



Digest

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Seldom Just Food:

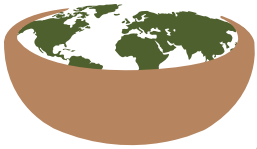
Garlic in Magic and Medicine in European and Mediterranean Traditions

By: Frank M. Dugan

Introduction

The notion that humans ascended to civilization in discernible stages was more popular in the past than at present. However, it has long been noted that certain premodern practices have more in common with magic per se than with religion (including “higher” religion of ancient times, e.g. Olympian gods of the Greeks and Romans) and were held by some to precede religion and then coexist with it (Harrison 1922, Frazer 1955). These magical practices, emphasizing placation or deterrence rather than supplication (prayer) or contemplation (meditation), are termed apotropaic, and remain the subject of contemporary scholarship (Wilson 2000). Ritualistic practices for warding off harm to crops, or for protection of persons and habitations, survive as vestiges in various modern customs and holidays (Dugan 2015a). Certain plants were essential for rituals intended to protect not just the crop, but also people and dwellings. Beans (*Vicia faba*), for example, were “used to lay ghosts at the Lemuria,” and featured in other Greek and Roman festivals, especially those propitiating the dead (Andrews 1949). Cakes of barley (*Hordeum vulgare*) were offered to propitiate various chthonic spirits, including pre-Olympian snake deities (Harrison 1927). Garlic (*Allium sativum*), arguably the world’s most well-known apotropaic plant, acquired such functions centuries prior to its clichéd effects on vampires.

Garlic, one of the earliest domesticated vegetables, is of somewhat uncertain lineage, originating perhaps from *Allium longicuspis* (Zohary et al. 2012). In the ancient Near East and Mediterranean it early acquired a reputation as a medicinal plant, subsuming both magical and culinary uses. This article reveals that by Greek and Roman times, there was a considerable body of folklore associated



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with garlic, extending through medieval and premodern times. Garlic became distributed throughout the Old World, and (after the Columbian Exchange) the New World. This review is restricted to traditions of Europe and the Mediterranean (including the Levant). Contributions from elsewhere (e.g., the Americas, Iran) are introduced only when strongly pertinent to European traditions.

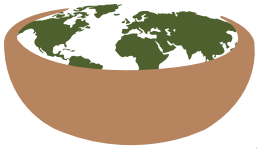
The primary contention of this work is that distinguishing magical, medicinal and culinary aspects of garlic is a recent innovation; that garlic has been strongly perceived as apotropaic throughout its history, and continues to be so in much contemporary lore and usage. Second, Southern Europe and the Levant, and Northern Europe (including the British Isles), possess allied but distinct sets of garlic folkways, understandable in the context of the spread of garlic cultivation. A capsule historical biogeography precedes a review of garlic in folkways, including (i) Mediterranean and Balkan, and (ii) Nordic and pre-Norman Anglo-Saxon. Related aspects of ethnomedicine and regional cuisine are sketched prior to conclusions, with remarks on limitations of folkloristic classification (types, motifs) for the study of plant lore.

Historical Biogeography

Prehistory in the Levant

Archaeobotanical materials from the Levant date from the Neolithic. Sometimes remains of garlic may persist as the papery tunic, or as the basal plate, including in kitchen waste (van der Veen 2007). Finds of onion (*Allium cepa*) bulb scales, and a garlic bulb and cloves were excavated in a Chalcolithic context near the Dead Sea, and remains of what are thought to be kurrat leek (usually considered a variety of *Allium ampeloprasum*) were recovered in Early Bronze Age Jericho (Leach 1982). “The discovery of garlic in such an early context is particularly important for it could only be grown from cloves or inflorescence bulbils,” i.e., absence of true seed and necessity of vegetative propagation imply cultivation (Leach 1982).

Ancient and Classical Antiquity

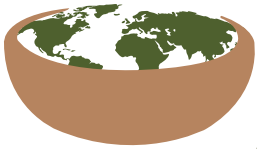


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The normal absence of seed in garlic has strong implications for interpretation of the archaeobotanical record, as tubers, bulbs or corms do not readily preserve. In Europe, archaeobotanical evidence of garlic and onion is rare (Badura et al. 2013). Garlic must have been common, as otherwise the chances of finding a carbonized clove would have been nearly zero (Bakels 2009). Vandorpe writes that “findings of garlic are not very common in Roman times North of the Alps. Five findings of carbonised garlic cloves are known ... from the graveyard at Windisch Dägerli [Switzerland]..., a grave in Augst [Switzerland] ..., another graveyard in Arconciel [Switzerland]..., a cellar in the villa in Gerlingen [Germany]... and the military camp in Novaesium [Germany]” (Vandorpe 2010). Even sparser is evidence of *A. sativum* in archaeobotanical or textual contexts for the British Isles. Leek (“*Allium cf. porrum*”, attested by archaeobotanical remains) and “wild” chives (*A. schoenoprasum*, attested in feral populations and centuries-old folklore) are indicated for Roman Britain (Britton and Huntley 2011, Witcher 2013). Leek (but not garlic) receives passing mention in a review of archaeobotany of Romano-British gardens (van der Veen et al. 2007). Fragments of a tablet from the Roman fort at Vindolanda near Hadrian’s Wall refer to garlic and garlic paste, probably representing “supplies for the praetorium rather than the ordinary soldier” (Déry 1997). Neither ‘garlic’ nor ‘*Allium*’ is listed in a review of Roman gardens in Britain (Cunliffe 1981), nor does Livarda (2008) document garlic remains in Britain. A conservative conclusion is that garlic was present in Roman Britain, but not yet common and perhaps only imported. In continental Europe north of the Mediterranean, garlic became absent or very scarce after the end of Roman times (Livarda 2008). A high proportion of garlic remains in Roman Europe were associated with burials, and also with temples (Livarda 2008).

In drier climes, there is definitive evidence even in the absence of charring, e.g., the garlic basal plates and clove from Mons Porphyrites (Egypt, mid-late 2nd century AD) (Figure 3 in van der Veen 2007). Older instances of onions and garlic in Egypt include 3rd and 2nd millennia BC (Leach 1982). Leek (*A. ampeloprasum*) was also identified from these times in Egypt, but apart from finds at Jericho and the Dead Sea above, “there are no unequivocal records of cultivated ‘vegetables’ before 3000 B.C.” (Leach 1982). Miscellaneous sources on Mesopotamian crops indicate that Assyrian gardens contained leek, garlic and several kinds of onion (Leach 1982).



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By the time of Pliny the Elder (23-79 AD) and Columella (4 to ca. 70 AD), several species of *Allium* were known to Roman gardeners: leeks, two or three types of garlic, chives, and several types of bulb onion. They may have also known shallots (usually considered a variety of *A. cepa*) and bunching onion, *A. fistulosum* (Leach 1982). Prior to these authors, the Greek Theophrastus (ca. 370-278 BC) described leeks, garlic and several types of onion.

Carbonized Roman-era remains of garlic cloves have been discovered in Herculaneum (Meyer 1980), and in Oedenburg and Entrains-sur-Nohain, France (Badura et al. 2013). Charred garlic gloves were excavated from a necropolis on the Greek island of Limenas (4th century BC) (Mégloudi et al. 2007, with photographs, and commentary on garlic in Homer, Theophrastus, Dioscorides, Aristophanes, Pliny and other ancient authors). There were garlic cloves in a room burned by invading Persians at Sardis in the mid-6th century BC (Nesbitt 1995).

Due to absence of archaeobotanical remains, it is unknown when garlic was introduced to Scandinavia (Karg et al. 2015). However, “the old Norse word ‘laukr’, meaning onion or leek is common in the first poems and sagas” (Leino and Hagenblad 2014). Ibn Fadlādlan, an Arab historian, noted that Vikings on the Volga River had onions onboard their ships (Leino and Hagenblad 2014). The word ‘lauka R’ appears engraved in runic script on gold bracteates, and there is evidence for plants identified as ‘*Allium* sp.’ in BCE Denmark and AD 1-400 Netherlands (Sloth et al. 2012). Garlic per se however, is not documented for this period in Scandinavia.

