on common elements of magical practice, with the result that Pliny does not, *de facto*, omit either of these disciplines from his work. The *Natural History*, like Theophrastus' *Inquiry*, is illustrative of the confusion that arises in pharmaceutical-didactic literature when an author who is not an expert in magic makes selective editorial decisions. It also showcases the range of terminology associated with magic, medicine, and poison, and the difficulties of interpretation that they produce. I have found that Pliny's methodology in both respects is, however, less haphazard than it appears.

Pliny's negative opinion of magic, juxtaposed with the inclusion of myriad supernatural remedies in the *Natural History*, has long perplexed scholars with its apparent hypocrisy.<sup>2</sup> I will argue that Pliny is not contradicting himself to the extent it

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<sup>1</sup> On the overlap between doctors, herbalists, and magicians in ancient Rome, see Flemming (2000). For Pliny's distaste for doctors and preference for traditional remedies, see Nutton (1986). For the non-criminalization of benevolent agricultural magic, see Collins (2008); for Roman agricultural magic, Ager (2010), and for Roman environmental concerns and the religious importance of agriculture, Hughes (1994). On the complementary nature of divine and secular healing in ancient Rome, see Nutton (2004).

<sup>2</sup> French (1994) suggests that Pliny is opposed to medical and magical theory, and prefers pragmatic remedies; the teachings of Magi, which call on supernatural forces to manipulate the natural world, oppose Pliny's view that there is an essential nature of things, whose inherent properties can be used for medicinal purposes. I argue below that it is Pliny's pragmatism itself that leads him to begrudgingly include medicine and magic in his remedies when there is no other option, and that his views on medicine and magic are more motivated by xenophobia against foreign practitioners of either art, and firm belief in their mendacity,

appears from a modern standpoint; firstly, on the basis of semantic nuance, which is not accounted for by the generic translations “magic,” “remedy,” and “medicine.” These words, which represent broad modern concepts, often do not convey the specifics of the Latin terminology they translate. *Remedia*, despite their sometimes-supernatural nature, enjoyed a neutral-to-positive status in ancient Rome, and were a part of the venerable Roman agricultural tradition, home remedies of the sort recommended by authorities like Cato the Elder.<sup>3</sup> Thus, they enjoyed greater legitimacy than *magia*, which was viewed as markedly foreign and *allegedly* recently-imported magic, or *medicina*, which was associated with Greek medicine. *Veneficium*, *carmina*, and *cantiones*, as I discuss below, also possess distinct nuances in the *Natural History*, though they all technically fit under the umbrella of “magic.” Because of this specificity of terms, supernatural *remedia* may not even have fallen under the category of “magic” or “medicine,” from the perspective of a native Latin speaker in the first century CE.

Secondly, when Pliny does include *magia*, his tone is skeptical, and he often provides a warning against it, showing a level of internal consistency and critical curating that may be overlooked if one does not consider the various forms of medico-magical terminology in Latin.

Finally, Pliny’s *Natural History* is meant to collect and display all the knowledge in the world,<sup>4</sup> and accordingly includes at times even the knowledge of people Pliny considers malicious and deceitful, provided that it is not overtly harmful from his

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than prejudice against the theoretical. (It would be surprising indeed if theory dominated a collection of home remedies; I am not certain that the lack thereof is indicative of Pliny’s objection to the abstract.)

<sup>3</sup> One good example, discussed below, appears in *De Agricultura* 159.

<sup>4</sup> Mirroring the influx of goods into the expanding empire. On the collection and transplanting of plants as a form of imperialism, see Pollard (2009).

perspective. It is not enough for him to provide useful facts; he must also offer warnings against the dissemination of falsehoods. Creating a comprehensive collection of information raises the moral question of how to treat dangerous knowledge, and Pliny explains what lines he has drawn in this regard in his work.<sup>5</sup>

On a broader scale, considering these issues brings to light the moral, socio-historical, and linguistic complexity underlying the categorization and transmission of magic and medicine, both during Pliny's time and as a continuation of the Greco-Roman didactic literary tradition as a whole. Many of Pliny's sources had to contend with the same questions he did, and set precedents of a sort, though Pliny does not necessarily follow them. As Fritz Graf remarks,<sup>6</sup> "Pliny does not share the twofold attitude that he finds in some of his predecessors. The Greek philosophers who allowed themselves to be charmed by magic are denounced just as harshly as Nero, who had himself initiated by the Magi."

Pliny may indeed be less willing than others to excuse famous philosophers for dabbling in magic; but I would qualify this statement with the point that Pliny condemns Greek philosophers and other authorities associated with *magia*, specifically, but not necessarily those who transmit supernatural *remedia* that are not associated with Magi—reasonably, since Pliny himself participates in the latter, and in this respect, he does follow some of his predecessors, most notably Theophrastus.<sup>7</sup> Both Pliny and

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<sup>5</sup> See especially *NH* 25.7.

<sup>6</sup> (1997)

<sup>7</sup> For the geographical distribution of Pliny's sources, see French (1994). For Pliny's use of Theophrastus as a source, see Bonet (2008). For Pliny's adherence to his botanical sources, see Scarborough (1986).

Theophrastus clearly criticize the veracity of the (othered) magic they include, but uncritically transmit (unmarked) magic.

Let us return to my third point: Pliny's own judgment concerning how to treat dangerous information. In contrast to Nicander's *Theriaka* and *Alexipharmaka*, which draw on magical traditions without moralizing commentary, the *Natural History*, in addition to its function as a repository of information, provides warnings against deception from those people who disseminate false knowledge (generally, Magi). Like Theophrastus, who chose to include the superstitions of the *rhizotomoi* in his *Inquiry into Plants* despite his reservations about their accuracy, Pliny must contend with the question of whether to include apparently false knowledge or knowledge from a source which is, in his opinion, fraudulent. Perhaps following Theophrastus' precedent, he chooses to do both, with caveats.

Pliny asserts, in *Natural History* 25.7:

*ego nec abortiva dico ac ne amatoria quidem, memor Lucillum imperatorem clarissimum amatorio perisse, nec alia magica portenta, nisi ubi cavenda sunt aut coarguenda, in primis fide eorum damnata.*

I myself speak neither of abortifacients nor of love potions, mindful that the highly illustrious general Lucullus perished by means of a love potion, nor of other magical portents, except where they must be defended against or refuted, condemned especially on account of the belief in them.<sup>8</sup>

In the first part of Pliny's statement, the case of Lucullus, who was rumored to have been driven insane by an *amatorium*, or love potion, provides a historical precedent for the dangers of this type of magic, and on the basis of this *exemplum*, Pliny excludes *amatoria*

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<sup>8</sup> All translations are my own, unless otherwise stated.

from his collection.<sup>9</sup> The exclusion of abortifacients, though not explained here, is likely based on Pliny's traditional Roman values. Both *abortiva* and *amatoria* may also be suspect in his eyes for their association with women, and perhaps, by extension, witchcraft—a full exploration of which is, unfortunately, not within the scope of this dissertation.<sup>10</sup>

In the second part of his statement, Pliny explains that he will include *magica portenta* only when they must be refuted (note that the adjective here, *magica*, is derived from *magia*; thus, I will treat the adjective as an indicator of *magia*, specifically). One sees here the stance on dangerous information that Pliny takes, according to himself; the question now is whether he actually follows it.

It is true that Pliny includes plentiful warnings against *magia*, if not other forms of magic, such as apotropaic protections and supernatural *remedia*; but the latter, again, are not necessarily what he aims to defend against in the first place. Pliny's entry on amethyst (*NH* 37.40) is one an example of such a warning and skeptical treatment of *magia*. It indeed appears that he only lists the so-called *vanitas* of Magi in order to dispute it:

*Magorum vanitas ebrietati eas resistere promittit...nec non in smaragdis quoque similia promiserunt, si aquilae scalperentur aut scarabaei, quae quidem scripsisse eos non sine contemptu et inrisu generis humani arbitror.*

The falseness of Magi promises that [amethysts] prevent drunkenness...they also promise similar things about emeralds, if eagles or scarabs are engraved on them, which they have written, I judge, not without contempt and derision for humankind.

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<sup>9</sup> However, he does not exclude certain plants and substances which were used to make *amatoria*. See *NH* 9.41.

<sup>10</sup> For the representation and intersection of women and remedy in the *Natural History*, see Richlin (2014).

Pliny, who set out to write a comprehensive history of natural knowledge, is particularly offended by the false knowledge disseminated, as he claims, by Magi. The end of this quote, *non sine contemptu et inrisu generis humani*, shows that Pliny considers this a purposefully malicious act.

Many of the other cases in which Pliny mentions magic or Magi are, as he claims, in the context of warnings against their deception, or in the context of providing apotropaic protection against their malevolent magic. These protective charms, often in the form of a plant or substance placed near the threshold of a dwelling, constitute magic in the modern sense, but perhaps not in Pliny's mind.<sup>11</sup> The case of the amethyst above is a form of apotropaic magic, but problematic to Pliny because, firstly, the source is unreliable, and secondly, and most critically, it doesn't work. (Pliny is so certain of this that one wonders if he ever attempted sobriety via amethyst himself.) Effectiveness is an important factor in Pliny's consideration; if the remedies of Magi work, he is not necessarily opposed to them, despite his animosity towards them as a whole. In the *Natural History*, effectiveness and truth, and ineffectiveness and falsehood, go hand in hand. I will further elaborate on this when I discuss the nature of Roman medicine.

### ***Magia as the Other***

Returning to my previous argument about the source of a magical remedy as a determining factor in its inclusion or exclusion from the *Natural History*, Pliny's apparent hypocrisy when he denounces the superstitions of Magi, while including similar beliefs in his collection of remedies, is partly a problem of terminology. The word

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<sup>11</sup> For apotropaic magic, see Gager (1992).

“magic” is broad and generic in modern usage, but in Latin, it originally referred to the practices of Magi, Persian wise men. Thus, it has specific foreign connotations, and is abhorrent to a xenophobe like Pliny. In the context of the *Natural History*, then, *magia* is a loaded term. (Henceforth, to avoid confusion, when I am speaking of the Roman concept of magic, I will use the Latin term *magia*, and when I refer to magic in the modern sense, I will use the English word.)

The Greeks, who Pliny also considered corrupted by magical practice, likewise considered *mageia* (the Greek word from which the Latin *magia* is derived) distinctly foreign. As Graf states:

This set of new terms was always to keep its original sense for the Greeks: *mageia* is always also the art of Persian priests...which, in the Athens of the fifth century, did not mean only a non-Greek practice, but much more emphatically the practice of the enemies of the Hellenic people...<sup>12</sup>

So we see that, unsurprisingly, it is a well-established trope of the classical tradition to claim that practices considered unsavory or heretical are external and foreign to one’s own people. In this respect Pliny does follow his Greek predecessors, albeit with unwitting irony.

*Magia* in ancient Rome and in the *Natural History* is assiduously othered, and attributed to multiple non-Roman cultures besides Persia. Pliny explicitly states that the famous Greek authorities he considers magicians had to cross the sea in order to learn their arts (*NH* 30.2):

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<sup>12</sup> (1997)



*certe Pythagoras, Empedocles, Democritus, Plato ad hanc descendam navigavere exiliis verius quam peregrinationibus susceptis, hanc reversi praedicavere, hanc in arcanis habuere...*

Certainly Pythagoras, Empedocles, Democritus, and Plato took ship to learn [magic], undertaking this more, in truth, because of exile than travel; upon their return, it was this they proclaimed, this they held among the mysteries...

The inclusion of Democritus and Plato in this group is rather striking from a modern perspective, since neither retains such a reputation; Pythagoras and Empedocles' association with magic is better known. In any case, foreign philosophers and scientists are an unsurprising target for accusations of magic and heretical beliefs, given that philosophy and science, like medicine, shared ambiguous boundaries with magic.<sup>13</sup>

Of Pliny's extensive list of magicians in *NH* 30.2, tellingly, none are Roman, but rather, Persian, Greek, Jewish, or Gallic (in the latter case, druids). This, too, is consistent with the theory that Pliny considers *magia* distinctly foreign in nature and origin. As he continues, he presents magic as an outside force that corrupted Greece, and, to a lesser extent, Italy, until the Senate banned the practice of human sacrifice.<sup>14</sup> In 30.2, Pliny writes (erroneously):

*primus, quod exstet, ut equidem invenio, commentatus est de ea Osthanes Xerxen regem Persarum bello, quod is Graeciae intulit, comitatus ac velut semina artis portentosae sparsit obiter infecto, quacumque commeaverat, mundo.*

The first person who wrote about [magic], [whose work] is extant, as I find on my part, is Osthanes, having accompanied Xerxes, king of the Persians, in war, since he campaigned against Greece, and he, as if he sprinkled the seeds of an ominous art, corrupted the world wherever he went, along the way.

