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"Ayenst trauelynge fendys by nyghte": Simple Medicines, Practical Innovation, and the Premodern Conceptualisation of the Nightmare

Abstract

Sleep paralysis, as it is known today, was one of the most remarked upon maladies in premodern medicine. The feeling of being choked during sleep was usually seen by physicians as being caused by an abundance of melancholic humours. Others interpreted the experience as a supernatural attack. However, the distinctions between medical and "superstitious" remedies against nightmares were rarely so clear cut, especially given the belief that demons were able to manipulate the bodily humours. In this article I will chart the various substances – plant and stone – that were traditionally believed to assuage the symptoms of the nightmare. I will examine how "hot" herbs such as peony, and minerals with occult heating properties such as gagate, could rebalance the dangerously cold and heavy vapours that provoked a nightmare attack. It will be seen that even seemingly "magical" apotropaic practices were entirely rational within the milieu of humoural theory.

Key words

Nightmare, ephialtes, melancholy, humours, herbals, lapidaries

Author Biography

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Introduction

The nightmare experience is a universal phenomenon. According to current neuropsychological research, nightmares are said to occur when the REM phase of sleep, characterised by the suppression of muscle activity (sleep paralysis) and the experience of vivid dreams, intrudes into the period immediately preceding sleep (the hypnagogic stage) and the onset of wakefulness (the hypnopompic stage). Medical anthropological studies have shown that anxiety, stress, and exhaustion are the key triggering factors, with the feeling of pressure on the chest and the experience of auditory and visual hallucinations the most commonly-recorded symptoms.² The relaxation of the chest muscles and shallower rate of breathing that occurs during REM sleep are interpreted by the dreamer as something, or someone, pressing down upon the body. With the sleeper partially aware of his or her surroundings, the state of hyper-vigilance that accompanies the REM process is cohered into a feeling of dread towards an imagined outside presence, an experience exacerbated by the accompanying hallucinations. Although the meanings ascribed to the nightmare are codified according to the prevailing worldview of the afflicted, the ascription of a malign agency to the assault is a near universal constant, detectable across a wide variety cultures both past and present.³

Where the evidence from the medieval period is concerned, the identity of the attacking agent could be interpreted in a variety of different ways, according the social-cultural situation of the percipient. Alongside the orthodox belief in the sexually-charged incubus that assailed victims in their beds,⁴ there existed parallel fears of the "mara", the goblin, and the "old hag", amongst others, the ontologies of which often intersected in the popular mindset.⁵ When nightmares were experienced in the aftermath of an ill-timed or ill-performed death, they were often attributed to the agency of a restless corpse, an ascription that can be discerned across a wide chronological and geographical spectrum, from twelfth-

century England to eighteenth-century Serbia.⁶ And yet, to medieval physicians trained in the tenets of humoural theory, the idea that the nightmare operated under its own agency was deemed unlikely at best. Instead, it was believed that the "ephialtes", to give the Greek designation, arose from indigestion and/or poor sleeping habits. Medieval dream theorists, working from the schemas popularised by the Roman commentator Macrobius (d.430), argued that the ephialtes or "incubus" belonged to the lowest class of dream – "Φάντασμα vero, hoc est visum" ⁷ – and had no symbolic function or import. Although the exact aetiology of the nightmare remained unresolved amongst medieval medical commentators – with explanations ranging from a general surfeit of humours to the blocking of the bodily spirits when lying supine – they all tended to agree that the condition was a *natural* dysfunction of the body. In this way it could be treated like any other illness, with the aim of redressing the humoural imbalance. Of course, the distinctions between medical and "superstitious" remedies against the nightmare were rarely so clear cut. Originating in the early theological works of Origen (d.253) and Evagrius Ponticus (d.399) the theory that the airy bodies of demons were composed of a similar substance to the human lifeforce (pneuma) structured the belief that evil spirits were intrinsically able to enter into and cause illness in their victims. 10 The "airy" interpretation of demonic bodies was further consolidated in the early Middle Ages through the influential writings of Augustine (d.430). 11 Although later scholastic theologians tended to view demons as immaterial Intelligences that assumed elemental bodies as required, the persistent fear that evil agents had the ability to manipulate the humours and infiltrate the senses – as discussed by Thomas Aquinas (d.1274) and Vincent of Beauvais (d.1264), amongst others – meant that physicians could never fully discount the possibility that natural dysfunctions had a supernatural causation, no matter how hard they tried. 12 To paraphrase the Bishop of Paris, William of Auvergne (d. 1249), whilst nocturnal visions could usually be ascribed to melancholic imbalances, the lack of "moral constancy"

associated with cold, predominantly female bodies meant that the ultimate origins of the complaint resided in the sufferer's own sinful nature and, consequently, the insidious agency of the devil. Much has already been written about the perception of the nightmare in learned and popular culture and its various medical and malign interpretations. Hus, it is surprising that so little attention has been given to the specific medico-magical substances that were used to manage its symptoms. The attested instances of "hag" and "incubi" attacks from theological treatises, historiographies and witchcraft indictments have often been discussed separately from the descriptions of the nightmare found in lapidaries, encyclopaedias, pharmacopoeia, and similar such texts that record the medicinal uses of herbs and stones.

The aim of this article, then, will be to conduct an examination of a selection of substances that formed part of the habitual repertoire of nightmare prevention in the medieval (and immediately post-medieval) intellectual world. The messy, sometimes contradictory intersection between magical, medical, and moral healing strategies finds suitable expression in the field of therapeutics. The hidden virtues of plants and precious stones appealed equally to the classically-training physician and the non-learned sufferer who demanded more substantial protection from the nightmare-creature than a change of sleeping position or prayer. It will be contended that even if evil spirits did indeed press their victims at night, the need to restore the body's humoural balance remained a key – if mostly unsaid – part of the apotropaic process, with habits of medical usage providing an intellectual framework for the development of remedies against active agents. The virtues associated with a stone or herb in one habitual context (i.e., the traditions of learned medicine) structured the perception and use of said substance in another (i.e., as a quasi-folkloric amulet against the supernatural). The re-production of knowledge – the "mental text" – involved constant interchange between different textual communities; a form of synchronic and diachronic entanglement that can be

discerned across all levels of society. Such entanglements naturally led to practical innovations and conceptual overlaps in how herbs and minerals were employed.

Following an initial analysis of the base tenets of humoural theory, an interlude on the overlap between medical and supernatural interpretations of the nightmare, and a brief survey of premodern sleep regimens, the final part of the investigation will explore how minerals that possessed "fiery" or "solar" qualities (gagate; chrysolite) and herbs that were considered "hot" (peony; betony; black hellebore) could rebalance the cold, melancholic humours that were considered the most common causes of night-time oppression, whatever its cause. Whether the anti-nightmare virtues associated with hot herbs and stones originated in the internal complexions of the substances themselves, revealed through the Doctrine of Signatures (where the apparent form of a substance acted as a manifest sign of its hidden properties), or else derived from the outside influence of the stars and constellations, was a question that occupied both medical and magical practitioners. 17 With the foundations of medieval pharmacology deriving mainly from the works of Damigeron (c.200-100BC), Dioscorides (c.90CE), Pliny (c.79CE) and Pseudo-Apuleius (c.400CE), filtered through the interpretative frameworks of Arabic and scholastic medicine, it will be seen how certain key texts up to c.1550 utilised the sediments of knowledge at their disposal. This is not to suggest that the transmission of nightmare remedies can be traced to specific manuscripts, only that some author-compilers (e.g., Macer Floridus; Marbode of Rennes; Bartholomaeus Anglicus; Matthaeus Platearius) represent attested nexus points for the dissemination of classicallyderived herb and mineral lore up to the reformist pushback against the perceived distortions of traditional "medieval" learning.

Between Medicine and Religion

Maintaining the internal balance of the four bodily humours (blood, phlegm, yellow bile, black bile) was one of the core tenets of premodern medical practice, a belief that finds its earliest, coherent expression in the Hippocratic text On the Nature of Man (c.410BC).¹⁸ Each humour corresponded to one of the four base elements – air, water, fire, earth – which themselves were formed from a combination of two of the four primary "qualities"; that is, the basic building blocks of the universe. Thus, blood (air) was considered hot and moist; phlegm (water) moist and cold; yellow bile (fire) dry and hot; black bile (earth) cold and dry. Put simply, health was defined as each of the four humours working in their correct proportion within the body. Disease, then, was conceived as a type of "unnatural" imbalance or excess. The Roman physician Galen (d. 215), whose commentaries on Hippocratic corpus circulated widely in the Greek and Islamic worlds before being reintroduced into the West in the eleventh century, notes succinctly that: "If we wish to call health a constitution of all parts in accord with nature [...] then clearly disease is the opposite, i.e. some constitution contrary to nature [...] what is contrary to nature is imbalance". One of Galen's major innovations was to extoll the importance of the management of the six "non-naturals" in the maintenance of bodily health. The non-naturals were defined as the external (or non-innate) factors that had the potential to impact on the internal balance of the humours. The inhalation and exhalation of air, eating and drinking, motion and rest, excretions, sleeping and waking, and the passions of the mind (i.e., emotions), needed to be carefully managed lest the body become imbalanced and succumb to ill-health. Thus, knowledge of the social, environmental and moral conditions of the patient were vital for deciding on the best course of healing action.²⁰ Such beliefs served only to substantiate the idea that sin had a direct link to the onset of disease, and that poor bodily conduct could lead to spiritual as well as physical ruin. Sinas-disease was a common metaphor in premodern religious writings and need not be

discussed in detail here.²¹ Suffice to say that it was a belief that originated in the authority of the Bible. Drawing upon biblical precedents (Leviticus 13; Luke 17:11-19), influential commentators such as Isidore of Seville (d. 636) argued that bodily afflictions such as leprosy were brought upon the sufferer through their own sinful and dissolute behaviour; the stains of the soul made manifest.²² Likewise, exegesis on the close, causal relationship between the macro- and microcosm – the "body politic" famously illustrated in 1 Corinthians 12:12 – also stresses the interconnectedness between the moral and material worlds. The French theologian Alain of Lille's likening of the idealised human body to an impenetrable watchtower remains one of the most enduring illustrations of this motif. The personified figure of Nature in Alain's *De planctu naturae* (c.1160s) notes how:

Arranging the different offices of the members, for the protection of the body, I ordered the senses, as the guardians of the corporeal realm, to keep watch, that like spies on foreign enemies they might defend the body from external assault.²³

Alain goes on to make an explicit connection between a balanced humoural complexion ("peace among the four humours") and the innate harmony of the universe. ²⁴ In Alain's schema it logically followed that the undermining of the body-fortress through indulgence and excess (*sensualitatis*) caused the entire edifice to destabilise, providing a foothold for sin to enter ("lust leads the human mind into the ruin of vices, so that it perishes"). ²⁵ That is to say, the destabilisation of physical and metaphysical harmony through poor spiritual habit created the ideal circumstances for demons, riding-ghosts, and similar such entities to breach one's bodily defences. For moralists such as the author of the *Fasciculus Morum* preacher's manual (c. early 1300s), non-natural excesses (over-eating; too much sex; emotional discord)

were manifest signifiers of an internal imbalance that could lead to demonic assailment.²⁶ Sickness in all its gradations could only be corrected through the teachings of the Church.

