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# DALBERGIA ODORIFERA, GRUS JAPONENSIS AND SACRED MEMORY

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## **Dalbergia Odorifera, Grus Japonensis and Sacred Memory**

### **Synopsis:**

This study is about *Dalbergia odorifera*, *grus japonensis* and Sacred Memory in the Taoism.

I. Introduction

II. Vital Scientific Connection between *dalbergia odorifera* and *grus japonensis*

III. Auspicious signs produced by memory of burning of *dalbergia odorifera* and *grus*

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# Dalbergia odorifera, grus japonensis and Sacred Memory<sup>1</sup>

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Abstract:

In zhai and jiao rituals of the Taoist, only the lighting of Dalbergia odorifera or the incense with the element of dalbergia odorifera can attract Grus japonensis. The phenomenon is conceived as the heavenly response to the prayers. Xian He is Grus japonensis and since the ancient time, it has been associated with the image of being immortal, auspicious signs and longevity. In Taoism, it is the spiritual animal which carries the immortal between heaven and earth. In this study, first, it explores the scientific reference of the efficacy of the religion. Secondly, it attempts to analyze how dalbergia odorifera and Grus japonensis become sacred association and memory. Thirdly, by dalbergia odorifera and dance of Grus japonensis presented by humanity and art, it probes into the spread of immortal religion of Taoism between the Taoists and common world. This study allows people to more clearly recognize the interaction between science and religion which finally becomes unforgettable sacred memory for the public.

Keywords: dalbergia odorifera, Grus japonensis, Taoism, sacred

## I. Introduction

As an exotic incense, dalbergia odorifera (Figure 1) has been recorded in *Wu Shang Mi Yao* (Volume 88 - *Yi Xingpin* 易形品), a Taoism scripture during Six Dynasties period, serving mainly as an exemplary record for Taoist rites in functional medication of life cultivation and health preservation so as to achieve multiple effect of health care, beauty and well-being. Till the mid-Tang Dynasty, Li Xun quoted from the legend of god in his *Haiyao Bencao*:

“Burned with a variety of incenses, it’s smoke flies up to the heaven and moves the god who then sends the grus japonensis. To burn this kind of incense during Taoism rituals is the most appropriate. In this way, Taoist will obtain the most efficacious Ofuda, hence the name of dalbergia odorifera.”<sup>2</sup>

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<sup>1</sup> This paper belongs to the Major Project “The History of Science and Technology in Taoism: Song through Qing” (Grant No. 13&ZD078).

<sup>2</sup> Chen Guiting editor, *General Explanation of Compendium of Materia Medica*: "Mu Vol. 34: Dalbergia odorifera", Beijing wenwu.,1992,Di yi ban, p.1589. Li Xun from Tang Dynasty. *Haiyao Bencao*, from Chinese Text Project: Mu Vol.

Today, scholars conduct study of *dalbergia odorifera* from the perspective of herbalism and treat this paragraph as the earliest herbal literature of *dalbergia odorifera*<sup>3</sup>; however, since Li Xun's idea was originated from god legend, it can be inferred that before the mid-Tang Dynasty, *dalbergia odorifera* has been known and widely applied. From the perspective of religious interaction, it can be said subjectively that "the god was moved and sent the *grus japonensis*". But this paper tends to understand the relationship between *dalbergia odorifera* and *grus japonensis* from a scientific point of view in order to clarify why *grus japonensis* appeared in rituals was regarded as an epiphany of god and to understand how science and religion are intertwined, rendering a sacred memory of common people.

## II. Vital Scientific Connection between *dalbergia odorifera* and *grus japonensis*

Relationship between smell and brain should be briefly illustrated before expounding on the topic of this chapter.

With regards to today's study of relationship between smell and brain, it is known that when odorant molecule enters the nasal cavity and then the top mucous membrane, they will dissolve in the moist and warm nasal mucosa. Osmoceptor of the olfactory cilia (nerve cells) will capture the message carried by these molecule, which will then pass it to the Mitral cell of the olfactory bulb through paranasal sinus and ethmoid on head, and finally to the olfactory brain through olfactory fasciculi (emotional brain and limbic system). Condition and operation of the entire olfactory system is determined by the nature of the inhaled odor and the processing process of central nervous system. When aromatic odor is diffused in the air, axons of the olfactory nerve cell will pass the message of aromatic molecules to the brain and respond; the dendrite capture aromatic molecules through mucosa; while nerve cells convey nerve messages with cynapse. These messages of smell will eventually be passed to the olfactory brain, amygdala, lower hypothalamus and cerebral cortex. The olfactory brain is responsible for screening and integration of odor messages; while amygdala and parahippocampal gyrus at the cerebral limbic system will link smell and feeling, emotion and memory. When the aromatic molecules enter into the system, they will be able to adjust the emotion and mood so as to produce an engraving effect in memory. The hypothalamus is the hub in nervous system. Hence, after absorbing a certain specific smell, smell may affect the hypothalamus and coordinate the nervous system and endocrine system. In this way, smell may, together with the limbic system, affect mood, memory and perception of the world. Also, it connects with the cerebral cortex that is responsible for thinking, affecting the ability of learning to some extent<sup>4</sup>.

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3"*Dalbergia odorifera*": <http://ctext.org/wiki.pl?if=gb&chapter=581145>

<sup>3</sup> Li Shu-Yuan, "*Herbal Nature of dalbergia odorifera*", *Strait Herbs* 9 (4), 1997, p.5-7 first put forward such idea; followed by Han Jing, Tang Xing, Ba De-Chun. "*Physical and Chemical Properties of Essential Oil of dalbergia odorifera*", *Study Journal of Traditional Chinese Medicine* 22 (7), July 2004.

