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Citation

Truitt, Elly R. "The Virtues of Balm in Late Medieval Literature." *Early Science and Medicine* 14, no. 6 (2009): 711-736.

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The Virtues of Balm in Late Medieval Literature

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In the *Troy Book* (c. 1412-1420), John Lydgate's Middle English poem about the Trojan War, balsam (balm) kept Hector's body extraordinarily well preserved, so that it appeared astonishingly alive. Priam wanted not only to erase all evidence of the abuse his son's body suffered at the hands of Achilles, but also to keep Hector's body preserved "from odour and abomynacioun," with no evidence of decay, and displayed aboveground with a wholly life-like aspect: "But •at it be lifly and visible/ To •e eye, as be apparence, / Like as it were quyk in existence...¹ But, as Lydgate noted, in the ordinary course of nature, "corrupte muste, ri•t of verray nede/...•er may be made noon opposicioun, / Aboue •e grounde •if •e body lie,/ •at of resoun it mvt putrefie..."²

To achieve his desire to thwart nature, Priam summoned the most skilled artificers in Troy to build an elaborate tabernacle for Hector's body and devise a method to keep his body "lifty visible." These men placed Hector in the temple of Apollo, on a dais made of gold, crystal, and gemstones, and used "sotil craftre" to place Hector's body upright, and he appeared

...as he were lyvyng.

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¹ John Lydgate, *Troy Book*, ed. Henry Bergen, 3 volumes in 2 (London, 1902), vol. 1, ll. 5593-98. All subsequent quotes from the *Troy Book* are from volume 1 of this edition.

² *Troy Book*, ll. 5584-88.

Of face & chere, & of quyk lokynge,
And of colour, sothly, and of hewe,
Beinge as freshe as any rose newe,
And like in al, as be supposaille,
As he lyuede in his apparaille.³

These skilled men achieved this wondrous feat by an ingenious and complex system of concealed golden tubes that ran “be grete avys [cleverness] and subtylite,/ To eche party and extremyte/ Of his body lineally porrect,/ •oru• nerve & synwe driven & direct...”⁴ From a golden urn at his head, “bawme natural” flowed through golden pipes that kept Hector “hool fro corrupcioun,/ With-outen any transmutatioun/ Of hyde or hewe...”⁵ From his head and neck, through his veins, the “vertu & force” of the liquor preserved him “lifty of colour.”⁶ The strong balsam kept Hector “fresche of hewe, quyke, & no •inge pale,” similar

To a sowle, •at were vegetable
•e which, with-oute sensibilite,
Mynystreth lyf in herbe, flour, and tre,
And, semblably, in-to euery veyne
Of •e cors •e vertu dide atteyne,
By brest and arme spredynge environ:
For •e moisture by descencioun
To hand and foot, sothly, as I rede,
•oru• bon and ioynt gan his vertu shede...⁷

As a final measure to keep Hector from putrefaction, the creators of his tomb placed a vial of sweet smelling “bawme & meynt” at his feet, making the air around Hector smell like “a verray paradys.”⁸

³ *Troy Book*, ll. 5657-62.

⁴ *Troy Book*, ll. 5667-70.

⁵ *Troy Book*, ll. 5673-77.

⁶ *Troy Book*, ll. 5679-84.

⁷ *Troy Book*, ll. 5679-97.

This bizarre and alluring image of Hector—pristine and life-like—on display in the open air may represent an exaggerated view of actual burial customs, especially of noble or high-ranking persons, in fifteenth-century northern Europe.⁹ Although it was not uncommon for corpses to be embalmed, it was done for short, limited periods of time. Yet in this case, Hector’s body remains intact and lifelike for eternity because of the vital properties of “bawme.” The nature of balsam and its qualities, especially the ability to act as an extraordinarily effective preservative, demands further inquiry. Is this Lydgate’s invention, or instead a reflection of late medieval ideas about a particular natural substance? In order to answer this question, we must look to Lydgate’s sources, and also to the trajectory of writing on balsam from the ancient world and medieval Europe—as a panacea, as a highly sought-after and expensive luxury commodity, and as something with a particularly Christian resonance and virtue.

THE NATURE OF BALSAM

Balm, or balsam, appears in numerous medieval texts as a natural substance that has marvelous healing and preservative properties. In the ancient and medieval periods, balm referred to the aromatic, resinous produce of a

⁸ *Troy Book*, ll. 5696-5702. On the link between sweet smells and Heaven, see Clifford Davidson, “Heaven’s Fragrance,” in *The Iconography of Heaven*, ed. Clifford Davidson (Kalamazoo, MI, 1994), 110-127.

⁹ See Patrice Georges, “*Mourir c’est pourrir un peu. Intentions et techniques contre la corruption des cadavres à la fin du moyen âge*,” *Micrologus* 7 (1999): 359-82; Agostino Paravicini-Bagliani, *The Pope’s Body*, trans. David S. Peterson (Chicago, 2000 [1994]), pp. 134-35; Katherine Park, “The Life of the Corpse: Division and Dissection in Late Medieval Europe,” *Journal of the History of Medicine and Allied Sciences* 50 (1995): 111-32. All note that embalming to preserve the corpses of high-ranking people was practiced in Europe in the late medieval period.

particular plant native to the “East,” meaning in this case Arabia, Egypt, or the Holy Land. Ancient texts offered overlapping, though not uniform, accounts of the origin and properties of balm, which were then repeated piecemeal in early medieval medical and encyclopedic texts. Later medieval travel narratives from pilgrims, merchants, and crusaders repeated some of the earlier material while also re-casting balm as something that had a specifically Christian nature. The resulting imbrication of ideas about balm has layers of botanical lore, philosophical explanation, and religious myth, resulting in a late medieval account in the *Troy Book* in which balsam keeps Hector’s corpse lifelike.

From these narrative texts—*roman* and *historia*, verse and prose, Latin and vernacular—a partial picture of medieval balm emerges. It is called both “balm” and “balsam;” it is precious, implying that it is rare or costly, or both; it comes in a liquid form; it has a particularly lovely odor; on its own or when mixed with other substances it restores or safeguards vitality and can stave off decay; and it has a Christian purpose and a Christian origin. In the medieval period, both “balm” and “balsam” have specific and general meanings. The word is derived from the Latin *balsamum*, which is a botanical term used to denote a specific aromatic shrub of the genus *Balsamodendron*, now classified as *Commiphora*, but which later came to mean a number of different kinds of plants, or the resinous substance secreted by them.¹⁰ In both the French and English medieval traditions, balm (or balsam) can mean the plant itself, the resin it

¹⁰ This expanded definition became especially apparent after European contact with North and South America, as many plants indigenous to those continents (and the resins they secreted) were called balm or balsam; for example, balsam of Tolu.

secretes, or an unguent made from this fragrant substance.¹¹ The meanings of “balm” and “balsam” encompass a broader semantic network: A fragrant oil or unguent used for anointing and embalming the dead, a substance used to heal wounds and soothe pain, and that has a preservative essence.¹²

BALM IN THE CLASSICAL WORLD

The etymology of *balsamum* derives ultimately from a Semitic root, *beshem*, and which originally meant a fragrant spice or resin.¹³ Ancient philosophers and natural historians described this substance and the plant from which it came in different, though overlapping, ways. Two of the earliest accounts of balsam in antiquity concur that balsam grows in a limited area, can only be harvested at a specific time of year, and, perhaps consequently, is a valuable commodity. Theophrastus (372-288 BCE), a pupil of Aristotle’s, wrote in his *Inquiry into Plants* that balsam of Mecca was native to the valley of Syria, and

¹¹ The “Balm of Gilead” mentioned in Genesis 37:25 added to this semantic confusion. In the Bible, Joseph’s brothers, after stripping him and throwing him into a well, encounter a group of Ishmaelite traders from Gilead loaded with myrrh, frankincense, and balm on their way to trade in Egypt. Yet what later became known as the “balm of Gilead” is actually turpentine from the terebinth tree. See Nigel Groom, *Frankincense and Myrrh: A Study of the Arabian Incense Trade* (London, 1981), 126. As I shall demonstrate below, although medieval writers used “balm” and “balsam” to refer to a variety of substances, there is a coherent set of qualities attributed to the natural resin from the plant now classified as *Commiphora opobalsamum*.

¹² *Dictionnaire historique de la langue française*, s.v. “baume;” *Middle English Dictionary*, s.v. “baume;” *OED*, 2nd ed., s.vv. “balm,” and “balsam.” Cf. *OED*, s.v. “embalm.” On the previous classification of *Balsamodendron* and its relationship to the current genus *Commiphora*, see Groom, *Frankincense and Myrrh*, 12.