Read within the wider theological debates on the aetiology of ill-health, it is not surprising that the prevention of nightmares had a definite moral component for churcheducated writers. The Benedictine monk Guibert de Nogent's account of the demon that "pressed" (oppressit) his mother at night – one of the most evocative anecdotes from his De vita sua (c.1115) – fuses the medicalised experience of melancholic instability (she was said to suffer from "despairing anxiety" [desperatissima sollicitudo]) with the insinuation that the affirmation of one's faith protected against future attacks (the angel that aided Guibert's mother pointedly warns her to be a good woman [Vide, inquit, ut sis bona femina]). Likewise, whilst William of Auvergne generally agrees with the medical interpretation of the ephialtes, he nonetheless allows for the possibility that God permitted evil spirits to actively suffocate the sinful in their sleep.²⁷ Prayer was of course the preferred spiritual shield. A miracle story recorded by Benedict of Peterborough (c.1170s) concerning a knight, Stephen of Hoyland, who first consulted physicians to cure his chronic nightmares before seeking intercession from Thomas Becket, similarly speaks to the ways in which tenets of humoural medicine and the fear of demonic infiltration intertwined, at whatever ratio, in the local habitus.²⁸ Although Benedict does not record specifically how the physicians treated the afflicted knight, medical theory dictated they would have focused their attention on the act of repletion and the management of his sleeping-waking regimen. These were the "non-naturals" that demanded extra attention where the ephialtes-nightmare was concerned. Forged, admittedly, by narrative circumstance, it is nonetheless telling that Stephen of Hoyland is described as seeking medieval advice before reaching out to the church to exorcise his self-diagnosed daemonium. And yet, the popular use of charms and amulets in the Middle Ages - e.g., the theologically dubious practice of reciting prayers before the gathering of efficacious healing herbs;

engraving Biblical scenes onto "thunderstones" (Neolithic axe heads) to add a spiritual dimension to the stones' inherent ability to ward off lightning – is a testament to the fact that rather than choosing one form of succour or the other, everyday populaces likely employed physical and metaphysical remedies in tandem. Strategies for protection supplemented each other, the afflicted choosing the widest variety of healing tools at their disposal.²⁹

Sleeping Well and Sleeping Badly in the Premodern World

Before an investigation into the perceived medical causations of the nightmare can commence, it would be prudent to first explore how the processes of sleep were conceptualised in humoural theory. In brief, the onset and offset of sleep was directly linked to the processes of digestion and the ebb and flow of the spirits within the body. According to Aristotle's *De somno et vigilia*, ³⁰ a work that circulated widely in Latin Europe as part of the collection of texts known as the *Parva Naturalia*, sleep was primarily governed by the heart. This was the organ that, in later Galenic terms, was responsible for the creation of the vital spirits, or lifeforce, necessary for the mechanical regulation of the body.³¹ Ultimately however, sleep depended on repletion and the actions of the stomach during the digestive process. Following the ingestion of food and drink, the hot vapours created in the stomach rose up through the body where, upon reaching the brain, they condensed into a heavier, phlegmatic form, blocking the passage of the more refined animal spirits that were produced there. The moist vapours then descended to the lower parts of the body, drawing the heat away from the brain and further impacting upon the workings of the *spiritus animalis*. Considered by Galen to be the most noble of the three bodily pneumas (the third pneuma being the "natural" spirit produced in the liver), the animal spirits were believed to regulate movement and sense perception. The restriction of the flow of the spirits and the cooling of the brain inhibited the senses, leading to unconsciousness and the onset of sleep. Once the

process of digestion had been completed, heat returned to the body's extremities. Only then did the sleeper begin to wake, the body's humoural equilibrium restored.³² Dreams, according to Aristotle, were created by "sense impressions" that were stored in the imagination, distorted by the turbulent vapours that arose from the digestive process.³³

The humoural theory of sleep remained more or less consistent until the latter half of the seventeenth century.³⁴ Sleep was essential for the revivification of the body. The moist vapours that descended from the brain refreshed the organs that had "dried out" during the day. Such mechanisms could not operate effectively without digestion, by which the body's heat was necessarily drawn towards the stomach. However, incomplete digestion and/or the eating of the wrong type of food led to the formation of coarser vapours and the production of more turbulent, terrifying dreams – including the nightmare. Sleep regimens provided instructions on how to avoid these pitfalls and keep the whole body (and soul) in good working order.³⁵ One of the earliest extant references to good and bad sleep practice can be found in the pseudo-Aristotelian Secreta Secretorum. Translated from the Arabic text Kitab sirr al-asrar ("The Book of the Secret of Secrets", c.900s) by John of Seville (c.1120) and later by Philip of Tripoli (c.1230), the Secreta Secretorum survives in over five hundred manuscripts from the twelfth century onwards and was one of the most widely read texts of the later Middle Ages, copied in both the Latin and the vernacular. ³⁶ The text ostensibly takes the form of a letter from Aristotle to his pupil, Alexander the Great. Amid the various sections on statecraft, medico-magical lore, natural history and diet, there is also a brief explanation of the correct regimen for sleep. As noted by M. A. Manzalaoui, the copy of the Secreta Secretorum from Bodleian MS 38 (c.1450) represents the only direct English translation of John of Seville's Latin text. Here, "Aristotle" advises the following:

And if thu wilt slepe aftir thu dyner, let thi slepe be litl and short, and begyn thi slepe vpon thi right side a litil season, and then turne on thi left side and so make an end of thi slepe. And be ware thu slepe not bifore mete, for such slepe shall make thi body ouir leene, and dry thi moisture natural. But moderate slepe aftir mete shall refresh the[e], and kepe the[e] in good disposicion of body.³⁷

The refreshing nature of sleeping after a meal is highlighted, as are the benefits of lying on one's right and left side to aid digestion. The corpus of *Secreta Secretorum* texts also stipulate that it was not advisable to eat food during the day as the body's natural heat had already been properly dissipated to the extremities, meaning that "the stomak cometh feble and losyth his strengthe to fully sethe the mete", potentially leading to the creation of coarser nightmare-inducing vapours.³⁸ Variations of such advice persevered for generations.

Indeed, the contents of the *Secreta Secretorum* proves especially influential on the creation of the *Regimen sanitatis Salernitanum* ("The Salernitan Rule of Health"), a didactic Latin poem compiled in the twelfth or thirteenth century but too late to have actually been written at the famed medical school of Salerno, Southern Italy.³⁹ Organised according to Galen's six non-naturals, the *Regimen* proved especially popular in the first few decades of the sixteenth century, with the 1528 English translation and commentary by Thomas Paynell fulfilling the increased public desire for books on dietary advice.⁴⁰ The section on sleep is particularly illuminating on the humoural imbalances that could arise from diverging from the expected rhythms of sleep and watch. Specifically, Paynell notes that afternoon sleep could engender "humid" fevers due to it impacting upon the natural processes of digestion and the passage of the bodily spirits, an imbalance that also caused sluggishness and mobility problems. As well as the heavy vapours "mov[ing] towarde the brayne and so caus[ing] the heed age", the cold humours that were usually dissolved during periods of wakefulness ended

up being retained within the body, precipitating further distress. In the section charting the various types of disease that could arise from afternoon sleep, Paynell reiterates the warning that resting during the day "kep[t] in [...] the grosse melancoly humours." Ultimately, daytime sleep was considered contrary to the workings of nature and has the potential to disrupt the humoural and digestive rhythms of the body. Although Paynell does not mention nocturnal oppressions specifically, the dangers presented by the superabundance of melancholy due to poor sleeping habits are nonetheless implied.⁴¹

These underlying beliefs are expressed more overtly in later vernacular health manuals. The extract from the *Bulwarke of defence againste all Sicknes, Sornes, and Woundes* (1562) by the English physician and polemicist William Bullein is especially interesting in its denigration of traditional (i. e "medieval") belief and is worth quoting in full:

The night is the best tyme [to sleep]: the day is euill, to sleepe in the Fyeld is perillous. But uppon, or in the Bed, lying fyrst uppon the ryght side, untill you make Water: then upon the lefte syde is good. But to lye upon the backe, with a gapyng mouth, is daungerous: and many thereby are found starke dead in their sleepe, through apoplexia, and obstruction of the sinewes, of the places vitall, animall, and nutrimentall. And all sutch as feele intolerable paynes in theyr breastes in the Nyght, whych growne, and can not draw theyr breath: the very cause is, lying or sleeping on their backe, and not through the Mare or nyght spirite, as they terme it, after the Iudgement of supersticious Hypocrites, Infidelles, with charmes coniuryngs, and relickes hangyng about the Necke, to fray the Mare, the foole I should say [...]. Remember it is Melancholy, that vexeth the body and spirites in the sleepe: and would bee purged wyth Hamech, Pilles de *lapide Lazuli*. &c. 42

According to Bullein, the supine sleeping position was especially dangerous as it completely restricted the flow of the natural, vital and animal spirits, which caused undue pressure on the chest and difficulty in breathing, an experience that "supersticious Hypocrites" cohered into an attacking agent called the Mare. Taking into account Bullein's ulterior role as a reformist propogandist, as well as his reasonably high social status, we can understand the logic of his vehemence against the charms and relics in favour of completely natural remedies, as well as his overly strident denigration of the credulous masses who believed that the nightmare had agency.⁴³

The above evidence demonstrates that there existed a long-lived habitual connection between indigestion, the production of gross vapours, and the consequences that could arise from the suppression of the spirits. ⁴⁴ As intimated by William Bullein, the belief that the nightmare was more than just the result of a humoural imbalance – specifically, the idea that "charmes coniuryngs, and relickes" could be just as effective as "pilles" – was just as resonant in the early Elizabethan era as it had been in earlier centuries. The scornful references to "Mares" and "nyght spirite[s]" obliquely point to the belief, entrenched in the local habitus, that supernatural entities were permitted by God to attack those stained with sin. ⁴⁵