<sup>4</sup> Wen You-Jun, *Fragrance and space: 30 Compulsory Courses of Professional Aromatherapy*, Taipei: Business Weekly Publications, 2006, p.85-101. Piet A. Vroon, Anton van Amerongen, Hans de Vries, translated by Hung Hui-Chuan: *Verborgen verleider: Psychologie van de reuk*, Chapter II "*Olfactory organ*" and Chapter V "*Smell and*

These research results pertaining to smell and brain will help us understand the significance of Taoism's use of *dalbergia odorifera* in terms of religion and reality.

Although it is known that use of *dalbergia odorifera* dated back to the period of the Six Dynasties, related exemplary descriptions were attributed to previously mentioned “Burned with a variety of incenses, it’s smoke flies up to the heaven and moves the god who then sends the *grus japonensis*. To burn this kind of incense during Taoism rituals is the most appropriate. In this way, Taoist will obtain the most efficacious Ofuda, hence the name *dalbergia odorifera*” quoted from god legend in the *Haiyao Bencao*, which will be the topic below.

According to the description of *Compendium of Materia Medica* 本草綱目 on “*grus japonensis*”: “With three feet in length, three feet in height and four inches in beak, they feature red dot on head, red eyes, red cheeks and green feet. They have long neck but short tail, brawny knee but slender fingers. Their white feathers are mingled with black, gray and dark green feathers. They once sang in the middle of the night, with their high-pitched straight into the heaven. The male ones will sing first, followed by the female ones, rendering a rhythmed song for the purpose of mating. They eat snakes, and fly over when they smell the fragrance of *dalbergia odorifera*, with their excrement becoming stone, probably a kind of interaction between matters of the same nature”<sup>5</sup>, we can see that this kind of creature is *grus japonensis*. Based on these faithful descriptions, we can know that “fly over when they smell the fragrance of *dalbergia odorifera*” is the biological nature of *grus japonensis*--attracted by the fragrance of *dalbergia odorifera*. Tao Zongyi of Yuan Dynasty put forward his view upon the rumor that burning of *dalbergia odorifera* may “move the god who then sends the *grus japonensis*”:

“In Taoism, people who conducts Taoist ritual are known as Gao Gong 高功, among them who are versed at this work will certainly borrow two or four *grus japonensis* from Nanyue Wei furen 南嶽魏夫人. I frequently see *grus japonensis* flying in the clear heaven, showing the mystery of natural law. Occasionally, I read *Materia Medica* 本草: “*Dalbergia odorifera* is originated from South Guizhou Province 黔南. When mingled with other incenses, its fragrance may float to the heaven, thus attracting the *grus japonensis* hovering over the altar”. Note: According to the legend of god, burning of *dalbergia odorifera* will sometimes attract the *grus japonensis*. Hence, when worshiping the stars, a large number of *dalbergia odorifera* will be used, serving as a best ritual supply for accepting ofuda from the heaven.

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*Memory*, Taipei: Business Weekly Publications, 2001. p.31-60, 120-160.

<sup>5</sup> Chen Guiting editor *General Explanation of Compendium of Materia Medica*: "Chin Vol. 47: Ch. 1 Crane", p.2030.

Burning of *dalbergia odorifera* is so efficacious that *grus japonensis* are attracted, isn't it? ”<sup>6</sup>

The article depicted a scene of “certainly borrow two or four *grus japonensis* from Nanyue Wei furen 南嶽魏夫人. *Grus japonensis* flying in the clear heaven” and other ritual work and interaction. It seems that all ritual efficacy of Gao Gong 高功 is realized out of their sincerity, moving the heaven which then sent the *grus japonensis* that were frequently seen by the author, thus leaving the appreciation of “showing the mystery of natural law”. However, Tao Zongyi, at the end of the text, calmly explained the description that burning of *dalbergia odorifera* attracted *Grus japonensis*, “in this regard, the reason why *grus japonensis* fly here is that the *dalbergia odorifera* is burned, isn't it?” He argued that flying of *grus japonensis* is caused by burning of *dalbergia odorifera* rather than a ritual efficacy.

*Grus japonensis* has long been an image of becoming immortal, auspicious, and longevous. In Taoism, it is regarded as an intelligent animal that carries the immortal between heaven and earth. In terms of current study on the habitat of *grus japonensis*, it is a wetland migratory, with its breeding places mainly distributed in the northeastern region of mainland China, Japan, Korean peninsula and Siberia. Also, it is frequently seen in winter seasons in central and southern part of China. With change of circumstances, *grus japonensis* is mainly distributed at the coastal wetlands and lakes of the middle and lower reaches of the Yangtze River, such as Jiangsu, Anhui and Shanghai.<sup>7</sup> However, be it the former central and southern part of China, or today's middle and lower reaches of the Yangtze River, they are the places where Taoism held the Taoist rites of Dong Tian 洞天 (Figure 2)<sup>8</sup>. Born in Tiantai, Zhejiang, Tao Zongyi later escaped to Sanwu Songnan at the end of Yuan Dynasty to shelter himself from wars, during which he got immersed in reading and writing<sup>9</sup>. Songnan 松南 is now the Xinnan Village, Sijing Town, Songjiang District in Shanghai. Then, it was by no means coincidence that he often saw *grus japonensis* flying over when *dalbergia odorifera* was burned. The following conditions should be fulfilled:

1. There was a habitat of *grus japonensis* nearby.
2. There were multiple holy places of Taoism at south part of the Yangtze River for Taoism to hold Taoist ritual activities for successive dynasties.
3. During ritual activities, *dalbergia odorifera* would be burned alone or blended with other incenses. If the burned incense did not contain any *dalbergia odorifera*, no *grus japonensis* would appear; in

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<sup>6</sup> Tao Zongyi. *Nancun Chuo Geng Lu*- Vol. 29, Jiang Chen Hsiang.

<sup>7</sup> Ma Zhi-Jun et al. “*Distribution of grus japonensis in China*”, *Bulletin of Biology*, 12, 1997: <http://dmt.zjlsedu.org/longrescz/200/080/070/010/010/L000000000073935.htm>. “*Grus japonensis*: Endangered Birds”, from National Museum: Topic of endangered birds: <http://www.nzmc.org/ztg/363>.

