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THE MARVELOUS FUNGUS AND  
THE SECRET OF DIVINE IMMORTALS

«The most secret of realities take the form of illusions  
to they eyes of ordinary people».

Marguerite Yourcenar

*Introduction*

In contemporary China, news outlets periodically report on the discovery of «numinous mushrooms» (*lingzhi* 靈芝) in remote areas of the country. Whether they are vegetal, animal, or fungal organisms, or even mineral concretions, often remains open-ended; but regardless of the ambiguity that surrounds them, they are invariably consumed as panacea, fetching high prices from mycophiles and enthusiasts of traditional medicine. Its purveyors and consumers both tout the effects of the marvelous fungus on health and especially longevity<sup>1</sup>. In material medica, «numinous mushrooms» are commonly identified as two polypore species, the crimson-tinged *Ganoderma lucidum* (*chizhi* 赤芝), and less commonly, the purple *Ganoderma japonicum* (*zizhi* 紫芝). However, in ritual manuals pertaining to medieval Daoism especially, the «numinous mushroom» refers to a drug of immortality, a medicine of life that also grants access to gods and the divine.

Historically, Indo-Iranians afforded holy fungi a prominent place in the Vedic and Zoroastrian traditions. In the latter, it was most prominently associated with the god Mithras. In Western Asia and Eastern Europe, the Phrygian and Thraco-Dacians also had an

1. For a sample online report dated to June of 2016 see <http://hottopic.chinatimes.com/20160625003635-260809> (last accessed 21/11/2017). See also <http://news.china.com/social/1007/20120621/17272477.html> (last accessed 21/11/2017) for a highly mediatized case dating back to 2012.

appreciation for sacred mushrooms in their cults to divine figures Sabazios and Zalmoxis, both of whom were possibly reinterpretations of Mithras. Likewise, the Romans developed a Mithraic mystery cult that remained popular and widespread despite its esoteric nature between the first and fourth centuries, especially among members of the military. Some scholars have further speculated that these traditions, which emphasized the mushroom as a symbol of fertility and immortality but also as a source of divine vision or insight, carried over into early Christianity<sup>2</sup>. Nevertheless, the scope of this article is not to establish parenthood between Chinese and non-Chinese mushroom cults, although there certainly are common elements that suggest a circulation of ideas between South Asia, the Near East, and Europe during the classical period. Rather, the present study focuses exclusively on Chinese, and more specifically, medieval Daoist views of numinous mushrooms.

After a brief treatment of fungus-related lore in early China in the opening section of the article, the principal extant Daoist ritual texts pertaining to supernatural excrescences are chronologically surveyed in the second and third sections. The majority of these are descriptive sources that supply adepts with the means to identify and pick marvelous fungi in the wild. However, only one source gives full instructions on how to grow, harvest, process, and consume them in order to reap their full benefits. Accordingly, the source in question, the «Scripture on Growing Mushrooms from Laozi's Jade Casket: *The Secret of Divine Immortals*» (Laozi yuxia zhong zhongzhi jing shenxian bishi 老子玉匣中種芝經神仙祕事), provides a complete panorama of Daoist mushroom cults. The fourth and most substantial section of the study centers on this scripture and the practice it describes. The last section of the article discusses numinous mushrooms as objects of contemplation which preserve the entheogenic (literally, «generating the divine within») properties of their material counterparts.

2. J. Allegro, *The Sacred Mushroom and the Cross*, New York 1970. See also its refutation by J. H. Jacques, *The Mushroom and the Bride*, Derby 1970, and J. C. King, *A Christian View of the Mushroom Myth*, London 1970. The consensus among scholars of early Christianity is that, despite the claims of Allegro and others such as C. Ruck, M. Hoffman, and J. Celdrán, *Mushrooms, Myth, and Mithras: The Drug Cult that Civilized Europe*, San Francisco 2007, there is insufficient evidence to establish that mushroom cults had a formative impact on early Christianity.

Overall, the purpose of this study is to highlight some of the main features of mushroom cults and thereby shed light on the subject of the marvelous fungus, one of the most poorly understood elements of Chinese religions. I aim to accomplish this through the lens of a hitherto unexplored yet emblematic primary source. Although this study will be of interest primarily to scholars of classical China, my hope is that experts of South Asian, Western Asian or European traditions, as well as specialists of global history might find some fruitful points of contact through which broader patterns of interchange may emerge and dialogue between fields or disciplines may flourish.

### *What is a «Numinous Mushroom»? The lingzhi in China*

Before proceeding any further, some clarifications are in order concerning the suitability of the term «mushroom» as a translation for *zhi* 芝. In Chinese, *jun* 菌 or alternatively *xun* 蕈 are used to denote bacterial and fungal organisms such as mold, mildew, yeast, as well as mushrooms. Other terms that are more or less interchangeable include *xiu* 茵, *kui* 藎, *ruan* 蕈, *fu* 茯, or *ling* 苓<sup>3</sup>. These appear individually or in compounds. As of the fifth or sixth centuries, «numinous mushrooms» were gradually identified with two species of the *Ganoderma* genus, either the *lucidum* «russet mushroom» (*chizhi* 赤芝), or the *japonicum* «purple mushroom» (*zizhi* 紫芝)<sup>4</sup>. It is possible that the identification of *lingzhi* as *Ganoderma* mushrooms was a strategic diversion to conceal from outsiders the secrets of Daoist initiatory mysteries. Yet, even if such sleight of hand occurred, both the red herring and the original esoteric substance

3. Some sources establish differences between the terms. According to Lu Di's reading of the sixth-century *Yupian* 玉篇 (Jade chapters), *xiu* 茵 and *zhi* 芝 are used for *Ganoderma* fungi; *ruan* 蕈 denotes *Auricularia* mushrooms, and *fu* 茯 and *ling* 苓 refer to *Wolfiporia cocos*. See Lu Di, «Ancient Chinese People's Knowledge of Macrofungi during the Period 220 to 589», *East Asian Science, Technology, and Medicine*, 37 (2013), 40. However, such distinctions do not appear to be consistent over time or across large samples of texts.

4. *Ganoderma lucidum* can also be referred to as *Ganoderma lingzhi*, whereas *Ganoderma japonicum* is sometimes known as *Ganoderma tsugae*. The former uses the familiar term *lingzhi* (numinous mushroom) to denote the species while the latter borrows the Japanese name for coniferous tree (*tsuga* 榧), on which the variety predominantly grows.

were mushrooms. Grounding his views in the work of ethnomycologist R. Gordon Wasson, Joseph Needham proposed that the *lingzhi* of Daoist lore was the iconic red-capped speckled mushroom known as fly agaric (*Amanita muscaria*), the same fungus that produced the vision-inducing medicine of immortality referred to as *soma* in Vedic sources<sup>5</sup>. Needham's view echoed that of the French Jesuit Pierre-Martial Cibot (1727–1780), who first identified the *zhi* as «ramified agaric» (Agaric ramifié) (see Fig. 1) in 1779. Needham also partly based his theory on an unpublished study by Michel Strickmann dating from 1966, which remains to date one of the most complete treatments of numinous mushrooms in early and medieval Daoism. Strickmann unequivocally regards the *lingzhi* as a mushroom, and he documents its contribution to fertility symbolism, immortality cults, and medical (both pharmacological and toxicological) knowledge within the Chinese religion; he concludes his survey with the proposition that numinous mushrooms were most likely consumed for their psychoactive properties in the context of contemplation methods or visionary rituals<sup>6</sup>.

Setting aside for the time being the question of the substance's entheogenic qualities to return to that of whether the *lingzhi* is even a fungus to begin with, some early Chinese sources appear to undercut the «mushroom» translation that modern scholars favor. The second-century lexicography, the *Explanation of Graphs and Analysis of Characters* (*Shuowen jiezi* 說文解字), is a typical counter-example

5. J. Needham, *Science and Civilisation in China*, V, 2, Cambridge 1974, 114–27. See also R. G. Wasson, *Soma: Divine Mushroom of Immortality*, New York 1968, 71–75 and especially 80–92. On this topic, Needham mentions an unpublished manuscript by Wasson titled «*Ling Chih* [the Numinous Mushroom]: Some Observations on the Origins of a Chinese Conception». However, in his published work, Wasson insists the Chinese merely adopted the *idea* of the numinous mushroom from the Indian *soma*, which he identifies as fly agaric (*Amanita muscaria*). He does not pronounce himself on the presence or actual ingestion of fly agaric in China. Instead, he speculates that since the Chinese were working from second-hand knowledge and thus unable to identify let alone locate the *soma* plant/fly agaric (i.e. *lingzhi*) in China, they confounded it with *Ganoderma lucidum*. Needham, *Science and Civilisation*, 121, is more assertive in his claims that the *lingzhi* was indeed fly agaric, which was attested in China early on; he even quotes a personal communication with Wasson in which the latter concedes that the Chinese must have been familiar with it.