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<sup>13</sup> For discussion of the amorphous boundaries between science and magic, especially as they relate to Empedocles and Pythagoreanism, see Kingsley (1995).

<sup>14</sup> In 97 BCE.

Pliny then continues in Chapter 30.3 with assurances that this is not the case in Rome:

*Extant certe et apud Italas gentes vestigia eius in XII tabulis nostris...DCLVII demum anno urbis Cn. Cornelio Lentulo P. Licinio Crasso cos. senatusconsultum factum est, ne homo immolaretur, palamque fit, in tempus illud sacra prodigiosa celebrata.*

Certainly, there exist even among the Italian peoples traces of [magic] in our Twelve Tables...Finally, in the year of the city 657, when Cneius Cornelius Lentulus and Publius Licinius Crassus were consuls, a *senatus consultum* was passed, that no human be sacrificed, and publicly it is so, though ominous rites had been performed up to that time.

One detects a certain anxiety about those *vestigia*, and perhaps the implication that magical rites, though they no longer happen publicly in Rome, still occur privately. Pliny's portrayal of *magia* as foreign seems to struggle with the existing evidence of magical practice in Italy: he doesn't want to ignore the obvious, but quickly skates by it, and concludes in 30.4 with a statement crediting the Roman people for destroying the evil of magic:

*Nec satis aestimari potest, quantum Romanis debeatur, qui sustulere monstra, in quibus hominem occidere religiosissimum erat, mandi vero etiam saluberrimum.*

Nor is it possible to sufficiently value how much is owed to the Romans, who destroyed the rites<sup>15</sup> in which it was [considered] very pious to kill a person, but to devour one was similarly [considered] very salubrious.

It seems clear that this collection of taboos—murder, human sacrifice, and cannibalism—that Pliny aims to associate with *magia* and divination is distinctly different from the practice of herbal healing in his mind. The former is a murderous crime and deception

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<sup>15</sup> In Latin, *monstra*, or portents; perhaps these are among the *magica portenta* Pliny refuses to relate, except as a warning, at *NH* 25.7.

promulgated by foreigners; the latter is a time-honored practice of rural Italians in need of remedies.

That Pliny refers to the legislation in the Twelve Tables as magical does, admittedly, complicate this assertion. The passage he refers to has nothing to do with taboos; it is a law against stealing crops by means of incantations—the word for which is *carmina*, not *magia*. I will discuss the former term in greater detail below, but in short, I have found that Pliny associates *carmina*, and other sung or chanted spells, with *magia*. Thus, Pliny’s consistency is not entirely lost, but the comparative harmlessness of crop-stealing, and the inconvenient existence of incantations in seminal Roman legal history, detracts from the strong statement he is attempting to make about the evils of *magia* as destroyed by the Romans. Banning grain-pilfering isn’t quite on the same level as banning human sacrifice.

As I mentioned previously, despite Pliny’s vehement and lengthy diatribe against Magi, surprisingly, he is not entirely against using their remedies, provided that they actually work. As he asserts at *NH* 30.29:

*Ex istis confessa aut certe verisimilia ponemus, sicuti lethargum olfactoriis excitari et inter ea fortassis mustelae testiculis inveteratis aut iocinere usto.*

I will cite from those [remedies] disclosed [by Magi], or rather, [those] which have the appearance of truth; for instance, lethargy is roused by strong smells, and among these, perhaps, are the dried testicles of a weasel or its burnt liver.

No doubt that particular stench was effective, regardless of its status as magic. The pragmatism Pliny displays here is consistent with the multi-pronged approach to healing in ancient Rome, wherein one might try a doctor, a god, and a magician for a cure,

hoping that something would stick.<sup>16</sup> At *NH* 30.30, Pliny openly admits that sometimes it's necessary to try magical remedies when medicine is at a loss:

*In quartanis medicina clinice propemodum nihil pollet. quam ob rem plura eorum remedia ponemus primumque ea, quae adalligari iubent...*

In quartan fevers, clinical medicine has just about no power. On account of this, we will cite numerous remedies of [Magi], and first, those which they say should be attached [to one's person]...

“Attachment” here refers to the practice of tying on an amulet, a popular form of protection against magic or misfortune in ancient Rome. As I have observed before, when Pliny does grudgingly relate the teachings of Magi, he is generally only willing to transmit apotropaic magic.<sup>17</sup> He is also careful to specify in this passage that he will relate *remedia*, not anything more sinister.

## **Magic in the Context of Roman Medicine and Law**

### *Medicine*

Further examination of Roman medicine and law as they relate to magic will aid us in understanding contemporary attitudes towards magic, and the difficulty that arose in attempts to draw a line between magic and medicine, particularly since their development was sometimes considered parallel. Vivian Nutton's work on Roman medicine<sup>18</sup> convincingly paints a picture of the gradual development of Greek medicine in Italy (as opposed to a sudden, state-controlled importation, as the ancient Romans themselves

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<sup>16</sup> See Flemming (2000), Nutton (2004); for how this practice manifested in the worship of Asclepius, see Horstmanshoff (2004). For parallel traditions of magic and medicine in pharaonic Egypt, see David (2004).

<sup>17</sup> With the exception of his warnings against them.

<sup>18</sup> (2004)

claimed). A juxtaposition emerged between foreign Greek medicine and local, rural Italian healing, which largely consisted of herbal remedies.<sup>19</sup>

This, in my opinion, neatly mirrors Pliny's treatment of (primarily) Italian *remedia* as opposed to foreign *magia* and *medicina*. Pliny believed that medicine and magic developed from the same source. Graf argues:<sup>20</sup>

Pliny distinguishes between two ways of healing—*medicina*, true medicine, and *magia*, the false and arrogant medicine—and he defines the latter as a medicine that claims to be higher and better anchored in the divine (*altio rem sanctio rem que medicinam*).

I find Graf's point convincing in the case of *remedia* versus *magia*, but perhaps not in the case of *medicina* versus *magia*; nowhere in the full passage does Pliny state that “true medicine” exists. Furthermore, Pliny nurses great suspicion against medicine as practiced by Greek doctors; this passage could just as easily be a condemnation of *medicina* on account of its alleged common origin with magic. Medicine and magic as practiced by professionals, particularly foreign professionals, would not have had the same connotation in Pliny's perspective as remedies passed down by rural Italian farmers. If there is a “true medicine” here, in his eyes, it is *remedia*, not *medicina*. As Mary Beagon puts it, Pliny's chapters on plants are “self-conscious pioneering of the literary transmission of Roman herbal medicine.”<sup>21</sup> I would add to her statement that herbal medicine (represented by the Latin word *remedia*), from Pliny's perspective, is superior

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<sup>19</sup> For Pliny's rural folk sources, see Stannard (1999).

<sup>20</sup> (1997)

<sup>21</sup> (1992.) For further discussion of Pliny's incorporation of Italian herbal traditions, see Stannard (1999).

to *medicina*; does not exclude supernatural elements; and in all but the most desperate cases, excludes *magia*.

Some examples of pharmaceutical remedies with magical elements in the *Natural History* may be illuminating. The following three remedies occur outside of the context of Magi. The first is at *NH* 24.106:

*herba in capite statuae nata, collecta in vestis alicuius pannum et inligata lino rufo, capitis dolorem confestim sedare traditur.*

A plant sprung from the head of a statue, gathered to the cloth of any garment and tied on with a red linen thread, is said to restrain pain of the head immediately.

This remedy includes four elements of magic: the collection of a plant ingredient under specific circumstances, found in the traditions of Theophrastus' *rhizotomoi* and the *PGM*; sympathy between the cure and the practitioner, as seen in the location of the plant on a statue's head correlating with the illness, a headache; binding, in the words *inligata* and *sedare*; and use of a spell component to create an amulet, a protective charm attached to one's person, which is what this remedy appears to be, though Pliny does not name it as such.

The next example, at 24.107, is similar:

*Herba quaecumque e rivis aut fluminibus ante solis ortum collecta ita, ut nemo colligentem videat, adalligato laevo brachio ita, ut aeger quid sit illud ignoret, tertianas arcere traditur.*

Any plant collected from streams or rivers before sunrise, so that no one sees the one collecting it, when it is tied to the left arm, [in such a way] that the sick person does not know what it is, is said to ward off tertian fevers.

Again, one observes that the remedy includes a plant gathered under specific circumstances, this time with both the time of day and location specified; the caveat that

no one must see it being gathered, which also commonly appears in the strictures of the *rhizotomoi*; and its attachment to part of the body as a sort of amulet. Unlike the previous example, but still certainly magical, its function is apotropaic, not binding; it is said to ward off illness (*arcere*) rather than restrain (*sedare*).

A third example, at 24.109, mirrors the first:

*Cribo in liminite abiecto herbae intus extantes decerptae adalligataeque gravidis partus adcelerant.*

Plants growing from inside a sieve when it has been cast aside in a hedgerow, once they have been picked and tied on, speed up the delivery of a pregnant woman.

Again, the plant must be taken from a specific location; the sieve, which allows substances to flow through it, is sympathetic with ease of childbirth; and it must be tied on (*adalligata*) and worn as an amulet.<sup>22</sup> These three remedies illustrate the use of magical elements in cures which Pliny considers *remedia*, but not *magia*. Although they share similarities with the prescriptions of Magi, Pliny apparently considers them effective, and derived from a more trustworthy source—or, perhaps, he avoids responsibility for the accuracy of the source and appeals to tradition, literally, by using the impartial *traditur* in two of them.<sup>23</sup>

### *Law*

How were magical remedies and poisons treated under Roman law? The answer is largely situational. Because of the ambiguity between medicine, poison, and magic, a

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<sup>22</sup> For sympathetic magic based on flow, see Blakely (2006).

<sup>23</sup> For further discussion of Pliny's use of impersonal verbs when relating supernatural cures, see Stannard (1999).

cure that accidentally injured a patient might well be considered malevolent magic or poisoning; if it had done no harm or helped the patient, it could be considered a good *medicamentum*. Derek Collins discusses a late legal interpretation of what is likely earlier Roman law; his analysis suggests that beneficial agrarian magic and healing magic were not necessarily criminalized in ancient Rome.<sup>24</sup> This, it seems to me, may further explain why Pliny seemingly does not hesitate to relate supernatural *remedia* in the *Natural History*: they may have been considered non-criminal healing magic. Collins provides a useful summary of the state of magic in Roman law:

Unlike the sporadic concern with magic in classical period Greek law, we have evidence beginning in Republican Rome down to the late imperial period of a sustained interest in the regulation of magical activities. An understanding of key statutes in the Roman juridical tradition as they pertain to magic – and especially the *Cornelian law on assassins and poisoners* of 81 BCE – is important not only for its own sake, but because such statutes give direct witness to how earlier Roman laws were expanded over time as the definition itself of what could be considered magical expanded. As earlier statutes were interpreted by later jurists, their writings gave the appearance that Rome had always condemned magical practice... Yet earlier legislation was surprisingly narrow in its enumeration of what qualified as magic – if it even concerned magic at all. This legislation was so narrow, in fact, that one can almost see the manipulation of judicial precedent at work so as to create the appearance of a seamless legal tradition.

The legality of practicing magic, then, would not necessarily have been much of a deterrent in the classical period, especially earlier on, unless one could be reasonably prosecuted on charges of *veneficium*, poisoning/malevolent magic, under the *lex Cornelia de sicariis et veneficis*; or, presumably, very early on, for stealing crops by incantation, under the previously discussed decree of the Twelve Tables. Indeed, Apuleius, who *was*

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<sup>24</sup> (2008)



charged with the *crimen magiae* under the umbrella of the *lex Cornelia*, was famously acquitted through his *Apologia*.