<sup>8</sup> With regards to ten great grotto-heavens (dongtian) 十大洞天, Jiangnan 江南 includes Gouqu shan grotto 句曲山洞, Linwu shan grotto 林屋山洞, Weiyu shan grotto 委羽山洞, Chicheng shan grotto 赤城山洞, Kuocang shan grotto 括苍山洞, taking half of the whole place; thirty-six grotto-heavens 三十六洞天 lies mostly in middle and south Jiangnan, taking up around 4/5.

<sup>9</sup> Sun zuoda 孫作大 “*Nancun chuo geng lu Xu*”, collected in Yuan Dynasty Tao Zongyi: *Nancun chuo geng lu*.

addition, only in the ritual venue would *dalbergia odorifera* be burned for several days or even months.

4. It was recorded in *Shenxian Xiangpu* 神仙香譜 that smoke of *dalbergia odorifera* may “ascend to a height of 40 li<sup>10</sup>”. In other words, Taoism had known that fragrance of such incense may be can be passed away for a long distance and produce a lasting effect, serving as a tool to interact with the heaven.

In fact, Fang Yizhi zhuan from Ming Dynasty once described objectively in his *Wu Li Xiao Shi*: “When *grus japonensis* smell the fragrance, they will fly over here. Their excrement will turn into stones. White and grey, they sleep at night with one foot”. Chu Yong said, “Taoists will use live rooster blood to draw magic figures to invoke or expel spirits so as to summon *grus japonensis*. When the purple *dalbergia odorifera* is burned, *grus japonensis* will fly over here. ”<sup>11</sup>

Such description explained the reason why *grus japonensis* appeared in a rational manner. Though Taoists used magic figures to “summon *grus japonensis*”<sup>12</sup>, he adopted a scientific method to extract fragrant oil. In this regard, *grus japonensis* is obviously attracted by fragrance of *dalbergia odorifera*, rather than some efficacious interaction.

What kind of unique fragrant element attracts *grus japonensis* to gather here? So far, no result is given in any relevant research reports<sup>13</sup>. But through current scientific research, it is known smell of birds can be as sensitive as hounds<sup>14</sup>. General birds may court or forage with their sensitive smell<sup>15</sup>, while some birds will be obsessed with specific kinds of fragrance<sup>16</sup>. Based on the experimental observation of response of these birds to smell, and relevant records of *grus japonensis* and *dalbergia odorifera* in Taoist scriptures and ancient books, we may reach the following conclusions: among all the fragrant materials used by Taoism, *grus japonensis* only responded to fragrance of *dalbergia odorifera*. Information we collected, for example, records quoted from legend of god in *Haiyao Bencao*,

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<sup>10</sup> *Sandong Shuji Zashuo* from , ZD 18th volume, p.489.

<sup>11</sup> Ming Dynasty Fang Yizhi zhuan *Wu Li Xiao Shi* , Vol 10, ( *Birds•Cranes*):

<https://www.kanripo.org/text/KR3j0160/010#1a>

<sup>12</sup> The so-called “using of live male bird to paint magic figures” is to collect a drop of blood from the comb of a cock and mix in the cinnabar to paint magic figures invoke or expel spirits.

<sup>13</sup> Current researches concerning *Grus japonensis* concentrate in [Hei Long Jiang Zhalong Nature Reserve] and [Jaingsu Yancheng Wetland Natire Reserve Rare Birds] from the aspects of number, habitat, feeding, migration and ecological environment, and rare sensory research is conducted.

<sup>14</sup> "Proceedings of the Royal Society B Sensitive smell of birds like hound." (trans. From "Avian olfactory receptor gene repertoires: evidence for a well-developed sense of smell in birds? "Abstract):

<http://big.sunyet.com/biol/a/n195372.html>; " Data proves that: Birds have extraordinary smell":

<http://env.people.com.cn/BIG5/7646613.html>. And also, Tim Birkhead, Katrina van Grouw (illus), Yan Li-Juan (trans): *BIRD SENSE: What It's Like to Be a Bird?* Chapter V Smell, Taipei City: Owl Publishing, 2014, p.165-198.

<sup>15</sup> "Birds can choose spouses through smell", *Invention & Innovation (Big Science)*, 1, 2015, p.5; Tashi, " Eagle and Celestial Buria ", *Tibet Travel*4, 2003, p.26.

<sup>16</sup> As is shown in experiment, pappus auks are obsessed with smell of oranges, refer to: Zheng, Ding-Jin "Birds can Smell", *New Tempo Science*, 12, 2003.

or scene seen by Tao Zongyi, or records of Fang Yizhi zhuan, or narration of Li Shizen 李時珍, are only the experience and results of observation. Under the scientific environment at that time, the author could not clearly explain the phenomena of “flying over here when they smell the fragrance of dalbergia odorifera”. Taking Li Shizen as an example. Based on his own life and reading experience and description of *Xiang he jing* 相鶴經: “birds are mount of the immortal”<sup>17</sup>, reached the conclusion of “interaction between species of same nature”. That is to say, as to these practical biological phenomena and observation experience, Taoists may boil down to the interaction between ritual activities and the immortal. For Taoists who worship grus japonensis, it equals to a specific response from the immortal to their pray!