6. M. Strickmann, «Notes on Mushroom Cults in Ancient China», Ghent 1966, 21–22.

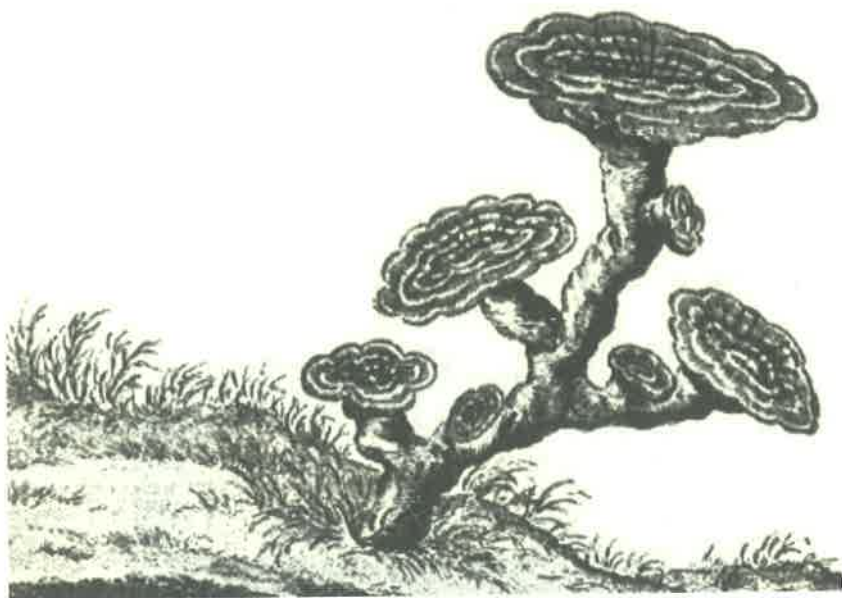


Fig. 1. Depiction of the *lingzhi* 靈芝, termed 'ramified agaric' from Pierre-Martial Cibot, «Notice du mo-kou-sin et du lin-tchi», in Id., *Mémoires sur les Chinois* IV, Paris 1779, 500.

since it glosses *zhi* as a «divine plant» (*shen cao ye* 神艸也). However, it should be pointed out that although early Chinese botany distinguished between fungi and plants, the headings were not considered to be mutually exclusive. Mushrooms were a subgenus of the larger category of plants (*cao* 艸; 草), and thus, referring to the *lingzhi* as a plant did not necessarily imply that the organism was an herbaceous plant or an «herb» as *zhi* is sometimes translated. Nevertheless, some early representations of *lingzhi* depict an organism that is much closer to an herb in likeness than a mushroom. In the following image (Fig. 2) from the Han dynasty (206 BCE–220 CE), a pair of winged immortals (*xian* 仙) clasp the growth in their hands. Correspondingly, some scholars have proposed «cryptogam» as a more encompassing translation for *lingzhi*<sup>7</sup>. The term refers to an organism whose means of reproduction (*gamee*in) are obscure or hidden (*kryptos*). In botany, it is used for plants that reproduce by means of

7. See for instance Needham, *Science and Civilisation*, 162.



spores, without the benefit of seeds or flowers. Medieval Chinese observers, who were fully cognizant of the fact that mushrooms reproduced differently from other plants, described this process as spontaneous manifestation (*zisheng* 自生), which can also be rendered «self-generating». Other translations that preserve the inflection of hidden or asexual reproduction include «excrecence» or «exudation», but cryptogam is perhaps the most fitting as it applies not only to mushrooms but also to algae, lichens, mosses, liverworts, and fern – to which the *lingzhi* in Fig. 2 would be an approximate match.

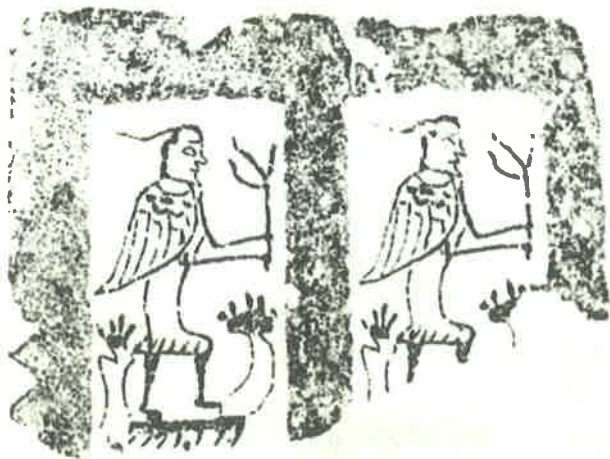


Fig. 2. Han-dynasty relief of immortals walking on clouds holding a *zhi* 芝 (mushroom) that resembles a fern. Reproduced from Nanyang Wenwu yanjiusuo 南陽文物研究所 [Nanyang Institute for Cultural Heritage], ed., *Nanyang Handai huaxiangbei* 南陽漢代畫像碑 [Han-dynasty stone reliefs from Nanyang, Hunan], Beijing 1990, fig. 171.

Yet, if mushrooms were considered a sub-category of plants (*cao*) then there is no contradiction in calling a *lingzhi* a mushroom. Cryptogam on the other hand, aside from being cumbersome, may be overly-technical and, at the same time, too broad a rendering for *lingzhi*. At any rate, the fern-like plants exemplified in Fig. 2 could very well be proper fungi; the ramified appearance of their outgrowths is strikingly similar to the erect antlers of certain *Ganoderma* mushrooms or to the branch-shaped fruit bodies of clavarioid fungi, more colloquially known as club or coral mushrooms. Moreover, keen observers will have noted that the immortals in the image are

stepping on elevated fungimorphic pedestals, an iconographic detail that reinforces the overall mycological theme of the composition.

Other depictions from the same period associate the *lingzhi* with mushrooms less ambiguously. In Fig. 3, the Queen Mother of the West (Xiwang mu 西王母) – a divine figure traditionally associated with *lingzhi* and immortality cults – is shown seated on a speckled fungoid throne, surrounded by attendants and winged immortals. Even the earliest Chinese dictionary, *Approaching the Correct* (*Er ya* 爾雅), whose entries predate the *Explanation of Graphs and Analysis of Characters* by over four centuries, used the synonymous compound *xiuzhi* 茵芝 in defining numinous mushrooms, thereby matter-of-factly equating *zhi* with fungus, *xiu* 茵<sup>8</sup>. The latter graph *xiu* is sometimes read as a specific type of fungus, but it is also understood as fungi in general, an equivalent term to *jun* 菌; indeed *xiuzhi* is a



Fig. 3. Detail from a first- or second-century mural discovered at Haotan 郝灘 depicting the Queen Mother of the West and her attendants seated atop dotted mushroom of immortality. From Li Song, *Zhongguo daojiao meishu shi* 中國道教美術史, vol. 1 [A history of Chinese Daoist art] Changsha 2011, 151.

8. The entry reads: «Zhiguan is a numinous mushroom» 渣灌, 茵芝; *Er ya*, «Shicao 釋草» (Defining plants) 39. The term *xiuzhi* 茵芝 is a known variant of *junzhi* 菌芝, which in most dictionaries is listed either as a synonym for *lingzhi* or a variety thereof.

variant for *junzhi* 菌芝, the redundant 'fungal mushroom' and one of the five categories of *lingzhi* identified in a fourth-century source discussed below.

On the basis of this and other information reviewed above, and on the incontrovertible grounds that the *lingzhi* is identified as a fungus in Chinese *materia medica*, I will adhere to the more conventional rendering of «numinous mushroom» for the remainder of this study, with the caveat that «mushroom» can also potentially extend to non-seed bearing plants. Another translation that I use interchangeably with «numinous mushroom» throughout the study is «marvelous fungus», a coinage devised by Kristofer Schipper that preserves some of the lyrical flair of the original Chinese term<sup>9</sup>.