The boundaries between natural and "supersticious" remedies were of course never as absolute as polemicists such as Bullein suggest. The multivalent meanings that could be ascribed to plants and stones blurred the distinction between licit and illicit practice, the substantive and amuletic. Herbs could be worn as physical charms, ⁴⁶ just as stone chippings could be included in medical concoctions and the innate virtues of material objects augmented with further spiritual powers. ⁴⁷ Although the worldview and social situation of the practitioner dictated how such substances were used, each derived from a habitual

understanding of the innate powers of plants and stones, even if the exact nature or origins of those powers was sometimes difficult to determine. On a practical level, the virtues associated with a substance in one experiential context (i.e., learned and medical) could be re-employed to suit another ("superstitious"). Habitual innovation could of course happen in the reverse, with remedies originally used in non-normative apotropaic contexts finding validation in medical literature. 48 With the ontological origins of the nocturnal assault never being fully resolved, plant and mineral lore (and the millennia of accumulated knowledge thereof) existed at the confluence of competing and sometimes contradictory beliefs. Simply put, the medical, theological and folkloric interpretations of the nightmare shared the same internal logic: whether physical or metaphysical, "imbalance" needed to be corrected at all costs. How, then, was balance achieved? To begin with herbal remedies: if, as the encyclopaedist Bartholomaeus Anglicus states, cold plants were able to "makyth slepe" (somnum puocat) through their ability to cool, temper, and moisten the brain (cerebrum refrigerat temperat et hume), 49 then the opposite was also true: "hot" plants that provoked wakefulness and mental acuity could mitigate the dysfunctions caused by severe melancholic and phlegmatic coldness. 50 To use the language of Alain of Lille and Vincent of Beauvais, the realignment of the humours and the reinforcement of the integrity of the body-fortress mitigated the demon's ability to manipulate the flow of the spirits and "imprint" terrible sensory experiences onto the minds of the unwary.⁵¹ Focus here will be given to three herbs whose innate hotness was believed to be particularly effective against the nightmare: betony, black hellebore and peony.

Nightmare Remedies and Herb Lore

Book IX of Theophrastus's *Historia Plantarum* (c.350-286BCE) is the earliest-known enquiry into the properties and virtues of plants to have survived to the present day. Along with Dioscorides's *De Materia Medica* and Books XX-XXVII of Pliny the Elder's *Naturalis*

Historia, its contents represent the baseline of western herb lore. Despite the Historia *Plantarum* not being rediscovered in the West until the early fifteenth century, aspects of the text were disseminated widely (and anonymously) through the works of other Classical writers.⁵² Although Theophrastus, Dioscorides and Pliny provide useful information about where a plant was located, its appearance, and medico-magical virtues, it was only through the later endeavours of Galen – specifically, On the Powers and Mixtures of Simple Drugs⁵³ – that a substance's medicinal qualities were formulised into "degrees" of hotness, coldness, wetness and dryness. As per majority of Galen's theories, the humoural classification system was consolidated in early medieval Arabic medicine to be recirculated in the West in the eleventh and twelfth centuries. Simply put, complaints that were relatively mild could be healed through the application of substances that had mildly opposing qualities (i.e., a patient aggravated by a temperately hot, choleric disease should ideally be treated with cold herbs of the first degree). As such illnesses caused by more severe humoral complaints needed to be treated with herbs of a higher degree or intensity. The botanist William Turner (d.1568) provides an effective synthesis of hundreds of years of theory in the prologue to the third part of his own herbal:

There are certeyne herbes that are temperate, and is of a mere qualitie or propertie betwene hote and cold, and are neither notablie hote nor cold. And if any herbe departe from the temperate herbs towards heat, and is sensible felt a littel hote, it is called hot in the first degre; and if it be a little hoter is called hote in the second degre, as though it had made two steppes or departinges from the temperate. If an herbe be very hote, it may be called hote in the third degree. If it be so hot as it can be, then it is called hote in the fourth degree. And so ye maye understand the degrees of cold, moyst and drye herbs.⁵⁴

In this way herbs with qualities in the fourth degree were considered especially potent and dangerous to use. Mandrake (*mandragora*), being traditionally cold and dry in the third or sometimes fourth degree, was often used to provoke sleep through its application to the surface of the body, but care needed to be taken if ingested lest the patient slip into too deep a sleep and die.⁵⁵ However, the qualities ascribed to herbs were rarely uniform and differed according to the textual traditions consulted by the compiler. Even so, nightmare remedies were rarely so extreme as to use fourth-degree hot substances to rebalance the body.

Betony

The ability of betony to assuage sleep dysfunctions is not directly mentioned by Dioscorides. Pliny is similarly imprecise, content only to say it is good for the stomach and that "the home in which it has been planted is considered to be safe from all dangers". Appended to the beginning of the *Herbarium* of pseudo-Apuleius at a very early stage of its circulation history, the *De Herba Vettonica* (c.400) by Antonius Musa provides a much more detailed overview of betony's anti-nightmare properties. Based mainly (but not completely) on Dioscordies and Pliny, the *Herbarium* corpus was incredibly influential and circulated widely throughout western Europe, the earliest extant English version of the text dating to the eleventh century. The translation of *De Herba Vettonica* that comprised the initial section of the *Old English Herbarium* explicitly mentions betony's ability to "protect a person from dreadful nightmares (*unhyrum nihtgengum*) and from terrifying visions and dreams". Compared to the Latin gloss *timores nocturnos* included in the marginal title for betony in the Harley MS 6258B *OE Herbarium* (late 1100s, fol. 5v), *nihtgengum* (literally "nocturnal spirit" or "nocturnal walker") is a lot more suggestive of the physical agency that could be attached to the phenomenon, as well as better explicating the interconnected ontology that allowed for

natural remedies to assuage supernatural assailants.⁵⁹ Musa's original Latin reference to betony being useful against *nocturnas ambulationes* ("night-wanderings") is somewhat difficult to parse on its own, but when read against the associated term *visus timendos* ("dreadful visions") it nonetheless speaks to an ability to ward off *something* that wandered around at night and negatively impacted on the sufferer's body, presumably whilst they were sleeping.⁶⁰ This was the interpretation chosen by the Old English translator.

The Musa-Apuleius tradition seems to have been the main conduit through which the belief in the apotropaic effects of betony entered into learned medical discourse. Texts influenced more by Dioscorides and Pliny's own descriptions of betony were much less precise about its anti-nightmare properties. The Circa Instans (c.1150) of the Salerno physician Matthaeus Platearius is a case in point. One of the most celebrated herbals of the age, the Circa Instans enjoyed equal if not greater popularity than the pseudo-Apuleius Herbarium, representing one of the major access points for the integration of Arabic-infused medicine into western cultural discourse. Serving as the intellectual basis for a wide variety of anonymous pharmacological handbooks, it was translated into French as Le Grant Herbier (c.1486), which itself formed the basis of Peter Treveris' *Grete herball*, published in 1526.⁶¹ The entry for betony begins by noting that it is "hot and dry in the third degree" (calida et est sicca in iii gradu) and as such good for "cold pains of the head" (ad dolores capitis ex frigida causa) and stomach problems (contra dolores stomachi), but there is no specific mention of nocturnal assaults.⁶² Similar allusions are made in *Banckes' Herball* (1525), which represents the earliest extant printed herbal in England, published in over twenty editions under a variety of titles throughout the sixteenth century. Although the manuscript sources of *Banckes*' *Herball* are obscure – belonging more to the folk-practical end of the medical spectrum – it does seem to have been influenced at however far a remove by the Circa Instans. 63 Indeed, Banckes' Herball is similarly coy on betony's ability to manage terrifying visions and

dreams, focusing instead on the other cold diseases of the head that could be cured by its "hote and dry" nature (earache, eye problems, indigestion etc; disorders also mentioned in the *Herbarium*). Even if texts influenced by the main Pliny-Dioscorides and Arabic branches do not *explicitly* mention betony's use for sleep disorders, the references to it "cur[ing] all head diseases" and easing stomach complaints are certainly inclusive of both aspects of the ephialtes. The dangers posed by the personified nightmare from the Old English pseudo-Apuleius tradition are, however, explicit, with the emendation from the Latin perhaps reflective of a pervasive unwritten belief in embodied ghosts. The reference in Nicholas Culpeper's *The English Physician* (1652) to betony's usage against witchcraft – deriving he says, from the "peculiar book [of] Anthony Muse" – not only speaks to the continued currency of the *Herbarium* corpus, but to betony's enduring conceptualisation as an apotropaic. 65

Black Hellebore

In contrast to betony, the anti-nightmare properties of (black) hellebore are much more established in the western pharmaceutical tradition. Useful as a supposed cure for epilepsy, depression, delirium, arthritis and paralysis, as well as being an excellent purgative, black hellebore is also noted by Dioscorides as being a common remedy for supernatural complaints, remarking that some people "sprinkle it around houses *thinking* it preserves them from evil spirits" (my italics). ⁶⁶ The Byzantine physician Paulus Aegineta's *Epitomae medicae libri septem* (c. late 600s) alludes to this folkloric application of black hellebore in his discussion of the medical origins of the ephialtes. The *Epitomae medicae* was the preeminent medical textbook produced in the Byzantine Empire and remained a key work for hundreds of years, being particularly influential in the Arabic medical community. After noting that the ephialtes emerged as a function of prolonged indigestion, Aegineta goes on to

describe the stereotypical nightmares symptoms: "a sense of suffocation, and oppression, as if from one pressing them down, with the inability to cry out [...]. Some imagine often that they even hear the person who is going to press them down". Building upon the earlier writings of Oribasius (d.403), who himself drew partly from Dioscorides, Aegineta argues that black hellebore was especially useful as a purgative, and could be taken alongside the seeds of the peony plant (the latter substance to be discussed in more detail shortly). Purgation was of course a popular method of restoring balance through the process of the immediate removal of the offending humour; hellebore and peony used in tandem to heal the body through internal re-balancing (peony) and re-balancing through forced evacuation (hellebore).