Medieval through premodern times

Garlic was obviously cultivated in southern and some more northern parts of Europe during antiquity. What of medieval Europe? There is controversy about the earliest gardening (i.e., vegetable gardening, as opposed to farming of cereals or pulses) amongst “barbarians” during the Migration Period (ca. 300-700 AD): Rösch claims, “Obviously the Alamanni [one of the Germanic tribes] continued the Roman tradition of horticulture without interruption. ... But it



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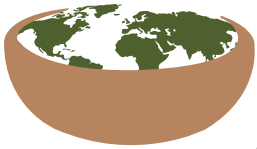
cannot be ruled out totally that the Alamanni only harvested from the abandoned Roman gardens and did no cultivation for themselves...But several cultivated Allium species of southeastern origin were introduced to central Europe by the Romans ... for example Allium sativum, A. cepa or A. porrum” (Rösch 2008). The presence of garlic in the Carpathian region during the late Migration Period (~600 AD) is contained in the archaeological record according to the synopsis of Gyulai (2006), and is similarly attested as present during medieval times.

Garlic is described in Christian and Islamic writings from medieval through premodern times.

The plant is attested in Moorish Spain in at least six period manuscripts (Harvey 1992a) and elsewhere by the famed Persian polymath, Al-Biruni (~1050 AD); later garlic was mentioned by the Islamic scholar Qasim ibn Yusuf (~1515 AD) of Herat (Harvey 1976). Of course garlic persisted in the Mediterranean where it had been long established. Planting of garlic (amongst other specified plants, e.g., leeks, chives and onions) was mandated by statute for family gardens in the Italian commune of Montagutolo dell’ Ardinghesca, ca. 1290 (Duby 1998).

The Breviarum rerum fiscalium (initiated during Charlemagne’s reign) lists garlic in the inventories of various Carolingian courts (Hahn 1996). A contemporary manuscript, the Capitulare de Villis, written between 792 and 800 AD at the behest of Charlemagne and listing plants to be propagated in royal gardens, specifies garlic (‘alia’) as well as leek, onions, chives, and shallots (Hahn 1996, Pearson 1997, Bakels 2009). Royal estates of the same era in northern France contained garlic, leeks, onions and shallots (Pearson 1997). Garlic was surely present in Britain by this time, as garlic was repeatedly mentioned in Anglo-Saxon documents reflecting knowledge prior to the Norman Conquest (Cockayne 1864, 1865, 1866). Garlic eventually became well established in medieval Europe (Fig. 1).

Although garlic was present in medieval British gardens, there are controversies about other Allium spp.: A. oleraceum, A. scorodoprasum and A. vinale, which



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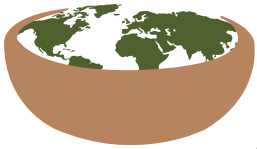
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some authorities consider as natives, but others believe to be introductions (Preston et al. 2004). Cockayne (1865, 1866) cites several instances of ambiguity regarding identity of plants named in leechbooks. Although identity is clear in some instances, in others a given name such as ‘garlic’ or ‘cropleek’ or ‘leac’ might refer, depending on context, to *A. sativum*, *A. oleraceum* or *A. porrum*. Modern scholarship echoes some of these concerns, e.g. for ‘cropleac’ or ‘porleac’ (Pollington 2000). Certain identification of a plant as *A. sativum* in later manuscripts may also be problematic. A list of ‘Herbys necessary for a garden by letter’ entered into a cookery book (British Library, Sloane MS 1201, “The Fromond List” ~1525) contains “one manifest addition, presumptively of later date ... common garlic” (Harvey 1989). The actual name in the list, Seyt Mar Garlek, probably indicates *Allium sativum*.



Fig. 1. Garlic harvest, from the *Tacuina sanitatis* (14th century). Wikimedia.

Grieg (1995/1996) tabulated British and European archaeobotanical records for garlic in the 13th century, and British archaeological or historical records in 13th, 14th, 15th and 16th centuries. From the Infirmerer’s Garden of Westminster Abbey (the garden survives to the present as the College Garden), garlic was documented in 1323 and 1340 (and leeks and onions in that time period as well), and in 1339-1340, garlic was purchased for planting (Harvey 1992b). Other records of that time period



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indicate presence of garlic in other contemporary gardens, royal or monastic (Harvey 1992b). An extended work in verse, *Mayster Jon's Gardener's Treatise*, comprises "the first coherent account of horticultural technique in our language [English]" (Harvey 1985). The surviving version appears to have originated in Glastonbury Abbey, and has apparent reference to Anglo-Norman Ireland. The work refers to garlic ('garlek') as well as onion ('onynyns' and other variants in spelling). Master John's work dates to sometime after 1350, to perhaps ~1380 (Harvey 1985).

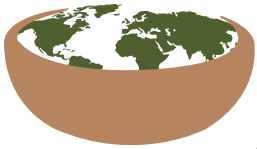
Badura et al. (2013) listed garlic from Beverly, UK (post-Roman); and Laufen, Switzerland (medieval). The authors, whose primary objective was reporting on garlic from a fifteenth century shipwreck, also cited literature (in Polish) on the Teutonic Knights' perceptions of longevity of garlic and onion in storage. Teutonic Knight documents from 14th century Gdańsk (present day Poland) refer to onion, and 15th century documents to both onion and garlic; archaeobotanical evidence for both plants is available from the latter time (Badura et al. 2015).

Folklore

Garlic in folktales and in folk motifs

Neither Aarne (1961) nor Uther (2004) index garlic in their tale type indexes, probably because the plant is never the protagonist of a tale, but garlic does appear in some tales assigned to tale types. Thompson's (1955-1958) six volume guide to motifs in folktales contains multiple entries for garlic. Examples in Thompson (1955-1958) include the familiar power of garlic to protect against evil (motif number D1385.2.8) as documented in Talmudic literature. Association of garlic with lower social strata is apparent when a servant asks his master for weaponry of a knight, but the master only gives the servant a stalk of garlic (motif J955.3).

There are other garlic motifs indexed in Thompson (1955-1958), including a highly prejudiced account, "why Jews smell bad" ("They rubbed Christ's body with garlic")



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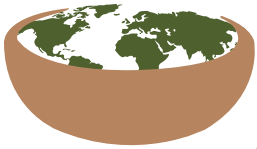
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motif A1662.1). Folklore reflects the biases, prejudices and even cruelty of the folk from which it is collected (Bell 2009) and folklore on garlic is no exception. Much lore on garlic reflects historical animus of privileged social strata against peasants and other poor persons, or stigmatized social groups. Garlic and Onion Peddler (Fig. 2) was intended to illustrate “the lowest type of immigrant—the Russian Jew,” with “inborn filthy habits” who “only wash when it rains on them” (Stephens 1917). That garlic was consciously employed for this sort of vitriol is a harsh reminder of the unpleasant side of folklore, including lore on garlic.



Fig. 2. Garlic and Onion Peddler. The photograph of a heavily burdened child peddler, potentially evoking sympathy and compassion, was actually intended by the anti-Semitic author to induce revulsion against the boy’s ethnic affiliation (Stephens 1917).

Garlic and onion are often seen as related (as of course they are). Introductions to



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the folklore of these plants sometimes begin with the cliché of Satan’s departure from the Garden of Eden, whereupon onion sprang from the soil where his right foot first stepped, and garlic arose from where touched his left foot (Wilson 1953, Grieve 1971, Watts 2007), but corresponding tale types or motifs were not referenced. The kinship of garlic with onion is reflected in a Latvian tale of their marriage (motif B286.1). There are, however, instances in which garlic (or onion) is central to the plot of a given tale and in which the tale is assigned a type.

For example, tale type ATU 804 is “St. Peter’s Mother Falls from Heaven,” wherein St. Peter (or another saint) is given permission to pull his wicked mother up from Hell with an onion skin (or twist of garlic, or leek). Other sinners grab her feet and she falls back into Hell. There are versions worldwide in over two dozen languages (Uther 2004, Marianthi 2006). Another example is “The Garlic Patch,” from Basile’s 17th century *Pentamerone* (2007 translation by Canepa). A father of seven daughters is so poor that his only income is from his garlic patch. One daughter disguises herself in male attire (tale type ATU 514), cures a rich man’s son, and eventually all seven are married to the wealthy man’s seven sons. Folklorist Jack Zipes (2002) expounded on the centrality of garlic: “Garlic marks the man and his family, a stench that he wants to expunge.” Garlic is emblematic of and synonymous with low social station.