In *Wu Shang Huang Lu Da Zhai Li Cheng Yi*, *Haiyao Bencao* cited another paragraph from the legend of god: “During ritual activities to worship the immortal, fragrance of dalbergia odorifera, blended with smoke of other incenses, may ascend to the heaven directly, summon grus japonensis and remove filthy substance in natural climate”<sup>18</sup>. Such statement was frequently quoted by Taoist scriptures to describe the characteristics of dalbergia odorifera, mirroring Taoism’s belief in religious divine nature of dalbergia odorifera. In this way, burning of dalbergia odorifera in ritual activities was connected with image of summoning grus japonensis. If we further refer to today’s research results pertaining to relationship between smell and brain, it can be said that with *Haiyao Bencao*’s quotation of legend of god and phenomena of burning of dalbergia odorifera and emergency of grus japonensis, memory is left in people’s brain through smell: when the ritual activities are held, burning of dalbergia odorifera may attract grus japonensis—the immortal arrives 降真 by riding on grus japonensis. Hence, the reason why believers believe that “During ritual activities to worship the immortal, dalbergia odorifera is the best incense” and “ofuda is of great efficacy ” is due to their group memory formed through religious experience of burning of dalbergia odorifera accompanied by flying of grus japonensis. When this memory is engraved into their brains, whether they smell the fragrance, such sacred memory will be refreshed.

### III. Auspicious signs produced by memory of burning of dalbergia odorifera and grus japonensis

In the case of Taoism, success of a ritual activity depends largely on the response of the heaven, which is demonstrated by emergency of grus japonensis during the rite. In fact, migratory nature of grus japonensis denies them to stay in a certain area for a long period. Based on today’s survey, grus japonensis migrate southward between October and November and northward between March and April<sup>19</sup>. Unless they get lost or fed or other specific reasons, no grus japonensis will be seen in south area when they return back to north. Thus, dalbergia odorifera **is used in** the altar to wake people’s

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<sup>17</sup> Chen Guiting. *General Explanation of Compendium of Materia Medica*: “Chin 禽部 Vol. 47: Birds: Cranes”, p.2030.

<sup>18</sup> *Wu Shang Huang Lu Da Zhai Li Cheng Yi* Vol. 50 “Zamen 雜門: Expenditure 經費帳狀”

<sup>19</sup> “Grus japonensis: Endangered Birds”, collected from National Zoological Museum of China Topic of Endangered Birds: <http://www.nzmc.org/ztg/363>. With the establishment of conservation area, frequently feeding make this place suitable for residents birds, such as Hokkaido Region in Japan, refer to Akan International Crane Center [GRUS]: <https://aiccgrus.wixsite.com/aiccgrus>.

memory of sacred interaction, serving as an important medium in the rite. Later, paper cranes are used to replace *grus japonensis* to smooth the whole rite. For example, as described in *Huangdi Taiyi Bamen Nishun Shengsi Jue*:

“Paste seven gold paper to a burner in which *dalbergia odorifera* is **burned**, and seven paper cranes are put in the middle of a gossip representing the heaven. These seven paper cranes face the north, with their tongues touching the upper jaws for 32 times. Then, they are put at the position representing Big Dipper.”<sup>20</sup>

During the above process, *dalbergia odorifera* is used to bring about sacred memory, coupled with layout of Big Dipper, to represent flying of *grus japonensis* into the heaven. Nowadays, *grus japonensis* in rites have evolved into folk activities, such as religious rites in Taiwan. When Taoism conducts rites in the altar, *grus japonensis* and *grus japonensis* boy perform folk activities outside. (Figure 3).

In this way, based on memory brought about by smell, *dalbergia odorifera* is of sublime status in religious field, as described by *Lingbao Lingjiao Jidu Jinshu*:

“Anyone who smell the fragrance of agilawood in the jing room accepts Green Lyrics (Qing-ci 青詞) of god; anyone who smell the fragrance of sandalwood accepts text of the heaven; anyone who smell the fragrance of *dalbergia odorifera* or special flowers accepts decree from the heaven. If anyone who sees a woman in purple during meditation in the altar will witness the immortal supervising good and evil behavior of Taoists.”<sup>21</sup>

In the citation, burning of *dalbergia odorifera* is accompanied by the True holy 真聖 come and other by mere Green Lyrics, text and so on. With sacred nature, *dalbergia odorifera* was emphasized specifically as the sacrifice of God. If it was not used as sacrifice, rule was broke, as *Sandong Shuji Zashuo* quoted from *Liuzhu Jing* 流珠經:

“Burning of foreign smelly and stinky incenses (such as frankincense and Luoja Xiang 螺甲香) is seemed guilty, as they are not incenses normally used during practice of the immortal 真人. The immortal loves the secret fragrance grown among trees of purple tiny stars, and people who smell it will feel pleased (Chenshuijian Xiang 水箋香). Smell of Hu Xiang 胡香 is smelly, which was disgusted by the immortal (Hu Xiang refers to frankincense). Tongbo zhenren Wangzi Jin 桐柏真人

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<sup>20</sup> *Huangdi Taiyi Bamen Nishun Shengsi Jue*: "Jiutian xuannu toutian 九天玄女透天 • fei zoufa 飛走法": ZD 10th volume, Beijing wenwu, p.748.

<sup>21</sup> *Lingbao Lingjiao Jidu Jinshu*, Vol. 285, "Cunsi xuanmiao pin 存思玄妙品 • Cunsi xuanmiao shiyi 存思玄妙拾遺 • Rujing houbaoyingjue 入靖候報應訣", ZD 8th volume, Beijing wenwu, p.512.

王子晉 told Qingxuzhenren Wang Zideng 清虛真人王子登: “Su shang qing 蘇上卿 used to like incenses with strong smell. With smell surrounded the Chinese Tianzun, official in the nether world reported to the heaven. However, Emperor in the heaven disgusted such smell, thus demoted him.”<sup>22</sup>

As described by *Shenxian Xiangpu* 神仙香譜:

“A large number of secular people use frankincense (also known as Hu Xiang) to worship the heaven. As this smell was tangy and foul, God and five-star god were disgusted when smelling, especially Luo Jia Xiang and She Qi 麝臍. Fragrance of agilawood, Jian Xiang 箋香, dalbergia odorifera, white sandalwood, Su He Xiang 蘇合香 and Qing Mu Xiang 青木香 can be far away for 40 li; Clove and benzoin can drive away mephitic; only raw borneol can be used, as cooked one may mix the smell of other trees.”<sup>23</sup>