The consolidation of new medical, natural historical, and philosophical knowledge in the West in the twelfth and thirteenth centuries led to increasing concerns about how best to organise all the data at one's disposal. It was a situation that led to the emergence of encyclopaedias as a viable literary form. Alongside Vincent of Beauvais' *Speculum Maius* (c.1239-64), Bartholomaeus Anglicus's *De proprietatibus rerum* (c.1240) represents one of the defining encyclopaedic works of this period, becoming an influential and widely-read authority on herb lore. Mainly quoting Dioscorides, Bartholomaeus is slightly more allusive in describing black hellebore's anti-nightmare properties than Paulus Aegineta, stating only that it was useful against melancholy-induced lethargy (translated by Trevisa as "the slepyng euyll").⁶⁸ Similarly, whilst the entry for "ellebore" in the *Circa Instans* does not say anything specifically about nocturnal suffocations, it does stress that being "hot and dry in the third degree" made it excellent for purging melancholic humours.⁶⁹ The association of black hellebore with melancholy remained a central part of western pharmacological tradition well into the Reformation, with William Turner one of many sixteenth-century botanists who make the usual Classical references to black hellebore's anti-melancholic virtues.⁷⁰

The humoural logic of opposites curing opposites meant that black hellebore as a notably hot-dry, choleric substance was seen as being particularly effective against cold diseases, including, as Paulus Aegineta notes, the ephialtes-nightmare. Such logic underlay its (seemingly) superstitious role as a device against evil spirits, a function acknowledged as far back as Dioscorides. Although the dearth of evidence for nightmare prevention in medieval Latinate texts suggests that practitioners may not have known that black hellebore could be used against nocturnal assaults, this, I feel, is doing disservice to the physician or folkhealer's capability for practical innovation. According to such influential theological writers as Thomas Aquinas, terrifying sensory experiences were one of the defining features of demonic interference in the body. As summarised by Nancy Caciola, "[d]emons can manipulate humors so as to produce the effects of madness, frenzy, or melancholy. And they can cause visions and hallucinations by stirring up both the humor and the spirits in the blood."71 In effect, the nightmare sufferer was possessed by a superabundance of cold and dry humours. It took only a small cognitive and habitual leap for a successful treatment against one type of bodily attack (the medical ephialtes) to be deemed useful against another (molestation by the devil), especially since both interpretations derived from the same somatic experience.⁷² Exemplified, again, by the theorisations of Aquinas, it was a commonly-held belief amongst church writers that the manipulation of the cold and dry internal vapours by evil spirits (per voluntariam commotionem spirituum et humorum) could lead to melancholic despair and even suicide. 73 In this way it was perfectly rational to encourage a nightmare sufferer to ingest hot substances to help repair what an infiltrating demon had upended. Hellebore's demon/nightmare-assuaging abilities may not be as overtly present in the central medieval sources as in earlier texts, ⁷⁴ but its effectiveness against melancholy – and noted anti-nightmare properties in the Byzantine tradition – suggests that,

on a habitual level, it may indeed have formed part of a physician or churchman's healing toolkit when confronted by a case of night-time oppression.

Peony

The final herb to be discussed in this section is peony. Out of all the substances thus far examined, peony is the one with the most long-lasting literary association with the nocturnal assault. As noted briefly above, Paulus Aegineta advocates the ingestion of peony seeds as part of a remedy to purge the gross humours that engendered nightmares. Much earlier than the sixth century, however, Dioscorides remarks that the black seeds are excellent against the "nocturnal suppressions called the Ephialtes". ⁷⁵ Pliny concurs, noting that peony "prevents the mocking delusions that the Fauns bring on us in our sleep" and repeating Dioscordies' claims about the powers of its seeds: "the black grains, taken in wine to the number mentioned, also prevent nightmare". ⁷⁶ The medico-magical text that circulated under the name Cyranides (c. 300s) likewise notes its ability to chase away phantoms of demons.⁷⁷ Peony's central position in the works of the preeminent Classical authorities ensured that its nightmare-suppressing abilities are mentioned throughout the premodern herbal corpus. The De viribus herbarum (c.1050), a poem in Latin hexameter composed by the physician Odo of Meung under the pseudonym "Macer Floridus" is a case in point. Deriving mainly from Pliny, Dioscorides, Galen and Gargilius Martialis, the "Macer" lists the medical and sometimes mystical properties of seventy-seven herbs. Due to its function as a user-friendly synthesis of classical pharmacological knowledge it was one of the most popular herb-books compiled in the Middle Ages. Indeed, as Bruce Flood notes, it had "a tremendous influence on medical and botanical literature from the early Middle Ages onwards". The name Macer was even appended to some later editions of Banckes' Herball to evoke a sense of ancient authority, despite only sharing the vaguest of connections to the De viribus herbarum

tradition.⁷⁸ The Macer text, then, repeats the claim that peony seeds were effective nightmare repellents: "Pressuras, inferre solent quas somnia nocte, Paeoniae semen, bibitur si saepius, arcet (Il. 1615-1616)", adding that the plant itself was hot and dry in the second degree (calidam siccamque [...] tenere gradum dieunt in utroque secundum, Il. 1605-1606).⁷⁹ Rendered in the Middle English Macer as "Pyonie seed drunken ofte wole do a-way brisures and other diseases that dremes doth men by nightes tyme", the transliteration of *pressuras* into the more ambiguous term *brisures* ("bruises") make senses if read as a metonym for the perceived symptoms of concerted pressure on the chest.⁸⁰

To bookend, it is worth mentioning that the above treatment can also be found in sixteenth-century botanical works. These texts put increasing emphasis on the importance of practically-attained knowledge over what was viewed to be the debased corpus of medieval European/Arabic herb texts. "Unsullied" Greek and Roman compilations still proved a fruitful avenue of information, however. Without detailing his specific source, William Turner remarks that "if one take xv. of the blak cornes and drynk them in mede or wyne they ar a good remedy agaynst the stranglyng of the [n]yght mare". Similarly, the Flemish botanist Rembert Dodeons' description of peony makes an overt connection between the physical symptoms of the nightmare and the hallucinations that can terrorise the melancholic dreamer:

Fifteen or sixteen of the black cornes or seeds dronken in wine or meade [...] is a special good remedy for them that are troubled with the night mare (which is a disease wherein men seem to be oppressed in the night, as with some great burthen, and sometimes to be overcome with their enemies), and is good against melancholicke dreames.⁸²

Betony, Hellebore and Peony are by no means to the only substances considered effective against the nightmare. By the time of the publication of Nicholas Culpeper's *The English Physician* we find bugle, cowslip, dodder, and polypody of the oak among the corpus of the hot and dry herbs said to counteract the somatic experience of terrifying sleep disorders.⁸³ The humoural logic of the use of these latter substances remained the same: hotness and dryness equalised (or helped to purge) the superabundance of phlegmatic and/or melancholic humours that disturbed restful sleep, however such imbalances were instigated. From a generalised statement about its effectiveness against melancholia in the Circa instans to its usage "against [...] fearful and troublesom sleeps or dreams" in Culpeper, polypody is a perfect example of how an innate understanding of the herb's complexion could lead to intellectual elaboration further down the line, or even simply the ratification of lore that already circulated in practical form.⁸⁴ The fourteenth-century physician Bernard of Gordon's complaint that commoners persisted in the belief that nightmares were caused by the "old woman" (vetula) similarly speaks to a situation where any natural remedy prescribed by medical experts would be understood by credulous patients as being an apotropaic against supernatural phenomena. 85 As will be seen shortly, the habitual belief in the apotropaic virtues of hot substances also extended to the medico-magical usage of precious stones. In the following sketch, emphasis will be given to two substances – gagate and chrysolite – that best illustrate how certain stones' traditional, folkloric connection to heat and fire fed into and took influence from the learned rhetorics of nightmare prevention.

Nightmare Remedies and Mineral Lore

Treatises on the properties of stones and minerals were just as prevalent in the Classical world as texts on the virtues of herbs. The *De Virtutibus Lapidum* of Damigeron, book 37 of Pliny's *Naturalis Historia* and book five of Dioscorides' *De Materia Medica* represent the

foundational texts of the medieval and early modern lapidary traditions. As with herbs, a conceptual tension existed between powers that were said to derive from a stone's internal qualities and those that were ascribed to a macrocosmic (i.e., astral) influence. However, by the end of the later Middle Ages the boundary line between the two theories was so vague as to be almost non-existent, with it generally believed that the hidden virtues engendered by the elemental complexion and specific form of a substance could be augmented by the celestial rays. Nowhere is this more evident than in the descriptions of stones deemed effective against the nightmare.

Gagate

Although the virtues of *gagate* are mentioned by Dioscorides (5.146), it is the entry from Damigeron's *De Virtutibus Lapidum* that is especially important where the popularisation of the association between jet and the ephialtes is concerned. Surviving in fragments of the original Greek but known mainly through its Latin prose translation (c.100-500CE), the *De Virtutibus Lapidum* records the properties of fifty stones. The entry for gagate provides the information that would become a mainstay of all future lapidaries, specifically its ability to help with menstrual problems and drive away "all snakes and vipers and serpents from the home" (*angues et viperas et serpentes effugat ex loco*)⁸⁷. Pliny's discussions of gagate draw from the same body of knowledge as Damigeron in stating that:

[Jet] is black, smooth, porous, light, not very different from wood, and brittle, and has an unpleasant smell when rubbed. Anything inscribed in it on earthenware is indelible. When it is burnt it gives off a smell like that of sulphur. What is remarkable is that it is ignited by water and quenched by oil. The kindling of jet drives off snakes and relieves suffocation of the uterus. Its fumes detect attempts

to simulate a disabling illness or a state of virginity. Moreover, when thoroughly boiled with wine it cures toothache and, if combined with wax, scrofulous tumours [...].⁸⁸

The medical logic that led to gagate being used against nightmares is apparent even from these earliest texts. With the Doctrine of Signatures specifying that the physical characterises of a substance corresponded to its internal properties, ⁸⁹ gagate's wood-like texture and the ease with which it was burnt is strongly suggestive of a potent choleric complexion. Its black appearance also indicated a sympathetic connection to disorders relating to black bile. These implicit correspondences made gagate the perfect substance for healing cold (and wet) illnesses when ingested, worn or inhaled. 90 Such beliefs can also be discerned in the poetic Orphic Lithica (c.350AD). Building on Damigeron, the Lithica makes pointed reference to jet "blas[ing] up like torch of driest pine" when burnt, a quality that had a direct correlation to its ability to quell phlegmatic diseases such as the suffocation of the uterus; the fumes dissolving the noxious vapours that prevented menses. But aside from the *Lithica*'s brief allusion to the snake being "[a] sure minister of gloomy hell", the early pagan tradition did not ascribe any overt apotropaic properties to jet. 91 The Roman historian Solinus (c.350-400CE), 92 for example, simply repeats Pliny's observations that gagate burns in water and can be quenched in oil. In Late Antique Christian contexts, Archbishop Isidore of Seville interpolates the moral symbolism of the snake with reference to gagate's ability to "reveal those possessed by demons" (daemoniacos prodit), 93 an association that persevered for centuries and reached a nexus point with the completion of Marbode of Rennes' De Lapidibus (c.1080). Deriving mainly from the Latin Damigeron, with additional material sourced from Pliny, Solinus, and Isidore, Marbode's text represents one of the most popular and widely read lapidaries produced in the Middle Ages, surviving in over 125 manuscripts. Written in an easy-tomemorise Latin hexameter, it describes the characteristics and medical virtues of sixty stones. Chapter eighteen, *de gagate*, reproduces the usual information regarding its ability to cure womb problems, head diseases and general swellings when taken within the body, but adds, tellingly, that it is deemed to be good against the power of demons and magical spells (Il.278, 280).⁹⁴ In Marbode's rendering, the ability to *reveal* possessions (as recorded by Isidore) seems to have become morally fused with the act of dispelling snakes. The interpolation is entirely logical in light of the traditional exegetical equivalence between the serpent and the devil. Taking into account gagate's ability to assuage "cold" diseases – a bodily state that allowed demonic influence to thrive – it is not surprising that the moralistic, folkloric and medical interpretations began to slowly converge in the form of an active pressing-agent.