A qualifier such as «numinous/marvelous» (*ling* 靈) or less commonly «divine» (*shen* 神) typically precedes *zhi*, but even when the graph appears on its own, there is an implicit connotation of supernatural origins. When encountered and properly consumed, *zhi* mushrooms are regarded as efficacious for both communicating with the divine and eschewing death. As a panacea and bridge to the supernatural, the *lingzhi* parallels the other famed substance of Chinese religions, the alchemical elixir. Kristofer Schipper describes *lingzhi* as «natural alchemical products»<sup>10</sup>, spontaneously occurring great medicines (*dayao* 大藥) that require no significant transformation since they are intrinsically perfect – a present from the gods to humans, a direct link to the Dao 道. Stephen Bokenkamp has pointed out that the character for *zhi* derives from etymon *zhi* 之/止 «to go, to come, remain», perhaps signaling the departure that ascending to immortality consists of, or referring to the arrival of divine beings at the side of those who are fortunate enough to consume the fungus. He adds that the *zhi* is «a plant which appears and disappears as a divine gift and heavenly sanction of the state»<sup>11</sup>. Bokenkamp elaborates that it was:

[...] not a product of earthly chemistry, but an emanation of heaven, the appearance of which proved an auspicious augury for the state, marked a

9. K. M. Schipper, *The Taoist Body*, Berkeley 1993, 174.

10. Schipper, *ibid*.

11. S. R. Bokenkamp, «The Herb Calamus and the Transcendent Han Zhong in Taoist Literature», *Studies in Chinese Religion*, 1.4 (2015), 303 n. 36. The author settles on «holy herb» or «divine herb» for *zhi* 芝; he finds «entheogenic herb» a more accurate, yet unwieldy translation.



sacred spot, or confirmed an individual's aspirations to transcendence. The sources of these plants were the stars. In ancient Chinese belief, the stars were seen as crystalline particles of the primordial ether from which all things were formed<sup>12</sup>.

Indeed, the numinous mushroom's function as a privileged line of communication with the divine was not only relevant to individual enthusiasts of self-cultivation; in political settings too, a sudden manifestation of the rare fungus was an auspicious omen, a supernatural acquiescence of a monarch's rule. In early and medieval China, a sovereign's capacity to secure a link with the divine was a crucial component of establishing political legitimacy, and as a result, emperors and aspiring potentates regularly dispatched massive missions, up to several thousand men, to search for the celestial portents or locate sites such as sacred mountains or the isles of immortals where they were susceptible to grow. The numinous mushroom's symbolic capital was eventually embodied in the *ruyi* 如意 («as you wish») wand, an often *lingzhi*-shaped ceremonial scepter that became an emblem of imperial authority, underscoring in no uncertain terms the visionary dimension of governance<sup>13</sup>.

### Early Daoist Sources

The *Records of the Grand Historian* (*Shiji* 史記) completed in 91 BCE refers to a number of expeditions entrusted with locating the lands of immortals and seeking out their divine flora, but it seems that none of them were ultimately successful<sup>14</sup>. To be sure, numinous

12. Bokenkamp, «The Herb Calamus», 294.

13. For a relatively recent general treatment of the *ruiyi* wand, with focus on its Buddhist variations, see J. Kieschnick, *The Impact of Buddhism on Chinese Material Culture*, Princeton 2003, 138–56.

14. There are a number of references to these excursions throughout the chapter on the «Feng and Shan sacrifices» (Fengshan shu 封禪書); see for example *Shiji*, 28, 24, 82, 88, 95, 100 and 103. The chapter is translated into French by Edouard Chavannes and into English by Burton Watson. For the passages cited above, see E. Chavannes, *Les mémoires historiques de Se-ma Ts'ien*, tome troisième, Paris 1898, 436–38, 499–500, 506, 512–13, 516, and 519; and Watson, *Records of the Grand Historian of China II*, New York 1961, 26–27, 57–58, 61, 65, 67, and 69. Contrasting with the general skeptical tenor of the *Shiji* regarding the outcome of the expeditions, one passage from the chapter does note that a *lingzhi* mush-

mushrooms were not easy to find. They grew in inaccessible places including steep ravines, deep forests, or the recesses of tall mountains. What is more, they remained hidden from sight to the common mortal, even to emperors. Only accomplished practitioners or those of the highest spiritual potential could aspire to catch a glimpse of the marvelous fungi. For those privileged few, a number of textual resources existed to assist them in the task of locating and identifying them. These resources were preserved in the Daoist Canon (Daozang 道藏) of 1445, which brings together earlier materials, some of them dating back over one millennium and a half.

Drawing on previous and unfortunately lost texts, the *Master Who Embraces Simplicity: The Inner Chapters* (*Baopuzi neipian* 抱朴子內篇), dated to 323, provides the earliest extant overview of numinous mushrooms, complete with an elaborate classification scheme. Its author, Ge Hong 葛洪 (283–343), was a minor local official and an aficionado of southern (Jiangnan 江南) esoteric traditions. In his chapter on «Medicines of Immortality» (Xianyao 仙藥), he identifies five genera of sacred fungi, each composed of 120 species. The mushrooms are classified under one of the five rubrics on the basis of where they grow and/or what appearance they espouse. Thus, readers find that stone mushrooms (*shizhi* 石芝), which look like rocks, grow from craggy cliffs or at the foot of lofty peaks<sup>15</sup> and wood mushrooms (*muzhi* 木芝) grow from the roots or congealed sap of millennial trees, usually evergreens<sup>16</sup>. The plant mushroom (*caozhi* 草芝) variety grows either among vegetation or in complete isolation from it, but in both cases it is morphologically identical to conventional plants, complete with stems, leaves, flowers and fruit which, one assumes, are not functionally reproductive<sup>17</sup>. Flesh mushrooms (*rouzhi* 肉芝) – all of which are to be caught, processed, and ingested – consist of exceedingly rare and long-lived creatures including a ten thousand-year-old horned toad (*wansui chanchu* 歲蟾蜍)<sup>18</sup>, a

room grew in the capital Chang'an 長安 as an auspicious portent under the reign of emperor the First Emperor of the Qin (Qin Shihuang 秦始皇; r. 247–220 BCE); see *Shiji*, 28.90; Chavannes, *ibid.*, 507–58; and Watson, *ibid.*, 63.

15. See *Baopuzi neipian* (DZ 1185), 11.197–59.

16. *Baopuzi*, 11.199–200.

17. *Baopuzi*, 11.200–1.

18. It is perhaps significant that the image of the toad (*chanchu* 蟾蜍 or *hama* 蛤蟆) is sometimes associated with entheogens in classical China, most likely on account of fly agaric's (*Amanita muscaria*) identification as the «toad mushroom» (*hama jun* 蛤蟆菌).

thousand-year-old white bat (*qiansui bianfu* 千歲蝙蝠), and an intriguing seven to eight inch humanoid figure riding in a miniature horse-drawn carriage<sup>19</sup>. Finally, fungus mushrooms (*junzhi*), briefly mentioned above, flourish where standard fungal growths proliferate:

Fungus mushrooms grow either deep in the mountains, at the base of large trees, or beside springs. They look like palatial buildings, horse-drawn carriages, dragons and tigers, human beings, or flying birds. They come in any of the five colors. There are 120 varieties for which there are illustrations. For all fungus mushrooms, one should reach them with the Pace of Yu and pick them, using a bone knife to harvest them. After drying them in the shade, making them into powder, and ingesting one square-inch spoonful, these mushrooms will make people ascend to immortality. Those of the medium grade grant several thousand years of longevity, while those of the lowest grade bestow one thousand years<sup>20</sup>.

菌芝，或生深山之中，或生大木之下，或生泉之側，其狀或如宮室，或如車馬，或如龍虎，或如人形，或如飛鳥，五色無常，亦百二十種，自有圖也。皆當禹步往採取之，刻以骨刀，陰乾末服方寸匕，令人昇仙，中者數千歲，下者千歲也。

Similar ritual instructions concerning how and when to pick marvelous fungi, in what manner and for what duration to dry them, or at which time and in what quantities to consume them are listed for the other genera as well. Since such details are crucial components of mushroom lore, they resurface in the vast majority of Daoist sources on the topic, as we will shortly see.

The *Array of the Five Numinous Treasure Talismans* (*Taishang lingbao wufu xu* 太上靈寶五符序), dated to the third- or fourth-century, is sometimes cited as another early source that mentions numinous mushrooms. The rationale for this is that the opening section of the text's second scroll contains a detailed method for «Ingesting the Essences of the Five Plants» (*Fushi wuzhi zhi jing* 寶服食五芝之精); but here, as my translation of the section's title makes clear, this is one of the unambiguous and relatively rare occasions in which the term *zhi* should be taken more generically as «plant» rather than «(numinous) mushroom»<sup>21</sup>. Indeed, the five plants in question are a

19. *Baopuzi*, 11.201-2.

20. *Baopuzi*, 11.201-2.

21. *Taishang lingbao wufu xu* (DZ 388), 1a-2b.

pine-resin derivative termed «jet» (*weixi* 威僖), sesame (*huma* 胡麻), fagara (*jiao* 椒) from Sichuan (Shuhan 蜀漢), ginger (*jiang* 薑), and calamus (*changpu* 菖蒲)<sup>22</sup>. None of these substances were self-generated or known to reproduce cryptogamically, and although some were certainly exotic, they remained obtainable with a modicum of effort and resources. They surely exhibited certain apotropaic and even life-extending properties, and as a result, they were considered remarkable growths of sorts, but they were by no means divine or supernatural in the same capacity as spontaneously manifesting numinous mushrooms.