¹³ There are several species of *Commiphora* native to Arabia, North Africa, and the Middle East. Groom, *Frankincense and Myrrh*, 12. On the distinction between spices, which were thought of as dry or processed, and herbs—local and fresh—see Paul Freedman, *Out of the East: Spices and the Medieval Imagination* (New Haven, CT, 2008), 5.

was cultivated in only two parks. The idea that balsam grew in this place goes back at least as far as the Jewish prophet Ezekiel (early sixth century BCE), who wrote that balsam was one of the exports of the independent Jewish kingdom and available at the market city of Tyre.¹⁴ The resin should be gathered by making incisions in the bark with an iron tool, “at the time of the Dogstar, when there is scorching heat.” Yet because the yield was so small, balsam was often mixed with other ingredients, and “does not reach us in a pure state.”¹⁵ Strabo (63/64 BCE-c. 24 CE), the Greek geographer, wrote that balsam grew in the country of the Sabeans, on the coast of southern Arabia, along with frankincense and myrrh. Trade in these spices, as well as cinnamon, made the Sabeans extremely wealthy, especially as balsam, the costliest, grew nowhere else. He also described the balsam garden in the palace in Jericho that belonged to the kings of Judaea, an echo of one of the private parks under cultivation in the valley of Syria that Theophrastus mentioned, implicitly suggesting that while balsam is native to southern Arabia, it had been successfully cultivated in Palestine. Additionally, Strabo repeated Theophrastus’ method of cultivation—tapping the bark. However, Strabo mentioned two other new details about balm: it has a spicy taste, and is an efficacious medical treatment, especially for curing headaches and vision problems.¹⁶

¹⁴ Ezekiel, 27.17-33. See also Andrew Dalby, *Dangerous Tastes: The Story of Spices* (Berkeley, CA, 2000), 34-36.

¹⁵ Theophrastus, *Inquiry into Plants*, trans. A. F. Hort, Loeb Classical Library (Cambridge, MA, 1916), 9.2.2-9.7.3.

¹⁶ Strabo, *Geographia*, ed. and trans. H. L. Jones, Loeb Classical Library (Cambridge, MA, 1928), see passages: i.2.32, xvi.4.2; xvi.4.19; xvi.2.41.

Several decades after Strabo wrote his *Geography*, Dioscorides and Pliny both discussed balsam in *On materia medica* and *Historia naturalis*, respectively. The two men were contemporaries, although Dioscorides wrote in Greek and Pliny in Latin. Dioscorides, an army physician, wrote his pharmacopeia around 65 CE, while Pliny, a natural philosopher and military commander, wrote his giant work on natural history just over a decade later, around 77 CE. The two authors, writing from the perspectives of medicine and natural philosophy, together provide a vivid portrait of the understanding, importance, and uses of balsam in the Roman Empire.

Both men repeated many elements from the previous descriptions of Theophrastus and Strabo, but went into greater detail and sometimes disagreed with one another. Both noted that the tree grows only in Judaea, although Pliny, echoing Theophrastus more directly, noted that the plant initially grew only in two gardens, both of which belonged to the king of Judaea. However, after the Romans conquered Judaea, they increased its cultivation in Palestine and also brought several trees back to Rome to figure in the victorious Titus' triumph. "The balsam tree is now a Roman subject...it pays tribute just like the people who tend it." Interestingly, although both agreed that pure balsam can only be obtained by tapping the bark, Dioscorides, not Pliny, confirmed Theophrastus' account, claiming that incisions in the bark need to be made with an iron tool "during the burning heat of the Dog Star." Pliny, on the other hand, was silent about the best time to gather the resin, but emphatically stated that *only* glass or bone knives should score the bark, never iron. The two concurred about the

name of the resin (*opobalsamum*), and the extremely limited yield the tree produces.¹⁷

The two accounts diverge when considering the uses of balsam. Pliny noted that “every other scent ranks below balsam,” and that it consequently was of great importance in making perfume. Dioscorides, as one might expect, paid far greater attention to the medical uses of balsam. He noted that the scent is “vigorous, pure, and not sharp,” and that the substance has an astringent quality (perhaps an echo of Strabo’s assertion that balsam is spicy). Far beyond curing headaches and vision problems, balsam, according to Dioscorides, is characterized by its heat and is a panacea. It is used to treat uterine chills and “it dissipates fits of shivering when rubbed on.” Balsam can also be used to clean putrid sores and counteract venomous bites. When drunk, it soothes coughs and other problems that affect the lungs, and can also act as a diuretic. Furthermore, it can be used to treat epilepsy, dizziness, colic, animal bites (especially wild animals), and indigestion. Balm is also particularly useful in treating some gynecological conditions: “It is a good thing to use for making thick smoke from below to treat female problems and boiled down for sitz baths, dilating the cervix and absorbing moisture,” and it can be used to expel the placenta or the fetus.¹⁸

¹⁷ The descriptions of balsam here and below are found in and were taken from the following: Dioscorides, *De materil medica*, trans. Lily Y. Beck (Hildesheim, 2005), 1.19.1-4; Pliny, *Historia Naturalis*, ed. and trans. H. Rackham, Loeb Classical Library (Cambridge, MA, 1940), 12.54.111-123.

¹⁸ Dioscorides: “It draws down both the afterbirth and embryos.” It is not clear if he meant that balsam was an efficacious abortifacient as well as a childbirth aid.

Given the many medical uses of balsam noted by Dioscorides, one would expect that Galen (129-200 CE), the Greek physician and philosopher, would have mentioned them in his treatise on medical recipes, *De simplicium medicamentorum*. Yet in this treatise, an alphabetical listing of different *materia medica* and their properties, Galen concentrated only briefly on the properties of balsam (hot and dry), and noted its rarity, its application in perfumes and embalming, and the differences among the resin, tree, and fruit.¹⁹ The mention of balsam as a preservative was an innovation of Galen's; neither Dioscorides nor Pliny mentioned balsam as a preservative for corpses. However, the Egyptians used myrrh, related to balsam and native to the same geographical areas, in embalming practices.²⁰ It may be that Galen had some knowledge of Egyptian embalming preparations, and also possible that because balsam is hot, dry, and fragrant, he posited that it would be an effective anti-corruption agent.

Due to the rarity of balm, and its many uses in perfume and medical treatment, balsam was extremely expensive and often adulterated with other ingredients. Pliny calculated that the produce of an entire garden of balsam plants would fill only a small shell each day, and he and Dioscorides said that it cost twice its weight in silver. Given that both authors had traveled extensively

¹⁹ Galen, *De simplicium medicamentorum temperamentis ac facultatibus*, in *Opera Omnia*, ed. C. G. Kühn (Hildesheim, 1965 [reprint]), vol. 11, 2.2, "*Balsamum desiccatur et calefacit secundo excessu. Est autem tenuium partium, adeo ut odoratum sit. Sed liquor ejus tenuiorum etiam partium est quam ipsa planta, non tamen adeo calidus, ut quidam existimant, tenuitate partium falsi. Porro fructus ejus persimilis genere facultatis est, caeterum longe in tenuitate partium inferior.*"

²⁰ Balsam, myrrh, and frankincense are part of the *Burseraceae* family, and myrrh and balsam both belong to the genus *Commiphora*. See Groom, *Frankincense and Myrrh*, 100; 125.

throughout the empire on military campaigns and were writing at roughly the same time, their agreement on the price of balm represents an accurate assessment of the value of it as a commodity. As balm was extremely useful, available in only small quantities, and expensive, it was frequently mixed with other ingredients. According to Dioscorides, balsam was often mixed other ointments, “for instance terebinth, flower of henna, mastic, lilies, oil of ben tree nut *metopion*, honey, cerate of myrtle, or very thin unguent of henna flowers.” It was therefore necessary to be able to test balsam for its purity, and he and Pliny mentioned several ways to tell if balsam is pure or an admixture. Pure balsam does not stain cloth and will curdle milk, while a mixture of balm and other substances leaves an oily stain on fabric and milk unaffected. There was some disagreement in this period about another way to test the purity of balsam: dropping it into a vessel of water. Apparently, some thought that pure balsam, perhaps because of its density, would sink to the bottom of the container and then slowly rise to the top. Dioscorides disagreed with this, saying “But those who believe that the pure, when dripped on water first sinks to the bottom then rises to the surface undissolved are mistaken.” Pliny, writing a few years later, espoused the opposite view.