Two scriptures cited by *Sandong Shuji Zashuo* pointed out that incenses used in the altar should be those with the effect of dispersing depravity and removing evil such as agilawood, Jian Xiang, dalbergia odorifera, white sandalwood, Su He Xiang and Qing Mu Xiang, and further denied the role of Hu Xiang. He argued that the folk randomly used various incenses with tangy and foul smell, such as frankincense, Luo Jia Xiang and She Qi from foreign countries, whose smell “were disgusted by god and five-star god”. In addition to *Sandong Shuji Zashuo*, by Ding Wei-zhi 丁謂之 from Northern Song Dynasty, quoted notes *Tian Xiang Zhuan* 天香傳 of Tang Dynasty, “During Minghuang period, said by a person with special ability, ‘every time frankincense is burned during the rites, all gods will leave’. It can be inferred that at about Tang Dynasty, the statement that gods disgusted the smell of frankincense has been popular. As this concept ingrained in people’s mind, multiple Taoist scriptures tended to admire dalbergia odorifera and belittled exotic incenses, such as words of *Fa Hai Yi Zhu* from Yuan Dynasty:

“Hierochloe odorata, aniseed, rue, pine nut and cypress nut are produced in local areas and are gifts from the land. Though agilawood, sandalwood, Jian Xiang and frankincense are of wonderful smell, they are from foreign land and could not be used to worship the heaven. Hence, dalbergia odorifera is the best choice.”<sup>24</sup>

Also, *Tianhuang Zhidao Taiqing Yuze* Volume5 from Ming Dynasty described in the *Feng sheng yi zhi zhang* • *Feng sheng yi* • *Gong xiang*:

“Dalbergia odorifera is an incense used to worship the heaven. In addition, speed of agilawood in

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<sup>22</sup> *Sandong Shuji Zashuo*, ZD 18th volume, p.489.

<sup>23</sup> *Sandong Shuji Zashuo*, ZD 18th volume, p.489.

<sup>24</sup> *Daofa Huiyuan in the Yuan Dynasty*, Vol. 42 "Taishang Ranggao Xinzou Miwen 太上禳告心奏祕文 • Gaodou Xiang 告斗香", 26th volume, Beijing wenwu, p.723.

conveying messages only seconds to the *dalbergia odorifera*. Fragrance of these incenses may convey messages to the heaven, while benzoin, frankincense and sandalwood are disgusted as they are from foreign counties. Be careful not to use these foreign incenses as they are prohibited in the heaven.”

*Fa Hai Yi Zhu* argued that “they are from foreign land and could not be used to worship the heaven” and only incenses produced in the local area may appropriately convey wishes of the folk, represented by *dalbergia odorifera*. “Gong xiang 供香” of *Tianhuang Zhidao Taiqing Yuze* emphasized again that “Be careful not to use these foreign incenses as they are prohibited in the heaven”. Obviously, since the Six Dynasties, frequent communications between China and the West were seen. During all previous dynasties, fragrant wood trade was of prosperous development whether in land or sea silk road. Meanwhile, growth and decline of ethnic groups in politics and social power is not rare, such as social internationalization in Tang Dynasty, half of Song Dynasty, ruling of alien races in Mongolian and Ming Dynasty’s partial denial on ruling of Mongolian. From the religious point of view, emphasis of efficacy of *dalbergia odorifera* is partially due to the original sacred memory, and aims to guide the folk in choosing incenses by adhering to the rule that incenses used in the altar are of higher status. In other words, though frequent communication with foreign countries could not be avoided in fact, national self-esteem may be achieved by incenses used to worship the heaven<sup>25</sup>. In this regard, in the “Xu Yan 許顏” story of *Yi Jian Zhi* 夷堅志, the dialogue between Xu Yan and his father when he toured in the hell was employed to bring out the conclusion that Wang Changzhe 王長者 had good fortune after doing good deeds, benefiting the three worlds. This story can be used to illustrate the way how the above concept could be ingrained in people’s heart in the religious forms:

“Yizhou 沂州 conducted *huang lu da zhai* 黃籙大齋 in the house of a man named Wang Changzhe who was usually doing good deeds to the benefit the three worlds. When you came here to serve as an official in hell, you may also be blessed. With words being not finished, there were two cranes flying in the air around the banners. Put incense table 香案 in front of the hall, Then, pardon decree was served and my late father wore clothes, showing the dignity of king to receive worship. A messenger held an instrument and whispered at father’s ear, with the other two doing the same thing. Father then led the spirits to worship to express thanks. When ascending the hall, he turned back and asked me, did you see that? The whole family of Wang Changzhe were very devout. Also, the Taoism who

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<sup>25</sup> Whether frankincense can be used in rites may involve some sensitive issues between religion and politics. In *Tian Xiang Chuan*, Ding Wei-zhi cited words of people in Tang Dynasty and deemed that “Every time the frankincense is burned, all gods will leave”. But later he argued that “people are confused, and Emperor Zhenzong 真宗 of Song explained that agilawood and frankincense are used to worship the heaven, thus no god dares to accept.” (collected in *Chen Shi Xiang Pu* Vol. 4, p.434-445). Although Emperor Zhenzong of Song deemed that “frankincense is used to worship the heaven, thus no god dares to accept” and regarded the frankincense as the top-class incense, which was in conflict with words of “unusual person 異人” in Tang Dynasty. Obviously, such explanation expressed the Emperor’s hope to order Taoists with standards of using of incenses.

presided over the rite was the one who had cut off Xie Chi Long Shen 解池龍. He was versed in rites, so did Tao Zhong 道眾 who also conducted the rite, denying frankincense as a gift and resulting in boundless merits. Such merit moved the heaven who then decreed to forgive all sins in hell. Three messengers from the heaven, the hell and the waters Sanguan 三官 were dispatched by the heaven to convey the decree. Hence, all the relevant spirits were awarded a promotion.”<sup>26</sup>