Elsewhere, the *Array* occasionally refers to numinous mushrooms, but it does so merely in passing<sup>23</sup>. More significantly, the text mentions an otherwise unattested *Charts of the Mushrooms of Divine Immortality* (*Shenxian zhi tu* 神仙芝圖) in twelve scrolls. It does not elaborate on the title, but it could conceivably correspond to a collated version of the *Charts of Stone Mushrooms* (*Shizhi tu* 石芝圖), *Charts of Wood Mushrooms* (*Muzhi tu* 木芝圖), *Charts of the Sundry Mushrooms of the Great Whitesoul* (*Dapo zazhi tu* 大魄雜芝圖), *Charts of Flesh Mushrooms* (肉芝圖), and *Charts of the Fungus Mushrooms* (*Junzhi tu* 菌芝圖) that are listed in the bibliographic chapter of the *Master Who Embraces Simplicity* and most likely served as the source for that text's section on the five genera of numinous mushrooms<sup>24</sup>.

Thus, if we disqualify the *Array* and its passage on «Ingesting the Essences of the Five Plants», the earliest surviving source that contains a substantial treatment of numinous mushrooms remains the *Master Who Embraces Simplicity*. The second earliest is a succinct section from the fourth or fifth century *Essential Instructions on the Scripture of the Reverted Elixir in Nine Cycles of the Perfected of the Great Ultimate* (*Taiji zhenren jiuzhuan huandan jing yaojue* 太極真人九轉還丹經要訣) that is titled «The Method of Lord Mao's Five Kinds of

22. I rely on the identifications from Bokenkamp, «The Herb Calamus», 298.

23. *Lingbao wufu xu*, 1.15b. An equivalent for «numinous mushroom» that is used in this source is «mushrooms plants» (*zhicao* 芝草); see for example 1.4a, 1.13b, 1.25b, or 3.19a. The term is sometimes prefaced with the epithet «divine» (*shen* 神).

24. *Lingbao wufu xu*, 3.17b; and *Baopuzi*, 19.333. In light of the other four titles, the *Dapo zazhi tu* (Charts of the sundry mushrooms of the great whitesoul) may have been devoted to plant mushrooms (*caozhi* 草芝).

Mushroom Growths» (*Maojun wuzhong zhirong fang* 茅君五種芝茸方)<sup>25</sup>. The text supplies descriptions for five types of fungi, including instructions on consuming them and information on their expected benefits. The descriptions of two out of the five mushrooms from this account notably correspond, almost verbatim, to passages from the «plant mushrooms» and «wood mushrooms» sub-headings in the *Master Who Embraces Simplicity*, underscoring the latter's status as a *locus classicus* of all things at once Daoist and fungal<sup>26</sup>.

### Later Daoist Sources

Both «Lord Mao's Five Kinds of Mushroom Growths» and the *Master Who Embraces Simplicity* account for a large proportion of the citations in the chapters on numinous mushrooms from the monumental encyclopedias of the Tang (618-907), Song (960-1279), or later<sup>27</sup>. This testifies to the unimpeachable authority of these sources on the subject. Accordingly, after the third and fourth centuries, there was a dearth of original writing on numinous mushrooms for a few centuries. Subsequently however, the composition of the «Scripture on Growing Mushrooms from Laozi's Jade Casket: *The Secret of Divine Immortals*» (Laozi yuxia zhong zhongzhi jing shenxian bishi), hereafter «Secret of Divine Immortals», heralded a new period of production for Daoist mycological sources.

25. *Taiji zhenren jiuzhuan huandan jing yaojue* (DZ 889), 6b-8a. The moniker Lord Mao refers to Mao Ying 茅盈, one of the immortals at the origin of the Shangqing 上清 (Highest Clarity) revelations (364-370); this section was apparently appended (*fu* 附) to the rest of the text, a considerable proportion of which dates to the third century. These early layers and their centerpiece, an alchemical recipe, belonged to the Taiqing 太清 (Great Clarity) alchemical tradition before being modified and incorporated into the Shangqing corpus. The recipe was later reproduced in a number of other Shangqing sources, including the *Shangqing daobao jing* 上清道寶經 (Highest Clarity scripture on the treasures of the Dao; DZ 1353), 4.9b, and the *Maoshan zhi* 茅山志 (Chronicle of Mount Mao; DZ 304), 19.1a-b; see Fabrizio Pregadio, *Great Clarity*, 237-38; and M. Strickmann, «On the Alchemy of T'ao Hung-ching», in *In Facets of Taoism: Essays in Chinese Religion*, New Haven 1979, 146-51.

26. Compare *Taiji zhenren jiuzhuan huandan jing yaojue*, 7a to *Baopuzi*, 11.200 and 201.

27. See for example, the Tang-dynasty *Yiwen leiju* 藝文類聚 (Categorized collection of literature), chapter 98, and the Song-period *Taiping yulan* 太平御覽 (Imperial digest of the Taiping Xingguo reign period), chapters 345, 985 and 986.



*The Secret of Divine Immortals* is undated, but it was most probably composed during the seventh or eighth century. It constitutes the seventh and last section of the *Scripture on the Essentials of the Bright Mirror [Method] of the Highest Clarity* (*Shangqing mingjian yaojing* 上清明鑑要經), a collection of techniques for achieving full health or immortality that were rooted in pharmacological knowledge<sup>28</sup>. *The Secret of Divine Immortals* stresses that traditional medicines only grant health and longevity, whereas numinous mushrooms can bestow true immortality. However, most of these have to be ingested gradually, over exceedingly long periods of time in order to definitively eschew death; only mushrooms that grow atop of four special substances can grant immortality almost immediately. *The Secret of Divine Immortals* is the only source in the Daoist Canon that explains exactly how to grow and harvest such nonpareil fungi. It is also noteworthy in that it reproduces much of the structure and tenor of the *Master Who Embraces Simplicity*, positing itself as its textual heir.

Two more sources warrant mention. The first is the *Numinous Treasure Catalogue of Mushroom Plants* (*Taishang lingbao zhicao pin* 太上靈寶芝草品). Dated to the early eleventh century, this text contains illustrations of 127 types of numinous mushrooms along with brief descriptions and concise instructions on where to find them or how to pick them. Despite the epigrammatic character of its entries, the source is exceptional on account of its exhaustive scope and its vivid iconography (see Fig. 4). It was likely compiled as a throwback to the bygone (and lost) illustrated mycological inventories mentioned in the *Master Who Embraces Simplicity*, and in emulating these foundational sources so faithfully, the text established itself an enduring paragon of the genre<sup>29</sup>.

28. See *Shangqing mingjian yaojing* (DZ 1206), 8b–13a. The «*Shenxian bishi*» (The secret of divine immortals) is duplicated in the *Zhong zhicao fa* 種芝草法 (Method for sowing mushroom plants; DZ 933). The text is dated to the reign of emperor Zhao Heng 趙恒 (r. 998–1022) on account of it observing the imperial avoidance on the graph *heng* 恒 (using 恒 as a substitute). This second text displays a number of inconsistencies, from scribal errors to truncated passages, thus pointing to the *Shangqing mingjian yaojing* as the original source. For more on the *Zhong zhicao fa*, from the perspective of natural history, see Lu Di, «*Ping Daojijiao dianji 'Zhong zhicao fa' de jiaoyu jizhi*», *Zhejiang shiyongjun*, 18 (2010), 56–59.

29. Along with the chapter from the *Baopuzi* (Master who embraces simplicity), the *Taishang lingbao zhicao pin* (Numinous Treasure Catalogue of Mushroom Plants; DZ 1406) is most often discussed in secondary literature



Fig. 4. Sample numinous mushrooms from the *Numinous Treasure Catalogue of Mushroom Plants* (*Taishang lingbao zhicao pin* 太上靈寶芝草品; DZ 1406).