Additionally, both authors noted the brisk market in by-products of the balsam tree—fruit and wood—because of the rarity of the resin. Dioscorides described the fruit and wood in detail; the latter is “yellowish-red, fragrant, and smelling slightly like juice of Mecca balsam,” and the former is “yellow, full, large, heavy, biting, and burning in taste....” Although both the wood and the fruit had

therapeutic benefits, “in general, the juice of Mecca balsam has the most efficacious properties, the fruit ranks second, and the wood is least efficacious.” Given the rarity of balsam resin, the wood of balsam plants often took the place of pure balsam in many applications, and the price of the wood (*xylobalsamum*) was significantly lower than the price of the resin, at only six denarii per Roman pound.²¹

Thus, in antiquity, balsam was known as a highly rare commodity, due both to controlled production in a specific location and natural limitations on output. It was a key ingredient in perfume and an effective therapy for a diverse array of medical conditions. Due to its many practical applications and regulated production, balsam was extremely dear, and often blended with other resins and oils and passed off as counterfeit.

MEDIEVAL BALM

Throughout the medieval period, writers in several genres repeated different elements of this characterization of balm, while adding new ones of their own. Balm remained characterized by its heat, though some writers, such as Hildegard of Bingen, classified balsam as hot and moist, rather than hot and dry. After the twelfth century, the ability of balm to halt corruption was noted and amplified, and it appears in literary and historical texts as a preservative.

Isidore of Seville, the sixth-century bishop and encyclopedist, repeated Pliny and Dioscorides in his description of balsam in his *Etymologies*. According

²¹ See also J. Innes Miller, *The Spice Trade of the Roman Empire* (Oxford, 1969), 26.

to Isidore, balsam grew only in Judaea in one small area. After the Romans took over, they cultivated it, growing it in trellised vines over a larger area.²² Often found mixed with henna oil or honey, balsam should be tested for purity. Unadulterated balsam curdles milk, while balsam with honey does not; pure balsam dissolves into water, but if it is mixed with henna oil it will float on top of the water, due to the presence of oil. Furthermore, as both Pliny and Dioscorides had stated, Isidore noted that pure balsam does not stain woolen cloth.²³ Yet, at the end of his description, Isidore added a new test for purity, based on balsam's innate heat: "When balsam is pure, it has so much potency that, if heated by the sun, it cannot be held in one's hand."²⁴ Isidore added nothing to this somewhat enigmatic statement, and did not otherwise mention balsam's heat as one of its distinguishing characteristics in his description. Yet this new test of balsam is absolutely tied to its intrinsic heat, for only true balsam is already so hot that it burns when exposed to the full heat of the sun.

Hildegard of Bingen (1098-1179) also emphasized the native qualities of balsam in her encyclopedia on natural substances, known as the *Physica* (c.

²² Isidore of Seville, *Etymologiarum*, ed. W. Lindsay, 2 vols. (Oxford, 1911), 17.8.14, "*Balsami arbor in Iudaea intra terminos tantum viginti iugerum erat. Posteaquam eandem regionem Romani potiti sunt, etiam latissimis collibus propagata est...*"

²³ Isidore of Seville, *Etymologiarum*, 17.8.14 "*Cuius guttam adulterant admixto Cyprino oleo vel melle. Sed sincerus probatur a melle si cum lacte coagulaverit, ab oleo, si instillatus aquae aut admixtus facile fuerit resolutus, praeterea et si laneae vestes ex ipso pollutae non maculantur. Adulteratus quidem neque cum lacte coagulat et ut oleum in aqua supernatat et vestem maculat.*"

²⁴ Isidore of Seville, *Etymologiarum*, 17.8.14, "*Balsama autem si pura fuerint, tantam vim habent ut, si sol excanduerit, sustineri in manu non possint.*"

1150-60).²⁵ Hildegard based her medical writings in part on the Greek system of the four elements—earth, water, air, and fire—and their corresponding qualities of cold, moisture, dryness, and heat. Hildegard had no access to Galenic texts, but rather from encyclopedic texts and commentaries, such as Isidore’s, that summarized and changed Galen’s system.²⁶ Following a broadly Galenic definition of health and disease combined with Christian theology, vernacular knowledge, and experience, Hildegard noted how to correct the imbalance of these qualities, manifested through their complementary humors, by using various natural substances with the necessary innate qualities.²⁷ In the *Physica*, she described the four elements, animals, plants, metals, and stones in a unique classification scheme. Hildegard diverged from Isidore by both explicitly emphasizing balm’s essence and also remarking on its use as a preservative. According to Hildegard, “regal” balsam “is exceedingly hot and moist” and can cure digestive disorders and fevers when applied externally.²⁸ Additionally,

²⁵ Hildegard wrote two brief encyclopedias on medicine, *Physica* and *Causae et curae*. Collectively titled *Liber subtilitatum* (*The Book of Subtelties of the Diverse Nature of Things*), she may have intended them to be read together. See Helmut Schwitzgebel, “Die Überlieferung die Werke de Hildegard von Bingen und die heute noch vorhandenen Handschriften,” *Blatter der Carl-Zuckmeyer-Gesellschaft* 5 (1979), 133-50.

²⁶ Hildegard of Bingen, *Cause et cure*, ed. Laurence Moulinier (Berlin, 2003), xxx-lxxvi; Victoria Sweet, *Rooted in the Earth, Rooted in the Sky: Hildegard of Bingen and Premodern Medicine* (New York, 2006), pp. 106-11.

²⁷ Sweet, *Rooted in the Earth, Rooted in the Sky*, esp. pp. 35-92; Florence Eliza Glaze, “Behold the Human Creature,” in *Voice of the Living Light: Hildegard of Bingen and Her World*, ed. Barbara Newman (Berkeley and Los Angeles, CA, 1998), 125-48. For a general introduction to Hildegard’s writings, Thorndike remains an invaluable resource. See Lynn Thorndike, *A History of Magic and Experimental Science*, 8 vols. (New York, 1923-58), vol. 2, pp. 124-54.

²⁸ Hildegard of Bingen, *Liber subtilitatum diversarum naturarum creaturarum et sic de aliis quammultis bonis*, PL, ed. J.-P. Migne, vol. 197, col. 1197, “Balsamon regalis naturae est, et valde calidum et humidum est....Et qui magnas febres in stomacho

“dead bodies in a little balsam are kept thus all day, without putrefaction....”²⁹

This preservative quality of balsam is implicitly tied to Hildegard’s definition of the humors. In Hildegard’s medical writings, “humor” can be more broadly understood as a life-giving sap or juice, such as those found in plants or the blood of animals.³⁰ Not only does balsam restore a body’s heat and moisture, but it is also a vital sap, a “humor” in the broader sense of the term. In this way, balm can replace the necessary moisture, which she expressed as “*viriditas*,” that sustained life. *Viriditas* (literally, “the quality of greenness”) echoes the notion of “humor” as a nourishing sap or liquid intrinsic to plants and animals, as it is explicitly linked to the potency that plants have at the height of their growing cycle.³¹

Yet, Hildegard’s medical writings are unique to her own understanding in many ways, and her discussion of balsam and its uses is only one of these.

habet, modicum balsami accipiat et satis de baumoleo addat...et circa stomachum cum eo se ungat, et febres ab ipso auferet.”

²⁹ Hildegard, *Liber subtilitatum*, “*Sed in balsamon mortua corpora aliquantulum diu tenentur, ne putrescant....*”

³⁰ Indeed, this understanding echoes the initial ancient Greek definition of “humor,” or *chymos*, meaning sap, and was attested to in medieval sources before 1150. Sweet, *Rooted in the Earth, Rooted in the Sky*, 105-06; 117-18.

³¹ Hildegard’s idea of “*viriditas*” overlaps significantly with the notion of radical moisture [*humidum radicale*] that, in ancient and medieval physiology, was present at the start of life and was necessary to sustain it. There are, however, some differences, most notably that for Hildegard, “*viriditas*” did not diminish with age. Sweet, *Rooted in the Earth, Rooted in the Sky*, 136-54. On *humidum radicale*, see Peter H. Niebyl, “Old Age, Fever, and the Lamp Metaphor,” *Journal of the History of Medicine and the Allied Sciences* 26 (1971): 351-368; Michael McVaugh, “The ‘Humidum Radicale’ in Thirteenth-Century Medicine,” *Traditio* 30 (1974): 259-83; Giovanna Ferrari, “*Il trattato De humido radicali di Arnaldo da Villanova*,” *Arxiu de textos Catalans antics* 23-24 (2005): 281-331; and Chiara Crisciani, “*Aspetti del dibattito sull’umido radicale nella cultura del tardo medioevo (secoli XIII-XV)*,” in previous, pp. 333-380.