### Lexicography of *Veneficium*

It will be useful to discuss the word *veneficium* at greater length. Another commonly found term for magic, I will argue that it overlaps with the teachings of Magi, but unlike *magia*, is not specific to them. Compared to *magia*, it has a more ambiguous, though still mostly negative, valence—especially when compared with *remedium*, which encompasses both supernatural and mundane cures, is largely positive in connotation, and has no particular association with Magi. The word *veneficium* helps to illuminate Pliny’s views on magic when he compares *magia* and *veneficia* at *NH* 30.6, and when one considers the inclusion of *veneficia* among his remedies.

*Veneficium* is one among a large number of words for magic in the *Natural History*, including *precatio*, *deprecatio*, *incantamentum*, *carmen*, *cantus*, *excantare*, *incantare*, *recanere*, and *augurium*; these cover curses, incantations, and divination, and Pliny tends to associate them with *magia*. *Veneficium*, however, is situated at an intersection of poison, magic, and medicine, and because of this unique significance in the context of supernatural remedy, calls for further analysis.

Pliny admits to a “shadow of truth” behind the lies of Magi: *habentem tamen quasdam veritatis umbras, sed in his veneficas artes pollere, non magicas*; that is, Magi have some accuracy in terms of *artes veneficas*, but not in terms of *artes magicas* (*NH* 30.6). This raises the question: if *veneficium* is part of the arts of Magi, but is not *magia*,

then what exactly is it? The easy answer to this question is that *veneficium* in this instance refers to poisoning, which is one of the word's widely accepted definitions. However, my survey of *veneficium* in the *Natural History* strongly contradicts this seemingly obvious solution.

Before discussing my results, I will start begin with Collins' and Graf's definitions of the term. According to Collins:<sup>25</sup>

The term *veneficium*...has two distinct meanings in Latin. The first is concerned with 'drugs/poisons' *venena* (sg. *venenum*) and means 'the act of poisoning/poison'. The second more generally refers to 'magic' and, in addition to that, can mean a 'philtre' or 'magical substance'. One who uses *venena* is called a *veneficus*, and the same bifurcated meanings apply: the *veneficus* is either a poisoner or a magician.

This is essentially the standard definition of *veneficium*, as one would find it in a dictionary. Graf's definition, which he derives from its legal context, is somewhat different:<sup>26</sup>

The word refers first, it seems, to an action that brings on sudden death, either by the effective administration of a poison or by some other clandestine means; it is no mere chance that the *lex Cornelia* also dealt with arson, of which in the imperial epoch, people readily suspected sorcerers (or other marginals, like Christians).

Later, in the summary of the same chapter, he adds,

...It became clear that *veneficium* and *veneficus* had been at first (and were still in the era of Sulla) special terms reserved for an inexplicable death in contrast to violent deaths; it was only later that these words came to refer to any evil spell...

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<sup>25</sup> (2008)

<sup>26</sup> (1997)

My own definition of *veneficium*, as will be explained below, is that *veneficium* is first and foremost magic, often, but not always, inflicting negative effects on the recipient, and based on substances, plant, animal, human, or mineral; only secondarily does it refer to poison.<sup>27</sup>

While I agree with Graf that *veneficium* was most likely grouped with assassination and arson under the *lex Cornelia* because of their common trait, that is, secrecy, I strongly disagree that *veneficium* only came to mean magic after Sulla's time.

*Veneficium* is a word which encompasses magic and poison, and is particularly connected with magic through its etymology; literally, it is the act of using *venena*. Although Servius traces the etymology of *venenum*, usually translated "poison or drug" in classical Latin, to *vena* and *venire*,<sup>28</sup> it actually shares a proto-Indo-European root with *Venus*, and may have meant "love potion" in pre-classical Latin.<sup>29</sup> Traces of its history as a substance of bewitching charm are scattered throughout the *Natural History* in the form of the many magical uses of the word *veneficium*, to the point that "the practice of using a substance with supernatural properties or effects" might be a more accurate definition than either "poisoning" or "magic." Thus, *veneficium*, through *venenum*, is connected with magic by definition.

Again, that Pliny considers Magi slightly more credible on the subject of *veneficium* than *magia* implies that they are separate in his mind, but I do not think a

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<sup>27</sup> This definition is based on evidence from the *Natural History*; it is possible that a more comprehensive survey of the term in all of Latin literature would provide different results, but in the interest of time and focus, my conclusions are mainly based on Pliny's work.

<sup>28</sup> Maltby (1991), p. 634.

<sup>29</sup> Barnhart (1988), entry "venom."

simple juxtaposition of poisoning versus magic is accurate here, since *veneficium* so frequently refers to acts of magic which are either not related to poison or ambiguously so, if one examines the text without the preconceived idea that they must be about poison.

The following analysis and survey of *veneficium* will, I hope, shed some light on the tangled relationship between pharmacy and magic in the *Natural History*.

<b>Table 3: Instances of <i>Veneficium</i> in the <i>Natural History</i> (41 Total)</b>
<b>Probably about poison (7)</b>
2.23 (murder of Claudius), 28.6 (people who have been bitten by a snake or dog and became poisonous themselves), 28.45 (goat's gall, antidote against weasel v.), 29.33 (broth as remedy for weasel v. & aconite), 32.3 (the poisonous sea-hare), 32.18 (bramble-frogs full of v.), 32.20 (antidote for v. of sea-hare)
<b>Probably about magic, or protection against it (26)</b>
2.9 (lunar eclipse), 8.66 ( <i>hippomanes</i> ), 9.41 (fish used in love potions & slowing legal procedures), 18.8 (Furius Cresimus "charming away crops"), 21.68 (protection against v.), 21.92 (aphrodisiac which protects against v. that cause impotence), 24.72 (protection against v.), 25.5 (common people think eclipses caused by v. & herbs), 25.5 (moly as protection against v.), 25.8 (moly as protection against v. (again)), 28.6 (people with magical gazes), 28.12 (magic, reveals evidence of v.), 28.17 (clasped fingers as v.), 28.18 (eunuch urine as v. to promote fertility in women), 28.27 (magic, hyena kidney to restore fertility taken by v.), 28.29 (v. ascribed to the chameleon by Democritus), 28.44 (wolf

muzzle, protection against v.),<sup>30</sup> 28.49 (*hippomanes* has great strength in v.), 29.19 (magic, basilisk blood an amulet against v.), 29.20 (*remedia* against snake bites are also v. of Magi), 29.23 (extremely poisonous salamander),<sup>31</sup> 30.6 (plant for divination & protection against v.), 32.16 (menstrual fluid full of v.; and antidote against), 32.25 (gold as protection against v.),<sup>32</sup> 36.31 (*amianthus* stone as protection against v., esp. of Magi), 37.40 (amethyst as protection against v., a lie of Magi)

### **Ambiguous (8)**

8.54 (bear brain causes madness), 8.56 (corrosive hedgehog urine), 10.95 (two birds with enmity so great that their blood won't mingle), 14.25 (substances added to color wine), 15.31 (dangerous substances used to allow more eating/drinking), 28.2 (cannibalism as remedy for v. = worse than v.), 29.34 (cure for hair loss caused by v.), 30.6 (shadow of truth from Magi in v., but not *magia*)

The first reference to the word *veneficium* in Pliny's work (*NH* 2.5) appears to have nothing to do with poison at all:

*aut in luna veneficia arguente mortalitate et ob id crepitu dissono auxiliante...*

or with mortals attributing [an eclipse] of the moon to *veneficia* and on this account helping with dissonant noise...

<sup>30</sup> *PGM* I.262-347, a protective charm, also uses a wolf's head.

<sup>31</sup> Though Pliny mentions that Magi believe that salamanders can extinguish fire, he dismisses the idea. Nevertheless, since he cites Magi, I have included it in the "magic" category.

<sup>32</sup> For the magical and mythical properties of metals, see Blakely (2006), Ch. 7. For the science of metallurgy in the *Natural History*, see Healy (1999).

In fact, it is difficult to even categorize this as magical substance-based in the first place, but it seems to refer to the figure of the Thessalian witch, who was said to be able to pull down the moon by means of magical herbs.<sup>33</sup>

This is just one example out of many—in fact, a clear majority—that associate *veneficium* with magic. As displayed in the chart above, as I have categorized the forty-one instances of *veneficia* in the *Natural History*, I have found that seven probably refer to poison, twenty-six probably relate to magic or protection against it, and eight were too ambiguous for me to categorize with any amount of confidence.

As I observed previously, many of these instances are apotropaic in nature—not using *veneficia*, but defending against them. These tend to take the form of plants or animal parts grown or attached to a threshold. Two instances, *NH* 28.17 and 28.18, are actually *veneficia* used as remedies, and a few are prescriptions of Magi, reported with varying levels of skepticism, which are supposed to protect against *veneficium*. In short, this survey shows that *veneficium* is sometimes poison specifically, but most often, more generically, a substance that causes magical effects, generally negative ones, and must be warded against or cured with a countercharm.

Returning to the original question, then, how does *veneficium* differ from *magia*? *Veneficium*, I think, is magic based on substances, plant, animal, human, or mineral. It is a subcategory not specific to Magi, though they sometimes use it. *Veneficia* can also fall under the category of beneficial *remedia*, but this is uncommon. All of this accounts for

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<sup>33</sup> For more on this ritual, see Ogden (2002).

why Pliny mainly relates protections and warnings against *veneficia*, with the occasional remedy.

### The Weight of the Canon

The final factor I will discuss is the question of literary authority and precedent. Pliny appears to feel obligated to acknowledge the famous authorities preceding him, though he does not hesitate to cast aspersions on those whose work includes *magia*. In *NH* 30.2, he remarks with surprise that Homer is silent about magic in the *Iliad*, though the *Odyssey* is almost nothing else, provided that Proteus, the Sirens, Circe, and Odysseus' summoning of the ghosts are all understood as magic.<sup>34</sup> Right away, it is clear that Pliny is willing to criticize even the most famous literary figures if they have some association with *magia*.

Homer is the most illustrious of the poets Pliny lists whose work includes a magical remedy. At *NH* 28.4, Pliny reports:

*Dixit Homerus profluvium sanguinis vulnerato femine Ulixen inhibuisse carmine...*

Homer said that Ulysses stopped the flow of blood from his wounded thigh by means of an incantation...<sup>35</sup>

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<sup>34</sup> “*Maxime tamen mirum est, in bello Troiano tantum de arte silentium fuisse Homero tantumque operis ex eadem in Ulixis erroribus, adeo ut vel totum opus non aliunde constet, siquidem Protea et Sirenum cantus apud eum non aliter intellegi volunt, Circe utique et inferum evocatione hoc solum agi*” (*NH* 30.2).

<sup>35</sup> *Odyssey* 19.457; after a boar hunt, the sons of Autolycus, Odysseus' grandfather, check the blood flowing from Odysseus' wound with a sung charm (ἐπαιοιδή).

Pliny is critical of this remedy, despite his own myriad supernatural *remedia*. The nature of the charm and the term Pliny uses to describe it may explain why. He calls it a *carmen*, which means “incantation” in the context of magic.

I hypothesize that sung magic, in the *Natural History*, is more closely aligned with *magia* than *remedia*. Pliny quotes the Twelve Tables’ ban on magic twice, and both instances refer to sung magic, as evinced by the key verbs in each citation: *excantare* and *incantare* [*malum carmen*], respectively (*NH* 28.4). Furthermore, the supernatural *remedia* Pliny includes in his collection do not include incantations, except in the context of criticizing magic.

But Homer is far from the only offender. Pliny continues in 28.4 to list several more poets, Greek and Roman, who, as he puts it, “imitate” magic:

*Defigi quidem diris precationibus nemo non metuit...hinc Theocriti apud Graecos, Catulli apud nos proximeque Vergilii incantamentorum amatoria imitatio...*

Indeed, there is no one who does not fear being cursed by dreadful imprecations...hence, the amatorial imitation of enchantments by Theocritus among the Greeks, Catullus among us, and most recently Vergil...

Pliny’s use of the word *amatoria*, here an adjective referring to love potions, shows that he is scornful of these poets, since he, as one may recall, banned *amatoria* from the *Natural History*.