The association of gagate with the ephialtes or nocturnal attacker is obliquely referenced in a (Pliny-inspired?) Anglo-Saxon leechbook remedy against "elves" and "strange visitors" (*unculpum sidsan*) (c.900CE), in which jet shavings were added to a concoction made of myrrh, frankincense and wine to be drunk after a predetermined number of nights' sleep. 95 However, it is only later that the connections to the medical nightmare become more explicit. Arnold of Saxony (c.1200) records that gagate helps against phantoms caused by indigestion as well as being hostile to demons. 96 Bartholomaeus Anglicus's entry in the *De proprietatibus rerum* adds the important qualification that *contra phantasmata & nocturnos daemonum vexationesas*, with John Trevisa's translation, "this stone helpyth [...] ayenst trauelynge fendys by nyghte", rendering a sense of physicality to the assailant. 97 Interestingly, Bartholomaeus also questions the circumstances that allowed gagate to be "kyndled in water, & quenchid in oyle" deeming it a "wonder" (that is, an event that had no immediate explanation but which did not actively contravene natural, God-given law). 98 Writing only a few years later, the polymath and Dominican theologian Albertus Magnus, working within the scholastic systematising tradition, made an attempt to synthesise all known literary,

medico-magical and experiential lore on precious stones in his monumental *De mineralibus* (c.1250-63), combining traditional authoritative knowledge (e.g. Marbode; Arnold of Saxony; Bartholomaeus Anglicus) with insights gained in the field. To quote the salient section from the gagate entry:

[...] It is known from experience that water in which it has been washed, or its fumes applied from beneath, will provoke menstruation in women. It is also reported to put serpents to flight; and it is a remedy for disorders of the stomach and belly, and for phantasms due to melancholy, which *some people* call demons'. ⁹⁹

Here, Albertus combines personal knowledge of gagate's properties (*De expertis autem est*) with references to the more spurious customs of the people (*quidam*). Although he seems to favour a humoural interpretation for *fantasmata*, as seen in the explicit comments about digestive issues and melancholy, the beliefs of the wider community – i.e., that terrible dreams were caused by demons – appear to have been entrenched enough to warrant authorial comment. Either way, the heating qualities of jet and its ability to dissolve heavy "sinful" humours meant it was considered a viable form of bodily protection regardless of the ontological origins of the melancholic sleep disorder.

Similar information concerning gagate can be discerned throughout the corpus of late medieval lapidaries. Thomas of Cantimpré (d.1272) records that gagate "puts demons to flight" (*ffugat demones*);¹⁰⁰ the lapidary text that circulated under the name of Damigeron-Evax says that it provides resistance to demons and all witchcraft (*demonibus et omnibus maleficis resistit*).¹⁰¹ The vernacular Peterborough Lapidary (c. late 1400s) takes its information on gagate almost wholesale from these previous authorities, but makes a further

comment that those "who bereb bis ston abowte his nek, ber schall no serpent do him harme", ¹⁰² providing an overt reference to jet's amuletic function. Such apotropaic uses can also be detected in the extant mortuary evidence from medieval England. ¹⁰³ Just as gagate could be used in different medico-magical circumstances in life – from rebalancing stomach complaints to protecting the body against serpents and witchcraft – so it could also be used to protect the integrity of the wearer in death. Gagate's ability to put evil spirits to flight would certainly have provided succour to family members worried about demons infiltrating the dangerously "open" corpse of a loved one. ¹⁰⁴

Chrysolite

Like gagate, chrysolite is another stone whose virtues were seen as offering protection against the nightmare. Pliny uses the term chrysolite for the modern topaz and topaz for chrysolite, ¹⁰⁵ but does not record the apotropaic virtues of either. It is Damigeron, then, who provides the literary foundation of chrysolite lore, recording that it shines like gold (*similis auro*), prevents night terrors (*nocturnos timeros*), and that when bored through with asses' hair and attached to the left forearm it was able to vanquish all demons (*daemonia vincit*). ¹⁰⁶ Marbode of Rennes modifies this description only slightly, noting that when affixed in gold and attached to the left arm it granted powers against night terrors and the molestations of evil spirits (*contra nocturnis fortus tutela timores* [...] *daemones exterret*). ¹⁰⁷ Exegetical investigations into the twelve stones of Jerusalem mentioned in Revelation 21: 19-21 provided tacit doctrinal acceptance of the use of chrysolite in this manner. For example, Bede's *Explanatio Apocalypsis* (c.710) notes that the seventh stone of the walls of Heavenly Jerusalem (chrysolite) represented spiritual grace and the granting of wisdom. ¹⁰⁸ As a holy gemstone it was intrinsically opposed to evil.

Chrysolite's ability to assuage demons, bad dreams *and* confer wisdom is entirely logical when taking into account the syncretism of its perceived moralistic and medical virtues. According to the Doctrine of Signatures its fiery appearance was a manifest sign of its inherent hot and dry qualities (Marbode explicitly says that it sparkles like fire [*scintillat ut ignis*])¹⁰⁹. As noted in the regimen literature, mental sluggishness forms one of the main side effects of heavy, noxious humours, something that could usually be dispelled through the application of choleric medicines. These humoural underpinnings are made explicit by Arnold of Saxony, who records that as well as assuaging demons and nightmares (*contra demoniaca et timores nocturnos*) chrysolite also drives out melancholy (*melancholiam depellit*).¹¹⁰ Almost identical entries to Marbode and Arnold are included in the lapidaries of Thomas of Cantimpré and Bartholomaeus Anglicus, the latter stressing the stone's ability to "maketh most soonest heat".¹¹¹ Albertus Magnus effectively synthesises hundreds of years of scholarship in stating that:

Chrysolitus is a stone of a pale, bright green colour, and in direct sunlight it sparkles like a golden star. It is not rare. It is said to come from Ethiopia. It has been found by experience that it eases the breathing and therefore it is powdered and given to those who suffer from asthma. It is reported that if it is pierced, and an ass bristle put through the hole, and is bound on the left wrist, it drives away terrors and melancholy: this is said in [books on] physical ligatures. And if it is worn in a gold setting, it drives away phantasms, they say. It is also affirmed that it expels stupidity and confers wisdom. 112

Albertus again makes a distinction between medical properties understood through experience (expertum) and the more superstitious, amuletic effects relayed through the reports

of others (*fertur*; *ut dicunt*). The *De mineralibus* entry is certainly completist, but we have to advance a few centuries to Robert Lovell's synthesis of medieval lapidary lore, the *Panoryktolygia* (1658), to articulate clearly what had previously only been acknowledged in subtext: "[chrysolite] is judged to be of a *solar nature according to its signature*, therefore it is thought good to lessen night greifes, to strengthen the intellect, and to prevent troublesome dreames, being hung about the neck or arm" (my italics).¹¹³

As with the section on herbs, it bears reiterating that these are not the only minerals and precious stones believed to assuage the nightmare. William Bullein, above, notes offhandedly that the ingestion of lapis lazuli was a more acceptable way to counteract the pains caused by nightmares rather than charms or other such popish superstitions. Other common preventative substances mentioned in medieval lapidaries include coral, chalcedony, diamond, jasper, onyx, and ruby. Whether this was due to their status as one the twelve stones of the apocalypse, their qualitative signatures, or the powers conveyed through astral influence, the ultimate causation probably mattered little to the everybody populaces terrorised by the ephialtes. The conceptual overlap that existed between the fields of humoral medicine, natural magic and religious discourse provided a platform through which a melange of different virtues could be attached to the apparent form of a mineral or precious stone. Being intrinsically "hot" and diagrammatically opposed to the coldness of melancholy, gagate and chrysolite were the perfect substances for banishing the *daemones* and *timores nocturnos* that terrorised unbalanced, sometimes morally suspect bodies – both living and dead.

Conclusion

The feeling of pressure on the chest and the experience of hypnagogic and hypnopompic hallucinations disrupted the rhythms of the daily sleep cycle, causing the sufferer anxiety and

distress. This is as true today as it was for people in the past. The aim of this article has not been to conduct an overarching survey of all the plant and mineral substances that were believed to assuage the nightmare – such a task is beyond the remit of an article-length study – but to provide a brief sketch on an often-underrepresented area of scholarship on sleep dysfunctions. Previous studies on the nightmare by historians of medicine and the supernatural have made only tangential references to the evidence contained in herb and lapidary lore, tending to focus instead on the theoretical underpinnings of night terrors and the subjective experiences of the sufferer. The management of the nocturnal assault through the application of simple medicines has often gone unexplored. In keeping with the scholarly consensus about the medieval understanding of the cosmos, exemplified by the writings of Alain of Lille, it has been shown to be impossible to separate a purely scientific reading of the nightmare (i.e., indigestion; humoural dysfunction) from the folkloric and theological (i.e., assaults by evil agents). Such demarcations, of course, did not fully exist in a moralised, multivalent universe, where the habitual knowledge of the properties of herbs and stones were structuring principles that influenced their use across a variety of medical, religious, learned and unlearned contexts; a form of "synchronic entanglement" that speaks to the validity of examining a wide range of sources and datasets. Indeed, with unwritten texts being just as valuable as written texts, future archaeological studies may wish to explore the potential apotropaic function of plant matter in burial sites, building upon Roberta Gilchrist's assertions about the protective qualities of mineral grave goods. 116 Just as Jean Beleth's influential handbook of church liturgy, the Summa de ecclesiasticis officiis (c.1162), advocates the placement of ivy and laurel in the grave to signify everlasting life, so the hypothetical presence of peony or betony in the burial matrix could indicate that the "sleeping" corpse was considered susceptible to demonic attack. 117 In this way the mediomagical power of herbs could extend even beyond death.