Unlike previous authors, who implicitly decried the adulteration of balsam with other ingredients, and provided different methods to test for its purity, Hildegard noted the proper way to mix balm with additional substances: “Thus strong balsam should be agitated with all substances in a liquid mixture, so they are properly mixed with it; otherwise, they evaporate easily from it.”³²

The anonymous author of a slightly later encyclopedia, *De bestiis et aliis rebus libri quatuor*, neatly condensed previous attributes of balsam into a short entry that repeats much of what had previously been written, including Hildegard’s mention of slowing decay.³³ In the fourth book of this compilation, an alphabetical *De proprietatibus rerum*, the author noted that balsam is fragrant and halts putrefaction, it preserves youth, and is often adulterated with henna oil and honey. He mentioned the milk test and the sun test, and also noted that balm must be gathered by making cuts in the bark of the balsam tree with only a stone or bone knife, as iron is poisonous to the plant.³⁴

³² Hildegard, *Liber subtilitatum*, “...ita etiam balsamon forte et timendum liquamen omnibus naturis, ut recte cum eo temperentur; alioquin facile ab eo dissipantur.”

³³ *De bestiis et aliis rebus libri quatuor* comprises four books written by several authors. The first book, on birds, was originally misattributed to Hugh of St. Victor, but has since been ascribed to Hugh of Fouillo. The second book, on beasts, is based on the *Physiologus* and has been attributed to Alain of Lille. The authors of the remaining two books, on fish, plants, and humans and an alphabetical *De proprietatibus rerum*, respectively, are unknown. See Robert Earl Kaske, Arthur Groos, and Michael Twomay, *Medieval Christian Literary Theory* (Toronto, 1988), pp. 204-05. On the concordance between *De bestiis* and Hildegard’s oeuvre see Moulinier, ed., *Cause et cure*, lxxxiv.

³⁴ *De bestiis et aliis rebus libri quatuor*, 4.2, *PL*, ed. J.-P. Migne, vol. 177, col. 138, “Balsamum odoriferum est, putredinem arcet,... juventutem conservat, ejus gutta mista oleo cyprino vel melle adulteratur, sed probatur esse sine melle, si quis cum lacte coagulaverit...pulum sole ardente sustineri non potest...acutis lapidibus et osseis cultellis inciditur, quia ferri tactus ei noxius est.”

The general outlines of these two later-twelfth century encyclopedia entries on balsam map onto the uses of balsam in two contemporaneous Old French *romans antiques*, *Le Roman de Troie* (c. 1165) and *Eneas* (c. 1160). In both of those accounts, balsam was noted for its fragrance and its ability to stave off decay, and was mixed with other curative natural substances, namely, myrrh and aloe. Stories of the ancient world, in literature and history, were enormously popular in medieval Europe. The Trojan War was one of the most frequent subjects, and, prior to Lydgate's version, circulated in several different versions. Two early medieval Latin texts, the fourth-century *Ephemeris belli troiani* by Dictys Credensis and the sixth-century *De excidio troiae historia* by Dares Phrygius, circulated widely, and were read as authoritative autoptic narratives of the Trojan War.³⁵ These were re-told in a different language and a different genre in the twelfth-century *Roman de Troie* by Benoît de Sainte-Maure.

Neither Dares nor Dictys mentioned Hector's preserved body; Benoît was the first to describe it in the *Roman de Troie* as one of many marvelous elements. In the *Roman de Troie*, as in the *Troy Book*, golden tubes and balm were integral to preserving his body in an aboveground tabernacle, yet there are some important differences. The first is that the method for delivering balm into Hector's body is far simpler in the *Roman de Troie*. The inventors—antecedents to Lydgate's "crafty maisteres"—placed Hector's feet into two amphorae made of gold and studded with emeralds and filled with balm and aloe. "Two golden

³⁵ See Werner Eisenhut, "Spätantike Troja-Erzählungen—mit einem Ausblick auf die mittelalterliche Troja-Literatur," *Mittelalterliches Jahrbuch* 18 (1983), 26-28.

tubes, very beautiful and well-made, and which were also placed in the vessels of balm, reached up to Hector's nose. In this way the virtue [*grant force*] and odor of the fresh balsam [*vert basme*] and the liquid permeated the entire body."³⁶ The use of the word "green" [*vert*] does not refer to the color of the balsam, for, as I have shown earlier, balsam was known to have a yellowish color. However, as with Hildegard's concept of *viriditas*, "green" here refers to a fresh, vigorous quality of the balsam—it has been gathered at the height of its potency. Secondly, in Benoît's version, Hector's body was carefully eviscerated and embalmed, unlike in the *Troy Book*. After being returned to the Trojans, Hector was stripped and then washed seven times in a mixture of white wine and rare herbs [*cheres especes*]. His entrails were removed, and his body was filled with balm [*ont embasmé...a grant plenté*].³⁷ The emphasis on costly building materials for the tomb (gold, precious stones), luxurious fabrics to dress Hector's body, and rare spices and aromatics reinforce the rarity and expense of the balm.

³⁶ Benoît de Sainte-Maure, *Le Roman de Troie*, ed. Léopold Constans, SATF, 6 vols. (Paris, 1904-12), ll. 16503-16858; for the entire description of Hector's embalment and entombment; ll. 16764-783: "*Li sage maistre e li dotor/ Ont pris le cors, jo n'en sai pls;/ Enz en la voute de desus/ L'ont gentement posé e mis/ E dedenz la chaeire asis./ Dous vaisseaus ont apareilliez/ D'esmeraudes bien entaillez,/ Toz pleins de basme e d'aloès;/ Sor un bufet de gargantès/ Les ont asis en tel endroit/ Que ses dous piez dedenz teneit./ Del basme grant plenté i ot:/ Jusqu'as chevilles i entrot./ Dui tuëleet d'or geteiz,/ Merveilles bel e bien faitiz./ Desci qu'al nes li ataigneient/ De dedenz les vaisseaus estient,/ Si que la grant force e l'odor/ De vert basme e de la licor/ Li entroënt par mi le cors.*"

³⁷ *Roman de Troie*, ll. 16507-517: "*Premierement l'ont desarmé/ E de vin blanc set feiz lavé/ En cheres especes boilli./ Anceis qu'il fust enseveli,/ L'ont mout bien aromatizié,/ E le ventre del cors sachié./ Oste e en ont bien la coraille,/ Feie e poumon e l'autre entraille./ Le cors dedenz ont embasmé,/ Sin i mistrent a grant plenté,/ E si refirent il dehors.*"

Lastly, Benoît did not emphasize either the life-like aspect of Hector's body, or eternal preservation.

Benoît may have based his description of Hector's embalming on a slightly earlier *roman antique*, the *Roman d'Eneas*.³⁸ In *Eneas* similar steps are taken to preserve the bodies of Camille and Pallas. Because Camille died so far from home, her corpse had to be prepared in order to sustain the two-week journey to her home.³⁹ Thus her attendants "wash off the blood from her with rose-perfumed water, cut her hair, and embalm her with balm and myrrh...."⁴⁰ Once she was back in her homeland, her attendants surrounded her in her tomb with vessels of balm and other fluids to keep her fresh with their odors.⁴¹ Pallas, already in a state of decay, was washed in wine and herbs and anointed with balm.⁴² Yet, unlike Hector, Camille and Pallas were then placed into impenetrable tombs, away from the gaze of their subjects. Benoît, then, went

³⁸ For *Eneas* as the exemplar for Benoît's account of Hector's tomb, see Bolens, "La momification dans la littérature médiévale," p. 217; on medieval visual representations of Hector's tomb, see H. Buctal, "Hector's Tomb," in *De artibus opuscula XL: Essays in Honor of Erwin Panofsky*, ed. Millard Meiss (New York, 1961), 29-36.

³⁹ *Le Roman d'Eneas*, ed. J.-J. Salverda de Grave, 2 vols. (Paris, 1925-29), II. 7409-7718; I. 7516. See Park, "The Life of the Corpse," p. 112.

⁴⁰ *Eneas*, II. 7433-38: "Ele esteit tote ensanglentee,/ d'eue rosade l'ont lavee,/ sa bele crinē ont trenchiee,/ et puis l'ont aromatisiee./ Et basme et mirre i ot plenté..."

⁴¹ *Eneas*, II. 7648-50: "Veissiaus ot asis lez lo cors,/ plains de basme, d'autre licors/ por refreschir la des odors."

⁴² *Eneas*, II. 6444-51: "...de frez basme l'ont tout enoint..." On embalming practices in this period, see Agostino Paravincini-Bagliani, *The Pope's Body*, translated by David S. Peterson (Chicago, 2000); Katharine Park, "The Life of the Corpse: Dissection and Division in Late Medieval Europe," *Journal of the History of Medicine and Allied Sciences* 50 (1995): 111-32; Park, *Secrets of Women: Gender, Generation and the Origins of Human Dissection* (New York, 2007).

beyond the *Eneas*-author in the ability he attributed to balm, for balm is what allowed Hector's body to remain aboveground and in the open air uncorrupted.