The Catullus poem in question is, unfortunately, not extant, but erotic magic is hardly an unthinkable subject for Catullus to have composed upon. The reference to



Theocritus must allude to *Idyll 2*,<sup>36</sup> and relatedly, Pliny's allusion to Vergil is probably about his eighth *Eclogue*, which is an homage to *Idyll 2*:

*Ducite ab urbe domum, mea carmina, ducite Daphnim.  
Has herbas atque haec Ponto mihi lecta venena  
ipse dedit Moeris; nascuntur plurima Ponto.  
His ego saepe lupum fieri et se condere silvis  
Moerim, saepe animas imis excire sepulcris,  
atque satas alio vidi traducere messis.*

Bring him home from the city, my songs, bring Daphnis.  
These herbs and these *venena*, plucked from Pontus  
Moeris himself gave me; very many grow in Pontus.  
With these I've often seen Moeris become a wolf and lurk  
in forests, often summon souls from the deepest tombs,  
and draw crops from another's fields.

Vergil *Eclogues* 8.94-99

This excerpt brings us back to *veneficium*; Moeris uses herbs and *venena* to work several forms of magic, including crop-stealing—perhaps a playful nod to the Twelve Tables, slipped into Vergil's own *carmen*. Earlier in the same *Eclogue* (69-70), Vergil refers to both the moon-drawing power of witches and Circe's transformation of Odysseus' men into pigs as *carmina*:

*Carmina vel caelo possunt deducere lunam;  
carminibus Circe socios mutavit Ulixi*

*Carmina* can even draw the moon down from the sky;  
Circe transformed the comrades of Ulysses with *carmina*.

This confirms that Vergil purposefully conflates song/poetry with magic, and Pliny accurately realizes this.

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<sup>36</sup> Discussed at length in Chapter 2.

Pliny does not restrict his criticism to poetry, but also mentions the magical remedies of three famous prose authors, Theophrastus, Cato, and Varro, who provide cures similar to the *carmen* of Ulysses:

*Theophrastus ischiadicis sanari, Cato prodidit luxatis membris carmen auxiliare, M. Varro podagris.*

Theophrastus says that hip-gout is cured [thus], Cato provides a helpful charm for sprained limbs, M. Varro for gout (28.4).

Pliny's point here appears to be that even these venerable authorities have been fooled by the deception of *magia*. As above, the magic keyword is *carmen*: this is not an unproblematic *remedium* or ambiguous *veneficium*, but an overtly magical charm. However, unlike the poets above, Pliny shows deference to Cato, implicitly defending him by referring to his charm as *auxiliare*, helpful, as opposed to a curse, a *malum carmen*. If even the most respectable authorities succumb to *magia*, it would seem even more imperative for Pliny's work to warn the reader against its dangers—hence, his earlier programmatic statement to that effect.

The *carmen* in the *De Agricultura*, which Cato calls a *cantio*, and the preceding passage, which he calls a *remedium*, neatly illustrate the difference between a remedy with magical elements that Pliny would not consider *magia* as such, and a magical charm that Pliny definitely views as *magia*.

The *cantio* reproduced in *De Agricultura* (160) appears to have been copied from a magical spellbook: the most striking clue to that effect is the actual incantation, which is indecipherable, a very common element in such manuals:<sup>37</sup>

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<sup>37</sup> On the principle that the unknowable is magical.

*Luxum si quod est, hac cantione sanum fiet: harundinem prende tibi viridem p. III aut quinque longam, mediam diffinde, et duo homines teneant ad coxendices; incipe cantare:- in alio s.f.: “moetas uaeta daries dardaries asiadarides una petes,” usque dum coeant -: “motas uaeta daries dardares astataries dissunapiter,” usque dum coeant. Ferrum insuper iactato. Vbi coierint et altera laterum tetigerint, id manu prehende et dextera sinistra praecide; ad luxum aut ad facturam alliga; sanum fiet. Et tamen cotidie cantata – in alios s.f. [uel] luxato uel hoc modo: “huat hauat huat ista pista sista dannabo dannaustra” – [et luxato uel hoc modo]: “huat haut haut istasis tarsis ardannabou dannaustra”.*

In case of dislocation this spell will cure it. Take a green reed 4 or 5 feet long, split it down the middle, and have two persons hold the split pieces to their hips. Begin to chant, MOTAS VAETA DARIES DARDARES ASTATARIES DISSUNAPITER (another text has MOTAS VAETA DARIES DARDARIES ASIADARIDES UNA PETES), while the two pieces are brought together. Brandish iron above. When they are together and touching, take the reed in your hand and cut it at left and right. Tie it to the dislocation or fracture and it will heal. Meanwhile chant every day, HUAT HAUT HAUT ISTASIS TARSIS ARDANNABOU DANNAUSTR (another text has HUAT AUAT HUAT ISTA PISTA SISTA DANNABOU DANNAUSTR).<sup>38</sup>

Without the incantation, this remedy would not be entirely dissimilar from the apotropaic remedies of Pliny discussed above, which also entail tying an object to the injured party. (Again, the *carmen*, or, in this case, *cantio*, appears to be an indelible sign of *magia* in Pliny’s view.)

Compare this to the *remedium* preceding the *carmen*, which Pliny does not mention as problematic (*De Agricultura* 159):

*Intertrigini remedium: in uiam cum ibis, apsinthi pontici surculum sub anulo habeto.*

Cure for chafing. When you go walking, hold a stem of *absinthium ponticum* under your finger-ring.<sup>39</sup>

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<sup>38</sup> Trans. Andrew Dalby.

<sup>39</sup> Trans. Andrew Dalby.

This remedy is not terribly different from the *cantio*, if one removed the chant, or Pliny's apotropaic *remedia*. Without the stain of *magia*, healing magic passes unremarked.

Pliny's treatment of Cato is characteristic of how his work interacts with the canon in general, and how it reflects the treatment of magic in pharmaceutical didactic as a whole. Pliny views his predecessors as tragically misguided by the pernicious teachings of Magi, and in this sense, he is not only passing on knowledge, but actively correcting it—not the work of an uncritical curator, but one who has carefully considered the dangers of certain types of knowledge and chosen to restrict it.<sup>40</sup>

Theophrastus grudgingly includes the superstitions of the *rhizotomoi* and openly includes apotropaic plants; Nicander, in pursuit of Homeric glory, includes implicitly magical remedies and explicitly magical mythology; Pliny condemns *magia*, except in certain hopeless medical situations, and includes implicitly magical remedies. Of the three, Pliny seems the most pragmatic: he is not writing for the sake of scientific classification, or poetic virtuosity. What matters most, with respect to remedies, is that they work.

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<sup>40</sup> For the restriction of magical knowledge by Egyptian priests, see LiDonnici (2002).

## CHAPTER FOUR

### Unspoken Magic in the *Compositiones* of Scribonius Largus

Scribonius Largus, a physician and medical writer of the 1<sup>st</sup> century CE, is in several ways an outlier among the four authors I have used as case studies, yet it is this very contrast that makes his work a valuable source of information on the reception of medicine and magic in the early empire.<sup>1</sup> Scribonius presents fewer overt examples of magic in his pharmaceutical writing than Theophrastus or Pliny,<sup>2</sup> but he does not avoid the magic interwoven into the pharmaceutical-didactic genre so much as conceal its presence.<sup>3</sup>

His success in this endeavor is nebulous. Magic surfaces intermittently throughout his recipes, though is never named as such. The term *veneficium*, for instance, so common in Pliny's *Natural History*, does not appear in the *Compositiones* at all; neither do *magia* or *magica*. In spite of this restricted lexicon, the actual practices and remedies associated

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<sup>1</sup> The scholarship on Scribonius is generally devoted either to the preface of the *Compositiones* and its place in Roman ethical and medical writing, or to technical pharmaceutical analysis of Scribonius' recipes. Most scholars who address magic in the *Compositiones*, like Hirsch (1911), are critical of Scribonius' "superstitious" remedies; more recently, Jouanna-Bouchet (2003) compares the "rationnel et irrationnel" in Scribonius and Marcellus Empiricus. Machold (2010) presents a thorough analysis of the influence of healing magic, which he terms *Iatromagie*, on the *Compositiones*, and argues for a higher level of magical influence, in fact, than I do; some of his categorizations are criticized by Gaillard-Seux (2013) as overly broad. He either does not reconcile this strong representation of healing magic with Scribonius' own statement on dangerous remedies, or he does not read it, as I do, as a veiled reference to magic. If, at any rate, Machold is correct about the substantial influence of *Iatromagie*, then Scribonius is even less capable of concealing the traces of magic in the *Compositiones* than I have thus far concluded.

The authoritative Latin edition of the *Compositiones* is Sconocchia's 1983 Teubner. Mantovanelli's 2012 commentary and Langslow's *Medical Latin in the Roman Empire* (2000) address Scribonius' technical terminology and word formation. Scarborough (2008) emphasizes Scribonius' pharmaceutical expertise, calling him "remarkably talented;" Baldwin (1992) agrees that *Compositiones* are worthy of more attention from scholars. Hamilton (1986), Pellegrino (1988) and Mudry (2006), on the other hand, focus on the medical ethics of the preface. Jouanna-Bouchet's 2016 edition studies Scribonius' contribution to Latin medical vocabulary, the preface as an example of Roman deontology, and the history of the text.

<sup>2</sup> I do not mention Nicander here because I do not think that he tried to be covert at all.

<sup>3</sup> Although Scribonius predates Pliny the Elder, the context and analysis of *veneficium* and its legal consequences that was established in the latter's chapter lays the necessary groundwork for this chapter.

with magic are evident, *de facto* and by implication, among both his remedies and his statements on morality.

Scribonius scrupulously delineates the boundaries that an ethical doctor, in his eyes, must maintain, particularly between medicine, poison, and, implicitly, magic.<sup>4</sup> In general, he projects an air of frustration with the public's conflation of *medicina* and those practices that he rejects from the profession; nevertheless, with a reluctant practicality that is reminiscent of Pliny, Scribonius sometimes deigns to record magical remedies for those cases to which mundane medicine has no answer. Unlike Pliny, however, Scribonius makes no indication that these remedies are, in fact, magical, and instead simply describes them. In cases where he is unable to avoid referring to them by some sort of name, he uses vague and euphemistic language.

A major hindrance in the way of Scribonius' attempts to separate magic from medicine is the extent to which they are, by this point, interwoven within his sources themselves. If this is, as I argue, characteristic of a pharmaceutical-didactic subgenre, formed from a chaotic web of poetry, pharmacy, religion, and magic, each with varying degrees of faithfulness to its source material, it would have been difficult for anyone to fully untangle a single strand of these influences. Theophrastus certainly struggled to do so in his records of *rhizotomia*, and he did not have to contend with the centuries of transmission that lie between his work and Scribonius' text.

There is, alternatively, the possibility that Scribonius, like Pliny, is not opposed to magical *remedia* (as opposed to *magia*), but unlike Pliny, is a physician of the imperial

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<sup>4</sup> For a comparison of Scribonius to Roman ethical writers, see Mudry (2006).

family, and must therefore be more cautious for the sake of his own livelihood and safety.<sup>5</sup> No doubt the popular association of *medicina* with *veneficium* would have cast suspicion on doctors, and, in the event of poisoning at court, they would have been easy suspects.<sup>6</sup> Although this was likely a factor in Scribonius' editorial decisions, I find it, overall, a less significant motive for his stance on magic than professional pride and personal morality, both because the type of *remedium* promoted by Cato the Elder would likely have been sufficiently unobjectionable for publication, and because many forms of ancient magic are in direct opposition to Scribonius' principles as he describes them in his preface. It is, after all, difficult to reconcile the Hippocratic injunction to do no harm with those magical remedies that require murder, coercion, or the desecration of human remains.

Indeed, the magical practices that Scribonius most vehemently rejects from his profession (but does not name) are those for which harm to a human being is required, and often, a violent and untimely death.<sup>7</sup> These remedies are obviously nefarious, in both the ancient and modern sense, and easily recognizable as magic. Amulets and apotropaic plants, which Scribonius mildly distances himself from, if at all, are less obvious—and, as discussed in the previous chapter, may be a less objectionable form of magic than *magia*.