Garlic appears in tale types or motifs about wealth conferred on the deserving (and denied to the undeserving). In tale type ATU 851, “The Princess Who Cannot Solve the Riddle,” the princess will marry whoever can pose a riddle she cannot solve. Usually the suitor is a peasant boy or shepherd. In subtype 851C (South European variants), she can’t resolve a riddle involving “Ajo, majo pico en piedras,” garlic crushed on a stone (Goldberg 1993). In “Journey to the Land of Cats” (from Palestine, motif-index number J2415.9.1 in MacDonald and Sturm 2001), a kind old woman is taken to the village of cats, and given a bag of onion and garlic peels to put under her bed. They turn to silver and gold. When an unkind neighbor imitates her, her peels turn to bees and wasps. In a similar motif, the youngest son of a merchant displays no talent for business, but is shipwrecked with a store of onions in a foreign land that has no onions but so many diamonds that the gems are without value. The son trades his onions for diamonds and manages to return home. His jealous



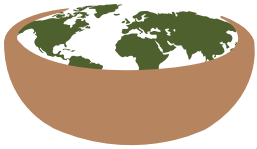
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older brothers arrive at this foreign land with a cargo of garlic, and the king of the land offers to trade the most valuable commodity in the land for their garlic. The brothers happily accept, and obtain in return for their garlic a full cargo of ... onions! (Kimmel 1996, from the Jewish tradition). The story is assigned to motif-index number J2415.1.0.1.1 “where pebbles are diamonds” (MacDonald and Sturm 2001).

In “The Two Brothers” occurs a variation on the ‘filthy lucre’ theme, wherein stolen garlic and onions are used to make pills of cooked filth, a “medicine” conferring the power to break a curse that protects buried treasure and enables its theft (Dorson 1949). There is no tale type precisely corresponding, but there are many allied motifs involving the humor of excreta and combining such with avarice and money. In this “Two Brothers” tale, garlic mediates themes of banality and prosperity. Conversely, rotten garlic can be a metaphor for mental deterioration. From a collection of insults in Portuguese we have: Cabeça de alho chocho, roughly, “rotten garlic head” (Dodson and Vanderplank 2007). An alternative transliteration and translation, also from the Portuguese, is cabeça d’alho xoxo “he has a head of rotten garlic” or “he is crazy” (Bonoid 2005).

Older compilations of plant lore addressed garlic, but unfortunately with minimal (sometimes no) attribution. Examples include Thiselton-Dyer (1889), who informed readers that “to dream of garlic indicates the discovery of hidden treasures, but [also] the approach of some domestic quarrel.” On Midsummer night, the Bolognese, “who regard garlic as the symbol of abundance” buy it as a charm against poverty (Thiselton-Dyer 1889). Folkard (1884) contains numerous references to garlic, but documentation is sporadic: “The seed of Garlic is black; it obscures the eyes with blackness and darkness” (Folkard 1884, discussing the doctrine of signatures). The designation of the plant is ambiguous, since *Allium sativum* seldom produces seed. Also with regard to doctrine of signatures, Folkard (1884) conveys this: “Garlic (from the Anglo-Saxon words gár, a spear, and leác, a plant) was, from its acute tapering leaves, marked out as the war plant of the warriors and poets of the North.”



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Magical properties (i): Mediterranean, Balkans and Western Asia

Magical properties of garlic denoted in folklore are ramified and overlapping in function. “Garlic was ... known in [Roman] antiquity for its protective powers... it imparted a warlike spirit or gave apotropaic protection against evil” (Gowers 1993). Romans, convinced of the power of garlic to banish evil spirits, adorned house walls with pictures of the plant, as attested by many excavations from Pompeii (Hahn 1996). Titinius (2nd century BC) stressed the power of the plant to protect children from a “virose, mammalian strix” that was “plainly chiropterous” (Oliphant 1913). This would be a wonderful bit of folklore if vampire bats were indigenous to Eurasia, but unfortunately vampire bats are all New World species.

Romans and Persians were famously adversarial in antiquity, but garlic had apotropaic functions in both cultures, although evidence presented here from Persia is of later date. Matin (2012) documented in Persian folklore (including “the Zoroastrians of Yazd”) that the plant (along with other strong smelling plants like onion and asafoetida, *Ferula assafoetida*) had “magical potential to ward off wicked creatures, like jinns, āls, and fairies.” Virgin girls and pregnant women must be protected from “jealous āls andimps.” Garlic is also useful against “eye-smiting” (the evil eye) and may be placed over doors or under the pillows of infants (Matin 2012). It is used for rain-making ceremonies in certain mountainous locations (Matin 2012). The Zoroastrians believe in garlic as “a symbol of environmental cleaning, disinfection, bodily health, and eye-smiting protection” and take care that garlic skins, potentially useful in satanic magic, be disposed of properly (Matin 2012). Conversely, skins may be burned to produce purifying odors (Matin 2012). The latter ritual must be carefully conducted to avoid arousing divine anger (Matin 2012).

Apotropaic functions are especially visible in Balkan folklore. In addition to protection against witches, garlic was useful for their detection. According to Serbs in Sumadija and near the Croatian border, witches are said never to eat garlic because of their intolerance for the odor (Vukanović 1989a). Counterintuitive to this notion is the contention that if certain rituals are followed in planting and harvesting garlic, witches may be detected by their



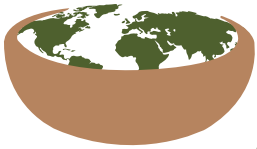
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requests for the plant. These rituals are arcane, including planting garlic in a snake's head, harvesting the garlic on Easter, St. Peter's day or the Feast of the Annunciation, and then wearing it to church (Vukanović 1989a).

In Serbia, because it is on Christmas and Easter that witches are most inclined to eat people, it was prudent for persons to rub themselves with garlic in order to repel these cannibals (Vukanović 1989b). Rubbing children with garlic on these days should be accompanied by a verbal charm indicating that only after a witch has counted all blades of grass and all leaves on trees (a virtual impossibility) can the child be eaten (Vukanović 1989b). Additional protections were placing garlic on the windowsill on St. Thomas's Day, eating it before bed, etc. As before, the witch is given an impossible task (in this case counting all stars in the sky and all grains of sand in the sea) before being allowed to do mischief. Children rubbed with garlic may be further protected by turning a broom upside down behind the door, or placing a spit with an eggshell above the door, etc., to prevent the entry of a witch or incubus (Vukanović 1989b). Newborns are especially vulnerable, hence placement of garlic (and knives or scissors! and matches!) in or under cradles, or under the pillow (Vukanović 1989b). Fathers in *couvade* were allowed garlic and a comb (but apparently not knives or scissors) when they lay with the child in bed (Vukanović 1989b). Depredations of witches were regarded as real. For Serbian gypsy women who have lost a child, Čvorović (2013) documented the mothers' affirmation of innocence and the blaming of witches.

"As in many other European folk beliefs, garlic is considered the best defense against living or dead strigoi [Romanian witches]" (Eliade 1975). "The most effective protection against the fairies is garlic and mugwort, that is, the same magico-medicinal plants that are in the bag tied atop the 'flag' of the *călușari* [a society of Romanian ritual dancers]. The *călușari* chew as much garlic as they can stand, and, in the course of the cure, the leader spits garlic on the patient's face" (Eliade 1975). Witches, *strigele* in Murgoci (1926), meet in the mountains, dance, and say, "Nup, Cuisnup, in casa cu ustoroii nu ma duc" (Nup, Cuisnup, I won't enter any house where there is garlic). Murgoci (1926) gives *strigoi* (fem. *strigoica*) as the most common name for vampires, with *moroi* "perhaps the next most common." There are other terms as well, with overlapping meanings, "used as if all were birds of the same feather."



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In Bulgaria, bands of dancers analogous to the *călușari* were called *rusaltsi* or *kalushari* (Barber 2013). Barber (2013) weaves an intricate (and controversial - see Cash 2013) hypothesis: that certain, putatively ancient, forms of dance in Eastern Europe reflect transfer of fertility from woodland and river nymphs to peasant farmers and their fields. What is of interest here is the recurring apotropaic use of garlic. Other herbs used, in conjunction with garlic or separately, included wormwood (*Artemisia* spp.) and lovage (*Levisticum officinale*). All were protective against potentially dangerous female spirits. Garlic, most often combined with wormwood, was carried in a pole or “flag” specific to a given troupe (as in Romania, above), or sometimes worn, carried in the hands or chewed. Garlic and wormwood repelled such spirits, whilst roses, birch, parsley and others attracted them. Pieces of garlic used by *călușari* dancers were believed to be especially potent for curing, and were preserved throughout the year (Wilson 2000).