Just over a hundred years later, Guido delle Colonne, a jurist from Messina, used Benoît's version as the uncredited basis for his Latin prose *Historia destructionis Troiae* (c. 1272-1287).⁴³ In *HDT*, which was immediately accepted as history and widely disseminated throughout Europe, and which was especially popular in England, Guido repeated and elaborated upon Benoît's description of Hector's tomb and body.⁴⁴ He introduced and made explicit concerns about corruption and smell, and the need to forestall both while Hector's body remained aboveground. "King Priam and his masters carefully examined if the body could be always visible without being in a sealed tomb, though without the horrible odors of a dead body...."⁴⁵ In addressing the issue of smell, Guido may have been addressing contemporary concerns. For example, Henry of Huntingdon, in his recounting of the death of English king Henry I, noted that, even though the body had been preserved, the corpse exuded putrid liquid

⁴³ Hereafter *HDT* in the text.

⁴⁴ Guido never mentioned Benoît by name, but disparaged the *Roman de Troie* as frivolous invention. Instead, he explicitly invoked Dares and Dictys as his sources. See Guido de Columnis, *Historia destructionis Troiae*, ed. Nathaniel Edward Griffin (Cambridge, MA, 1936) pp. xvi-xvii; Guido delle Colonne, *Historia destructionis Troiae*, trans. Mary Elizabeth Meek (Bloomington, IN, 1974), p. xi. The text survives in at least 136 manuscripts. *HDT*, ed. Griffin, p. xi; *HDT*, trans. Meek, p. xiv. On the popularity of Guido's history in England, see James Simpson, "The Other Book of Troy: Guido delle Colonne's *Historia destructionis Troiae* in Fourteenth and Fifteenth-Century England," *Speculum* 73 (1998): 397-423.

⁴⁵ Guido, *HDT*, ed. Griffin, p. 177: "*Verum quia corpus Hectoris, cadaver effectum, sicut est fragilitatis humane, diu non poterat supra terram sine corrupcione seruari, in multorum consilio magistrorum rex Priamus subtiliter perquisuit si corpus ipsum absque sepulture clausura posset in aspectu hominum semper esse sic quod absque alicuius horribilitatis odore corpus mortuum....*"

that smelled so foul it killed a man.⁴⁶ Guido also went into greater detail about how Hector's body was kept fresh; positing a more extensive network of golden tubes that allowed the balm to penetrate further into Hector's body. Ingenious artificers [*magistros...ualde artificiose*] with "amazing mastery and skill" [*mirabilis magisterii eorum artificio*] made an opening in Hector's head, into which

...they placed a vase, full of pure and precious balsam [*balsamo*], into which were mixed compounds that had the power to preserve life.⁴⁷

The balsam flowed into Hector's head and throughout his face, "so that his entire face with its multitude of hair bloomed [*uigebat*]."⁴⁸ From his head the liquid traveled through his entire body, ending at his feet, where

...there was another vase full of pure balsam [*balsamo puro*]. And thus through these applications, the corpse of Hector was presented like the body of a live man, since it was guarded with many precautions for durability.⁴⁹

In this passage there is much of what we have seen before: balm that prevents corruption, an emphasis on the purity and cost of the balm, the open

⁴⁶ Henry of Huntingdon, *The Chronicle of Henry of Huntingdon*, trans. Thomas Forester (London, 1853), pp. 262-63, cited in Park, "The Life of the Corpse," p. 112.

⁴⁷ Guido, *HDT*, ed. Griffin, p. 177-78: "*Corpus uero ipsius Hectoris in mirabilis magisterii eorum artificio statuerunt in medio, ipsius solli subnixa firmitate, sedere, sic artificiose locatum ut quasi uiuum se in sua regeret sessione, propriis indutum uestibus preter pedum extrema. Apposuerunt enim in eius uertice, quodam artificioso foramine constituto, quoddam vas, plenum puro et precioso balsamo, quibusdam aliis mixturis rerum uirtutem conseruacionis habencium intermixtis.*"

⁴⁸ Guido, *HDT*, ed. Griffin, p. 177-78: "*Cuius balsami et rerum liquor primo deriuabatur ad frontis ambitum per partes intrinsecas, deinde ad oculos et nares, necnon rector decursu descendendo per easdem partes intrinsecas perueniebat ad genas, per quas gingiuas et dentes conseruabat ipsius, sic quod tota eius facies cum suorum multitudine capillorum in sua conseruacione uigebat....*"

⁴⁹ Guido, *HDT*, ed. Griffin, p. 177-78: "*In cuius pedibus erat quoddam aliud vas balsamo puro plenum. Et sic per has appositiones cadauer Hectoris quasi corpus uiui ficticie presentabat, in multa durabilitatis custodia conseruatum.*"

display of Hector's body. However, in this instance, Guido explicitly mentioned the power of the balsam mixture to preserve vital virtue [*uirtutem conseruacionis*], later remarking that Hector's face, including his facial hair, "bloomed" [*uigebat*] due to the preservative mixture. Lydgate, who presented the *Troy Book* as a verse translation of *HDT*, picked up this implicit comparison between Hector's corpse and a plant and made it more explicit, when he referred to Hector in the *Troy Book* as having a "vegetable sowle."

The link between vital sap and life was present in the earlier works discussed above, yet by the time Guido wrote *HDT*, there is evidence that it was widely believed that decay was caused when bodies become dry and colder than their surrounding environment. That is, healthy, alive bodies can be characterized by intrinsic qualities of heat and moisture. According to Aristotelian physics, which became part of the university curriculum in the thirteenth century, decay occurs when a thing is colder than its surrounding environment, but not so cold that it is frozen. "Decay is the destruction of a moist body's own natural heat by heat external to it, that is, the heat of its environment. Since, therefore, a thing is so affected because of lack of heat, and as everything that lacks this property is cold, decay is caused by and is the common result alike of internal coldness and external heat."⁵⁰ Furthermore, bodies grow drier as they grow

⁵⁰ Aristotle, *De meteorologica*, 4, "Putrefactio vero est corruptio caliditatis naturalis per caliditatem extra naturam. Istaе autem operationes sunt adhaerentes aeri continenti nos proprie, et quando privatur generatio caliditate sua innata, laeditur et corrumpitur et fit frigida, privatio autem caliditatis innatae, et frigus vincens post illud sunt corruptio illius generationis." In Pieter L. Schoonheim, *Aristotle's Meteorology in the Arabico-Latin Tradition: A Critical Edition of the Texts, with Introduction and Indices*, (Leiden, 2000), p. 142. For the English translation, see Aristotle, *De meteorologica*, 3.3.379a in *The*

older, another aspect of the process of decay that begins before death.⁵¹ Yet even outside of the textual authority of Aristotle, observers noted that dead bodies putrefy more quickly in a warm, humid environment. Jacques de Vitry's account of the death of Pope Innocent III demonstrates this vividly. Arriving in Perugia to be consecrated as bishop of Acre the day after Innocent III died (July 16, 1216), Jacques saw the pope's body displayed in the cathedral of Perugia that same day. He found that thieves had stripped the corpse of its clothes, and that the corpse was already putrid (*fetidum*), leading him to meditate on the fleeting nature of earthly glory.⁵² Thus by the end of the thirteenth century, when Guido wrote *HDT*, there was even more rationality to the idea that balm, which is hot and moist, was the main ingredient that kept Hector's body from decomposing.

TRAVELERS' TALES

Latin Christians, who either traveled to the Holy Land or who were based there, paid special attention to balsam in their writings, emphasizing the

Complete Works of Aristotle, ed. H. D. P. Lee, Loeb Classical Library (Cambridge, MA, 1952), 297. For an introduction to *De meteorologica* in medieval Europe, see Joëlle Ducos, *La meteorology en français au Moyen Age (XIIIe et XVIe siècles)* (Paris, 1998); Lorenzo Minio-Paluello, "Henri Aristippe, Guillaume de Moerbeke et les traductions latines médiévales des *Météorologiques* et du *De Generationes d'Aristote*" *Revue Philosophique de Louvain* 45 (1947): 206-35.

⁵¹ This is the idea of *humidum radicale* and the metaphor of radical moisture as lamp oil, which gradually decreases over a person's lifetime. See above fn. 30.

⁵² Jacques de Vitry, *Lettres de Jacques de Vitry*, edited by R. B. C. Huygens (Leiden: Brill, 1960), 73: "Post hoc veni in civitatem quandam que Perusium nuncupatur in qua papam Innocentium inveni mortuum, sed nudum sepultum, quem de nocte quidam furtive vestimentis preciosis, cum quibus scilicet sepeliendus erat, spoliaverunt; corpus autem eius fere nudum et fetidum in ecclesia relinquerunt. Ego autem ecclesiam intravi et oculata fide cognovi quam brevis sit et vana huius seculi fallax gloria."