This story of *Yi Jian Zhi* covers three elements related to this paper: 1) Ritual activities: huang lu da zhai 黃籙大齋; 2) No frankincense in rites; 3) Cranes flying in the air around the banners. Huang lu zhai 黃籙齋 is a rite used by scholar 士人 to apologize for an offence. During the rite, incenses should be burned all long day without any interruption. Though the text does not mention *dalbergia odorifera*, an emphasis on “denying frankincense as a gift” will lead to “boundless merits”, indicating that the burned incense must be the *dalbergia odorifera* whose fragrance may ascend directly to the heaven. Thus, when “there were two cranes flying in the air around the banners”, they were seen as the messengers sent by the heaven to convey the pardon decree, followed by preparation of rites, dress-up and burning of incense to accept the decree from the heaven. On the other hand, if frankincense with no special fragrant molecules is burned in the rite, there will be no *grus japonensis*. Based on the memory that “burning of incense to summon *grus japonensis*”, if *grus japonensis* do not show, it means that wishes are not realized by the heaven. From the religious point of view, it is an ominous sign of violation of law.

*Xu Yi Jian Zhi* 續夷堅志 records another story of "Tian Qing 天慶 *grus japonensis* Flying", which mentions the following details pertaining to flying of *grus japonensis*:

“Every February 15 is called "Zhen Yuan Jie 貞元節" in Taoism, in which *grus japonensis* will fly to get together, with a number from 10 to 12. They will fly over the altar for a long time before leaving. Folks in the district often watch such scene near the rampart. Governor of the district promised that who was the first one seeing the *grus japonensis* would be awarded, thus attracting a large number of Taoists and tourists for three consecutive days. During Zhen You 貞祐 period, the hall was destroyed due to military chaos, thus no *grus japonensis* was seen afterwards.”<sup>27</sup>

Taoist festivals are generally the days when gods come to earth to assess the good and evil deeds of the folk. At this time, there would be a ritual ceremony in which *dalbergia odorifera* was used to pray for blessing. During "Zhen Yuan Jie", flying of *grus japonensis* was naturally considered an

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<sup>26</sup> *Yi Jian Zhi • Zhibu* 志補, Vol. 6, "Xilei qinggu yu 細類輕故獄 • Xu Yan 許顏", (Hanfen lou cang shu 涵芬樓藏板)

<sup>27</sup> *Xu Yi Jian Zhi*, Vol. 1 "Tian Qing Flying of Cranes 天慶鶴降"

auspicious sign, thus attracting many Taoists and folks, even officials awarding people who first saw the *grus japonensis*; however, when wars broke out, Taoists in the temple escaped to other places from wars and could not burn *dalbergia odorifera* to worship the heaven, naturally attracting no *grus japonensis*. In this paper, burning of *dalbergia odorifera* is the main reason that attracts *grus japonensis*. Xinzhou 忻州 Tian Qing Quan 天慶觀 is also known as White Crane Quan 白鶴觀. Using white crane as the name of the temple implying that a large number of cranes visited here in previous periods and that *grus japonensis* were also seen in Shanxi Xinzhou area during Song and Yuan Dynasties<sup>28</sup>.

Even, it was ruled that *dalbergia odorifera* must be used in rites conducted by the folk, for example, in volume No. 252 of *Daofa Huiyuan* 道法會元--*Taishang Hundong Chiwen Nuqingshaoshu Tianlu* 太上混洞赤文女青詔書天律--*Fa Guan* 法官:

“Altars are set up among the folks, can’t be burned sandalwood 檀香, benzoin 安息香, frankincense, and only Bai He Xiang 百和香 can be burned instead of sandalwood, benzoin, and frankincense, which may attract the immortal 上真 for supervision. *dalbergia odorifera* is also of the same effect. Those who violate such rule will be plagued by disasters and his family of three generations will be punished. For Fa Guan 法官 and Taoists, their lives will be shortened for 3 years”

Folks rarely pay attention to the type and source of incenses used in rites, while entails Taoism to develop certain standards. Taoists of Fa Guan is requested to follow relevant rules of burning of incenses during rites among folks, otherwise they would be punished. This request remains the same, and *dalbergia odorifera* should be used in rites among folks (Figure 4).

The auspicious sign of gathering of *grus japonensis* is represented by “Rui He Tu 瑞鶴圖” completed in Northern Song Dynasty in the second year for Zheng He 政和 (1112). Hence, at the end of this paper, the author hopes to put forward different point of views on this auspicious painting.

“Rui He Tu” is believed to be Taoist painting drawn by Emperor Huizong 徽宗 of Song and is now in the possession of Liaoning 遼寧 Provincial Museum. With a height of 51cm and a width of 138.2cm, this painting is a silk scroll. At 1/3 of the bottom of the painting, there is the roof of the symmetrical palace surrounded by clouds, with two cranes standing respectively at both ends of the ridge in different gestures; 2/3 of the top of the painting is dominated by a group of flying white cranes

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<sup>28</sup> Ruins of Tian Qing Quan (White Crane Quan) is located in Xiurong 秀容書院 Academy in Xinzhou 忻州 and is under the restoration project of local government. Refer to interaction between government of Xinzhou and residents: <http://www.xfq.gov.cn/index.php/opinion-post-id-5>. Today, as an endangered bird, *Grus japonensis* has a decreasingly amount of habitat. Xinfu District in Shanxi is not included as a distribution area of *Grus japonensis*. Refer to "Grus japonensis: Endangered Birds", collected from National Zoological Museum of China>Topic of endangered birds: <http://www.nzmc.org/ztg/363>.

against the backdrop of blue sky in an elegant and rhythmic manner, rendering an ideal naturalistic representative with creative thoughts<sup>29</sup>; inscription and signature are placed in the left:

“During Zheng He 政和 renchen 壬辰 period, on the next day of the Lantern Festival 上元節, auspicious clouds suddenly gathered around the south gate. When everyone looked up, a group of cranes suddenly sang in the sky, with two stopping at the end of ornament on roof ridge in a leisure fashion. Other cranes were flying in the sky, as if coordinating with rhythm of music. Passersby admired such wonderful scene in a devout manner. These cranes stayed for a long time before leaving from the northwest corner. Describing such auspicious sign, this poem was written to memorize such scene.