Garlic warded off additional dangers, nautical, natal and legal: “You see it [garlic] ... in every sailing-vessel as a preventive against shipwreck” (Spencer 1851). This was an old tradition, as both Greeks and Turks might hang bunches of garlic over the stern as an apotropaic measure (Watts 2007). Use against the ‘Evil Eye’ is addressed in detail below. In Romanian belief, stealing during pregnancy could incline the unborn child to become a thief. However, “the mother ... can provide protection to her unborn ‘thief’ child if she gives birth ...while holding two cloves of garlic in her hands, so that he will never get caught” (Hulubaș 2011). Without impugning the future integrity of the infant, pregnant women in Lorraine (France) might eat plenty of garlic if they desired a boy (Watts 2007).

Magical properties (ii): Northern Europe

From Roman Iron Age Denmark (Bornholm) an amulet box containing remains of *Allium* was excavated from a woman’s grave. The plant was probably not garlic but related *A. scorodoprasum* (sand garlic) (Karg et al. 2015). Apotropaic uses of garlic in pre-conquest (prior to 1066 AD) Anglo-Saxon traditions include incorporation into a talisman to prevent a man from being ridden by “a mare



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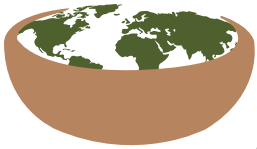
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or a hag” (i.e., a nightmare or a witch) (Cockayne 1865). Similarly, garlic may be used in “a salve against the elfin race and nocturnal goblin visitors” and may protect “women with whom the devil hath carnal commerce.” It is best not only to use correct ingredients, but to put them under a church altar, and sing masses over them or to repeatedly perform the sign of the cross (Cockayne 1865). These same practices, differing in details, are related by Grendon (1909) and Rohde (1922). The plant was also used to expel demoniae from “fiend sick” persons, by concocting a drink (consumed from a church bell) with this and other herbs, and with use of holy water, psalms, prayer and the giving of alms (Cockayne 1865).

Although separated from the above rituals by centuries, a similar apotropaic use of garlic is apparent against a skogsrå (succubus). Every night, the skogsrå would come to the house and steal away a woman’s husband, who was powerless to resist. But one night the woman met the skogsrå before she could enter the home, and solicited her advice about “a bull who never came home at night.” The skogsrå helpfully replied that the beast must be fed with garlic, tar, and grass from the north side of a chimney. When this remedy was applied to the husband, the spell was broken. The skogsrå ruefully admitted that the wife had tricked her (Lindow 1978, from a version collected in 1931 from a Swedish crofter born in 1840). Pollington (2000) stated, without attribution, that garlic “could be worn to protect against the walking dead on All Hallows Eve.”

Use of garlic to protect infants from malign forces has been indicated above for Mediterranean regions. Garlic was also among objects (holy water, crosses, the Bible, or iron objects like scissors, knives or nails) that when placed near an infant could prevent its abduction by fairies in the British Isles (Buccola 2006). Similar traditions are evident in later Germanic or Nordic belief, e.g., placing garlic together with a sharp instrument in the cradle protected an un-baptized child from fairies (Henderson 1879). Similarities to practices in Southern Europe are obvious.

Apotropaic functions of garlic are evident in New World folklore too. In



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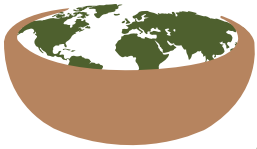
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a survey of North American folklore on the evil eye, it was found that “use of garlic is principally apotropaic” (Hand 1980). Such use (including against witchcraft) in North America includes garlic worn as an amulet or carried as cloves in Utah (Salt Lake, Midvale, Magna, Vernal), Ohio (Hand 1980, 1983) and by Italian-Americans in New York City (Berger 2012).

Magical properties (iii): The Evil Eye

Within a given region, multiple botanicals may be used protectively against the evil eye. Sometimes botanicals may derive from different traditions. In Tuscany, use of *Buxus* (boxwood) and *Juniperus* spp. (juniper) is plausibly traced to Germanic folklore via the Longobards (Lombards), whereas use of *Foeniculum vulgare* (fennel) and *Allium sativum* is probably from Greco-Roman tradition (Pieroni and Giusti 2002). This use of garlic is widespread and apparently of considerable time depth in the Mediterranean and Levant.

In Spanish Salamanca (in a “witches’ village” of local tradition), rue (*Ruta montana*) was most commonly used to deter witches, but garlic was also used against the evil eye (González et al. 2011). Rue (*Ruta graveolens*) was primary against the evil eye among the Sephardim, but garlic was commonly employed (Zumwalt 1996). Indiscrete compliments may provoke the attentions of the evil eye, so such compliments were often followed by, “Let it go to the garlic” (Zumwalt 1996). Cloves might be integrated into necklaces (Fig. 3), usually with blue beads, or placed under the pillow, by windows or doors, carried in a pocket, or sewn into a shirt to protect infants (Zumwalt 1996). Analogous use of garlic against the evil eye was specified for Wallachian and Bulgarian children by 19th century travelers (Campenhausen 1808, and St. Clair and Brophy 1869, respectively).



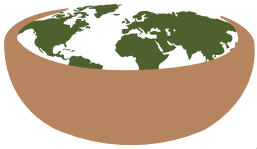
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Fig. 3. Baby with necklace of cloves, from Zumwalt (1996). (The children of Alberto Cohen, Turkey, c. 1930; Beit Hatfutsot Photo Archive, Tel Aviv, courtesy of Rachel Altaef via MORIT-Legacy of Turkish Jewry)

In Greece, even the word ‘garlic’ was laden with apotropaic function against the evil eye, and would be exclaimed in the event of inappropriate public praise of a child (McCartney 1992). Similarly, garlic was suspended from the branches of trees if compliments were inappropriately bestowed on orchards or gardens (McCartney 1992). Garlic on one’s person, under the pillow or on a bonnet had apotropaic powers against the evil eye used against “new-made mothers” or children (Hardie 1992). Garlic plus fennel was placed by a healer (a benandante) under the pillow or by the bed, so witches would not molest a sleeping child



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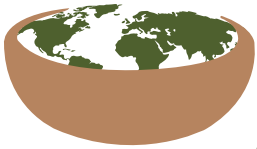
(Ginzburg 2013). Also, garlic with fennel and other plants was used by a benandante to treat the sick (Ginzburg 2013). The 17th century Italian benandanti professed to be Christians, were notoriously anti-witchcraft and anti-witch, but themselves were held suspect by authorities and eventually persecuted (Ginzburg 2013).

Garlic was an accompaniment of incense to counteract the evil eye against infants in Lebanon (Harfouche 1992). Garlic might be incorporated along with other substances (e.g., pepper, bread crumbs, pieces of a child's caul, salt) into an amulet, or for protection of an animal, tied to the tail (Murgoci 1992). However, wearing garlic might be insufficient to ward off the evil eye of a powerful curse (Pitré 1992, for Italy).

Maclagan's (1902) attempt to locate the evil eye in the Acallan na Senórach (medieval Irish, 12th century) is not altogether convincing, but the evil eye can be documented in folklore from much later periods in the British Isles. Garlic is not mentioned in Maclagan (1902). Dundes (1992) noted "the evil eye complex in the Celtic world" but provided little documentation other than the Cyclops-like Balor, who had a single eye and stole cattle; garlic is not mentioned in Dundes (1992), whose primary analyses consisted of Freudian gymnastics of heroic proportions to establish equivalence of eyes (evil or otherwise) with breasts and genitals. However, garlic could be worn, together with other articles in an amulet, against the evil eye in 19th century Ireland (Mooney 1887), or hung over the bed for the same purpose in Scotland (Abercromby et al. 1994). Although use of garlic against the evil eye was detected in the British Isles in the 19th century, the practice was much less pervasive than for Southern Europe and the Levant.

Magical properties (iv): Garlic against vampires

Although creatures allied with death and feeding on humans occur in various ancient or medieval traditions, "the word vampire postdates the Middle Ages" (Petzoldt 2002). In British tradition the use of garlic against creatures explicitly specified as vampires is late, only "since the publication of Bram Stoker's *Dracula* in 1897" (Alexander 2002), although 'vampire' appeared in print in English as early



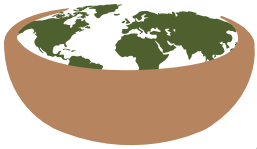
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as 1741 and probably derives from Serbian upirina “ghost, monster” (Petzoldt 2002). According to Simpson and Roud, “it is often assumed that the concept of the vampire was unknown in England until imported (in glamorized form) by 19th-century novelists” but various vampire-like creatures occur as early as late 12th century (Simpson and Roud 2000). The Oxford English Dictionary traces etymology of ‘vampire’ to Slavonic sources in Central Europe and the Balkans. Voltaire (a skeptic on these matters) remarked that vampires were not found in London or Paris; the locus classicus of vampire stories was 18th century Belgrade (Barber 1987).