European market for balsam, its cost and rarity, and, beginning in the thirteenth century, its particularly Christian nature. Thus, by the turn of the fifteenth century, pure balsam was, to Lydgate, an extremely rare and valuable substance, with a particular ability to halt putrefaction.

An early medieval pilgrim's account of his sojourn in the Holy Land demonstrates the European desire for balsam and the extent to which Muslims protected their monopoly, as well as the lengths a European would go to circumvent Muslim authorities. Willibald, an Anglo-Saxon monk, left his homeland in 721 to undertake a pilgrimage to Jerusalem. He traveled through the Holy Land and the Near East for seven years before spending ten years in the monastery of Monte Cassino. He eventually became bishop of Eichstätt in 741, and recounted the story of his life several decades later to Hugeburc, a nun at Hildesheim who wrote the *Vita Willibaldi*.⁵³ On his fourth trip to Jerusalem, Willibald purchased balsam and figured out a way to smuggle it past the customs officials at Tyre.⁵⁴ "He filled a hollow gourd [with the balsam], and placed a reed, which was hollow and had a bottom, inside the gourd, and filled the reed with oil and cut it to the same length as the gourd, so that at the top edge of the gourd the two were at the same level, and closed the mouth of the gourd like that."⁵⁵

⁵³ Thomas F. X. Noble and Thomas Head, *Soldiers in Christ: Saints and Saints' Lives from Late Antiquity and the Early Middle Ages* (University Park, PA, 1995), 141-43. A translation of the *Vita Willibaldi* by C. H. Talbot follows on 143-64; however, I have used my own translation of the *Vita Willibaldi* in the *MGH*.

⁵⁴ *Vita Willibaldi Episcopi Eichstetensis*, ed. O. Holder-Egger, *MGH SS* 15.1 (Hanover, 1887), 101: "*Episcopus Willibaldus prius, quando erat in Hierusalem, emebat sibi balsamum...*"

⁵⁵ *Vita Willibaldi*, 101: "...replevit unam munerbam, tollit unam cannam, que fuit concava et habuit imum, illam replevit de petre oleo et fecit intus in munerbam et secavit illam

When Willibald and his traveling companions reached Tyre they were arrested, and officials searched their luggage for contraband. Finding Willibald's gourd, "they opened it and sniffed in order to find out what was inside. When they smelled the mineral oil, which was on top, they did not smell the balsam, which was in the gourd under the mineral oil, and so they let them go."⁵⁶ The punishment for smuggling was death. Willibald's crafty method for smuggling balsam out of Jerusalem suggests that he was experienced in this undertaking. This account indicates more strongly that balsam was a highly controlled and sought-after substance, to the extent that Willibald and his companions risked death if discovered.⁵⁷ A likely reason that Willibald took considerable risk in smuggling balsam resin out of the Holy Land is that it was vital to Latin Christian worship. Balsam was mixed with oil to make chrism, the sanctified unguent used in baptismal, ordination, and dedication rites.⁵⁸

The continued presence of Latin Christians in the Holy Land and its environs after the First Crusade engendered travel narratives that combined history, ethnography, and natural history. Two such texts, written for a Latin

cannam parem munerba, it ut in margine ambo erant similes plane, et sic claudebat os munerbe."

⁵⁶ *Vita Willebaldi*, 101: "Cumque veniebant illi ad urbe Tyro, illi cives urbis tollentes eos constringebant et omnem scirfam eorum exquirebant, ut repperirent, si aliquid habuissent absconditum, et si aliquid invenissent, cito illos punientes martyrizarent. Cumque omnia exquirentes nihil invenerunt nisi unam munerbam, quam habuit Willibaldus, illamque aperientes, odorabant, quid intus fuisset. Cumque odorabant petre oleam, qui intus in canna fuerat supra, et balsamum, qui intus erat in munerba subtus petre oleam, non repperierunt, et sic eos relinquerunt."

⁵⁷ Michael McCormick, *Origins of the European Economy* (Cambridge, 2001), 133; 586-87.

⁵⁸ McCormick, *Origins*, 718-19; Freedman, *Out of the East*, 80.

Christian audience, give accounts of balm that place it in a position even more central to Christianity: as a plant with a uniquely Christian origin. The first of these, a late-thirteenth century northern French continuation of the *Historia Hierosolymitana* of William of Tyre, known as the Rothelin continuation, contains one of the earliest descriptions of balsam linked with Christian legend.⁵⁹ One of the notable pilgrimage sites outside Jerusalem was in Babylon (Cairo), a spring where Mary had washed the clothes of the infant Jesus. “In this spring Our Lady washed the clothes of her dear son, when they fled from King Herod to Egypt. The Saracens showed the highest honor to this spring and were happy to wash themselves in it. This spring watered the trees that produce the true balm.”⁶⁰ William of Boldensele, who wrote an autobiographical account of his pilgrimage to Egypt and Palestine in 1336, also mentioned the spring and the balsam garden near Cairo. However, in this later account, the balsam trees grew where

⁵⁹ The Rothelin continuation is linked to a still earlier continuation of the events in Jerusalem, and opens in 1229 and ends in 1261, giving a *terminus post quem* of 1261. See *Recueil des historiens des croisades, Historiens occidentaux* (Paris, 1859), vol. 2, 469-639. See also M. R. Morgan, “The Rothelin Continuation of William of Tyre,” in *Outremer, Studies presented to Joshua Prawer* (Jerusalem, 1982), 244-57.

⁶⁰ *Itinéraires à Jérusalem et descriptions de la Terre Sainte rédigés en français* (Geneva, 1882), 174-5, “En la cité de la Nouvelle Babillonne qui estoit en Egypte, et au Kahaire (Babilloinne estoit la citéz et le Kahairez li chastiaus)...avoit une fontainne. A cele fontainne lavoit Nostre Dame les drapiaus a chier fil, quant il s’en fouïrent en Egypte pour le roi Herode. A cele fontanne portoient li Sarrazin mout grant honour. Et mout volantierz se vennoient lave de cele fontanne. De cele fontainne estoient lavé li arbre qui portoient le veri basme.” The above was cited in D. J. A. Ross, “Nectantebus in his Palace: A Problem of Alexander Iconography,” *The Journal of the Warburg and Courtauld Institutes* 15 (1952), 67-87, p. 75. This article, although about the relationship between the palace of Cairo and the city of Babylon in several fourteenth-century manuscript paintings relating to stories about Alexander, contains many medieval descriptions of balsam trees and gardens and was invaluable in alerting me to the accounts of the anonymous continuator of William of Tyre and William Boldensel. For a more wide-ranging historiography of the garden of balm, see Jean-Pierre Albert, *Odeurs de sainteté: La mythologie chrétienne des aromates* (Paris, 1990), 131-46.

Mary poured out the spring-water in which she had washed Jesus' clothes.⁶¹ In these examples there is no hint of the more widespread cultivation mentioned by Isidore or ancient writers. Instead, this miracle insisted on the idea that balsam grew only in a particular location, due to the singular event that engendered it.⁶²

Boldensele's account, among others, provided material for the most well-known travel narrative in the later medieval period: *Mandeville's Travels*. Written in Anglo-Norman French around 1357, *Mandeville's Travels* was immediately popular and translated (sometimes many times) into Latin and virtually every vernacular language in Europe. The source for much of the text was a group of French translations of *itineraria*, including William of Boldensele's description of the Holy Land, as well as Vincent of Beauvais' encyclopedia *Speculum maius* (c. 1250), which was itself based heavily on Isidore and other earlier encyclopedias.⁶³ The author lingered over his account of Egypt and included a long description of balsam trees, where and how they grow, and the different ways to test balsam for purity. According to Mandeville, "beside Cayre withouten that cytee is the feld where bawme groweth....This bawme groweth in no place

⁶¹ William of Boldensele, *Hodoeporicon ad Terram Sanctam*, ed. J. Basnage, *Thesaurus monumentorum ecclesiasticorum et historicorum* (Antwerp, 1725), vol. 4, 342, cited in Ross, 74, "*Irrigatur hic hortus quodam fonte parvo, in ipso existente, in quo virginem Mariam puerum Jesum balneasse saepius, ac veste panniculosque eius lavisse asserunt Christiani et hoc dicunt fontem virtutem contraxisse, ut terra, huiusmodi aqua irrigata balsamum germinet, et producat.*"

⁶² William of Boldensele, "*Propre Cairum versus plagam deserti est hortus Balsami singularis, non multum magnus....*" Cf. Theophrastus, Strabo, and Pliny.