Despite this similarity to Pliny's approach in the *Natural History*, Scribonius and Pliny object to magic on different grounds. While from Pliny's point of view, *magia* is

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<sup>5</sup> The *Natural History* is, however, dedicated to the emperor Titus, a potential reason for its lengthy diatribe against magic.

<sup>6</sup> Tacitus certainly does not hesitate to implicate Claudius' primary doctor, Xenophon (*Annales* 12.66-67).

<sup>7</sup> With one notable exception, discussed below.

problematic because it is foreign, mostly false, and ineffective, to Scribonius, people who use *mala medicamenta*, as he euphemistically puts it, are impious, harmful to the reputation of his profession, and in violation of a medic's sacred duty.

### **The Life and Context of Scribonius**

Scribonius stands out from the other authors I have analyzed in several ways. Most obviously, Scribonius, unlike Theophrastus, Nicander, and Pliny, was a practicing medic, a court doctor of the emperor Claudius and the imperial family, though he was not the emperor's primary physician.<sup>8</sup> His practical experience would have lent him a different perspective on the use and misuse of *materia medica*, and, perhaps, the ability to better describe his remedies and instruct others in their use. It would also have raised the reputational and professional stakes attached to his stance on medicine, unlike the more limited investment of Theophrastus the botanical investigator, Nicander the Homeric poet, and Pliny the collector of knowledge.

Though little more is known about the life of Scribonius than his profession and relation to Claudius, the *Compositiones* is usually dated between 43 and 48 CE. This time range is derived from two of Scribonius' statements: first, a remark that he accompanied Claudius on his military campaign in Britain, which began in 43 (CLXIII), and second, a reference to Claudius' wife Messalina, who died in 48 (LX). Doctors, in general, did not enjoy high status or respect in Rome during this time, and Greek medicine in particular was viewed with suspicion by the general populace, an attitude exemplified by Pliny's

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<sup>8</sup> That title fell to Xenophon, according to Tacitus. While it is within the realm of possibility that Nicander was also a doctor, the evidence is inconclusive.



tirade against it a few decades later.<sup>9</sup> Scribonius, at any rate, must have occupied a more privileged position than his fellows, as a doctor to the imperial family; yet this higher status would also have been accompanied by greater scrutiny.

Both of these factors inform the *Compositiones*. Scribonius is often defensive of medicine as a profession, and he walks a careful line between advocating for the use of medication and denouncing those unscrupulous individuals who use it for the sake of power, rather than healing.<sup>10</sup> He also takes care to frequently praise the Julio-Claudians and make note of their favorite remedies.

Considering that *veneficium* was outlawed by the *lex Cornelia*, and that poison and magic were both used as political weapons against the imperial dynasty, it is not surprising that Scribonius would go out of his way to denounce this genre of magic in particular.<sup>11</sup> One might assume that he also does so because he finds these practices ridiculous from a medical standpoint, but it is not clear whether that is completely true.

### **Delineating *Medicina***

According to Scribonius, a doctor should know about *mala medicamenta*, but only enough to recognize their symptoms and treat them.<sup>12</sup> He asserts that anything beyond that should rightly be rejected by both mortals and the gods. What, then, does going beyond the necessary knowledge entail? It seems that the act of putting this information

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<sup>9</sup> For Pliny's stance on medicine, see especially Nutton (1986).

<sup>10</sup> *Non a medendo, sed a potentia* (1.4).

<sup>11</sup> Indeed, Claudius would later reportedly be murdered by *veneficium* (*Annales* 12.66-67).

<sup>12</sup> Section 3.5 of the preface.

into practice, whether for poisoning or the more nefarious forms of healing,<sup>13</sup> is the line that must not be crossed.

There is one particularly helpful passage that describes the sort of violent magical remedies that Scribonius rejects from *medicina*:

*Nam sunt et qui sanguinem ex vena sua missum bibant aut de calvaria defuncti terna coclearia sumant per dies triginta; item ex iecinore gladiatoris iugulati particulam aliquam novies datam consumant. Quaeque eiusdem generis sunt, extra medicinae professionem cadunt, quamvis profuisse quibusdam visa sint.*

For there are even people who drink blood drawn from their own veins, or take three spoonfuls at a time from the skull of a dead man for thirty days; similarly, they consume a certain small piece from the liver of a slaughtered gladiator, administered nine times. All things of this nature fall outside the profession of medicine, however useful they have been considered by certain people (XVIII).<sup>14</sup>

The practices that Scribonius describes are harmful to the practitioner, in the case of blood drawn from one's own veins; in the other cases, they are harmful to the person whose murder provides the purportedly medicinal material. These remedies require desecrating corpses, harnessing the power of one's own life force, or bringing an untimely end to another's. They are, furthermore, based on principles similar to coercive love spells, as illustrated by a ritual in the *PGM*, described as a "love spell of attraction performed with the help of heroes or gladiators or those who have died an untimely death" (IV.1390-1495).<sup>15</sup> As such, they can definitely be categorized as *magia*, by Pliny the Elder's standards. Pliny, who writes at length upon similar and even more violent practices, labels the type of person who would extend their life by such methods *nefandus*, and concludes that *nullum melius esse tempestiva morte*: nothing is better than

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<sup>13</sup> *Veneficium*, essentially.

<sup>14</sup> All translations are my own unless otherwise noted.

<sup>15</sup> Tr. E.N. O'Neil.

a timely death (*NH* 28.2). From his perspective, the victim's life, cut unnaturally short, is paralleled by the unnatural extension of the practitioner's life, and both of these things are immoral and undesirable.

Scribonius, however, is not in consensus with all of his contemporaries in his goal to expel such remedies from *medicina*.<sup>16</sup> Celsus, for instance, comments that some people have been cured of epilepsy by the practice of drinking gladiators' blood (*De Medicina* 3.23):

*Quidam iugulate gladiatoris calido sanguine epoto tali morbo se liberarunt; apud quos miserum auxilium tolerabile miserius malum fecit.*

Certain people have freed themselves from such an illness by drinking hot blood from the slit throat of a gladiator; among them, a more miserable evil makes a miserable remedy acceptable.

Celsus appears to accept the validity of this remedy, albeit grudgingly. His attitude is a more extreme example of the practical streak that is apparent in the *Natural History*, and to a lesser extent in the *Compositiones*, mainly in the context of illnesses that are incurable or very difficult to treat; that is, that one may resort to questionable remedies in the absence of other options. It seems that for Celsus, at any rate, the use of gladiators' blood as a remedy is not, in fact, outside the profession of *medicina*.

There is one notable exception to Scribonius' non-violent and anti-magic ethical standpoint among his remedies. The passage that rejects the drinking of murdered gladiators' blood occurs not long after a remedy for epilepsy that calls for a young deer to be killed with an "[implement] soaked in the blood of a slaughtered gladiator (XIII)."

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<sup>16</sup> Or near-contemporaries: though little is known about him, Celsus apparently lived during Tiberius' reign.

Scribonius does not dispute the validity of this prescription; he merely mentions that he heard it from someone else, thus distancing himself to a certain extent.<sup>17</sup>

The underlying principle, that the remains and spirits of the violent dead hold miraculous power, is just as evident here as it is in the remedies that Scribonius rejects. The most obvious difference is that this remedy does not require cannibalism (certainly a significant and important distinction!); it is a milder version, yet one that still depends on the alleged medico-magical properties of a murdered person's blood.

The positioning of Scribonius' denunciation of the more extreme practices dependent on this principle, which occurs shortly after this passage, suggests that he intends it as a disclaimer for the preceding epilepsy remedies, meant to convey that he does not personally consider such things a valid part of the medical profession, and this is only what he heard someone else say, not his own beliefs. Both the disassociation with the source and the disclaimer that these remedies are not part of *medicina* allow Scribonius to reconcile including the information with his ethical conviction that a doctor should do no harm to his patients. This careful rhetorical footwork is characteristic of his approach in the preface and elsewhere.

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<sup>17</sup> He attempts to distance himself in a similar manner when he mentions a hyena-hide amulet (though he does not call it an *amuletum*), discussed below.

*...Hoc remedium qui monstravit, dixit ad rem pertinere occidi hinnuleum tinctorio, quo gladiator iugulatus sit.*

The person who revealed this remedy said that it is pertinent to the matter that the young deer be killed by means of the blood-soaked [implement] with which a gladiator was slaughtered (XIII).

### The Definition and Ethics of the *Malum Medicamentum*

In order to unpack one of Scribonius' most notable euphemisms, namely, *malum medicamentum*, it will be beneficial to examine a key passage from the preface. Here Scribonius explains his stance on medical ethics, which greatly resembles the precepts of the Hippocratic corpus, with the (very Roman) caveat that a doctor will not hesitate to use force against an enemy in war or when it is the duty of a good citizen.

*Idcirco ne hostibus quidem malum medicamentum dabit, qui sacramento medicinae legitime est obligatus (sed persequetur eos, cum res postulaverit, ut militans et civis bonus omni modo), quia medicina non fortuna neque personis homines aestimat, verum aequaliter omnibus implorantibus auxilia sua succursuram se pollicetur nullique umquam nocituram profitetur.*

Therefore, one who is justly bound by the oath of medicine will not give a *malum medicamentum* even to enemies (but he will attack them, when circumstance demands it, as a soldier and good citizen in every way), because medicine estimates people not by fortune nor character, but promises that it will offer its aid equally to all who ask, and professes that it will never harm anyone (3.5).

The term *malum medicamentum* is the closest Scribonius comes to using magical terminology, and thus, it is worthy of closer examination. To begin, what does Scribonius mean when he forbids “giving a *malum medicamentum*”? One possibility is that he refers to doctors who give false or harmful medicines to their patients, and that this is a warning against medical malpractice. Certainly, an unscrupulous or incompetent doctor would be well-positioned to offer dangerous compounds to patients, because the knowledge required by the profession necessitates understanding which dosages heal and which are

deadly. This is one reason that Scribonius is so insistent that a doctor should understand, but not use, *mala medicamenta*.<sup>18</sup>

This statement may also double as a veiled warning against magical remedies, like the infamous gladiators' blood, and even the use of *veneficium* against the doctor's enemies (or the enemies of a third party willing to pay for *veneficium*). The use of medical knowledge to harm, instead of to heal, is a reversal that is characteristic of *magia*. A spell in the *PGM* demonstrates this concept when it lists "causing disease" as a part of magical knowledge:

...And when he comes, ask him about what you wish, about the art of prophecy, about divination with epic verses, about the sending of dreams, about obtaining revelations in dreams, about / interpretations of dreams, **about causing disease, about everything that is part of magical knowledge** (I.262-347).<sup>19</sup>

This presumably refers to the practice of inflicting illness on one's enemies with magic. In this light, Scribonius' statement may mean that a doctor should not use *veneficium*, in the sense of poison or magic, against an enemy. Considering that Scribonius accompanied Claudius' British campaign, he may even have witnessed such actions against prisoners of war.

Later in the *Compositiones*, Scribonius offers antidotes for individual *mala medicamenta*; these consist of toxic plant, animal, and mineral substances. At first glance,

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<sup>18</sup> This is articulated most clearly in his remarks following remedy CXCIX (for leeches): *Medicamentorum malorum non nocet nominum aut figurarum notitia, sed ponderis scientia. Hanc porro medicus nec quaerere nec nosse debet, nisi diis hominibusque merito vult invisus esse et contra ius fasque professionis egredi.*

Noting the names or forms of *mala medicamenta* is not harmful, but the knowledge of their weight [is]. Beyond this a doctor ought neither to seek nor to know, unless he wants to be deservedly hated by gods and humans, and to go against the law and divine righteousness of the profession.

<sup>19</sup> Tr. E.N. O'Neil.

this would suggest that he mainly uses the term to refer to poisons or dangerous substances; but on the other hand, many of these *mala medicamenta* overlap with substances that Pliny the Elder refers to as *veneficia*.