Deterrence of vampires by means of garlic has become a cliché, but has a basis in genuine folkways. Murgoci (1926), cataloging uses of garlic against the vampire in Romania (multiple late 19th century sources), noted that garlic may be placed in the mouth of a dead person who might potentially become a vampire. Among the South Slavs, “It is known that a man is a vampire if he does not eat garlic.”

Vampires fight with (or ride on) hemp brakes, devices used to process hemp into fiber, and may visit houses and ask for them. If they enter, inhabitants should place needles on the house threshold, accompanied by garlic. This traps the vampire in the house until it “gets out the needles and removes the garlic ... thus proving she is a vampire (strigoica)” (Murgoci 1926). Murgoci noted that especially on St. Andrew’s Eve, St. George’s Eve, before Easter and before the New Year, windows should be shut and “anointed with garlic in the form of a cross, [with] garlic put on the door and everything in the house, and all the cows in the cowshed should be rubbed with garli.” (Murgoci 1926). Since vampires enter by chimneys and keyholes, these apertures must be rubbed with garlic. In Greece and Macedonia the general name for vampire is vǎrcolac, but in Romania the term only exceptionally means a vampire, and usually denotes a werewolf; garlic has efficacy against wolves and various evil spirits, too (Murgoci 1926). Tying a clove around the neck of “the leading ewe” putatively would deter wolf attacks on sheep and similarly, if fed to poultry, would deter weasels (Watts 2007). One suspects these methods (or rather, the livestock) would not survive rigorous testing.



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Johnson (2001) concisely reviewed the use of garlic in destroying vampires (“cut off the head and fill the mouth with garlic”) or averting them (wreaths of garlic flowers, garlic crosses in windows, rubbing of livestock with garlic, placing of garlic in chimneys or keyholes). Reviewing the “classical aversion of the vampire to garlic,” Maas and Voets (2014), speculated on contributions to the myth from certain compounds in garlic that induce a heme-degrading enzyme, thereby exacerbating porphyria, a condition involving defects in synthesis of heme and resulting in anemia. Other possible diseases potentially contributing to the vampire myth are rabies and pellagra (Maas and Voets 2014). A short but entertaining list of uses of garlic against vampires in modern film and literature is provided by Vickery (1995).

Magical properties (v): Plant lists from witch trials

Counterintuitive is the notion that garlic not only deters witches, but it may be used by them. Garlic is among plants referenced by documents from witch trials in Poland, and used in tonics against coughs and colds, worms, to treat mouth sores in cattle, and of course for apotropaic purposes (against witches). It was also used to increase dairy production (Ostling 2014). Field garlic (*A. vineale*) had similar uses. Ostling (2014) purports to join others who contend that “the persecuted female healer joins the myth of the midwife witch in the dustbin of history.” Actually, more than sixty plants are documented from these trials (Ostling 2014), so it is the case that persons using plants were caught up in the witch craze. However, most collectors of plants were not persecuted for witchcraft, in large measure because they were the economically important source of plants for apothecaries throughout Europe (Dugan 2011).

Allium schoenoprasum ssp. *sibiricum* (Siberian chive), but not garlic per se, was an ingredient in a potion prepared by woman condemned as a witch in Finnmark, Norway in 1626, and the same plant had apotropaic functions (Alm 2003). In Russia, in the town of Dobry, a woman tried for witchcraft in 1690 possessed “a little knot” with a garlic clove and two wax seals, and other everyday plant items (Kivelson and Shaheen 2011). By the time of the witch trials, association of the plant and other *Allium* spp. with witches seems to have had roots in both Northern and Southern Europe. “The Romans ... left dishes of garlic at the crossroad shrines of



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the witch-goddess Hecate” (Gowers 1993). The woman’s grave with an amulet box containing remains of *Allium* in Denmark (Karg 2015) is probably germane here, as were pagan Scandinavian rituals involving severed penises of stallions wrapped in *Allium* leaves; the Church, personified by St. Olaf, took a dim view (Shenk 2002).

Medicine

Synoptic treatments of garlic in medicine are so numerous that only a few are addressed here. Typical of much literature is Shah (2014), useful for breadth (from ancient Mesopotamia and Egypt to the modern era), but exemplifying credulity regarding efficacy against cancer or other diseases. Other reviews also document scope of use, but are skeptical of efficacy, e.g., Block (2010) on treating tuberculosis via inhalation of garlic oil. Several *in vitro* studies demonstrate effectiveness of garlic extracts against drug-resistant strains of *Mycobacterium tuberculosis* (Dini et al. 2011) but conclusions are typical: “It is appropriate to further investigate” (Dini et al. 2011). Less skepticism is evident for claims on anti-parasitic properties, e.g. Block (2010) on garlic against intestinal parasites *in vitro*.

Historical context

In antiquity, certain foods were “on the borderline between foods and drugs ... for example, onion and garlic and many aromatics” (Wilkins and Hill 2006). According to the classification of the famous Greek physician Galen (born 129 AD), “these plants are possibly not nutritious foods (*trophai*), for they are all *opsa*, like onions, garlic, leeks, wild leeks and all sharp plants” (Wilkins and Hill 2006). Aristotelian philosophers attempted to define the differences between drugs and foods (although the Hippocratics avoided this separation), and in fact garlic exemplified a “food-drug continuum” although it was “primarily an item of diet” (Totelin 2015, with explications of the role of garlic in various Hippocratic writings, in Galen, Pseudo-Galen, and others).

The Egyptian Codex Ebers (the Ebers Papyrus, ca. 1550 BC) recommended garlic



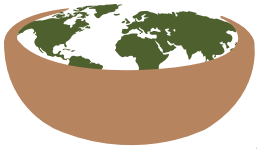
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against abnormal growths, circulatory diseases and parasites (Rivlin 2001). Biblical reference to garlic (Numbers 11:5) specifies only that after leaving Egypt, garlic was amongst the foods remembered by the Jews, although Rivlin (2001) states that they “were fed garlic and other allium vegetables, apparently to give them strength and increase their productivity.” Rivlin (2001) also contends that garlic was used to bestow strength on athletes during the earliest Olympics (“one of the first ... ‘performance enhancing’ agents”) and that garlic was used for the same purpose by Roman sailors and soldiers. Since garlic was considered by the Greeks to bestow strength, it was eaten by Greek soldiers before battle, and smeared onto (or fed to) cocks before a cockfight (Wilson 1953, Gowers 1993). The same practice survived in Central Europe for increasing the pugnacity of cocks, dogs and ganders (Watts 2007). “Wild forms (e.g. *Allium scorodoprasum* L., *Allium ursinum* L.) also have similar properties and were used in the past” (Badura et al. 2013).

“Pliny lists as [garlic’s] natural enemies snakes, scorpions, or perhaps all beasts, shrew-mouse bites, poisons like aconite and henbane, and dog bites” (Gowers 1993). Indeed, garlic was something of a cure-all in Greek and Roman medicine, being useful for “cleaning” the arteries, treatment of gastrointestinal disorders, liver disorders, animal bites, seizures, as an antidote to poison, etc. (Rivlin 2001). A tendency among physicians to regard garlic as a panacea long persisted, e.g., the physician S.F. Geoffroy, writing in 1761. By 1829, however, J.F. Oslander introduced a note of skepticism by considering garlic as a folk medicine (Hahn 1996).

Garlic also bestowed potency. “According to Pliny, garlic mixed with green coriander made a man lecherous ... and it has kept its reputation for being a food of love” (Gowers 1993). This aspect long persisted. Gowers writes that “Chaucer’s Summoner [in *Canterbury Tales*] relished garlic, onions, and leeks, and was as hot-blooded



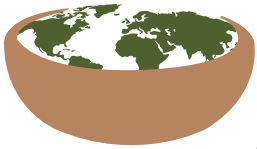
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and lecherous as a sparrow” (Gowers 1993). Garlic was not only regarded as enhancing male sexual performance (as in the plays of Aristophanes) but was a treatment for male sexual impotence (McMahon 1998, in analysis of impotence and virility in the *Satyricon* of Petronius). It could also comprise part of a love charm: “three beans and three bulbs of garlic and a few pieces of dried coal and a dead frog” placed under the threshold (Ogle 1911, for Magyar folklore).