Finally, the last source that warrants mention is the «Chapter on the Explanation and Discernment of the Thirty-Six Varieties of Mushroom Plants' Transformations of Form» (*Bianshi sanshiliu zhong zhicao bianxing zhang* 辯識三十六種芝草變形章). The chapter is embedded in a larger section on mountain survival, which accounts for one of three scrolls (*juan*) in the tenth- or eleventh-century *Esoteric Secret Writ of the Three Sovereigns* (*Sanhuang neibi wen* 三皇內祕文)<sup>30</sup>. This source is a compilation of methods that habitually fall under the rubric of the Three Sovereigns (*Sanhuang* 三皇) tradition – an integral part of the southern esoteric lore that Ge Hong assiduously documented in his *Master Who Embraces Simplicity*. Thus, encountering a significant section on numinous mushrooms in this text confirms the close ties between early-medieval Jiangnan religious culture and the mycological path to immortality. The chapter on mushrooms from the *Esoteric Secret Writ of the Three Sovereigns* provides the names of four sets of nine numinous mush-

dealing with numinous mushrooms in Daoism. For recent examples, see Lu, «Knowledge of Macrofungi», 52–54; and S. Huang, *Picturing the True Form: Daoist Visual Culture in Traditional China*, Cambridge MA 2012, 180–85. For an Italian translation of the text, see T. Lipiello, *Le droghe dell'immortalità nell'antichità cinese e il Taishang lingbao zhicao pin*, Venezia 2007.

30. The full title of the source is *Taiqing jinque yuhua xianshu baji shenzhang sanhuang neibi wen* 太清金闕玉華仙書八極神章三皇內祕文 (*Esoteric secret writ of the Three Sovereigns, divine chapters of the Eight Poles in the immortal writing of jade florescence of the golden portal of Great Clarity*; DZ 855). The chapter on numinous mushrooms spans 2.7a–8b.

rooms (divided according to where they grow) along with details of their appearance and an account of their benefits. Subsequently, part of the text describes a talismanic seal of the Sovereign of Earth (*dihuang* 地皇) by means of which practitioners can cause medicinal herbs of immortality (*xianyao* 仙藥) and essence-plants (*jingcao* 精草) to manifest before them; from the context, it would appear that the powers of this seal extend to the thirty-six numinous mushrooms described in the previous section as well<sup>31</sup>.

### *How to Grow Numinous Mushrooms*

Among the sources surveyed above, *The Secret of Divine Immortals* is extraordinary in that it devotes a lengthy and elaborate reflection to only four mushrooms, rivaling the *Master Who Embraces Simplicity* in terms of the amount of information provided per specimen. But more importantly, it also supplies precise instructions on how to generate the prized fungi of immortality. By contrast, other texts from the Daoist Canon merely guide mushroom hunters in identifying and locating their coveted prey in the wild. Yet, despite its unique content, *The Secret of Divine Immortals* has received almost no scholarly attention.

The text opens with a passage that details how traditionally celebrated plant-based medicinal substances such as asparagus root (*tianmen dong* 天門冬), or atractylis (*shanji* 山薊) are only efficacious in extending lifespan. Admittedly, if consumed properly and without fail every single day, they may add several hundred years to one's existence, but in the end, they do not grant immortality. They cannot enable those who consume them to lightly ascend and ride the clouds, to fly about and have an audience with the Sovereign of Heaven (Tianhuang 天皇). On the other hand, the varieties of numinous mushrooms that grow on trees, mountains, or around pure springs can grant full immortality, but they require years of ingestion before yielding their benefits<sup>32</sup>. However, there are special fungi that grow atop of four special substances, and these can grant immortality to adepts upon consumption. The «Secret of Divine Immortals» explains:

31. *Taiqing jinque yuhua xianshu baji shenzhang sanhuang neibi wen* (DZ 855), 2.10b.

32. *Shangqing mingjian yaojing* (DZ 1206), 8b-9b.

Indeed, accretions on top of cinnabar, accretions on top of gold, accretions on top of laminar malachite, and accretions on top of realgar, all of them generate [numinous] mushrooms. These mushrooms are not those of utmost virtue that respond to divinity, for one can encounter them yet not see them and not be able to eat them. The reason why these mushrooms can immediately make people become immortals is because, by receiving the perfect essence of those four substances, they incorporate the harmonious breath of Heaven and Earth and Yin and Yang along with its fragrant fluids; and by means of this they accomplish generative transformation. These [four] medicines are in fact divine on account of the basic nature of those four substances<sup>33</sup>.

其積丹砂之上，積黃金之上，積曾青之上，積雄黃之上，皆生芝。此芝非至德感神者，逢而不見，而不得食也。此芝所以能使人立仙者，受此四物之至精，含天地陰陽之和氣，蒸薰之津液，以得生成，其味乃神於此四物之本體也。

The passage sketches out the rationale for these mushrooms' exceptional potency. The fungi grow atop mineral substances that have inordinately high concentrations of harmonious breath (*heqi* 和氣) from Heaven and Earth and Yin and Yang. It is no coincidence that these same substances are highly-valued commodities in Chinese alchemy for compounding elixirs of immortality. Through a transfer of perfect essence (*zhi jing* 至精), the fungi that grow on them acquire the harmonious breath of their respective mineral along with the generative and life-giving properties of Heaven and Earth and Yin and Yang.

The text then supplies detailed instructions on how to grow potent mushrooms from the four mineral substances in question. The first is generated from laminar malachite (*cengqing* 曾青; lit. «layered blue»):

On a day at the beginning of spring, dig up the ground at the [shaded] East-northeast area of a household. Whether it is on the inside or the outside of the dwelling does not matter; it is only necessary to obtain [a site with] good soil that is not too ashen. Dig and make hole that is three feet deep and three feet across. Take one catty [1.3 pounds] of laminar malachite mineral and process it into grounds. Wrap the grounds in a sheep's [skin] to keep them together. Sprinkle with half a liter of blue cockscomb (*Celosia cristata*) [and place them in the hole]. Cover with soil and pound on top.

33. *Shangqing mingjian yaojing*, 9b.

After seven days, there should be blue clouds that come and cover the site, and after seventy days, it will generate blue breath that [rises and] connects with the blue clouds above. After a hundred days, a [blue] mushroom will sprout atop the site, as shown in the following image [the image is missing]. On a *yinmao* day following sunset, make an offering of three feet of blue silk, and while grasping a bone knife, perform the Pace of Yu and cut out the mushroom. [Depart] and be careful not to look back [after completing the harvest]. Then, return to dry the mushroom in the shade for one hundred days and process it into grounds. Ingest one spatula full and take it thrice daily by means of fragrant well water. When the mushroom is entirely consumed, you will immediately be able to lightly float about. Gods will arrive to welcome you. You will ascend to Heaven in broad daylight and be as limitless as Heaven and Earth<sup>34</sup>.

當以立春之日，掘家東寅地，宅內外无在也，要欲得善土非灰壤者。掘為坑，令深三尺，方三尺。以曾青一斤，治為屑，裹以羊附來，沃以青菹一升，復其土，築其上。七日當有青雲來覆其上，七十日生青氣，連其上青雲也。百日上生芝，其狀如圖。以寅卯之日，從日下以青繒三尺執骨刀，禹步而刺取之，慎无以顧也。歸，陰乾百日，治為屑。服一刀圭，以井花水，日服三。芝盡，即能輕舉，當有神來迎之，白日昇天，與天地无窮矣。

Such precise ritual directives and their strict observance are paramount in mushroom lore. Here, many of the elements from this section on laminar malachite fungi are consonant with the passage on fungus mushrooms (*junzhi*) in the *Master Who Embraces Simplicity*, from the mention of the exorcistic Pace of Yu and the bone knife to the specifics of drying and grinding. The instructions in *The Secret of Divine Immortals* contain many of the same ritual details and follow the same sequence as those that Ge Hong penned; they are essentially a more intricate version of what can be read in the pages of the *Master Who Embraces Simplicity*, a source that set the standard for texts on numinous mushrooms and was still used as a template over five hundred years after it was written. Directives for each of the remaining three types of mushrooms follow the same ritual blueprint as well. This is not the venue to present a full translation of the text, but since their particulars are ingredient to understanding what *The Secret of Divine Immortals* expounds, I will nevertheless provide a

34. *Shangqing mingjian yaojing*, 10a-10b.



short paraphrase of the sections on cinnabar (*dansha* 丹砂), gold (*huangjin* 黃金), and realgar (*xionghuang* 雄黃).

In order to grow cinnabar mushrooms adepts are enjoined to make a hole that is eight feet (*chi* 尺) deep and eight feet across, on a south-facing slope of a mountain oriented towards the south. They should take two catties (*jin* 斤) or roughly 2.6 pounds of pulverized cinnabar mixed with processed red-colored realgar and sprinkled with Ningpo figwort root (*xuanshen* 玄參), and burry it. After eight days, red clouds appear and after eighty days, a smoke-like red breath will emerge from and cover the site. Eventually, after one hundred days, a red mushroom will sprout. On a *siwu* 巳午 day, after sunset, adepts should make an offering of eight feet of scarlet silk, and while performing the Pace of Yu, they should harvest the fungus with a wooden knife. They must leave the site without turning back. After drying and pulverizing the mushroom, they should ingest it daily. When it is completely consumed, all illnesses inside the body will turn into turbid blood and evacuate from the mouth and nose<sup>35</sup>. Thereafter, adepts will «immediately be able to pace on water, [pass through] flames and fire without getting burned, and cut out grains and not eat [without being hungry]». The text adds that «those who [wish] to depart from the world should not engage in intercourse and should cut out meats; then there will be a dragon carriage and multiple immortals coming to welcome them»<sup>36</sup>.