In the *Natural History*, Pliny uses *malum medicamentum* as a broad term for harmful substances, encompassing both poison and magic, similar to and perhaps synonymous with *veneficium*.<sup>20</sup> For example, Pliny uses the term *malum medicamentum* for the danger prevented by the squill plant, citing Pythagoras (20.39).<sup>21</sup> In this context, the meaning of *malum medicamentum* overlaps with *veneficium*, since it is equivalent to the sort of quasi-magical peril against which Pliny's apotropaic charms characteristically defend.<sup>22</sup>

In a similar vein, Pliny (though he hedges with *si verum est*) describes the cyclamen plant as an *amuletum* that protects against *mala medicamenta* (NH 25.67):<sup>23</sup>

*A nostris tuber terrae vocatur, in omnibus serenda domibus, si verum est, ubi sata sit, nihil nocere mala medicamenta; amuletum vocant.*

[Cyclamen] is called by our people *tuber terrae*, and should be planted in all homes; if it is true, where it has been sown, *mala medicamenta* do no harm: they call it an amulet.

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<sup>20</sup> Scribonius uses *venenum* at times, but never *veneficium*.

<sup>21</sup> See Chapter 1.

*Pythagoras scillam in limine quoque ianuae suspensam contra malorum medicamentorum introitum pollere tradit.*

Pythagoras relates that squill, suspended also on the threshold of a door, is effective against the entrance of *mala medicamenta* (20.39).

<sup>22</sup> Pliny also reports an ancient tradition that newly wedded brides oiled the doorposts with wolf fat in order to prevent the entry of any kind of *malum medicamentum* (28.37), and a teaching of Magi that the bile of a black dog is an *amuletum* against *mala medicamenta* (30.24). At 32.16, he adds that a sea star, imbued with fox's blood and attached to a lintel or door with a copper nail, prevents the entry or, at least, the harm, of *mala medicamenta*.

<sup>23</sup> He also says that the cyclamen is effective against one of the *mala medicamenta* listed by Scribonius, the sea-hare (25.77).

*Amuleta*, of course, were used as protection against *veneficium*.<sup>24</sup> Moreover, in Chapter 28, Pliny appears to use *malum medicamentum* synonymously with *veneficium*:

*papilio quoque lucernarum luminibus advolans inter mala medicamenta numeratur; huic contrarium est iocur caprinum, sicut fel veneficiis ex mustella rustica factis. (28.45)*

The moth, too, flying toward the lights of lamps, is counted among *mala medicamenta*; opposing it is goat's liver, just as its gall opposes the *veneficia* produced by the rustic weasel.

One wonders by what reasoning a moth could be considered a *medicamentum*! Was it thought to be toxic, or perhaps some kind of omen? The comparison with the gall of the weasel suggests the former. Regardless, the materials derived from the goat counteract both *mala medicamenta* and *veneficia*, revealing a certain equivalence between the terms.

Scribonius himself includes an amulet among the *Compositiones*, though he does not name it as such. He instead refers to it, vaguely, as a *remedium* tied to the left arm, and mentions that it was rumored to have allowed a man on Crete to administer medicine to dogs afflicted with symptomatic rabies (CLXXI).<sup>25</sup> Scribonius then explains that he asked his guest, a doctor who had been sent from the area as a legate, what the remedy was, and the man told him that it was a piece of hyena hide bound in cloth.<sup>26</sup> Finally, Scribonius remarks that he is not experienced in preparing hyena hide, but that, in the

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<sup>24</sup> See *NH* 29.19

<sup>25</sup> *Quamquam pervenit ad me opinio esse in insula Creta barbarum quondam naufragio adpulsum maiorem natu publice mercedem accipientem, quem etiam, cum liquorem timent et latratus edunt spasmoque vexantur, remedio brachio sinistro alligato efficere ut et potionem accipiant et liberentur vitio, quod adhuc ante antidotum Celsi inter omnes quasi insanabile constitit.*

Nevertheless, rumor has reached me that there was once on the island of Crete a barbarian, driven to shore by shipwreck, rather old in age, receiving recompense at public expense, who, even [at the stage] when they fear liquid and bark and are disturbed by convulsions, with a remedy bound to his left arm, got [rabid dogs] to accept a potion and be freed from a sickness which thus far, before the antidote of Celsus, was considered seemingly incurable by everyone.

<sup>26</sup> Pliny informs us that hyena kidney is a remedy against *veneficium* that reduces fertility (*NH* 28.27).



unfortunate occurrence that one contracts rabies, it is necessary to have a remedy for such a trial at hand (CLXXII).<sup>27</sup>

Scribonius leaves the magical nature of the hyena-hide amulet unspoken, while delicately denying that he has any prior experience with such remedies and distancing himself by reporting it as a secondhand source. It is nonetheless, if Pliny can be believed, a type of *magia*; in the *Natural History* he elaborates at length on the hyena's status as the animal that Magi "have held in highest esteem," relating the magical (*magicas*) properties that they attribute to it,<sup>28</sup> and, in a juxtaposition that Scribonius would not have appreciated, the medicines (*medicinis*) that are produced from it.<sup>29</sup> Among these, Pliny reports a remedy for dog bites that prescribes hyena hide and fat:

*...a cane vero morsis adipem inlitum et corium substratum...*

[Magi say that], for people bitten by a dog, its fat, smeared upon them, and its skin, spread under them, [is a cure].<sup>30</sup>

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<sup>27</sup> *Hoc ego cum quaererem ab hospite meo legato inde misso nomine Zopyro Gortynense medico, quid esset, pro magno munere accepto dixit autem hyaenae corii particulam esse panno inligatam. Quod ego adhuc non sum expertus, quamvis protinus magna cura hyaenam emerim et pellem paratam habeam, quia non incidit ex eo quisquam, et opto quidem ne incidat, sed quia id non est in nostra potestate, si casu inciderit remedium habere oportet ad tantae rei experimentum.*

This [remedium], when I asked my guest, a legate sent from there by the name of Dr. Zopyrus Gortynensis, what it was, in return for the receipt of a large gift—he said, at any rate, that it is a little piece of hyena hide, bound in cloth. Which I, thus far, am not an expert [in], yet immediately, with great care, I bought a hyena and have its skin prepared, because not everyone encounters this, and certainly I hope that one does not encounter it, but because it is not in our power, if, by chance, one has contracted it, it is necessary to have a remedy for the trial of such a terrible thing.

<sup>28</sup> *Hyaenam Magi ex omnibus animalibus in maxima admiratione posuerunt, utpote cui et ipsi magicas artes dederint vimque, qua alliciat ad se homines mentes alienans...nunc persequemur quaecumque medicinis produntur.*

Magi have held the hyena, out of all the animals, in greatest esteem, inasmuch as they have even attributed magical arts to it, and a power by which it may entice people to itself, numbing their minds...Now we will follow up on whatever medicines are produced [from it]. (28.27).

<sup>29</sup> It is apparent that Pliny does not care to differentiate very much between *magia* and *medicina*, yet this may not be peculiar to him, since even Scribonius, who is ostensibly taking great care to do so, fails from time to time. This is, as I have argued, the inevitable nature of the pharmaceutical-didactic genre, and, more broadly, a reflection of the syncretic state of medicine in the ancient Mediterranean.

<sup>30</sup> Interestingly, the remedy listed right before this one is for people injured by *malo medicamento*, which hints that the term is perhaps more closely associated with *magia* than it seems; with the caveat that Pliny's usage of the word is likely less precise than Scribonius.'

This suggests that the curative properties of hyena hide, and likely, the “rumor” that Scribonius reports, originated with magicians.

Scribonius, it appears, includes this amulet out of desperation, because, as he notes, symptomatic rabies was (and still is!) considered incurable. In this respect, his rationale strongly resembles Pliny’s, on those occasions when the latter offers the prescriptions of Magi in the absence of any better option, and, ironically, Celsus’ pragmatic acceptance of gladiators’ blood as a cure for epilepsy.<sup>31</sup>

If Scribonius is occasionally willing to mention magical cures for extreme cases, then it is not beyond belief that the term *malum medicamentum* covers both toxins and magic—but the former meaning is predominant enough to provide plausible deniability. Scribonius’ statement on the morality of administering a *malum medicamentum* thus implicitly condemns his magic-using colleagues while openly denouncing medical malpractice.

### **Plant-Picking Spells in the *Compositiones***

The gathering of pharmaceutical herbs, in the *Papyri Graecae Magicae* and the traditions of the *rhizotomoi*, is often accompanied by ritual, and Scribonius, like Theophrastus and Pliny, transmits some of these practices. In the section on *theriacae* (defined as *medicamenta* for the bites and strikes of snakes), Scribonius recommends some of the magical plant-picking precautions that we have previously seen recorded in the *Inquiry into Plants* and the *Natural History*:

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<sup>31</sup> Pliny, however, admits that he is doing so (some of the time).

*Idem praestat et hierobotane et trifolium acutum...Sed utrasque superius dictas herbas [quas] cum inveneris, pridie notare oportet et circumscribere sinistra aure fruges aliquas ponentem, atque postero die solis ortu sinistra manu vellere, ita illigatas habere.*

Likewise, both holy vervain and sharp trefoil are outstanding...But when you have found either of the aforementioned herbs, it is fitting to note them on the day before, and to draw a circle around them with the left [plow-]ear, setting down some fruits, and on the day after, at sunrise, to pick them with the left hand, to hold them thus bound (CLXIII).

This advice is familiar. As usual, there is a temporal element: in this case, the process takes two days, one on which to circumscribe the plant and leave offerings, and one on which to pick them. As so often in this type of ritual, the picking should be done at sunrise. On each day an action is performed on the left—drawing the furrow around the plant with the left ear,<sup>32</sup> and picking the plant with the left hand.<sup>33</sup> This leaves the herbs safely bound (*illigatas*).

Why would Scribonius, who scrupulously removes or censors magical traditions from his work, include the plant-picking superstitions of the *rhizotomoi*? It seems unlikely that he is relying on the authority of Theophrastus, both because Scribonius includes this *theriacae* among those he is personally familiar with (*quae cognita habui remedia*, CLXIII), and because the practices of inscribing a circle around a plant and leaving offerings in its place are among those which Theophrastus considers unreasonable.<sup>34</sup> Furthermore, the *rhizotomos* seems to be similar or equivalent to the *pharmakopōlēēs*, (Latin *pharmacopola*), a figure strongly rejected by Scribonius. He accuses these herb-sellers of seeking knowledge of *mala medicamenta* beyond what is

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<sup>32</sup> I have tentatively translated this as the left “ear” of the plow (cf. Vergil *Georgics*. 1.172), since it seems a more likely tool for inscribing a circle in the dirt, but it is not impossible that he means one’s actual ear.

<sup>33</sup> Similarly, the hyena-hide amulet is attached to the left arm. See also *NH* 24.107, discussed in Chapter 3.

<sup>34</sup> Though it is not impossible that his disapproval was lost in translation.

necessary, acting contrary to what is law (*ius*) and moral (*fas*) in the profession of medicine, and opposing *medicina* even while resembling it (CXCIX).

However, as I have found in my analysis of Pliny, plant-picking traditions seem to have been normalized in Rome to the point that they were not considered a Greek or otherwise foreign import (which would likely condemn them to the category of *magia*), but rather an acceptable Italian practice. Indeed, Scribonius, earlier in the passage, mentions the snake repellents used by Sicilian hunters, and describes two varieties of trefoil (one of the plants that should be picked ritually, according to the passage above), one from the hills around the port of Luna, and one from other regions of Italy.<sup>35</sup>

If this is Scribonius' reasoning, then it is another case when a practice that would be considered magic by modern standards is simply a *remedium* by ancient Roman standards. Its connection to Greek *rhizotomia* and general *magia* is either unknown or conveniently overlooked. The latter seems more likely for Scribonius, who is clearly well-read in Greek. The plant-picking rituals in question, in fact, appear among his *theriacae*, a word that is obviously of Greek origin, and reminiscent of Nicander.

### Scribonius and Nicander

Scribonius uses Nicander as a source twenty times, not counting the two *theriacae* that are unfortunately not extant.<sup>36</sup> In general, Scribonius' reception of Nicander is very cautious, effective at avoiding the more blatantly magical aspects of the latter's remedies,

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<sup>35</sup> He emphasizes that this plant smells very bad, making this passage, like many pharmaceutical-didactic prescriptions, a combination of practical and ritual rationale.

<sup>36</sup> For a full list of Scribonius' citations of Nicander, see Schonack (1912).

and adherent to the precept that a doctor must only know the minimum amount of information necessary to recognize and cure the effects of dangerous substances.