⁶³ *Mandeville's Travels*, ed. M. C. Seymour (Oxford, 1967), xiii-xvi. The Seymour edition is based on the Cotton Version of *Mandeville's Travels*, a Middle English translation of the text made around 1400.

but only there.”⁶⁴ As with Boldensele and the Rothelin continuator, Mandeville insisted that balm could grow nowhere except near Cairo because of the Christian miracle that was its origin. However, Mandeville gave a different account of the miracle. According to him, in the field where balm grows, “ben vii welleses that oure lord Ihesu Crist made with on of His feet whan He went to pleyen with other children.”⁶⁵ And unlike the Rothelin continuator, who noted that the local Muslim population also honored this site, Mandeville asserted that because the springs that nurtured the balm grove had sprung from Jesus’ footprints, only Christians can till the plants, or else they will not “fructyfye,” and only Christian men may harvest it “with scharp flyntston or with a scharp bon.”⁶⁶ Mandeville’s account rationalizes Christian dominion over Egypt: The natural world itself—i.e., balm—requires Christian handling in order to bloom.

Additionally, even when Christians harvested balsam properly, Saracen (and other) middlemen would adulterate it with other substances. Mandeville did not mention of the price of balm or its uses, but he did implicitly comment on the high demand for balm when he detailed the many devious ways in which Saracen balsam-merchants swindle Christian buyers. “For the Sarazines countrefeten it be sotyltee craft for to disceyuen the Cristene men.”⁶⁷ They do this by mixing turpentine with a little balm, adding wax to oil of balsam-wood (an

⁶⁴ *Mandeville’s Travels*, Chapter 7, “Of the contree of Egipt. Of the bird Fenix of Arabye. Of the cytee of Cayre. Of the connyng to knowen bawme and to preuen it. And of the gernerres of Ioseph,” 35.

⁶⁵ *Mandeville’s Travels*, 36.

⁶⁶ *Mandeville’s Travels*, 36.

⁶⁷ *Mandeville’s Travels*, 36.

inferior by-product), or by distilling cloves, spikenard, and “othere spices that ben wel smellynge” and calling that liquid “bawme.”⁶⁸ After that, spice-merchants and apothecaries adulterate it further, “and thane it is lasse worth and a gret del worse.”⁶⁹ Thus, he wrote, many great lords have been deceived into thinking “that thei han bawme and thei haue non.”⁷⁰ Therefore, it was of great importance that the educated reader and consumer know how to discern pure balm from adulterate. First, the author said, “naturelle bawme” is completely clear, citrine-colored, odoriferous, and that if it is thick, red, or black “it is sophisticate, that is to seyne contrefeted and made lyke it for disceyt.”⁷¹ Echoing Isidore, the author noted that, when placed on the hand, pure balm burns in the heat of the sun. Likewise, it will also curdle milk. Lastly, the Mandeville-author resurrected Pliny’s test: Pure balm will sink to the bottom of a vessel of water “as though it were quyksyluer, for the fyn bawme is more heuy twyes than is the bawme that is sophisticat and countrefeted.”⁷² According to the author, although balsam has a divine source, it is frequently only encountered as counterfeit, due to the cunning of Saracen traders and other merchants intent on deceiving Christian men. These three examples of late-thirteenth and fourteenth century descriptions of balm transform it from an eastern luxury into a specifically Christian substance,

⁶⁸ *Mandeville’s Travels*, 36.

⁶⁹ *Mandeville’s Travels*, 36.

⁷⁰ *Mandeville’s Travels*, 36.

⁷¹ *Mandeville’s Travels*, 36-37.

⁷² *Mandeville’s Travels*, 37.

not just used in Christian ritual, but its existence due entirely to a Christian miracle.

CONCLUSION

That balm was used to preserve the heroic, beloved prince of a wealthy, noble, and ancient kingdom in the *Troy Book*, just over a decade after *Mandeville's Travels* was translated into Middle English, indicates the overlapping ideas about balsam and the meanings ascribed to it. This near-miraculous ability of balm to suspend decay, however, extends far beyond powers attributed to this natural substance in earlier medieval and in ancient texts.⁷³ The balm coursing through Hector's body gave him a fresh, dewy complexion, first described as "fresche as any rose newe" in color and touch, and again as "lifty of colour...& no •inge pale."⁷⁴ Color, texture, and skin-sheen were of paramount importance in medieval art to convey life-likeness.⁷⁵ Furthermore, the balm gave Hector the exact appearance of a body with a vegetable soul. Hector lacked a sensible soul (unable to feel) and a rational soul (lacking self-consciousness or the ability to reason), and so therefore was no longer a living person, but he still appeared alive in the way that plants are alive. Furthermore,

⁷³ *Troy Book*, ll. 5673-77.

⁷⁴ See above, notes 5 and 7.

⁷⁵ On the importance of representing skin in a life-like manner in medieval art, see G. B. Ladner, *Ad Imaginem Dei: The Image of Man in Medieval Art* (Latrobe, PA, 1965); on the symbolism of embalming in medieval literature, especially Hector's corpse, see Guillemette Bolens, "La momification dans la littérature médiévale: L'embaumement d'Hector chez Benoît de Sainte-Maure, Guido delle Colonne, et John Lydgate," *Micrologus* 13 (2005): 213-31.

Lydgate deftly used the term “vertu” twice in the same passage: First, to refer to the intrinsic restorative nature of the balm (“in-to euery veyne/ Of •e cors •e vertu dide atteyne”), and secondly, to refer to Hector’s returning vitality, visible as the balm penetrated his body (“•oru• bon and ioynt gan his vertu shede”).⁷⁶

Lydgate’s emphasis on the perfectly, eternally preserved body of Hector, and its sensibility also reflects northern European attitudes towards death and the corpse, in that a dead body remained decreasingly sensitive until its decomposition to bones—a period of about a year.⁷⁷ During this liminal period, the corpse remained sensitive, “possessed of a gradually fading life.”⁷⁸ Thus, Hector’s “vegetable sowle” and uncorrupted body allow him to remain in that liminal state between life and death forever.

The “crafty maisteres” who built Hector’s tomb and oversaw his embalming created an elaborate hybrid apparatus that not only allowed him to appear alive, but also mimicked human respiration. The “bawme natural” flows from Hector’s head into his nerves and sinews by means of an elaborate artificial network of golden tubes, while at his feet a container of balsam and mint further perfumes the air. Thus, balm descended from Hector’s head into his extremities, while balm-fortified fumes traveled upward to Hector’s head, creating a

⁷⁶ “Shede” means a distinction, or the discernment of a difference between two things or states. *Middle English Dictionary*, ed. Hans Kurath, 23 vols. (Ann Arbor, MI, 1954), s.v. “shede.”

⁷⁷ See Caroline Bynum, “The Female Body and Religious Practice in the Later Middle Ages,” in *Fragmentation and Redemption: Essays on Gender and the Human Body in Medieval Religion* (New York, 1991), pp. 234-35 on the sensitive corpse; Park, in “The Life of the Corpse,” argues convincingly for geographical specificity in attitudes toward dead bodies.

⁷⁸ Park, “The Life of the Corpse,” p. 115.

semblance of breath. This artificial/natural hybrid system mimics human physiology, in which inspired air, mixed with blood, formed *spiritus*, the vital virtue necessary to sustain life, and traveled through blood vessels to the extremities.⁷⁹ Although in medieval physiological theory the heart was central to respiration, the apposition of descending liquor and ascending vapor (a synonym for “breath”) in the description of the apparatus implies a link between the two that is necessary to preserve Hector.

Lydgate’s description of Hector’s embalmed body demonstrates many of the ideas about balm in western Europe that had accumulated over centuries. Its rarity (especially in purest form), high value, presence in the ancient world, and eastern origin befit its sumptuous setting in the *Troy Book*. Troy, one of the great kingdoms of the ancient world, was fabled for its wealth, attested to throughout the *Troy Book* (and earlier accounts) by the emphasis on the staggering quantity of gold and precious gems used in public display.⁸⁰ The essential hot nature of balm, combined with its ability to replace *humidum radicale*, makes it a useful therapeutic agent, especially in preventing decay and preserving youth; Hector is “quyk lokyng,/ And of colour...and of hewe,/ Beinge as freshe as any rose newe....”⁸¹ Lastly, the link between balsam and Christianity made balm a miraculous, as well as a medical, substance that was capable of preserving Hector from death, for eternity. Yet, at the same time, the elaborate artificial

⁷⁹ See Nancy Siraisi, *Medieval and Early Renaissance Medicine* (Chicago, 1990), pp. 101-08.

⁸⁰ For example, as with the setting for Hector’s body at the temple of Apollo.