Another facet of garlic’s relation to sexuality has provided aficionados of Greek drama with amusement. Gowers notes, “When the women [in Aristophanes’ *Thesmophoriazousae*] admit ... that they have been eating garlic to disappoint their husbands, this conceals another confession: they are trying to hide the taste of another kind of garlic, the phallus” (Gowers 1993, on innuendo in Aristophanes). The tradition (if you wish to call it that) continues today. Combining ‘garlic’ with ‘penis breath’ on Google generates hundreds of records, most in the context of intended humor. The frequent mention of garlic in the plays of Aristophanes (ca. 446-388 BC) has not escaped the attention of *Allium* specialists, who have noted that uses in these plays also include medicinal (strength-giving, or as a plaster for treating skin maladies like boils, or as a cure for a problem with eyelids). But most references to garlic in Aristophanes focus on sex, such as the use by women above to disguise having had sex, or contrariwise, use by women to avoid sex, as during the Athenian women’s festival of Skira. This festival is background for Aristophanes’ *Lysistrata*, in which women attempt to overthrow male domination.

Allium is one of dozens of genera documented in lists of *materia medica* over two millennia, from Hippocrates (ca. 460 - ca. 370 BC) through 1865 (De Vos 2010). *Allium* appeared in 10 of 12 selected works containing unambiguous lists of “simples” (plants often used individually as a remedy), and some wild or ornamental *Allium* spp. appeared in four such works. Garlic is also prominent in “modern



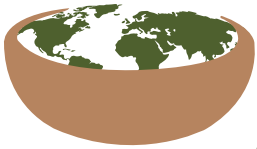
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simples - herbs and supplements on Medline Plus” (www.nlm.nih.gov/medlineplus/herbalmedicine.html). The clear implication is one of longevity of use, with implications for future use (De Vos 2010). Also germane to materia medica are materials from the 11-14th centuries, and now at Cambridge (UK). Originating from the Ben Erza synagogue in Old Cairo and mostly in Arabic, these documents indicate that garlic was specified for “cleanses the throat” and efficacy against intestinal worms, coughs, toothache, diseases of the eye, skin diseases, and utility as an emmenagogue (Lev 2007).

In Anglo-Saxon lore, garlic had efficacy against maladies of ears or teeth, gastrointestinal problems, womb disorders, blemishes, boils and swellings, and other ailments. Use was often accompanied by talismans or prayer (Cockayne 1865). Verbal charms and other accompaniments were sometimes prescribed: bloodletting and/or cupping for infection of tonsils and the “dry” diseases, holy water and miscellaneous prayers against cysts and blemishes (Cockayne 1865, 1866). An amulet containing garlic was recommended for digestive problems. Ingestion of garlic with other herbs, plus making the sign of the cross and singing specified hymns was a cure for “elf hiccup” (possibly anemia) (Grendon 1909). However, garlic does not seem to have been used in a manner that addressed the major causes of diseases in leechbooks (flying venom, elf shot, worm). On the continent, where the traditions of Galen and doctrine of signatures were well established, St. Hildegard of Bingen [1098-1179] gave garlic a prominent role in medicine and she concluded that “raw garlic was more effective than cooked garlic” (Badura et al. 2013). Garlic was held to beget yellow bile (along with phlegm, blood and black bile a cornerstone of Galen’s humoral theory) (York 2012).

From 15-16th centuries Serbia is the Chilandar Medical Codex. Garlic is referenced twice for liver diseases or haematuria, A. porrum (leak) twice for ear pain, and A. ursinum (bear’s garlic) three times



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as an antidote to snake bite or for haematuria (Jarić et al. 2011). In medieval and Renaissance Europe in general, garlic was held useful against constipation and other digestive disorders (including parasites), toothache, kidney disease, the plague(!), prevention of heat stroke, and easing of childbirth (Rivlin 2001). Paracelsus (1493-1541) recommended garlic against plague (Hahn 1996). Also in medieval and premodern times, garlic was used to diagnose pregnancy by “placing a clove of garlic in the vagina: if the woman could taste the garlic in her mouth in the morning she was not pregnant, since there was free passage through her womb” (Wilson 2000).

Such attitudes on the general efficacy of garlic eventually made their way into modern practice, e.g., John Gunn’s *Home Book of Health* (1878) where garlic “was recommended as a diuretic, for treatment of infections, as a general tonic and for asthma and other pulmonary disorders (Rivlin 2001). In World War I, raw garlic juice was applied to wounds as a precaution against sepsis (Watts 2007). The best way to ward off colds is to wear around the neck a piece of garlic, “an old wives’ tale still current in England” and observed as far away as Lebanon (Harfouche 1992). Use of garlic against colds, whooping cough and other respiratory ailments persisted well into the 20th century in Britain, Ireland and North America (Watts 2007). In Appalachia, a region where a good deal of old lore from European migrants has been documented, garlic, onion and ramp (*A. tricoccum*) have been recorded multiple times for use against high blood pressure, respiratory ills and other ailments (Cavender 2006).

In North America, garlic was used to magically prevent disease (including infections and smallpox) by being hung over the door, tied around the neck, or placed under the pillow (Hatfield 2004). Also in American practice, as in Europe, properties of the plant can be supplemented with charms or prayers. Some such therapies are not for the faint-hearted. One treatment for *susto* (a psychosomatic condition)



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calls for “insertion of a piece of garlic into the anus on nine nights; if the garlic absorbs, the patient ... will experience relief after the ninth night. Prayers and candles burning at saints’ images are often part of the cure” (Granger 1976, for Spanish-speaking people in southern Arizona). “Wild garlic” was used against rabies in Ozark lore, either supplementing or supplanting ‘madstone’ (a kind of talisman applied to the bite) in humans and animals (Randolph 1933). The belief that garlic was effective against rabies can be traced to Europe, as stories of cures by garlic were documented in the Balkans (Hahn 1996).

Veterinary

Plant remedies for livestock and poultry parallel uses in folk medicine in that garlic (and onion) were regarded as panaceas. However, traditional animal health practices are fast disappearing in Italy and elsewhere. Pieroni et al. (2004) provided a concise list of citations for European field studies and noted more extensive studies elsewhere, e.g., for Africa and Asia. In southwestern Serbia, veterinary plant uses are remembered but neglected due to availability of modern drugs. However, garlic or onion were formerly used against respiratory problems in horses or (in a typical conflation of medicine and magic) rubbed against the udders of cows to protect against evil eye (Pieroni et al. 2011), purportedly a common cause for diminished milk production in both women and livestock (Berger 2012).

Garlic was especially used as a vermifuge in folk medical and veterinary practice. In Italy, such uses persisted in the second half of the 20th century. Garlic and/or other *Allium* spp. were employed against afflictions of the gastrointestinal tract, against parasites, kidney and respiratory diseases, skin problems (including treatment of wounds), and nervous and locomotor disorders in a variety of animals, including chickens, turkeys, pigs, sheep, cattle, horses and donkeys (Viegi et al. 2003). In Catalonia, and



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in the Balearics, garlic was applied to stings and wounds of both humans and livestock (Bonet and Vallès 2007, Carrió et al. 2012). In Sardinia, cattle, horses, sheep and chickens were treated with garlic for infections and intestinal worms (Bullitta et al. 2007).

European veterinary ethnobotany is not confined to the Mediterranean, although studies from more northern countries are less abundant. From the Netherlands are instances of garlic used in livestock or poultry as a vermicide, an insect repellent, for cough, or as a blood cleanser (Van Asseldonk and Beijer 2006). Garlic was used for de-worming livestock in Nordic countries (Waller et al. 2001). Analogous uses are widespread outside Europe, e.g., Alyemini et al. (2010) for Saudi Arabia; and multiple studies for south Asia, e.g., Pande et al. (2007) for Uttaranchal State, India.

Garlic and health, a “reality check” of science versus folklore

Block writes, ““Garlic teases us. Garlic-derived compounds display remarkable in vitro activity and simultaneously show low toxicity to mammalian cells ... testing in rats and other laboratory animals reinforces the in vitro studies” (Block 2010). Typical was the study of Kendler (1987), on cardiovascular effects, finding “some evidence to suggest that use of certain formulations of garlic ... is accompanied by favorable effects ... in normal subjects and in patients with atherosclerotic disease ... [but] further clinical and epidemiological studies are required.” Somehow, confirmation of benefits in humans has been consistently elusive in double-blind randomized placebo-controlled clinical trials (Block 2010) although some intriguing results are occasionally obtained (Mulrow et al. 2000).