The most striking example of this erasure manifests in Scribonius' transmission of Nicander's remedy for salamander poisoning. The salamander is associated with witchcraft in Nicander's poetry and in Theocritus' second *Idyll*, and with both *veneficium* and the teachings of Magi in Pliny's *Natural History*.<sup>37</sup> Scribonius reports a truncated version of Nicander's salamander remedy,<sup>38</sup> stripped of all references to the salamander's magical properties and the figure of the *pharmakis*:

*Ad salamandram*

*Salamandra quibus data est, lingua exasperatur, corpus invalidum fit ; praeter hoc torpet rigoribus quibusdam et livoribus quasi maculis variatur. Adiuvari autem debent, quibus impacta est, melle quam plurimo per se vel cum resina ex pinu, cuius etiam tenera folia cum herba, quam Graeci χαμαίπιτον appellant, decocta ex aqua mulsea prosunt. Item lini seminis farina ex aqua mulsea sumpta quam plurima bene adiuvat.*

*For salamander*

For those people to whom salamander has been given, the tongue is irritated, and the body becomes weak; besides this, it becomes numb with chills of a sort, and it is mottled with discolorations, like spots. Those upon whom it has been pressed, however, should be helped by honey, [taken] as often as possible, either by itself, or with the resin from a pine tree, whose tender leaves, additionally, are beneficial with the herb that Greeks call χαμαίπιτος [ground-pine], boiled down from honey-water. Similarly, powder of flax seed, taken from honey-water as often as possible, is very helpful (CLXXXVII).

Note Scribonius' phrasing: he writes that the hypothetical salamander has been given to (*data est*) or pressed upon (*impacta est*) the victims of its toxins, not that those afflicted

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<sup>37</sup> See Chapters 2 and 3.

<sup>38</sup> Scribonius' version is less than half of the length of Nicander's.

have accidentally touched a wild salamander. Although this grammatical framing indicates that there is a deliberate act of poisoning involved, whether through contaminated food or drink (as shown, perhaps, by *data est*) or direct skin contact with the salamander (*impacta est*), Scribonius' use of the passive voice serves to conceal the implied agent of the act. He may envision this figure as a fraudulent, unscrupulous medic, of the sort who would distribute *mala medicamenta*, or even as a full-blown *veneficus* or *venefica*, like Nicander's *pharmakis*. Scribonius, as he has previously made abundantly clear, does not want the former to be associated with *medicina*; and, of course, directly referring to the latter is politically, legally, and morally dangerous.

This motivation to erase the figure of the *pharmakis* or *veneficus* may also explain why Scribonius has removed Nicander's statement that the form in which salamander poison harms its victims is a "hard to cure drink."<sup>39</sup> As I argue in Chapter 2, Nicander, in doing so, leaves little room for ambiguity in the matter of intent, since the poisoned drink he describes is highly unlikely to be accidental. Scribonius' choice to remove it has the effect of concealing the means of magical poisoning in addition to the perpetrator. All that remains of Nicander's original passage is the act itself, rendered indeterminate by the agentless passive voice, and several of his suggested remedies.<sup>40</sup> Scribonius cannot entirely remove the lingering implications of *veneficium* associated with salamander poisoning, but through a combination of euphemistic phrasing and restriction of information, he remains true to his ethical principles.

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<sup>39</sup> The previously discussed *πότος δυσάλυκτος* (*Alex.* 537).

<sup>40</sup> Out of a total of nine remedies for salamander poison in the *Alexipharmaka*.

With respect to Scribonius' treatment of Nicander, it is also relevant to review (from a much closer temporal perspective, this time) the reception of Theophrastus and Nicander in the trial of Apuleius, in which the latter displays an uneasy awareness of the inseparability of magic from the pharmaceutical-didactic genre.<sup>41</sup> Apuleius argues that an educated reader would never consider these authors a source of magical knowledge, that it is absurd, even; yet, as I have endeavored to show, this assertion is patently false. Educated Romans were well aware of the problematic nature of this genre; they only differed in their willingness to admit to it. Pliny the Elder meets the elephant in the room head on with his vigorous denunciation of Magi, while Scribonius takes a roundabout approach, attempting to address the problem of magic while simultaneously erasing its existence. His careful scrubbing of the lexicon of magic from his text, ironically, reveals the extent to which it concerned him (or, perhaps, his patron). Nicander, it seems, had no such concerns, and so it fell to Scribonius to edit the former's more obvious references to magic out of his remedies.

This approach, characterized by concealment, may also explain the absence of Homer from the *Compositiones*. Scribonius is hardly shy about citing Greek authorities, yet Homer—who is present in the texts of Theophrastus, Nicander, and Pliny—is noticeably omitted from the work of Scribonius. I suspect that this is not because Scribonius is more critical of the veracity of poetry; Theophrastus and Pliny, after all, sometimes correct or criticize Homer, and Nicander is apparently more concerned with emulating his famous predecessor than with factual accuracy. On the contrary, Scribonius must leave Homer

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<sup>41</sup> This genre, of course, did not formally exist in antiquity, but the problematic nature of pharmaceutical literature did.

out if he is to avoid the strain of magic that runs through didactic epic and is, as Pliny points out, extremely obvious in the *Odyssey*. Homer's moly is an unmistakable *pharmakon*; Nicander, on the other hand, is allowable through the polite fiction, later employed by Apuleius, that his work is purely about toxicology. But what role does the relative literariness of these texts play?

### **Scribonius and Genre**

Scribonius' *Compositiones* is arguably the least literary of the works I have included in the development of the pharmaceutical-didactic subgenre. It is composed, in large part, of true recipes, with specific quantities and preparations, in which respect it is, ironically, akin to the *Papyri Graecae Magicae*. Yet the illusion of the "practical handbook" that was actually written by a member of the upper classes is itself a common feature of ancient Roman didactic literature, an archetype notably embodied in prose by Cato's *De Agricultura*, Varro's *De Re Rustica*, and Pliny's *Natural History*, and in poetry, by Vergil's *Georgics*. Furthermore, Scribonius' preface on the ethics of medicine, and the various moments of moralizing interspersed among the recipes themselves, hint that Scribonius is situating himself within a literary and philosophical tradition.<sup>42</sup> The intended audience for this work certainly seems to be the imperial court, rather than the average citizen, and, in a didactic tradition as old as Hesiod, the text is addressed to a recipient (Gaius Julius Callistus, a powerful freedman of Claudius).

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<sup>42</sup> Scholars have *de facto* received it as such, as demonstrated by the fact that only the preface of the *Compositiones* has been published in English translation. However, Mantovanelli's 2012 Italian translation and Jouanna-Bouchet's 2016 French edition are indicative of a growing critical interest in the rest of the text.



In this respect, it is also similar to Nicander's *Theriaka*, which purports to provide Hermesianax with knowledge that will impress rural laborers, and in doing so, implicitly separates the assumed audience from them. Moreover, the recipe format of the *Compositiones*, though it is vaguely mirrored in the *Natural History*, more closely resembles the lists of ingredients in Nicander's *Theriaka* and *Alexipharmaka*, and Scribonius' admonitions about plant-picking echo Theophrastus' *rhizotomoi*.

In this way, despite the superficial appearance of a strictly medical and practical text, Scribonius' *Compositiones* falls squarely within the pharmaceutical-didactic tradition. The *Compositiones* also showcases the influence of the element of concealment, so characteristic of magical didactic texts, upon pharmaceutical literature. While one might expect an educational text to be forthright and generous with its knowledge, this aspect of didactic clashes with the clandestine nature of ancient magic, causing a certain amount of cognitive dissonance. For authors like Theophrastus, Nicander, Pliny, and Scribonius, who aim to provide their audience, for various reasons, with as comprehensive an exposition of knowledge as possible, how does one treat knowledge that is forbidden, dangerous, and unspoken? This is the conflict at the heart of the pharmaceutical-didactic genre as I have defined it, to which each author offers a different solution.

## CONCLUSION

My aim in this research has been to show how, diachronically, magical practices—or facsimiles of them—became hopelessly entangled with didactic writing on herbal medicine, ultimately forming a subgenre of their own, which I call pharmaceutical-didactic; and consequently, to advocate for scholarship on these texts that is informed by an understanding of both ancient magic and medicine.

My chapters on Theophrastus and Scribonius have shown how these authors' attempts to cherry-pick what they considered reasonable from their source material was often futile, and even led to distortion of the underlying magical or medicinal principles they recorded. Pliny the Elder's treatment of magic and remedy further highlights the complexity of this transmission, as exemplified in the medico-magical lexicon of the Flavian period, and illustrates the general conflation of magic and medicine among the Roman public.

The works of Nicander reveal another generic dimension, that is, the role of magic in didactic poetry, beginning with Homer. The poetic realm of myth and unreality, truth mingled with untruth, allowed Nicander far more leeway in the inclusion of magic than would likely have been afforded to an author of didactic prose, which purported to be factual; and yet, Nicander was used as a source by many later prose writers, who thereby invited his poetic fantasy into the prosaic sphere. Thus, although poetic and prosaic pharmaceutical-didactic texts appear to belong to different genres at first glance, I argue that they are in fact part of the same subgenre.

Looking forward, new scholarship that considers the role of gender and social class in the nexus of medico-magical transmission, which I have only touched upon, would be fruitful. I have investigated a literary tradition dominated by upper-class men, but how was the transmission of pharmaceutical knowledge progressing among midwives, female herbalists, *matronae*, and so-called witches? What attractions did the power evoked by magic and medicine hold for marginalized populations, and to what extent did the powerful try to regulate it or preserve it for themselves? And, more broadly, there remains the mirror image of my inquiry: how did medicine influence magical texts and practices? Pharmaceutical didactic is a crossroads with many angles of approach, and much work remains to be done.

## BIBLIOGRAPHY

- Ager, Britta. (2010). *Roman Agricultural Magic* (Doctoral dissertation). Retrieved from [https://deepblue.lib.umich.edu/bitstream/handle/2027.42/75896/bager\\_1.pdf](https://deepblue.lib.umich.edu/bitstream/handle/2027.42/75896/bager_1.pdf).
- Baldwin, Barry. (1992). "The Career and Works of Scribonius Largus." *Rheinisches Museum für Philologie*, 135, 74-82.
- Barnhart, Robert K. and Steinmetz, Sol (Eds.). (1988). *Chambers Dictionary of Etymology*. New York: Chambers Harrap Publishers Ltd.
- Beagon, Mary. (1992). *Roman Nature: The Thought of Pliny the Elder*. Oxford University Press.
- Blakely, Sandra. (2006). *Myth, Ritual, and Metallurgy in Ancient Greece and Recent Africa*. Cambridge University Press.
- Bonet, Valérie. (2008). "Pline et Théophraste : à propos des plantes médicinales." Actes du colloque "Métissage culturel dans l'Antiquité" de la CNARELLA 27 et 28 octobre 2008, Nice.
- Bretzl, Hugo. (1903). *Botanische Forschungen des Alexanderzuges*. Leipzig: Teubner, p. 366 and n. 24.
- Burkert, W. (1972.) *Lore and Science in Ancient Pythagoreanism*. Cambridge, MA. Harvard University Press. p. 109ff.
- Burton, Joan B. (1995). *Theocritus's Urban Mimes: Mobility, Gender, and Patronage*. Berkeley: University of California Press.
- Cato. (2010). *De Agricultura*. A Modern Translation with Commentary by Andrew Dalby. Prospect Books.
- Chisholm, Hugh, ed. (1911). "Hellebore, citing Codronchius (*Comm.... de elleb.*, 1610), Castellus (*De helleb. epist.*, 1622)". *Encyclopædia Britannica*. 13 (11th ed.). Cambridge University Press. pp. 235–236.
- (1911). "Rose". *Encyclopædia Britannica* (11th ed.). Cambridge University Press.
- Cholmeley, R.J. (1901). *The Idylls of Theocritus*. London. George Bell & Sons.
- Clauss, J.J. (2006). "Theriaca. Nicander's Poem of the Earth." *SIFC* 4, 160-82.
- Clauss, J.J. & Cuypers, M. (Eds.). (2010). *A Companion to Hellenistic Literature*, Malden, MA: Blackwell.
- Collins, Derek. (2003). "Nature, Cause, and Agency in Greek Magic." *Transactions of the American Philological Association*, vol. 133, no. 1, 2003, pp. 17–49.