⁸¹ *Troy Book*, ll. 5658-60.

invention that kept Hector's body life-life underscores an important contrast between his body and one that is truly holy. Hector's pagan body needs an elaborate network of tubes to infuse the natural balsam throughout his body and give the impression of life. The "bawme natural" glosses the manufactured tubes; but the natural substance requires an artificial method of delivery in order to penetrate fully Hector's nerves and sinews. Saints' bodies were noted for the sweet smells that they exuded after death, and this was, in turn, seen as evidence of their harmony with God.⁸² The bodies of saints are eternally incorruptible and fragrant, and exist beyond life and death, kept that way by the balm of virtue, rather than the virtues of balm.

⁸² Davidson, "Heaven's Fragrance," 110-127; Freedman, *Out of the East*, 80-81.

Bibliography

PRIMARY SOURCES

Aristotle. *De meteorologica*. In *The Works of Aristotle*, translated by H. D. P. Lee. Loeb Classical Library. Cambridge, MA, 1952.

Boldensele, William von. *Hodoeporicon ad Terram Sanctam*. In *Thesaurus monumentorum ecclesiasticorum et historicorum*, edited by J. Basnage. Antwerp, 1725.

Colonne, Guido delle. *Historia Destructionis Troiae*. Edited and translated by Mary Elizabeth Meek. Bloomington, IN, 1974.

Columnis, Guido de. *Historia Destructionis Troiae*. Edited by Nathaniel Edward Griffin. Cambridge, MA, 1936.

De bestiis et aliis rebus libri quatuor. In *Patrologia Latina*, edited by J. P. Migne.

Dioscorides. *De materia medica*. Translated by Lily Y. Beck. Hildesheim, 2005.

Eneas. Edited by J. J. Salverda de Grave. 2 vols. Paris, 1964.

Galen. *De simplicium medicamentorum temperamentis ac facultatibus*. In *Opera Omnia*. Edited by C. G. Kühn. Hildesheim, 1965.

Hildegard of Bingen. *Cause et cure*. Edited by Laurence Moulinier. Berlin, 2003.

—. *Liber subtilitatum diversarum naturarum creaturarum et sic de aliis quammultis bonis*. In *Patrologia Latina*, edited by J. P. Migne.

Historia Hierosolymitana. Recueil des historiens des croisades, Historiens occidentaux. Paris, 1859.

Isidore of Seville. *Etymologiarum sive originum libri XX*. Edited by W. M. Lindsay. 2 vols. Oxford, 1911.

Itinéraires à Jérusalem et descriptions de la Terre Sainte rédigés en français. Geneva, 1882.

Jacques de Vitry. *Lettres de Jacques de Vitry*. Edited by R. B. C. Huygens. Leiden, 1960.

Lydgate, John. *Troy Book*. Edited by Henry Bergen. 3 vols. Early English Texts Society. London, 1902.

Mandeville's Travels. Edited by M. C. Seymour. Oxford, 1967.

Pliny. *Historia Naturalis*. Edited and translated by H. Rackham. Loeb Classical Library. Cambridge, MA, 1940.

Sainte-Maure, Benoît de. *Le Roman de Troie*. Edited by Léopold Constans. 6 vols. Paris, 1904-12.

Strabo. *Geographia*. Translated by H. L. Jones. Loeb Classical Library. Cambridge, MA, 1928.

Theophrastus. *Inquiry into Plants*. Translated by A. F. Hort. Loeb Classical Library. Cambridge, MA, 1916.

Vita Willibaldi Episcopi Eichstentensis. Edited by O. Holder-Egger. MGH SS. Hanover, 1887.

SECONDARY SOURCES

Albert, Jean-Pierre. *Odeurs de sainteté: La mythologie chrétienne des aromates*. Paris, 1990.

Bolens, Guillemette. "La momification dans la littérature médiévale: L'embaumement d'Hector chez Benoît de Sainte-Maure, Guido delle Colonne, et John Lydgate," *Micrologus* 13 (2005): 213-31.

Buctal, H. "Hector's Tomb." In *De artibus opuscula XL: Essays in Honor of Erwin Panofsky*, edited by Millard Meiss. New York, 1961.

Bynum, Caroline. *Fragmentation and Redemption: Essays on Gender and the Human Body in Medieval Religion*. New York, 1991.

Crisciani, Chiara. "Aspetti del dibattito sull'umido radicale nella cultura del tardo medioevo (secoli XIII-XV)," *Arxiu de textos Catalans antics* 23-24 (2005): 333-380.

Dalby, Andrew. *Dangerous Tastes: The Story of Spices*. London, 2000.

Davidson, Clifford. "Heaven's Fragrance." In *The Iconography of Heaven*, edited by Clifford Davidson. Kalamazoo, MI, 1994.

Dictionnaire historique de la langue française. Edited by Alain Rye. 2 vols. Paris, 1992.

Ducos, Joëlle. *La météorologie en français au Moyen Âge (XIIIe et XVIe siècles)*. Paris, 1998.

Eisenhut, Werner. "Spätanike Troja-Erzählungen—mit einem Ausblick auf die mittelalterliche Troja-Literatur," *Mittellateinisches Jahrbuch* 18 (1983), 26-28.

Ferrari, Giovanna. "Il trattato *De humido radicali* di Arnaldo da Villanova," *Arxiu de textos Catalans antics* 23-24 (2005): 281-331.

Freedman, Paul. *Out of the East: Spices and the Medieval Imagination*. New Haven, CT, 2008.

Georges, Patrice. "Mourir c'est pourrir un peu. Intentions et techniques contre la corruption des cadavres à la fin du moyen âge." *Micrologus* 7 (1999). *Il cadavere*.

- Glaze, Florence Eliza. "Behold the Human Creature." In *Voice of the Living Light: Hildegard of Bingen and Her World*, edited by Barbara Newman. Berkeley, CA, 1998.
- Groom, Nigel. *Frankincense and Myrrh: A Study of the Arabian Spice Trade*. London, 1981.
- Kaske, Robert Earl; Groos, Arthur; and Twomay, Michael. *Medieval Christian Literary Theory*. Toronto, 1988.
- Ladner, G. B. *Ad Imaginem Dei: The Image of Man in Medieval Art*. Latrobe, PA, 1965.
- McCormick, Michael. *Origins of the European Economy*. Cambridge, 2001.
- McVaugh, Michael. "The 'Humidum Radicale' in Thirteenth-Century Medicine." *Traditio* 30 (1974): 259-83.
- Middle English Dictionary*, edited by Hans Kurath. 23 vols. Ann Arbor, MI, 1959.
- Miller, J. Innes. *The Spice Trade of the Roman Empire*. Oxford, 1969.
- Minio-Paluello, Lorenzo. "Henri Aristippe, Guillaume de Moerbeke et les traductions latines médiévales des *Météorologiques* et du *De Generationes d'Aristote*." *Revue Philosophique de Louvain* 45 (1947): 206-35.
- Morgan, M. R. "The Rothelin Continuation of William of Tyre." In *Outremer. Studies presented to Joshua Prawer*. Jerusalem, 1982.
- Niebyl, Peter H. "Old Age, Fever, and the Lamp Metaphor." *Journal of the History of Medicine and the Allied Sciences* 26 (1971): 351-68.
- Noble, Thomas F. X. and Head, Thomas. *Soldiers in Christ: Saints and Saints' Lives from Late Antiquity and the Early Middle Ages*. University Park, PA, 1995.
- Paravincini-Bagliani, Agostino. *The Pope's Body*. Translated by David S. Peterson. Chicago, 2000.
- Park, Katharine. "The Life of the Corpse. Dissection and Division in Late Medieval Europe," *Journal of the History of Medicine and Allied Sciences* 50 (1995): 111-32.
- . *Secrets of Women: Gender, Generation, and the Origins of Human Dissection*. New York, 2007.
- Ross, D. J. A. "Nectantebus in his Palace: A Problem of Alexander Iconography," *The Journal of the Warburg and Courtauld Institutes* 15 (1952): 67-87.
- Schoonheim, Pieter J. *Aristotle's Meteorology in the Arabico-Latin Tradition: A Critical Edition of the Texts, with Introduction and Indices*. Leiden, 2000.

Schwitzgebel, Helmut. "Die Überlieferung die Werke de Hildegard von Bingen und die heute noch vorhanden Handschriften," *Blatter der Carl-Zuckmeyer-Gesellschaft* 5 (1979), 133-50.

Simpson, James. "The Other Book of Troy: Guido delle Colonne's *Historia destructionis Troiae* in Fourteenth and Fifteenth-Century England." *Speculum* 73 (1998): 397-423.

Siraisi, Nancy. *Medieval and Early Renaissance Medicine*. Chicago, 1990.

Sweet, Victoria. *Rooted in the Earth, Rooted in the Sky: Hildegard of Bingen and Premodern Medicine*. New York, 2006.

Thorndike, Lynn. *The History of Magic and Experimental Science*. 8 vols. New York, 1923-58.