Flying over the roof at dawn, *grus japonensis* suddenly show auspicious signs. As companion of the immortal, each two of them show a gesture of thousands of years.

They are like Qingluan in the immortal attic instead of the wild goose gathering in Tianchi? They are flying over the red gate in the heaven, singing loud and clear, displaying the heaven to you the ignorant people!

I produced, painted and wrote the text on my own.”

The inscription describes that on the next day of Shangyuan 上元 in the second year for Zheng He 政和(1112), a group of cranes gathered at the south gate and flew towards North West after a long time, being admired by passerby. Shangyuan fell on lunar January 15 and according to *Taishang Dongxuan Lingbao Sanyuan Yujing Xuandu Daxian Jing* 太上洞玄靈寶三元玉京玄都大獻經: “In January 15 the Shangyuan, Tianquan 天官 will assess the good and bad deeds of the heaven and earth”. Also, in *Sanguan dengyi* 三官燈儀, “Shangyuan yipin jiuqi cifu tianquan ziwei dijun 上元一品九炁賜福天官紫微帝君, devout folk crept on the ground and prayed for penetrating judgment and auspicious fortune. Name of the immortal were recorded on the book of Bei Du 北都 and were noted as the immortal in the book of Nanchang Shangong 南昌上宮.” Based on the above-mentioned Taoist scriptures, Shangyuan is the day in sanyuan when Tianquan Ziwei dijun 紫微帝君 came to the earth to assess the good and bad deeds of the folk and reward blessing. At this time, cranes flying over the Royal Gate 皇門, for a Taoist, indicates an auspicious sign from the heaven and promising future of the country. Besides, group of cranes gathered over the south gate of the imperial palace, which implied Nanchang Shangong 南昌上宮. We must pay attention to the concept of the painting. When general scholars are analyzing the “Rui He Tu”, they may discuss from the perspective of composition, brushwork, color and other painting techniques. However, only roof of the south gate appeared in this painting surrounded by auspicious clouds, over which a group of flying cranes. Such scene clearly

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<sup>29</sup> Kao Mu-Sen 高木森: “Art of Taoism and Emperor Huizong of Song (3) Paintings of Taoism and Emperor Huizong of Song”, *The National Palace Museum Monthly of Chinese Art* 75, Jun 1989, p.36-45.

showed that the immortal lived above the clouds. Coupled with description on the left indicating that the place in the painting was the south gate, San Shan 三山 and Dan Yue 丹闕, the palace of the immortal. Thus, Emperor Huizong of Song aimed to use this “Rui He Tu” to “display to the innocent people” that location of the imperial palace and places under the control of emperor were the wonderland of the immortal! In other words, cranes, which dominate 2/3 of the painting--conveys the following message: Under the leadership of Emperor Huizong of Song, people live in a carefree fairyland. Yu Hui 余輝 discussed the concept of governing a state with Taoism of Emperor Huizong of Song in *Political Motives for Ancient Painting--Taking Several Pieces of Song Paintings as Example*, and held that Huizong convinced that belief in Taoism can bring luck for the country, and painting of auspicious things is an important way to pray for national welfare. In this regard, his painting of auspicious flowers and birds have been combined with prays, which was represented by “Rui He Tu”. Emperor Huizong of Song also wished to show people the auspicious sign of “*grus japonensis* showing auspicious things<sup>30</sup>”, which was indeed quite insightful.

Another question related to this “Rui He Tu” is that how cranes appear on the south gate. This paper proposes three ideas:

1. Gathering here with natural ecological group: based on existing researches, *grus japonensis* did not fly to north during February and March in solar calendar and remained in Yellow River basin<sup>31</sup>. Calculated with solar calendar, the Lantern festival fell on the middle and end of February. Thus, it is possible that a group of cranes appeared in Bian Jing 汴京 (now Kai Feng 開封). *Song shi* described that in the second year for Zheng He 政和(1112): “ when Yanfugong 延福宮 entertained ministers working on national affairs, a group of cranes flew from the North West and hovered over Ruimodian 睿謨殿 till the performance of Dachengyue 大晟樂. Thus, Rui He Qi 瑞鶴旗 was made”<sup>32</sup>. Records in *Song shi* may prove the context and words in the painting.
2. Being fed: Suggested by Taoists, Emperor Huizong of Song intended to change the feng shui 風水 so as to have more male offspring. Thus, he built the Shoushan Genyue 壽山艮岳 and requested eunuch Liang Shi-cheng 梁師成 to be responsible for such matter. Thus, “Treasures in his possession were used and best skills around the world were employed. After six years of effort, Shoushan Genyue was completed, also known as Wansuishan 萬歲山. Decorated with beautiful flowers, rare birds and animals, its layers of pavilions were spectacular to the extreme”. Based on Zuxiu's 祖秀 *Hua yang gong ji* 華陽宮記: “Rare birds and animals were collected up and down the crowds in a number of billion, but he was unsatisfied”. Also, he believed Lin ling-su 林靈素 saying, that Empress-Mingjie 明節皇后 was the Jihua Yuzhen Anfei 九華玉真安妃 in Shexiaodian 神霄殿 in the heaven, and thus built the Sanxiutang 三秀堂 in Genshan to worship

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<sup>30</sup> Yu Hui. “Political Motives for Ancient Painting —Taking Several Pieces of Song Paintings as Example”. *The National Palace Museum Monthly of Chinese Art* 298, 2008.1, p.38-51.

<sup>31</sup> “*Grus japonensis*: Endangered Birds”, from National Zoological Museum of China>Topic of endangered birds: <http://www.nzmc.org/ztg/363>.