Ultimately, the fear of imbalance is a concept that bridges the natural and supernatural and micro- and macrocosmic worlds. With regimen books from the *Secreta Secretorum* onwards designed to cultivate the soul as well as the body, 118 the *wilful* negation of the six non-naturals was a sign that the patient was living an immoral, irresponsible life. The engendering of noxious humours through overeating, poor bedroom habits and lack of bodily care resulted in an affliction – the nightmare – that spoke equally to the sufferer's dietary and socio-spiritual dysfunction. As articulated most prominently in scholastic demonology, evil spirits only needed a slight opening to breach the body-fortress and wreak havoc upon the senses. Alongside prayer and pious living, herbs and stones formed two of the main weapons for alleviating melancholy-induced torment and bringing the body and soul back to balance.

¹ For an overview of the neuropsychology of the nightmare, see J. Allan Cheyne, Steve D. Rueffer and Ian R. Newby-Clark, "Hypnagogic and Hypnopompic Hallucinations during Sleep Paralysis: Neurological and Cultural Construction of the Nightmare," *Consciousness and Cognition* 8 (1999): 319-37.

² See especially Shelley R. Adler, *Sleep Paralysis: Night-mares, Nocebos, and the Mind-body Connection* (New Brunswick, N.J.: Rutgers University Press, 2011); David J. Hufford, *The Terror that Comes in the Night: An Experience-centered Study of Supernatural Assault Traditions* (Philadelphia, PA: University of Pennsylvania Press, 1982).

³ Adler, Sleep Paralysis, 8-9.

⁴ Charles Stewart, "Erotic Dreams and Nightmares from Antiquity to the Present," *Journal of the Royal Anthropological Institute*, New Series 8 (2002): 279-309; Maaike van der Lugt, "The Incubus in Scholastic Debate: Medicine, Theology and Popular Belief," in *Religion and Medicine in the Middle Ages*, ed. Peter Biller and Joseph Ziegler (Woodbridge: York Medieval Press, 2001), 175-200.

⁵ The various ontological and typological categories of the nightmare, from a wide variety of cultural contexts, are catalogued in Louise S. Milne's useful overview article, "The Terrors of the Night: Charms Against the Nightmare and the Mythology of Dreams," *Incantatio* 6 (2017): 78-116.

⁶ Stephen Gordon, "Medical Condition, Demon or Undead Corpse? Sleep Paralysis and the Nightmare in Medieval Europe," *Social History of Medicine* 28 (2015): 425-44.

⁷ "The Apparition (*visum*) comes upon one at the moment between wakefulness and slumber [...]. In this drowsy condition he thinks he is still fully awake and imagines he sees spectres rushing at him or wandering vaguely about, differing from natural creatures in size and shape, and hosts of diverse things, either delightful or disturbing [...]. According to popular belief [the ephialtes] rushes upon people in their sleep and presses them with a weight which they can feel," in Macrobius, *Commentary on the Dream of Scipio*, ed. and trans. W. Harris Stahl (New York: Columbia University Press, 1952), 89. For the Latin, see *Commentarii in Somnium Scipionis, in Macrobii Ambrosii Theodosii Opera quae supersunt*, 2 vols, ed. Ludwig Von Jan (Quedlinburg: Bassii, 1848), I., 26-27.

⁸ William of Conches (c.1140s), Pascalis Romaus (c.1165), Bernard of Gordon (c.1303) and John of Gaddesden (c.1304-17), represent just sone of the medieval writers who advocated for a natural causation of the nightmare experience. Van der Lugt, "Incubus," 183-86. See also: William F. MacLehose, "Fear Fantasy and Sleep in Medieval Medicine," in *Emotions and Health, c.1200-1700*, ed. Elena Carrera (Leiden: Brill, 2013): 67-94;

⁹ Superstitio was of course a pejorative term utilised by learned scholars throughout the Middle Ages to denigrate credulous, non-normative beliefs, especially in the context of the supernatural. I use the term here to denote the more metaphysical, apotropaic remedies against the nightmare.

- ¹² Vincent of Beauvais, *Speculum Naturale* (Venice: Hermannus Liechtenstein,1494), II.118 (at fol. 26r); Thomas Aquinas, *The "De Malo" of Thomas Aquinas*, ed. Brian Davies; trans. Richard Regan (Oxford: Oxford University Press, 2001), qu.3, art. 4.
- ¹³ Nancy *Caciola, Discerning Spirits: Divine and Demonic Possession in the Middle Ages* (Ithaca, NY: Cornell University Press, 2006), 144-7, 214-5.
- ¹⁴ See especially Van der Lugt, "Incubus." For an equally pertinent early modern discussion, see Janine Rivière, "Demons of Desire of Symptoms of Disease? Medical Theories and Popular Experiences of the Nightmare in Premodern England," in *Dreams, Dreamers and Visions: The Early Modern Atlantic World*, ed. Anne Marie Plane and Leslie Tuttle (Philadelphia, PA: University of Pennsylvania Press, 2013), 49-71.

¹⁰ Gregory A. Smith, "How Thin is a Demon?" *Journal of Early Christian Studies*, 16 (2008): 479-512 (at 501).

¹¹ See especially Augustine, *De Civitate Dei*, XXI.10, in *Opera Omnia*, PL 41 (Paris, Migne, 1845), col. 724, where it is noted that demons have bodies of dense or humid air (*aere crasso atque umido*).

¹⁵ MacLehose, "Fear, Fantasy and Sleep," 68.

¹⁶ For the theory of the creative and restrictive properties of the *habitus* ("a system of internalised schemes that have the capacity to generate all the thought, perceptions and actions characteristic of a culture, and nothing else") and the medieval understanding thereof, see Pierre Bourdieu, "Postface to Erwin Panofsky, Gothic Architecture and Scholasticism," in *The Premodern Condition: Medievalism and the Making of Theory*, ed. Bruce W. Holsinger (Chicago, IL: Chicago University Press, 2005), 221-43 (at 233).

¹⁷ Isabelle Draelants, "The Notion of Properties: Tensions between Scientia and Ars in Medieval Natural Philosophy and Magic," in *The Routledge History of Medieval Magic*, ed. Sophie Page and Catherine Rider (London: Routledge, 2019), 169-86; Nicolas Weill-Parot,

- "Astrology, Astral Influences, and Occult Properties in the Thirteenth and Fourteenth Centuries," *Traditio* 65 (2010): 201-30.
- ¹⁸ "The Nature of Man," in *Hippocratic Writings*, ed. G. E. R. Lloyd; trans J. Chadwick and W. N. Mann et al (Harmondsworth: Penguin, 1978), 260-71; Mirko D. Grmek, "The Concept of Disease," in *Western Medical Thought from Antiquity to the Middle Ages*, ed. Mirko D. Grmek; trans. Antony Shugaar (Cambridge, MA: Harvard University Press, 1998), 241-59 (at 247-53).
- ¹⁹ On the Differentiae of Diseases, VI. 837-8K, in Galen: On Diseases and Symptoms, ed. and trans. Ian Johnston (Cambridge: Cambridge University Press, 2001), 134-35.
- ²⁰ Luis García-Bellester, "Soul and Body, Disease of the Soul and Disease of the Body in Galen's Medical Thought," in *Galen and Galenism* ed. Jon Arrizabalaga et al (Aldershot: Ashgate, 2002), III, 127-50 (at 134).
- ²¹ For the link between sin and disease, see Susan R. Kramer, "Understanding Contagion: The Contaminating Effects of Another's Sin," in *History in the Comic Mode: Medieval Communities and the Matter of Person*, ed. Rachel Fulton and Bruce W. Holsinger (New York: Columbia University Press, 2007), 145-57; R. I. Moore, "Heresy as Disease," in *The Concept of Heresy in the Middle Ages (11th-13th c.): Proceedings of the International Conference, Louvain, May 13-16, 1973*, ed. W. Lourdaux and D. Verhelst (Leuven: Martinus Nijhoff, 1976), 1-11.

²² Kramer, "Understanding Contagion," 148.

²³ In qua ad corporis clientelam diversas membrorum ordinans officinas, in eadem, sensus quasi corporeae civitatis excubias vigilare praecepi, ut quasi exterorum hostium praevisores, corpus ab exteriori importunitate defenderen. See Alan of Lille, *The Complaint of Nature*, trans. Douglas M. Moffat (New York: Holt, 1908), 24. For the Latin, see *Alani de Insulis doctoris universalis opera omnia*, PL 210 (Paris: Migne, 1855), col. 442.

- ²⁸ Indeed, Hoyland was said to have been pressed (*oppressus*) and choked (*suffocatus*) at night for thirty years. See Gordon, *Supernatural Encounters*, 193-6. For a further explication of the Stephen of Hoyland story, see MacLehose, "Fear, Fantasy and Sleep," 67-9, 81.
- ²⁹ Scholarship on the use of charms and amulets in the medieval world is vast. For the case studies mentioned, see Lea Olsan, "The Marginality of Charms in Medieval England," in *The Power of Words: Studies on Charms and Charming in Europe*, ed. James Kapaló, Éva Pócs, and William Ryan (Budapest: Central European University Press, 2013), 135-64; Annie Montgomery Labatt, "Turning an Axe on Its Head," *West 86th: A Journal of Decorative Arts, Design History, and Material Culture* 25 (2018): 160-75.

²⁴ Et que eaedem inter quatuor humores pacis sanciunt firmitatem. Alain of Lille, *The Complaint of Nature*, 25-6.

²⁵Haec mentem humanam in vitiorum occasum deducit, ut occidat, Ibid, 26.

²⁶ Stephen Gordon, *Supernatural Encounters: Demons and the Restless Dead in Medieval England, c.1050-1450* (London: Routledge, 2020); see sermon V.35 "Attack of the Devil," in *Fasciculus Morum: A Fourteenth Century Preacher's Handbook*, ed. and trans. Siegfried Wenzel (University Park, PA: Pennsylvania State University Press, 1989), 602-3.

²⁷ Thomas de Mayo, "William of Auvergne and Popular Demonology," *Quidditas*, 28 (2007): 61-88.

³⁰ Aristotle, *On Sleep and Dreams*, ed. and trans. David Gallop (Warminster: Aris & Phillips, 1996).

³¹According to Galen, the vital spirits were created through the mixture of blood and air drawn from the lungs. For information on the relationship between the natural, vital and animal spirits, see Heather Webb, *The Medieval Heart* (New Haven, CT: Yale University Press, 2010), 26-31.