Even in popular media, there were categorical denials that, in spite of folklore, garlic will cure anything. Thosteson notes, “It is as hard



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to suppress the many claims made for it as it is to suppress its odor ... Garlic has no medicinal value” (Thosteson 1978). Science writings can be equally emphatic. Pittler and Ernst claim, “The evidence based on rigorous clinical trials of garlic is not convincing” (Pittler and Ernst 2007, in a review of randomized, double-blind trials on common colds, cancer, arterial disease and other ailments). The authors conclude that reported effects, even when real, “are small and may not be of clinical relevance” (for elevated cholesterol) or “effects are too small to be clinically meaningful” (for elevated blood pressure) (Pittler and Ernst 2007). Jacobs and Gundling (2009, discussing Josling 2001) cited “promising preliminary data” showing “fewer colds (24 vs 64, $p < 0.001$), and shorter symptom duration (1.5 vs 5, $p < 0.001$) compared with the placebo.” But Jacobs and Gundling (2009) concluded, “There is insufficient evidence to refute or recommend the use of garlic for this indication at this time.” Skepticism regarding the many popular claims can be summarized in a quote: “The plural of anecdote is not data” (Roger Brinner, in Block 2010). Nonetheless, some particular aspects of folk belief seem confirmed. Garlic appears to possess efficacy against certain nematodes in horses (Peachey et al. 2015).

Culinary history

Ancient

The Greeks were acquainted with garlic, and it was Greeks from whom the Romans learned its use (Hahn 1996). The Romans transmitted garlic to Gaul and Germany (Hahn 1996). Garlic was, at least initially, a luxury food in Central Europe during the Roman period. Badura et al write, “As in the case of onions, garlic was dispersed across Europe after the Roman legions moved north, and later spread by the Jews, as well as by monks, as food and medicine” (Badura et al. 2013).

Among the ancient Greeks, garlic was popularly consumed in a salted broth, although the soup “was detested by the aristocracy”



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(Hahn 1996). In Roman cooking, “garlic had plebian overtones” (Corbier 1999). Horace, in his Epodes, wrote a literary tirade against garlic breath (Gowers 1993). Nonetheless, there is evidence that garlic was routinely used in Roman cooking (Fig. 4).

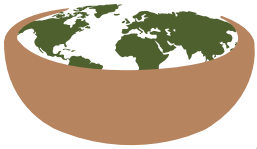


Fig. 4. Garlic bulb with spices, detail: Fragment of a Fresco Panel with a Meal Preparation, 100-150 AD, courtesy of The J. Paul Getty Museum.

Medieval

Garlic is mentioned in fragments of a Teutonic cookbook from medieval Königsberg (Badura et al. 2013): Bandura et al claim, “Certainly, *A. sativum* was known and used in medieval Poland.” There are indications that garlic was used for provisioning crews of ships. The garlic found in a medieval Baltic ship wreck “may have come from the higher parts of the ship’s stern, where the food for the crew was stored” (Badura et al. 2013).

Period literature indicates attitudes. Catalan Franciscan writer Francesc Eiximenis (late 14th century) invented a letter from a



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rich priest to a doctor. The priest complains of loss of appetite but describes an exceedingly rich diet. The physician responds by mocking the priest's humble origins, and recommends that the priest eat the diet typical of his youth when he was a mere peasant: barley, bread, onions, garlic, a little salted meat, and water (Freedman 2007). Thus we're informed that garlic was traditionally regarded as peasant food in late medieval Catalonia. This sentiment is echoed elsewhere for late medieval French cuisine: "Garlic was thought to be suitable only for the crude stomachs of peasants" (Flandrin 1999). The reputation of garlic as a food for the lower classes persisted into the Renaissance. To serve garlic or onions at a banquet "will not ... be honorable, for besides the stink they bear, they will suggest that the diners are rustics" (from a period source, quoted in Albala 2007).

According to Lauriou, "The most detailed descriptions we have of medieval dinners come from satirical and comic literature" (Lauriou 1999). Such literature provides clues to the status of garlic: "Defeated champions are sautéed in garlic" (and whores roasted in a tart sauce, "black friars" fried in fat, perjurers have their tongues fried in butter, etc.) (Lauriou 1999). With respect to plants: "The least noble plants were those that produced an edible bulb underground (such as onions, garlic and shallots)" (Grieco 1999). Occasionally we see from period literature that garlic features in stereotypical views of other peoples. Kislinger states, "According to both Nicetas Choniates, in an account written in 1204, and Eustace of Salonika, a Latin would sell his soul for a fillet of beef, or salted pork and pureed beans, dressed in a garlic sauce" (Kislinger 1999).

All this putative prejudice against garlic did not deter its occasional consumption in haute cuisine. Garlic was used to flavor sturgeon or combined with truffles in recipes for Renaissance banquets (Albala 2007). Culinary aspects merge with the pseudo-medicinal. Four Thieves Vinegar (wine vinegar, garlic and herbs, including "wormwood,



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rue, mint, sage, and rosemary, as well as a variety of additional herbs” - a popular condiment with over 43,000 records in Google) wards off plague and protects against the spells of rival witches (Renoux 2005, alas without attribution). According to Hahn (1996), the four thieves were apprehended by police in Marseille in the plague year 1721 while looting the sick and the dead; they told police that garlic mixed with wine and vinegar had protected them from infection.

Premodern and into the modern era

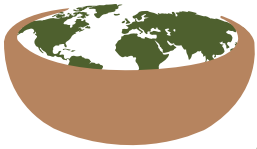
Garlic in cuisine or as a market vegetable is documented in art, but especially in oil paintings from the Renaissance forward. Examples include Joachim Beuckelaer, *Vegetable Vendor*, later 16th century; Jusepe De Ribera (1591-1652), *Old Man with Onions* (ragged clothing, a garlic bulb in foreground); Baltazar Gomes Figuera, *Still Life with Fish* (mid- to late 17th century - a string of garlic is nearly as prominent as the fish); Willem van Mieris, *The Greengrocer*, 1731 (Fig. 5); Edouard Manet's *Still Life with Bag and Garlic*, c. 1862; Vincent Van Gogh, *Still Life with Bloaters* 1887 (the garlic bulb is as prominent as the herring). In these paintings, garlic connotes the plebian or the common, as in Diego Velasquez, *Christ in the House of Martha and Mary*, 1618. Garlic can also imply vulgar sexuality, as in Bartolomeo Passerotti's *Allegra Compagnia* (ca. 1577), wherein garlic is placed prominently in the foreground with symbols of vulgarity and intoxication. So too, with onions, e.g., Annibale Carracci's *The Bean Eater* (c. 1583), in which scallions are prominent alongside the graceless diner and his dinner. Market and kitchen scenes, often with moralistic themes, are informative on the social history of food plants, especially so in the realism of late Renaissance and early modern periods.



Fig. 5. The Greengrocer, Willem van Mieris (detail). Even this romanticized portrayal

shows affiliation of garlic (upper left) with common folk. Wikimedia.

Of British cooking, “Well-done meat and soggy vegetables were well-established norms before 1800, as was an aversion to garlic” (Otter 2012). Block’s (2010) concise review of “anti-garlic” movements, notes an American opinion of 1796, “Garlicks, tho’ used by the French, are better adapted to the uses of medicine than cookery...The English also despised Southern European cooking, characterizing it as greasy, reeking with garlic, and swimming in olive oil. Olive oil and garlic in combination [were], of course, almost hilariously dreadful” (Howes and Lalonde 1991). Writing of English restaurants, Hahn (1996), noted “Even restaurants that offer French cuisine use garlic only in very small quantities.”



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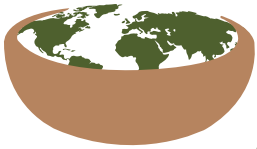
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Fig. 6. From a vintage postcard (1921) promoting a theatrical production (courtesy Alex Lowe© 2010, Cardmix, Ltd., www.cardmix.co.uk)

Of French gastronomy, “all the garlic-laden dishes from the south of France should remain where they belonged” (Ferguson 1998, citing opinion from 1825). These sorts of opinions long persisted in British and American cooking (Fig. 6). Of Alliums in general, “Popular as these strong flavours are, especially among the southern Latin races, it would seem that persons of refined taste have always held aloof from them” (in Block 2010, from a British work of 1914).