<sup>32</sup> *Song shi* No.110, “Yiwei 6 儀衛六 · Lubu yifu 鹵簿儀服”.

the portrait of Jiuhua Yuzhen Anfei<sup>33</sup>. Under elaborate arrangement, Genyue became a fairyland on earth. Since it was a fairyland, it possessed *grus japonensis* which may appear at any appropriate period.

3. Burning of *dalbergia odorifera* to summon *grus japonensis*: Whether the cranes are wild migratory bird, or being fed in Genyue as resident birds, they have their own nature. How can they appear when people are in the need of auspicious signs from time to time? It needs clever arrangements. *Sandong Shuji Zashuo* 三洞樞機雜說, Taoist scripture in Tang Dynasty, includes two Xiangfang 香方, one named “*Xiangfang*” dominated by new *hierochloa odorata* and supported by *cyperus rotundus*, clove bark, *dalbergia* and *dalbergia odorifera*; one named “*Qingyuan Xiangfang* 清遠香方” dominated by musk and *hierochloa odorata* and supported by sub-spiced skin, *dalbergia odorifera*, *agastache rugosus* and *cyperus rotundus*, mixed with honey to use. Based on obsession of *grus japonensis* in *dalbergia odorifera*, as long as the fragrant materials containing *dalbergia odorifera* is burned, *grus japonensis* with sensitive smell will fly over. As the fragrant elements in *dalbergia* materials last for a long period, cranes naturally “hover for a long time before leaving”. Till the fragrant smell in the air disperses, they may leave. Cranes appear in the “Rui He Tu” at the time when Emperor Huizong of Song entertained his ministers in Yanfugong Ruimodian. Incenses burned during the banquet<sup>34</sup> or on the south gate may attract cranes. Hence, it is no difficulty to summon *grus japonensis* at specific moment and location with mixed *dalbergia odorifera* to show auspicious sign for Emperor Huizong of Song.

To sum up, we can know that history of Taoism’s use of *dalbergia odorifera* in ritual activities and later application of *dalbergia odorifera*.

#### IV. Conclusion

Taoism believes that burning of *dalbergia odorifera* during sacrifices is of great efficacy, as overwintering habitat of *grus japonensis* is in Taoist’s grotto-heavens (dongtian 洞天). During ritual activities, memory of “smoke flies up to the heaven and moves the god who then sends the *grus japonensis*” is always accompanied by the fragrance in people’s minds, becoming the community memory of believers. As *grus japonensis* means becoming longevous, immortal and mount, flying of *grus japonensis* is a symbol of descendants of the immortals. Thus, *grus japonensis*’ biological behavior of “flying over to the place where *dalbergia odorifera* is burned” is seemed as an auspicious sign. In this regard, *dalbergia odorifera*, under such appearance of the immortal, takes up an unshakable sacred position of “best incense when worshipping the heaven which allows Taoists to accept the

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<sup>33</sup> Song Dynasty Zhang, Hao 張淏. *Gen Yue Ji* 艮岳記; Jiuhua Yuzhen Anfei. Recorded in *Zhen gao* 真誥. Shangqing gao 上清誥. Female immortal 女真.

<sup>34</sup> Liou Jing-Min "Tea Time Incense Burning: On Past to Present Incense Burning During Teatime", 2013 "Tea and Art—Story of Pinglin Street Corner" Academic Forum, <http://cart.ntua.edu.tw/upload/st/201311/201311-04.pdf>. Huang Tzu-En. *Huizong's Extended Prosperity Palace : through the analysis of Qu Yan*, National Taiwan Normal University, Graduate Institute of Art History 2014 Master paper.

Ofuda of great efficacy, winning the name of *dalbergia odorifera*'.

Second, when the migratory *grus japonensis* return north, there is no cranes in the south. Thus, paper cranes are made to replace the real ones and included in the rites. Nowadays, *grus japonensis* in rites have evolved into folk activities. When rites are conducted, *grus japonensis* and *grus japonensis* boy will perform folk activities, representing an auspicious sign. In this way, burning of *dalbergia odorifera*, accompanied by dance of *grus japonensis*, becomes an indispensable element in rites that arouses the sacred memory of the folk.

This sacred memory can not only be used in the ritual ceremony, but also be combined with political, religious, literary and artistic performance to appease the people. Rui He Tu drawn by Emperor Huizong of Song is a comprehensive presentation. Although political prayer and appeasement at that time did not work, the flying *grus japonensis*, after the millennium, still tell the pray of a prosperous country and contented people; Relatively speaking, habitat of *grus japonensis* does not expand to Taiwan at the south, but today, Taiwan's grand ritual activities will arrange the folk activities of crane and crane boys. Then, what's the difference between these two? In fact, this sacred memory has become a profound auspicious sign among the ethnic group.

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## VI Figures



Figure 1: *General Explanation of Compendium of Materia Medica* attached with figure of *dalbergia odorifera*

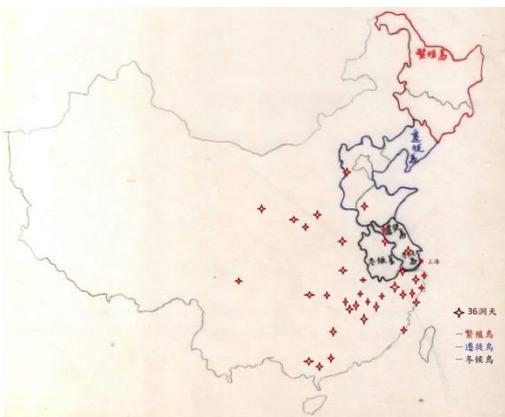


Figure 2: Modern habitat for *grus japonensis* and thirty-six grotto-heavens of Tang Dynasty



Figure 3: *Grus japonensis* and *Grus japonensis* boys in Xigangwang Chuangjiao 西港王船醮 in Taiwan



Figure 4: *Dalbergia odorifera* sold in Taiwan folk shops



Figure 5: Zhao Ji (Emperor Huizong of Song) Rui He Tu