The method for growing mushrooms from gold consists of digging a hole six feet deep and six feet across at the beginning of autumn on the north-facing slope of a mountain oriented towards the west and placing one catty of heated gold sprinkled with a mixture of grasses and clarified ale (*qingjiu* 清酒) into the ground. After six days, white clouds emerge, and after sixty days, a yellow steam-like breath appears. After one hundred days a yellow mushroom will sprout. On a *shenyou* 申酉 day after sunset, adepts must make an offering of white silk six feet in length and then harvest the mushroom by means of a gold blade while performing the Pace of Yu<sup>37</sup>. After drying it and ingesting three fingers worth per day, «the old

35. *Shangqing mingjian yaojing*, 10b-11b.

36. 即能步行水上, 焰火不灼, 絕穀不食。去世者勿入房室, 絕血食, 即有龍車衆仙來迎之; *Shangqing mingjian yaojing*, 11b.

37. *Shangqing mingjian yaojing*, 11b.

will be young anew, the young will develop a beautiful countenance, white hair will all turn black, and lost teeth will grow back»<sup>38</sup>.

Finally, the realgar mushroom is grown at the beginning of winter, on the north-facing slope of a mountain angled towards the north. A hole five feet deep and five feet across is dug. Three catties (roughly seven pounds) of ground realgar are mixed with approximately one liter of hemp oil (*mayou* 麻油) and placed in a copper pot. The pot is put in the hole, covered in another cattie of powdered realgar, and buried. After five days, black clouds will emerge, and after fifty days a purple breath will manifest. When it reaches one hundred days, a purple mushroom will sprout. Despite its small size, this particular mushroom glows with a radiance that can be seen from a distance of up to one *li* 里, or a third of a mile. On a *rengui* 壬癸 day, after sunset, adepts must make an offering of black silk five feet in length, and harvest the mushroom with a blade made from an animal's horn while executing the Pace of Yu. After drying, pounding, and ingesting the substance at the rate of five spoonfuls per day (at the midnight hour, facing north), adepts will see their years turned back and have immortal officers visit them<sup>39</sup>. They will «enjoy longevity coterminous with Heaven. Stabbing and slicing will not pierce them, nor will fire burn them, and submerging them in water will not [even] wet them.» Moreover, «the five poisons will keep away from them, evil spirits will be dispelled, and they will not know hunger or thirst»<sup>40</sup>.

In a nutshell, *The Secret of Divine Immortals* describes a practice in which adepts harvest and consume fungal growths that sprout atop a divine class of minerals identified with four of the Five Agents (*wuxing* 五行). As highlighted in the passage translated above, the mushrooms self-generate by responding to, absorbing, and transforming the essence (*jing*) of the minerals on which they grow. Each of the minerals embodies the breath (*qi*) of Heaven and Earth, and Yin and Yang, which is passed on to the mushrooms through their

38. 老者更少, 少者華色生, 頭白皆黑, 齒落更生; *Shangqing mingjian yaojing*, 11b-12a. To these benefits, the corresponding passage in *Zhong zhicao fa* (DZ 933), 3b adds that adepts will acquire the faculty of flight and omniscience, and immortals and jade maidens will follow and serve them.

39. *Shangqing mingjian yaojing*, 12ab.

40. 壽與天同, 斫刺不入, 火燒不燥, 溺水不濕, 五毒遠之, 邪鬼避之, 不知飢渴; *Shangqing mingjian yaojing*, 12b.

essence. Thus, just as the mushrooms are transformations of the four minerals' essence, the four minerals are transformations of celestial/Yang and earthly/Yin breaths. These breaths are themselves transformations of divinity (*shen*). In Daoist theology, divinity corresponds to supreme Unity (*yi* —), which in cosmogonic terms, immediately follows the fountainhead of the Dao. Through their essence, which is derivative of breath and divinity, numinous mushrooms therefore provide a line of access to the Dao.

### *Daoist Entheogens*

Although the notion of transformation (*bianhua* 變化) and its parent concept of perfection (*cheng* 成; alt. «completion») are crucial to a wide gamut of Daoist practices, they are particularly germane to alchemy. Traditionally, there existed a close association between alchemical elixirs and numinous mushrooms. Marvelous fungi were looked upon as naturally occurring elixirs of the highest quality, and some sources even prescribed combining fungal ingredients with mineral ones in order to create a superlative class of elixirs<sup>41</sup>. On more than one occasion, *The Secret of Divine Immortals* is infused with alchemical allusions; in the following example, the text draws a functional analogy between producing an incorruptible metal and generating the death-eschewing body of the immortal:

The designs of Heaven and Earth and Yin and Yang, they can transform and generate the ten thousand things. One cannot say they do not exist. [...] How can it be said that there is no resonance [in their workings]? If there is a cauldron of cinnabar, it can be transformed into mercury because it

41. See for instance, *Zhoushi mingtong ji* 周氏冥通記 (Mr. Zhou's records of his communication with the unseen; DZ 302), 4.19a-20b. Strickmann, «On the Alchemy of T'ao Hung-ching», 159-62, supplies a detailed paraphrase of the passage in the context of his discussion of the intersection between alchemy and what he terms «occult horticulture». See also *ibid.*, 169-78 for a broader consideration of some key issues. The instructions for generating the hybrid elixir — which is produced from a cinnabar infusion and a nine-stalked purple fungus — are similar to those of the *Shangqing mingjian yaojing*. They notably involve powdering the dried mushroom, burying the mycomineral substance, exhuming it with the Pace of Yu, and consuming it after processing.

reacts to the essence of Great Yang. What thing is there that cannot transform? And if it transforms, what thing is there that cannot be perfected<sup>42</sup>?

天地陰陽之數，能變生萬物，不可云无。[...] 何謂之不感乎。其有丹砂之汞，變成水銀，感動太陽之精，何物之不可化，化何物而不成？

In the same way that cinnabar (a Yang substance) activates its inherent Yang constituents when combined with sulfur (another Yang substance) in order to complete its alchemical perfection into mercury, so too people with inherent inclinations<sup>43</sup> towards immortality awaken these propensities in response to their ingestion of numinous mushrooms. The resulting alchemical reaction spurs a transformative process that consists of a gradual refinement of their coarse vitality into essence, their essence into breath, and their breath into divinity, until they reach the perfection of immortality.

While the actual effects of ingesting mushrooms on longevity are difficult to ascertain, previous scholarship has operated under the assumption that practitioners were consuming real fungi. Albeit scant, there is some evidence that Daoists integrated the use of certain psychoactive substances into their practices – cannabis is often cited, as is wolfsbane/aconite, which was certainly popular in literati circles during the Six Dynasties (220–589)<sup>44</sup>. In view of the amount of mycological lore in Daoist Canon, the ritual use of hallucinogenic mushrooms would not seem out of place. The visions of celestial palaces, interactions with supernatural beings, and the experience of flying through the clouds that are included as benefits of

42. *Shangqing mingjian yaojing*, 12b.

43. The text refers to this potential as the «destiny of [immortal] bones» (*guming* 骨命); see *Shangqing mingjian yaojing*, 12b.

44. On cannabis use in Daoist rituals, see for example Needham, *Science and Civilisation* 150–52; Sakade Yoshinobu, *Taoism, Qi, and Medicine*, Osaka 2007, 99–100; K. Schipper, «Taoism: the Liturgical Tradition», *Bellagio* 1968, 34–35; and Strickmann, «On the Alchemy of T'ao Hung-ching», 172. Li Hui-Lun's pair of articles, «Hallucinogenic plants in Chinese herbals», *Botanical Museum Leaflets Harvard University*, 25.6 (1977), 161–81 and «An Archaeological and Historical Account of Cannabis in China», *Economic Botany*, 28 (1974), 437–48, along with Touw Mia, «The Religious and Medicinal Uses of Cannabis in China, India, and Tibet», *Journal of Psychoactive Drugs*, 13.1 (1981), 23–32, provide more general analyses of cannabis use in classical China. For wolfsbane/aconite, see F. Obringer, *L'aconit et l'orpiment: drogues et poisons en Chine ancienne et médiévale*, Paris 1997.

consuming fungal elixirs certainly lend some weight to the claims made by Needham and others that, in an effort to precipitate experiences of communion with the divine, some Daoists ritually swallowed psychoactive fungi such as fly agaric or perhaps the psilocybin-rich *Gymnopilus spectabilis* (which is both attested in China and closer in appearance to the *Ganoderma lucidum* identified with the numinous mushroom in Chinese *materia medica*). In this light, *The Secret of Divine Immortals* could have been a grower's guide for serious mycological enthusiasts who doubled as psychonauts, something akin to Terence McKenna's popular how-to handbook for producing magic mushrooms<sup>45</sup>.