- (2008). *Magic in the Ancient Greek World*. Blackwell Publishing.
- Crugnola, A. (1971). *Scholia in Nicandri Theriaca cum glossis*. Cisalphino, Milan.
- David, R. (2004). "Rationality Versus Irrationality in Egyptian Medicine in the Pharaonic and Graeco Roman Periods." In H.F. J Horstmanshoff & M. Stol (Eds.), *Magic and Rationality in Ancient Near Eastern and Graeco Roman Medicine*. Brill.
- Effe, B. (1977). *Dichtung und Lehre: Untersuchungen zur Typologie des antiken Lehrgedichts*. München: Beck.
- Einarson, Benedict. (1976). "The Manuscripts of Theophrastus' *Historia Plantarum*." *Class. Phil.* 71, 67-76.
- "*Helleborus niger* - Christmas Rose." (2018, September 4). Cornell University, College of Agriculture and Life Sciences. Retrieved from <http://poisonousplants.ansci.cornell.edu/christmasrose/christmasrose.html>.
- Fantuzzi, M. (2000). "Nikandros (4) aus Kolophon." *Der Neue Pauly* 8, 898-900.
- Faraone, C. (1995). "The Performative Future in Three Hellenistic Incantations and Theocritus' Second *Idyll*." *CPh* 90.1, 1-15.
- Faraone, C. & Obbink, D. (Eds.). (1991). *Magika Hiera: Ancient Greek Magic and Religion*. New York, NY: Oxford University Press.
- Flemming, Rebecca. (2000). *Medicine and the Making of Roman Women: Gender, Nature and Authority from Celsus to Galen*. Oxford University Press.
- Flood, Bruce P. (1976). "The Medieval Herbal Tradition of Macer Floridus." *Pharmacy in History*, vol. 18, no. 2, pp. 62–66.
- Foley, Helene P. (1994). *The Homeric Hymn to Demeter: Translation, Commentary, and Interpretive Essays*. Princeton: Princeton University Press.
- Fornaro, S. (1999). "Nikandros (3)." *Der Neue Pauly* 6, 898.
- French, Roger. (1994). *Ancient Natural History*. Routledge.
- Gager, John G. (1992). *Curse Tablets and Binding Spells from the Ancient World*. Oxford University Press.
- Gaillard-Seux, P. (2013). C. Machold, *Scribonius Largus und die antike Iatromagie: der Einfluss übernatürlicher Heilkonzepte auf die Compositiones medicamentorum*. (Beiträge zur Geschichte, Theorie und Ethik der Medizin 19). *Journal of Roman Studies*, 103, 312-313.
- Gow, A.S.F. & Scholfield, A.F. (1953). *Nicander: The Poems and Poetical Fragments*. Cambridge University Press.

- Graf, Fritz, trans. Franklin Philips. (1997.) *Magic in the Ancient World*. Harvard University Press.
- Griffith, F.L. (1909). "Herodotus II.90: Apotheosis by Drowning." *ZÄS* 46, pp.132-4.
- Hamilton, J.S. (1986). "Scribonius Largus on the Medical Profession." *Bulletin of the History of Medicine*, 60, 209-216.
- Healy, John F. (1999). *Pliny the Elder on Science and Technology*. Oxford University Press.
- Hirsch, Viktor. (1911). "Abergläubisches aus einer antiken Rezeptsammlung." *Deutsche Medizinische Wochenschrift* 21, 988-989.
- Hughes, J. Donald. (1994). *Pan's Travail: Environmental Problems of the Ancient Greeks and Romans*. Johns Hopkins University Press.
- Jacques, J.-M. (2002). *Nicandre: Oeuvres, Tome II: Les thériaques. Fragments iologiques antérieurs à Nicandre*. Paris: Les Belles Lettres.
- Jordan, David R., and Roy D. Kotansky. (2011). "Ritual Hexameters in the Getty Museum: Preliminary Edition." *Zeitschrift für Papyrologie und Epigraphik* 178: 54–62.
- Jouanna-Bouchet, Joëlle. (2003). "Scribonius Largus et Marcellus: entre rationnel et irrationnel." In Nicoletta Palmieri (ed.), *Rationnel et irrationnel dans la médecine ancienne et médiévale: aspects historiques, scientifiques et culturels*. Publications de l'Université de Saint-Étienne, 163-182.
- (2016). *Scribonius Largus. Compositions médicales*. Collection des universités de France. Série latine, 412. Paris: Les Belles Lettres.
- Kingsley, Peter. (1995). *Ancient Philosophy, Mystery and Magic: Empedocles and Pythagorean Tradition*. Oxford.
- Knoefel, P.K. & Covi, M.C. (1991). *A Hellenistic Treatise on Poisonous Animals. The 'Theriaca' of Nicander of Colophon. A Contribution to the History of Toxicology*. Lewiston, NY: Mellen.
- Langslow, David R. (2000). *Medical Latin in the Roman Empire*. Oxford University Press.
- Liddell, H. G., & Scott, R. (1940). *A Greek-English Lexicon*. Oxford: Clarendon Press.
- LiDonnici, Lynn R. (2002). "Beans, Fleawort, and the Blood of a Hamadryas Baboon: Recipe Ingredients in Greco-Roman Magical Materials." In Paul Mirecki and Marvin Meyer (Eds.), *Magic and Ritual in the Ancient World*. Brill.
- Machold, C. Robert. (2010). *Scribonius Largus und die antike Iatromagie: der Einfluss übernatürlicher Heilkonzepte auf die Compositiones medicamentorum*. Hildesheim: Georg Olms.

- Magnelli, E. (2006). "Nicander's Chronology: A Literary Approach." In M.A. Harder, R.F. Regtuit & G.C. Wakker (Eds.), 185-204.
- Maltby, R. (1991). *A Lexicon of Ancient Latin Etymologies*. Leeds.
- Mantovanelli, Loredana. (2012). *Scribonio Largo: Ricette mediche. Traduzione e commento*. Padova: S.A.R.G.O.N. Editrice e Libreria.
- McCarntey, Eugene S. (1924). "The Plant Almanac and Weather Bureau." *The Classical Weekly*, vol. 17, no. 14, pp. 105–108
- Mudry, Ph. (2006). *Medicina soror philosophiae. Regards sur la littérature et les textes médicaux antiques (1975-2005)*. Réunis et édités par Brigitte Maire. Lausanne: Editions BHMS.
- Nagy, Gregory. (1996). *Poetry as Performance: Homer and Beyond*. Cambridge: Cambridge University Press.
- Nutton, Vivian. (1986). "The Perils of Patriotism: Pliny and Roman Medicine." In French, R. K., and Frank Greenaway (Eds.), *Science in the early Roman Empire: Pliny the Elder, his sources and influence*. Totowa, N.J.: Barnes & Noble Books.
- (2004). *Ancient Medicine*. Routledge.
- Ogden, Daniel. (2002). *Magic, Witchcraft, and Ghosts in the Greek and Roman Worlds: A Sourcebook*. Oxford University Press, 179ff.
- Overduin, Floris. (2015). *Nicander of Colophon's Theriaca: a literary commentary*. Koninklijke Brill NV, Leiden, The Netherlands.
- Pammel, Louis Hermann. (1911). *A manual of poisonous plants, chiefly of eastern North America, with brief notes on economic and medicinal plants, and numerous illustrations*. The Torch Press, p. 857.
- Pasquali, G. (1913). "I due Nicandri." *SIFC* 20, 55-111.
- Pease, Arthur Stanley. (1927). "The Loves of the Plants." *Classical Philology*, vol. 22, no. 1, 1927, pp. 94–98.
- (1952). "A Sketch of The Development of Ancient Botany." *Phoenix*, vol. 6, no. 2, pp. 44–51.
- Pellegrino, D. and Pellegrino, A. (1988). "Humanism and Ethics in Roman Medicine: Translation and Commentary on a Text of Scribonius Largus." *Literature and Medicine*, 7, 22-38
- Petropoulos, J. (1993). "Sappho the Sorceress: Another Look at fr. 1 (LP)." *Zeitschrift Für Papyrologie Und Epigraphik*, 97, 43-56
- Pfister, F. (1938). "Pflanzenaberglaube." *PRE* 19, pp.1446-56.

- Pollard, Elizabeth Ann. (2009). "Pliny's Natural History and the Flavian Templum Pacis: Botanical Imperialism in First-Century C. E. Rome." *Journal of World History*, vol. 20, no. 3, pp. 309–338.
- Potter, D. (2015). "Claros." *Oxford Classical Dictionary*. Oxford University Press.
- Richardson, N.J. (ed). (1974). *The Homeric Hymn to Demeter*. Oxford University Press.
- Richlin, Amy. (2014). "Pliny's Brassiere." *In Arguments with Silence: Writing the History of Roman Women*. Ann Arbor: University of Michigan Press, pp. 241-266.
- Scarborough, John. (1978). "Theophrastus on Herbals and Herbal Remedies." *Journal of the History of Biology*, vol. 11, no. 2, pp. 353–385.
- (1991). The Pharmacology of Sacred Plants, Herbs, and Roots. In C. Faraone & D. Obbink (Eds.), *Magika Hiera: Ancient Greek Magic and Religion*. New York, NY: Oxford University Press.
- (2008). "Scribonius Largus." In P. Keyser and G. Irby-Massie (Eds.), *Encyclopedia of Ancient Natural Scientists: The Greek Tradition and Its Many Heirs*. Routledge, 728-9.
- Schneider, Otto. (1856). *Nicandrea: Theriaca et Alexipharmaca*. Leipzig.
- Schonack, Wilhelm. (1912). *Die Rezeptsammlung des Scribonius Largus: Eine Kritische Studie*. Jena: Verlag von Gustav Fischer, 53-57.
- Sconocchia, S. (1983). *Scribonii Largi Compositiones*. Leipzig: Teubner.
- Silberman, Henri C. (1996). "Superstition and Medical Knowledge in an Italian Herbal." *Pharmacy in History*, vol. 38, no. 2, pp. 87–94.
- Singer, Charles. (1927). "The Herbal in Antiquity and Its Transmission to Later Ages." *The Journal of Hellenic Studies*, vol. 47, pp. 1–52
- Sistakou, E. (2012). *The Aesthetics of Darkness. A Study of Hellenistic Romanticism in Apollonius, Lycophron and Nicander*. Leuven: Peeters.
- Smith, William. (1873). *A Dictionary of Greek and Roman biography and mythology*. John Murray, London.
- Sollenberger, Michael G. (1988). "Identification of Titles of Botanical Works of Theophrastus." In Fortenbaugh, W. and Sharples, R. (Eds.), *Theophrastean Studies: On Natural Science, Physics and Metaphysics, Ethics, Religion and Rhetoric*. Studies in Classical Humanities, Vol. III. Rutgers University: Transaction Publishers.
- Spatafora, G. (2007). *Nicandro: Theriaká e Alexiphármaka*. Rome: Carocci.



- Stannard, Jerry. (1969). "The Herbal as a Medical Document," *Bull. Hist. Med.*, 43, p. 213.
- (1999). *Pristina Medicamenta*, ed. Katherine Stannard and Richard Kay. Ashgate Publishing Company.
- Thomas, R.F. (1988). *Virgil: Georgics Books I-II*. Cambridge University Press.
- Toohey, P. (1996). *Epic Lessons. An introduction to Ancient Didactic Poetry*. London & New York: Routledge.
- Touwaide, A. (1991). "Nicandre, de la science à la poésie. Contribution à l'exégèse de la poésie médicale grecque." *Aevum* 65, 65-101.
- Versnel, H.S. (2002). "The Poetics of the Magical Charm: An Essay in the Power of Words." In P. Mireki and M. Meyer, (Eds.), *Magic and Ritual in the Ancient World*. Leiden: Brill.
- Volk, Katharina. (2002). *The Poetics of Latin Didactic*. Oxford University Press.
- Wilson, Kathryn Dorothy. (2018). "Avenging Vipers: Tragedy and Succession in Nicander's *Theriaca*." *The Classical Journal*, 113(3), 257-280.