³² Pedro Gil Sotres, "The Regimens of Health," in Western Medical Thought from Antiquity to the Middle Ages, 291-318 (at 310).

³³ Aristotle, *On Sleep and Dreams*, 3. 37 (at 97-98). The Islamic physician Avicenna (d.1037) notes that going to sleep on a full stomach had a putrefactive effect and provoked particularly bad night-terrors. See *A Treatise of the Canon of Medicine of Avicenna: Incorporating a Translation of the First Book*, ed. and trans. O Cameron Gruner (New York: AMS Press, 1973), 374.

³⁴ From around the 1660s, there was an increased focus on the idea that sleep refreshed the nerves. See Sasha Handley, *Sleep in Early Modern England* (New Haven, CT: Yale University Press, 2016), 20.

³⁵ Sotres, "The Regimens of Health," 300.

³⁶ For the literary history of the *Secreta Secretorum*, see Steven J. Williams, "The Pseudo-Aristotelian *Secret of Secrets* as a Didactic Text," in *What Nature Does Not Teach: Didactic Literature in the Medieval and Early-Modern Period*, ed. Juanita Feros Ruys (Turnhout: Brepols, 2008), 41-57.

³⁷ Secreta Secretorum: Nine English Versions, ed. M. A. Manzalaoui; vol. 1., Text, EETS, o.s.276 (Oxford: Oxford University Press, 1977), 6. Note: all thorns and yoghs have been regularised throughout this article.

³⁸ *Three Prose Versions of the Secreta Secretorum*, ed. Robert Steele; vol. 1., Text and Glossary, EETS, e.s. 74 (London: Trübner, 1898), 71.

³⁹ Christopher Bonfield, "The First Instrument of Medicine: Diet and Regimens of Health in Late Medieval England," in *A Verray Parfit Praktisour: Essays presented to Carole Rawcliffe*, ed. Elizabeth Danbury and Linda Clark (Woodbridge: Boydell, 2017), 99-120.

⁴⁰ Thomas Paynell, *Regimen sanitatis Salerni: This boke techyng al people to gouerne them in helth*e (London: Berthelet, 1528); The upsurge of interest in dietary books in England in the Later Middle Ages is discussed in Bonfield, "The First Instrument of Medicine," 106.

⁴¹ Regimen sanitatis Salerni, B iiiiv.

⁴² William Bullein, "The Boke of the Use of Sicke Men and Medicines," in *Bulwarke of defence againste all Sicknes, Sornes, and Woundes hat doe dayly assaulte mankinde* (London: Marshe, 1579 [1562), fol. 22r.

⁴³ Handley, *Sleep in Early Modern England*, 28; Christopher J. Duffin, "The Gem Electuary," *A History of Geology and Medicine*, ed. C. J, Duffin, R. T. J., Moody, and C. Gardner-Thorpe (London: The Geological Society, 2013), 81-111 (at 81-83).

⁴⁴ Handley, *Sleep in Early Modern England*, 31-38.

⁴⁵ Such a belief can be discerned on the deathbed as well as the sickbed. Traditional *Ars moriendi* literature gave advice on how the dying could avoid succumbing to last-minute sin lest their souls be dragged to hell by demons. See Mary Catherine O' Conner, *The Art of Dying Well: The Development of the Ars Moriendi* (New York: Columbia University Press, 1942).

⁴⁶ Peter Dendle, "Plants in the Early Medieval Cosmos: Herbs, Divine Potency, and the *Scala natura*," in *Health and Healing from the Medieval Garden*, ed. Peter Dendle and Alain Touwaide (Woodbridge: Boydell, 2008), 47-59; Catherine Rider, *Magic and Impotence in the Middle Ages* (Oxford: Oxford University Press, 2006), 160-85.

⁴⁷ Gordon, "Medical Condition," 435; Labatt, "Turning an Axe on Its Head," 161.

⁴⁸ Ibid, 434.

⁴⁹ Bartholomaeus Anglicus, *Proprietates Rerum domini bartholomei anglici*. bk. 17, ch. 191 (Heidelberg: Knoblochtzer, 1488). English quote taken from the entry for violet in John Trevisa's 1399 translation of Bartholomaeus' Latin text, *De proprietatibus rerum* (c.1240).

See the printed text, Trevisa, *Bartholomeus, de proprietatibus rerum* (Westminster, 1497), book 17, ch. 191 [In lieu of pagination in this edition, the chapter number will be used as reference].

- ⁵⁰ Jerry Stannard, "Medieval Herbalism and Post-Medieval Folk Medicine," *Pharmacy in History* 55 (2013): 47-54 (at 50).
- ⁵¹ Vincent of Beauvais, *Speculum Naturale*, II.118 (at fol. 26r); Caciola, *Discerning Spirits*, 144.
- Theophrastus, Enquiry into Plants and Minor Works on Odours and Weather Signs, 2 vols, ed. and trans. Arthur Hort (London: Heinemann, 1916); Dioscorides, De Materia Medica, ed. and trans. T. A. Osbaldeston (Johannesburg: Ibidis Press, 2000) and, for the text in Latin, Pedacii Dioscoridis Anazerbei de medica materia, lib. V (Frankfurt: Wechel et al, 1598). [Hereafter the equivalent page references in the English and Latin texts will be in the form of "xx/xx"]; Pliny, Natural History, Volume VI: Books 20-23, trans. W. H. S. Jones. LCL 392 (Cambridge, MA: Harvard University Press, 1951) and Natural History, Volume VII: Books 24-27, trans. W. H. S. Jones and A. C. Andrews, LCL 393 (Cambridge, MA: Harvard University Press, 1956). See also Charles B. Schmitt, "Theophrastus in the Middle Ages," Viator 2 (1972): 251-70 (at 253).
- ⁵³ Galen, *De simplicium medicamentorum temperamentis ac facultatibus* [On the Powers and Mixtures of Simple Drugs], in *Claudii Galeni Opera Omnia*, vol. 11 ed. Karl Gottlob Kühn (Cambridge: Cambridge University Press, 2011).
- ⁵⁴ William Turner, *The first and seconde partes of the herbal of William Turner Doctor in Phisick, lately oversene, corrected and enlarged with the thirde parte* (Cologne: Birckman, 1568), III. fol. ii.
- ⁵⁵ See the uses for mandrake listed in Matthaeus Platearius's *Liber de simplici medicina*, (Lyon, 1512), fol. 26r. Also known as the *Circa Instans* after the first lines of the text, this

treatise, compiled c.1150, represents one of the standard texts of scholastic medicine [Hereafter *Circa Instans*].

⁵⁶ domus in qua sata sit tuta existimetur a periculis omnibus, in Pliny, *Natural History*, 25.46 (at 198-99).

⁵⁷ The *Herbarium* was also one of the first herbals to make the transition to print in the late fifteenth century. See H. J. de Vriend, *The Old English Herbarium and Medicina de Quadrupedibus*, EETS, o.s 286 (Oxford: Oxford University Press, 1984); Agnes Arber, *Herbals: Their Origins and Evolution* (Cambridge: Cambridge University Press, 1912), 11-15.

⁵⁸ "hyne scyldeþ wið unhyrum nihtgengum 7 wið egeslicum gesihðum 7 swefnum," in Vriend, *The Old English Herbarium*, 30. For a modern translation of this text and the editor's rationale for translating nihtgengum as nightmare, see Anne van Arsdall, Me*dieval Herbal Remedies: The Old English Herbarium and Anglo-Saxon Medicine* (London: Routledge, 2002), 139, n.71.

⁵⁹ Gordon, "Medical Condition," 437.

⁶⁰[...] animas hominum et corpora custodit, nocturnas ambulationes et loca sancta et busta, etiam uisus timendos et omnes res sanctas. Vriend, *The Old English Herbarium*, 31. For further analysis of the nihtgengum, see Gwendolyne Knight, "'The Night is Dark and Full of Terrors': Darkness, Terror and Perception in Anglo-Saxon England," in *Darkness*, *Depression, and Descent in Anglo-Saxon England*, ed. Ruth Wehlau (Kalamazoo, MI: Medieval Institute Publications, 2019), 37-60 (at 42-45).

⁶¹ H. M. Barlow, "Old English Herbals, 1525-1640," *Proceedings of the Royal Society of Medicine*, 6 (1913): 108-149 (at 123).

⁶² Circa Instans, fol. 9r.

Although it is not the remit of this article to conduct a full comparison of the *Circa Instans* and the *Banckes Herball* textual traditions, it is worth noting that the sleep remedies included in each text are remarkably similar, suggestive of an ultimate connection in the murky habitus of medical knowledge. The *Bankes' Herball* entry for violet notes that "let hym soke well his fete in the water to the ancles, and whan he goeth to his bedd bynde of this herbe to his temples and he shall slepe well by the grace of God." Compare this statement to the treatment mentioned in the *Circa Instans*: "Fomentatio ex aqua decoctionis ipsius circa pedes et frontem in acatis somnum provocat." The entries for poppy and lettuce are also remarkably similar. See *Here begynneth a new mater, the which sheweth and treateth of ye vertues and proprytes of herbes, the whiche is called an Herball* (London: Banckes, 1525) [Hereafter *Banckes' Herball*], and *Circa Instans*, fol. 39v.

⁶⁴ Banckes' Herball, fol. B.ii-v.

⁶⁵ Nicholas Culpeper, *The English Physician* (London: Cole, 1652), 25.

⁶⁶ Sed et eo domos aspergunt purgandi expiandique vim illi tribuentes. Dioscorides, *De Materia Medica*, 4.151 (at 703/477).

Nonnulli etiam vero etiam saepe etiam audire qui super ipsos inciderit. Paulus Aegineta, *The Seven Books of Paulus Aegineta*, vol. 1. ed. and trans. Francis Adams (London: Sydenham Society, 1844), 3.15 (at 388-89). For the Latin, see *Pauli Aeginetae Medici Opera* (Venice: Torresano, 1553). III (at 58). For Oribasius' discussion on the use of Black Hellebore and Peony as a nightmare purgative, see Oribasius, *Oeuvres D'Oribase*, vol. 6, ed. A. Molinier (Paris: J.-B. Baillière & Sons, 1876), 9.4 (at 205-6).

⁶⁸ Bartholomaeus, 17.55.

⁶⁹ Circa Instans, fol. xviiiv.

⁷⁰ Turner, *The Herball of William Turner*, I, 161.