However, my intention here is neither to support nor dispute the claim of Daoists ingesting mind-altering fungi. Rather, I submit an alternate reading of *The Secret of Divine Immortals* that could perhaps be extended to some of the other sources on numinous mushrooms in the Daoist Canon. In this respect, the fleeting mention of the triple concepts of essence (*jing*), breath (*qi*), and divinity (*shen*) in *The Secret of Divine Immortals* belies their importance in understanding the transformative logic of numinous fungi. The text proposes that by ingesting the powdered remains of numinous mushrooms, adepts are suffusing their bodies with the Dao – via its gradually coarser transformations as divinity/unity, breath/minerals, and essence/mushrooms – and eliciting transformative responses within themselves that will gradually refine their physical coarseness into essence, their essence into breath, and their breath into pure spirit or divinity. Once this is achieved, in a final step, adepts can rejoin the Dao (see Fig. 5).

This specific formulation of the generative faculties of divinity, breath, and essence, along with their inversion (*ni* 逆) or reversal (*fan* 返; 反) in a program of return (*huan* 還; *gui* 歸) to the Dao is fundamental to alchemy – in particular to Internal Alchemy (Neidan 內丹). This tradition rose to prominence in the Tang dynasty with its program of transformative visualizations elaborated on the basis of fully internalized alchemical processes. To encounter the language and dynamics of Internal Alchemy in *The Secret of Divine Immortals* is highly suggestive of an inward and contemplative focus of its prac-

45. See D. and T. McKenna, under the pseudonym O. T. Oss and O. N. Oeric, *Psilocybin: Magic Mushroom Grower's Guide*, Berkeley 1976.



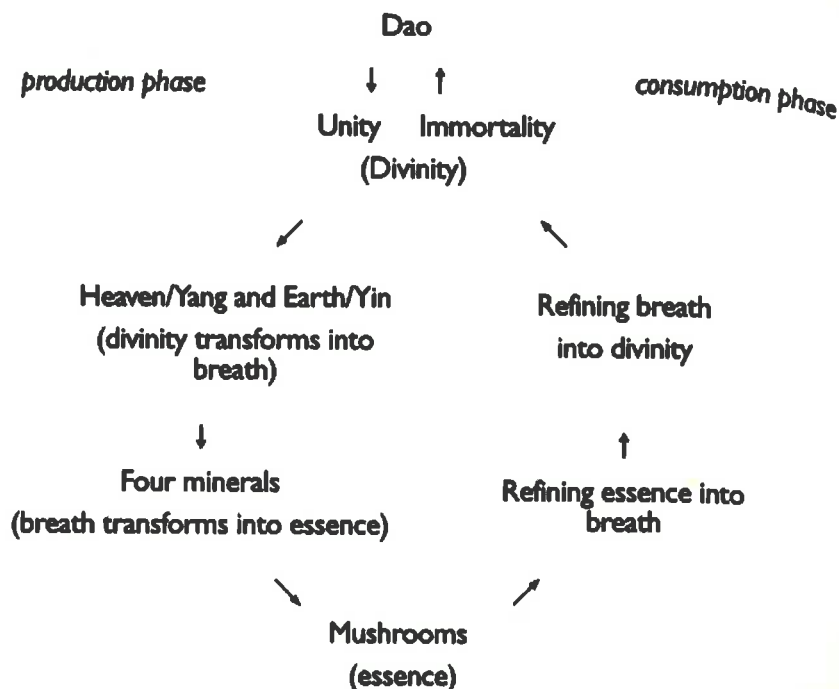


Fig. 5. Schematic representation of the transformation processes involved in the generation and ingestion of numinous mushrooms on the basis of «The Secret of Divine Immortals».

tices. Thus, our source and others like it might very well have functioned as visualization manuals. In this optic, adepts grew, picked, and ingested numinous mushrooms in their mind's eye, as part of a lengthy and elaborate meditation technique. In fact, approaching *The Secret of Divine Immortals* as a meditation manual sheds some light on passages that otherwise resist deciphering. For example, in the introductory section to the text examined above, a line specifies that the four mushrooms which grow atop prized minerals «are not those of utmost virtue that respond to divinity, for one can encounter them yet not see them and not be able to eat them»<sup>46</sup>. This statement is perplexing if readers expect to produce actual

46. 此芝非至德感神者，逢而不見，而不得食也；*Shangqing mingjian yaojing*, 9b; see above, 369.

mushrooms by following the instructions provided in the text. However, when read from the perspective of visualization practices, the excerpt appears to be underlining that if the growths from *The Secret of Divine Immortals* are of a different class than the traditional numinous mushrooms of «utmost virtue that respond to divinity», it is not because they are inferior; rather, they are different because contrary to their «real» counterparts, they cannot be seen or eaten in conventional ways. Instead, these intangible mushrooms are «encountered» and consumed internally, during meditation.

That certain sources on numinous mushrooms served as meditation manuals may not be an earth-shattering hypothesis, but it is revealing with respect to how substances – herbal, fungal, mineral, or other – were understood in early and medieval Daoism. In a nutshell, whether a substance physically existed was not particularly relevant; when consumed in the mind's eye, it was expected to be just as potent if consumed orally. This was notably the case for alchemical elixirs even before the development of Internal Alchemy<sup>47</sup>, and given the confluence of alchemical and Daoist mycological discourses, it is not unexpected that the notion would apply to numinous mushrooms as well. Yet, the question remains: in those instances in which numinous mushrooms were visualized, how could one account for them retaining their entheogenic properties?

Part of the answer lies in the Daoist ritual program. Before engaging in most meditative practices, adepts had to undergo purification retreats (*zhai* 齋) that often involved reductions in food intake and diminished sleep. In many cases, they engaged in a trance-inducing monotonous recitation of scriptures, registers, or invocations. They also underwent prolonged sensory deprivation by secluding themselves in oratories, the so-called «quiet chambers» (*jingshi* 靜室). In his study on Daoist investiture rituals, Charles Benn identified one Six Dynasties scripture that comments on the intended effects of these preliminary measures:

47. In the sources of operative «external alchemy» (*waidan* 外丹), meticulous instructions for compounding actual elixirs – which included descriptions of chemical reactions and processes – could also be used for the purpose of ecstatic visualization practices. Since the base ingredients for making elixirs were both exceedingly rare and expensive, it stands to reason that contemplation became the most common application of alchemical texts. See, for instance, N. Sivin, «The Theoretical Background of Elixir Alchemy», in *Science and Civilization in China*, V, 4, Cambridge 1980, 210–11.

Those who engage in purification retreats and prolong quietude, who purify their thoughts and are absorbed in the mysterious, who recite scriptures and repent their transgressions, who burn incense and show reverence, will see flying celestial people. Immortal lads and jade maidens will descend to them. Some will hear their virtues praised [by voices] from the air around them, others will see rays of light illuminate their bodies, others still will hear the tinkling of gold and jade [chimes] and the sounds of the eight tones<sup>48</sup>.

夫人清齋久靜，精思耽玄，誦經悔罪，燒香禮拜，將見飛天人矣，仙童玉女降於子矣。或聞空中為稱善，或光影照身，或聞金玉之響，八音之聲。

Benn concludes that these preparatory rites deliberately cultivated states in which adepts became naturally more susceptible to otherworldly visions, auditory hallucinations, or ecstatic experiences<sup>49</sup>. Thus, certain components of Daoist retreats were inherently entheogenic, thereby cancelling the need for external aids such as psychotropics.

In some instances however, mild hallucinogens were employed. The ubiquitous incense or aromatics (*xiang* 香) that are mentioned in the previous passage and were routinely burned in censers and lamps at various intervals during preliminary purifications were sometimes made of cannabis<sup>50</sup>. Immersed in billows of psychoactive holy smoke inside the poorly ventilated and confined space of the oratory (usually 19 ft. by 12 ft., with a single small paper-covered opening to let in a sliver of light), adepts augmented the phantasm-inducing effects

48. *Shangqing taiji yinzhu yujing baojue* 上清太極隱注玉經寶訣 (Precious instructions on the Jade Scripture: a secret commentary by the [Perfected of the] Supreme Ultimate; DZ 425), 17b; see also *Wushang biyao* 無上祕要 (Unsurpassed secret essentials; DZ 1138), 47.1ab. See C. Benn, *The Cavern-Mystery Transmission: A Taoist Ordination Rite A.D. 711*, Honolulu 1991, 105 for a translation of the passage.