The evolution of garlic cuisine in the United States is traced by Adema (2009), from its status as un-American and largely



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associated with ethnics, especially Italians, to its use by celebrity chefs (Julia Childs and others), general acceptance, and popularity. Gilroy, California, bills itself as the Garlic Capitol of the World, and holds an annual festival with delicacies, tourism and even a Garlic Queen pageant (Adema 2009).

Conclusions

This review and others (Dugan 2008, 2015b) document folktale types and motifs in which plants or fungi are intrinsic, but folklore specific to these organisms better conforms to alternative categories, independent of folkloristic classifications. There is no tale type, nor even a specific motif, for garlic lore per se. Although folk taxonomy of plants and animals parallels to considerable extent scientific classification (Berlin et al. 1973), and although folktales about animals comprise one of the primary categories for tale types, there are no analogous folktale categories for plants or fungi (Aarne 1961, Uther 2004). Tale types AT 307, AT 363 and AT 365A specify vampires, but aversion of these creatures to garlic is not recorded in Aarne (1961) or Uther (2004). Garlic has a higher profile in Thompson's (1955-1958) index of folk motifs, but motif-index D2071 Evil Eye (Thompson 1955-1958) does not directly address garlic's apotropaic function, although other apotropaic measures are specified, such as swinging a cat over a child's cradle (D2071.1.2). Folkloristics has its own taxonomy, rarely parallel to biological taxonomy of protagonists or organisms comprising subject matter of folkways. Tales involving garlic are dispersed amongst multiple tale types and motif numbers, but folkways for garlic can be assigned to alternative categories: apotropaism, provision of power or potency, or association with things or people plebian, common or despised. All these aspects address content in tales, motifs and beliefs and practices for magic. Theoretical frameworks such as distinctions between emic and etic (Dundes 1962) are often implicit but have not been analyzed here, and nor are attempts made to analyze structure (morphology) sensu Propp (1968).



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Like the plant itself, lore about garlic propagated northward from the Mediterranean and Balkans. However, lore from southern cultures appears not to have co-migrated to the north with the plant, but to have lagged. For example, the term ‘evil eye’ (against which garlic was so extensively employed in Balkan and Mediterranean environs) does not seem to occur in leechcraft (Cockayne 1864, 1865, 1866, Grendon 1909, Rohde 1922, Pollington 2000). Scholarly works indicate the evil eye only from much later periods, often not until 19th century, in the British Isles and Finland (Dundes 1992). Likewise, vampire lore caught up to, rather than accompanied, distribution of garlic germplasm. Although garlic could be used against other undesirable supernatural creatures in early Anglo-Saxon lore, use against creatures specifically denoted as resurrected from the grave and craving human blood was absent in published literature until the 19th century.

No instances of garlic used against elf shot, flying venom or worm, primary causes of disease in Anglo-Saxon leechcraft (Rohde 1922), could be located. Although worm could cause ‘tooth wark’ against which garlic was sometimes used, worm was not mentioned in the instance in which garlic as a therapy was specified (Cockayne 1865). In each case (elf shot, flying venom, worm) numerous other plants comprised therapies (often along with charms or prayers). Garlic was, however, indicated as germane to the humoral theory and doctrine of signatures as noted above.

Malign beings against which garlic was used in leechcraft were variously termed mares, hags, witches, succubi, elves, daemons or devils, but no instances denoting something specifically vampire-like (blood-feeding creatures from the grave) were located in leechbooks. It would seem that the blood-feeding vampire arrived in Britain (and probably northern Europe in general) only subsequent to the



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time of the leechbooks, with the cliché of deterrence by garlic established in Britain only in late Victorian times. From the abundance and ubiquity of vampire lore (including their aversion to garlic) in the Balkans and proximate countries in late 19th century folklore collections, it seems that this lore was long established there.

The termination of Roman control in Britain, Gaul, and Central Europe was accompanied by diminution of archaeobotanical evidence for garlic in those areas. One might tentatively posit a hiatus in cultivation of garlic (and perhaps horticulture in general) in Northern Europe during the Migration Period, but evidence for horticulture (including for garlic) is stronger in subsequent times, and southern folk themes eventually infused northwards along with Christianization. Simultaneously, medical lore in Northern Europe became less dominated by Anglo-Saxon concepts (elf shot, flying venom, etc.) and more by the doctrine of signatures, theory of humors, and other components from Galen and the Hippocratic tradition. Garlic continued to be used “medicinally” (including with components of magic, especially accompaniments of prayer or verbal charms).

Throughout Europe and the Mediterranean, and indeed in regions of the Americas, it is readily apparent that for centuries magical, culinary and medicinal aspects of garlic (and other plants) remained merged rather than distinct. The contemporary concept of nutraceutical does not quite approach this integrative (it would not be too biased to say confounding) perspective of the premodern mind. Magic was pervasive. That the world is permeated by unseen and often malign forces that can be deterred, coerced or placated by magical means was a common outlook prior to (and for many, well past) the Enlightenment (Wilson 2000, Swan 2005). Belief in witches and vampires in the Balkans, for example, “survived till the end of the nineteenth century, and even some traces ... remained in the first decades of the twentieth” (Vukanović 1989a). Vukanović



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writes, “Apotropaic customs and rites ...are rooted in the remote and primitive past ... having been preserved ...up to the present day” (Vukanović 1989b). Similar conservatism applied elsewhere in Eastern Europe (Worobec 1995). Even in Britain, people continued to believe in witchcraft as a cause of illness well into the nineteenth century, and traditional healers (“cunning-folk”) were employed in administering herbal cures augmented with magic (Davies 1999).

Such conservatism was not confined to Europe. About life in early twentieth century Ozarks, Randolph wrote: “The old belief in witchcraft is rapidly dying out ... Many of the old folks, however, still believe that certain women can call up the Devil” (Randolph 1922, with incidents of putative witches and witchcraft). Analogous, intriguing research exists for the southern Appalachians (Gainer 2008). More disturbing than intriguing are Hand’s (1983) accounts, from informants, of mob burnings of suspected witches in Utah.

Persistence of the belief that garlic possesses special properties should come as no surprise. Evidence-based studies do not seem to have much diminished the common perception that garlic cures or wards off respiratory infections, acts as an aphrodisiac, or even deters cancer and coronary diseases. (‘Garlic’ + ‘natural cure’ generates 360,000 records on Google.) I am well acquainted with several persons who ingest garlic regularly because they believe it is effective against common maladies. However, other beliefs have proven less resistant to modernity. Vampires that wear lipstick and werewolves that drive cars now abound in novels and films, but I am not acquainted with anyone who hangs garlic over their door, window or chimney, or wears it as an amulet. Perceptions of garlic can be viewed as exemplars of change: simultaneously conservative and adaptive, with apotropaic remnants in folk medicine and expanded horizons in cuisine.



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Acknowledgments

The author thanks Jade D'Alpoim Guedes, Kim Hummer, and Barbara Hellier for constructive comments on the manuscript.

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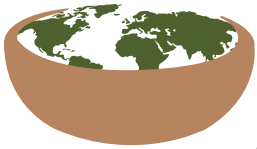
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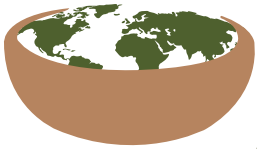
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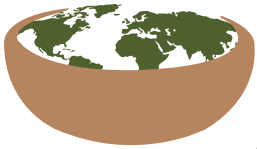
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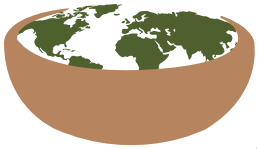
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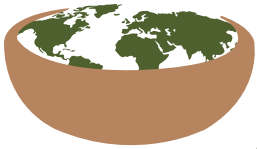
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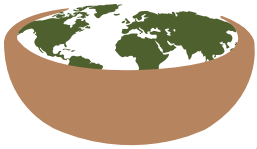
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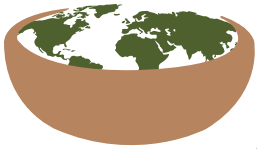
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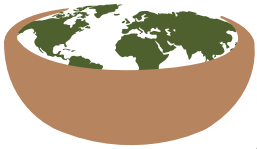
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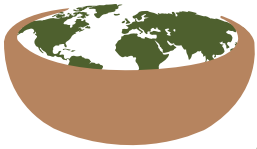
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