⁷⁴ To move forward in time slightly, Hellebore's mystical qualities can be read much more explicitly in Robert Turner *Botanologia* (1664). As well as arguing that black hellebore is good for clearing melancholic and phlegmatic humours from the head, he also notes that "it cures such as seem possessed with the Devil, and therefore is by some called Fuga-Daemonum." See Robert Turner, *Botanologia: The Brittish Physician, Or, the Nature and Vertues of English Plants* (London: Blagrave, 1687 [1664]),150.

⁷¹ Caciola, *Discerning Spirits*, 214.

⁷² Rivière, "Demons of Desire," 59.

⁷³ See Catherine Rider, "Demons and Mental Disorder in Late Medieval Medicine," in *Mental* (*Dis*)Order in Late Medieval Europe, ed. Sari Katajala-Peltomaa and Susanna Nirranen (Leiden: Brill, 2014), 47-69 (at 57). Aquinas, *De malo*, qu. 3 art. 4

 ⁷⁵ quae vero nigra sunt grana, suppressionibus nocturnis, quas Ephialtes vocant. *Dioscorides* 3.157 (at 530/380).

⁷⁶ haec medetur et Faunorum in quiete ludibriis [...] grana nigra auxiliantur et suppressionibus nocturnis in vino pota quo dictum est numero. Pliny, *Natural History*, 25.10; 27.60 (at 156-57; 440-1).

⁷⁷ Translated into English as *The Magick of Kirani King of Persia, and of Harpocration* (London, 1685), 12.

⁷⁸ Bruce P. Flood, Jr, "The Medieval Herbal Tradition of Macer Floridus," *Pharmacy in History*, 18 (1976): 62-66; Francis R. Johnson, "A Newe Herball of Macer' and 'Banckes's Herbal': Notes on Robert Wyer and the Printing of Cheap Handbooks of Science in the Sixteenth Century," *Bulletin of the History of Medicine*, 15 (1944): 246-60; *A Middle English Translation of Macer Floridus de viribus herbarum*, ed. Gösta Frisk (Uppsala: Lundequist, 1949), 13-17; Barlow, "Old English Herbals," 113.

⁷⁹ Macer de Floridis de Viribus Herbarum, ed. Ludovic Choulant (Leipzig: Voss, 1832), 94.

⁸⁰ A Middle English Translation of Macer Floridus, 158. For "brisures" as a bodily affliction wrought upon the sufferer by an outside, physical force, see the definitions recorded in the Middle English Dictionary: brisure, n., 1.(a) A wound, bruise; also fig.; (b) a breach in a wall; 2. The action of wounding or bruising. https://quod.lib.umich.edu/m/middle-english-dictionary/dictionary/MED6076/ [accessed 23 January 2021]

⁸¹ Turner, The Herball of William Turner, bk II, at fol.84v.

⁸² Rembert Dodoens, *A New Herbal, or Historie of Plants* (London: Newton, 1586).

Dodeon's herbal is an English translation of a work that first appeared in Flemish in 1551.

⁸³ Culpeper, The English Physician, 40, 66, 76, 176

⁸⁴ Circa Instans, fol. 11r.

⁸⁵ Van der Lugt, "Incubus," 176.

⁸⁶ Draelants, "The Notion of Properties," 171-72

⁸⁷ Orphei Lithica accedit Damigeron De Lapidibus, ed. Eugenius Abel (Berlin: Calvary et Socios, 1881), 179.

⁸⁸ Niger est, planus, pumicosus, levis, non multum a ligno differens, fragilis, odore si teratur gravis. fictilia ex eo inscripta non delentur; cum uritur, odorem sulpureum reddit; mirumque, accenditur aqua, oleo restinguitur. fugat serpentes ita recreatque volvae strangulationes. deprendit sonticum morbum et virginitatem suffitus. idem ex vino decoctus dentibus medetur strumisque cerae permixtus. Pliny, *Natural History*, 36.34 (at 112-5).

⁸⁹ Radcliffe G. Edmonds, *Drawing Down the Moon: Magic in the Ancient Greco-Roman World* (Princeton, NJ: Princeton University Press, 2019), 137-38.

⁹⁰ Ibid, 137.

 ⁹¹ Orphei Lithica, 28-30. For the English translation of the gagate section of the text, see C.
 W. King, Natural History, Ancient and Modern of Precious Stones and Gems and of Precious
 Metals (London, Bell and Daldy, 1865), 388-89.

⁹² aqua ardet, oleo restinguitursi potestatem, attritu calefactus adplicita detinet atque sucinum.
Solinus, *Collectanea rerum memorabilium*, ed. Theodor Mommsen (Berlin: Wiedmann,
1864), 102.

⁹³ Isidore of Seville, *Etymologies*, ed. and trans. S. A. Barney et al (Cambridge: Cambridge University Press, 2006), XVI. iv. 3 (at 320); for the Latin, see *Isidori Hispalensis Episcopi*, *Etymologiarum Sive Originum Libri XX*, ed. W. M. Lindsay (Oxford: Clarendon, 1911).

94 Idem demonibus contrarius esse putatur [...] vincit prestigias, Marbode of Rennes, *De Lapidibus: Considered as a Medical Treatise with Text, Commentary and C. W. King's Translation; together with Text and Translation of Marbode's Minor Works on Stones, ed. J.

M. Riddle, <i>Sudhoffs Archiv*, 20 (Wiesbaden: Steiner, 1977), 1-144 (ch. XVIII, at 56).

95 Gordon, "Medical Condition," 435.

⁹⁶ et valet contra ventris subversionem et fantasmata et confert demoniacis. Valentin Rose,
"Aristoteles De lapidibus und Arnoldus Saxo," *Zeitschrift für deutsches Alterthum*, 18 (1875):
321-455 (at 436).

⁹⁷ Stephen Batman's expanded and annotated version of Trevisa translation renders the clause as "against vexation of feends by night." See *Batman uppon Bartholome his booke De proprietatibus rerum, newly corrected, enlarged and amended* (London: East, 1582).
⁹⁸ extinguitur vero in oleo quod est mirum, in Bartholomaeus, 16.49 [16.47 in the Trevisa printed edition]. See also Caroline Walker Bynum, "Wonder," *The American Historical Review* 102 (1997): 1-26.

⁹⁹De expertis autem est, quod lotum cum aqua et per suffumigationem mulieribus inferius suppositum, provocat menstrua. Fertur etiam quod serpentes fugat, et valet contra stomachi et ventris subversionem, et contra fantasmata, melancholia quida daemones vocant. *Mineralium*, in *B. Alberti Magni, Opera Omnia Vol.* 5. ed. Augustine Borgnet (Paris: Vives, 1890), 37.

For the English translation, see Albertus Magnus, *Book of Minerals*, ed. and trans. Dorothy Wyckoff (Oxford: Clarendon, 1967), 93.

- ¹⁰⁰ Appendix D, in Joan Evans, *Magical Jewels of the Middle Ages and the Renaissance*, *Particularly in England* (Oxford: Clarendon, 1922), 223-34 (at 230).
- ¹⁰¹ Appendix A, in *Magical Jewels of the Middle Ages*, 195-213 (at 206).
- ¹⁰²A Medieval Book of Magical Stones: The Peterborough Lapidary, ed. and trans. Francis Young (Cambridge: Texts in Early Modern Magic, 2016), 48.
- ¹⁰³ The presence of jet beads and pendants as part of medieval grave assemblances provides a strong indication that their occult properties were seen as being beneficial for the deceased. See Roberta Gilchrist, "Magic for the Dead? The Archaeology of Magic in Later Medieval Burials," *Medieval Archaeology* 52 (2008): 119-59 (at 139); Stephen Gordon, "Disease, Sin and the Walking Dead in Medieval England, c.1100-1350: A Note on the Documentary and Archaeological Evidence," in *Medicine, Healing and Performance*, ed. Stephen Gordon et al (Oxford: Oxbow, 2014), 55-70.

¹⁰⁴ Gordon, Supernatural Encounters, 205.

¹⁰⁵ As noted in Wyckoff, *Book of Mineral*, 82.

¹⁰⁶ Est spissus, lucidus, similis auro. Hic applicatus ad rasuram auri, levatus phylacterium est ad nocturnos timeros. Pertusus et transiectus cum setis asininis et alligatus in sinistro brachio, omnia daemonia vincit. Abel, *Orphei Lithica*, 194.

¹⁰⁷ Marbode, *De Lapidibus*, XI.

¹⁰⁸ For Bede's commentary on Revelations 21: 19-21, see Peter Kitson, "Lapidary traditions in Anglo-Saxon England: Part II, Bede's *Explanatio Apocalypsis* and Related Works," *Anglo-Saxon England*, 12 (1983): 73-123. To give the bible quotation in full: "The foundations of the city walls were decorated with every kind of precious stone. The first foundation was jasper, the second sapphire, the third agate, the fourth emerald, the fifth onyx, the sixth ruby,

the seventh chrysolite, the eighth beryl, the ninth topaz, the tenth turquoise, the eleventh jacinth, and the twelfth amethyst."

¹⁰⁹ Marbode, *De Lapidibus*, XI

¹¹⁰ Rose, "Arnoldus Saxo," 433.

¹¹¹ Evans, Magical Jewels of the Middle Ages, 228; Bartholomaeus, fol. 258r.

¹¹² Chrysolitus lapis est in colore habens tenuem viriditatem lucidam, in qua ad oculüm solis micat sicut stella aurea, et non est rarus. Dicitur autem venire de Aethiopia. Expertum autem est quod spiritualia confortat: propter quod tritus asmaticis datur. Fertur etiam quod perforates et setis asini in Foramine repletus et brachio ligatus sinistro, fugal terrores et melancholicas passions: et hoc dicitur in physicis ligatures: et in auro etiam positus et gestatus, fugat phantasmata, ut dicunt: stultitiam etiam repellere, et sapientiam conferre perhibetur; Wyckoff, *Book of Minerals*, 82-83; *B. Alberti Magni, Opera Omnia*, 34.

113 Robert Lovell, *Pambotanologia sive enchiridion botanicumn* (Oxford: W.H. for Davies, 1665 [1658]), 70.

¹¹⁴ Kitson, "Lapidary traditions in Anglo-Saxon England," 115-20; Weill-Parot, "Astral Influences," 203.

¹¹⁵ Gilchrist, "Magic for the Dead," 153

¹¹⁶ Gilchrist, "Magic for the Dead," 153.

¹¹⁷ John Beleth, *Summa de ecclesiasticis officiis*, ed. Heriberto Douteil, CCCM 41A (Turnhout: Brepols, 1976), 319.

¹¹⁸ Bonfield, "The First Instrument of Medicine," 115.