49. Benn, *Cavern-Mystery Transmission*, 105–6. For a biomedical/neurological consideration of this point, see, for example, N. Goodman, «The Serotonergic System and Mysticism: Could LSD and the Nondrug-Induced Mystical Experience Share Common Neural Mechanisms?» *Journal of Psychoactive Drugs*, 34:3 (2002), 263–72.

50. For example, citing the *Dongshen jing* 洞神經 (Canon of the cavern of divinity), *Wushang biyao*, 66.8ab mentions cannabis oil (*mayu* 麻腴) as the principal ingredient in a type of incense destined to be burned in ritual lamps (*deng* 灯); see also Needham, *Science and Civilization*, 150, and Schipper, «Taoism: the Liturgical Tradition», 34–35.

of the preparatory retreat. In concert with the sustained inward gaze of contemplation practices, all these elements came together as a calculated discipline designed to precipitate divine apparitions<sup>51</sup>. In such a setting, meditating on numinous mushrooms would undoubtedly have the same perceived results as actually ingesting fly agaric or some other entheogenic fungus.

### *Concluding Thoughts*

This study opened with a brief overview of the numinous mushroom in classical China and a treatment of related terminological concerns. In its early history, the label (*ling*)*zhi* was applied to any growth, vegetal or fungal but also mineral and animal, that was a self-generated spontaneous manifestation of stars, cosmic principles, or divine entities. These were considered auspicious excrescences that granted health, long-life, and even immortality, but they also embodied a direct line of communication with the divine. In this capacity, the *lingzhi* represented heavenly approbation of an undertaking, from individual self-cultivation to the governance of a kingdom. From the fourth or fifth century onward, *lingzhi* were increasingly identified as mushrooms. In pharmacological and medical sources, they were treated as a rare but ultimately conventional fungus known as *Ganoderma lucidum*. By contrast, in religious sources, they retained much more of their original celestial or visionary character, leading to some speculation as to whether Daoists might not have been denoting fly agaric (*Amanita muscaria*) or other entheogenic mushrooms.

Among the early texts from which we may glean a representative Daoist view of the marvelous fungus, the fourth-century *Master Who Embraces Simplicity* remains the most important, largely on account of its detailed survey of divine mushrooms and their harvesting methods. This source's impact is measurable centuries later in subsequent Daoist mycological catalogues. Among these, the «Scripture on Growing Mushrooms from Laozi's Jade Casket: *The Secret of Divine Immortals*» is remarkable in its lengthy treatment of numinous mushrooms, but also because it is the only source from the Daoist Canon

51. Benn, *Cavern-Mystery Transmission*, 106.

that contains complete instructions on growing, harvesting, processing, and properly ingesting them. The text enjoins adepts to grow fungi from four precious alchemical minerals. In accordance with the principles of Daoist cosmogony, the cultivated growths contain the essences (*jing*) of these minerals, which are themselves distillates of the breaths (*qi*) of Heaven and Earth and Yin and Yang, which in turn contain the divinity (*shen*) that directly derives from the Dao. By consuming the numinous mushrooms, adepts absorb the myco-mineral essence and use it to invert the cosmogonic process. They use it to refine their own essence into breath and their breath into divinity. In an ultimate step, they refine divinity in order to rejoin the Dao as immortals.

The methods for growing and ingesting mushrooms in *The Secret of Divine Immortals* are strikingly identical to the self-cultivation template for Internal Alchemy visualizations. Since these are firmly focused on the inner plane, we may infer that the practice from *The Secret of Divine Immortals* too was deployed internally, as a contemplation technique. In this case, it was not the psychotropic agents in the mineral-laced fungi that caused visions of attending immortals, celestial palaces, and ethereal flight. Rather, it was adepts who generated these visions in their minds. The vividness of these phantasms was augmented by an elaborateentheogenic ritual regimen that adepts undertook in preparation for most Daoist practices – a calculated and cultivated discipline of preliminary steps that predisposed practitioners to trance or ecstatic apparitions.

In recent years, material culture has proven a fertile methodological ground for research on East Asian religions. In combination with the history of medicine more generally, and pharmacology, ethnobotany, and ethnomycology more pointedly, it is a promising avenue of inquiry certain to yield valuable insights on substances such as numinous mushrooms. At the same time, this study has hopefully succeeded in showing that material culture can also manifest immaterially. If substances were equally effective for practitioners regardless of whether they were physical or envisioned, we may use this preliminary inquiry as a springboard into the project of mapping the vast utopian reality projected by the Daoist inward gaze, or on a more comprehensive scale, that of surveying the even vaster universe of the imaginal.



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## ABSTRACT

Dominic Steavu, *The Marvelous Fungus and The Secret of Divine Immortals*

One of the most peculiar avenues to immortality in Daoism is the ingestion of «numinous mushrooms» (*lingzhi* 靈芝), a topic that has received little scholarly attention despite being a recurring theme in medieval Daoist texts. This study first provides some basic background knowledge about numinous mushrooms before surveying the principal mycological sources from the Daoist Canon. The second part of the study centers on one of these sources, the seventh- or eighth-century «Scripture on Growing Mushrooms from Laozi's Jade Casket: The Secret of Divine Immortals», (Laozi yuxia zhong zhongzhi jing shenxian bishi 老子玉匣中種芝經神仙祕事). Most texts on numinous mushrooms describe how to identify and harvest marvelous fungi in the wild, but «The Secret of Divine Immortals» alone explains how to generate them. A focused analysis of the treatise reveals close connections to Internal Alchemy (Neidan 內丹) and its contemplation methods, strongly suggesting that in some instances, the ingestion of numinous mushrooms may have been a process that was undertaken in the mind's eye in the context of visualization practices.

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## CONTENTS

### LONGEVITY AND IMMORTALITY EUROPE-ISLAM-ASIA

- vii Agostino Paravicini Bagliani, *Longevity and Immortality. Europe-Islam-Asia. Introductory Remarks*

#### GENERAL PERSPECTIVES

- 5 Chiara Crisciani, *Death as a Destiny and the Hope of Long Life in the Latin Middle Ages*
- 27 Donatella Rossi, *Faith or Fate? The Path Towards Immortality According to the Tantric Traditions of Tibet*

#### PREDICTING LIFE AND DEATH

- 49 Danielle Jacquart, *Est-il possible et légitime pour un médecin médiéval de prévoir la longévité d'un patient?*
- 79 Joseph Ziegler, *Why Did the Patriarchs Live so Long? On the Role of the Bible in the Discourse on Longevity Around 1300*
- 113 Rolf Scheuermann, *«One Will Quickly Die!». Predictions of Death in Three Tibetan Buddhist Divination Manuals*

#### PROLONGING LIFE

- 133 Agostino Paravicini Bagliani, *The Prolongation of Life and its Limits. Western Europe, XIII<sup>th</sup>-XVI<sup>th</sup> c.*
- 155 Charles Burnett, *Natural Death and the Alleviation of Old Age in the Middle Ages*

## CONTENTS

- 169 Joël Coste, *La «Mort de Vieillesse» dans les statistiques de mortalité (XVII<sup>e</sup> siècle - XXI<sup>e</sup> siècle): une catégorie problématique*
- 183 Didier Kahn, *Quintessence and the Prolongation of Life in the Works of Paracelsus*
- 227 Matthias Heiduk, *A Quest for Longevity? A New Approach to the Earliest Testimonies of Medieval Alchemy*
- 255 Michel Pastoureau, *Longévité animale dans les traditions médiévales*

## ATTAINING IMMORTALITY

- 267 Francesco Santi, *Teologie della resurrezione della carne (Secc. XIII-XIV)*
- 283 Anna Caiozzo, *Rêves d'immortalité: trois rois, deux héros, un prophète*
- 303 Manuel Förg, *The Centaur's Death. The Myth of Chiron and the Transfer of Immortality*
- 321 Basma A. S. Dajani, *Immortality Through Love in Classical Arab Literature*
- 337 Barbara Hendrichske, *Modes of Avoiding Death in the Scripture on Great Peace (Taiping jing 太平經)*
- 353 Dominic Steavu, *The Marvelous Fungus and The Secret of Divine Immortals*
- 385 Fabrizio Pregadio, *Which is the Daoist Immortal Body?*

## INDEXES

- 411 *Index of persons and locations*, by Agostino Paravicini Bagliani
- 421 *Index of manuscripts*, by Agostino Paravicini Bagliani