5 Bees in China
A Brief Cultural History

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Although we know that honey was being consumed in China by the seventh millennium BCE, and that honey hunting and beekeeping were common throughout China during the imperial period, bees are not as prominent in Chinese history and culture as they were in some other parts of the world.[1] Bees do not begin to emerge clearly from the broader category of *feng* 蜂, which includes wasps, until the second century CE, and the first literary meditation upon them is a rhapsody composed in the early fourth century CE. While numerous texts mention bees, few elaborate on them, either descriptively or imaginatively. The pictorial record of bees is poor, and there are hardly any images in which bees or their hives are used symbolically. No 'royal beekeeper' is mentioned in the Western Han (206 BCE–25 CE) *Zhouli* 周禮 (Rites of Zhou) or other texts relating to governance, and there seems to have been little government interest in beekeeping; it was not until the Yuan dynasty that beekeeping was added to agricultural manuals, and its place in such manuals was not assured even after that.[2]

Despite their marginal place in cultural representations of animals in China, a lore about them did emerge during the pre-Qin period, which became more elaborate over time. This chapter traces the broad contours of this process, which has, as yet, not been systematically described in existing scholarship.[3] It will first examine some early descriptions of *feng* and the negative characteristics normally associated with them. It then traces the emergence of honeybees (*mifeng* 蜜蜂) in texts from the Six Dynasties period, before focusing on the

[1] McGovern et al. (2004). Numerous local gazetteers list honey as a local product, but rarely describe it. Li Shixiong's 李世熊 *Ninghua xianzhi* 寧化縣志 (Ninghua County Gazetteer) (1684) is the most detailed account seen by this author. See *Ninghua xianzhi*, 2.134b–136a.

[2] See *Nongsang jiyao yi zhu*, 377–8. For a further discussion of beekeeping in agricultural manuals, see Pattinson (2012).

[3] Eva Crane noted some examples of representations of bees in Chinese culture, but it was not the focus of her work and she did not have direct access to Chinese sources. See Crane (1999), 609–12.

Song dynasty and beyond, for which there is a stronger textual record. It will show that the negative associations of the *feng* in early texts as stinging, swarming and generally inauspicious creatures mostly gave way to a view of bees as an orderly imperial court. Worker bees came to be viewed as officials assiduously serving their 'king' (*fengwang* 蜂王), and the arrival of a swarm near a farmer's home was thought to augur prosperity.

Bees in Early Lexicons

Since both bees and wasps are called *feng* in early texts, it is usually difficult to tell which creatures a text is referring to, unless there is contextual information. Even then, there is not always enough for precise identification.[4] For instance, in the 'Shi chong' 釋蟲 (Explaining Insects) chapter of the third-century BCE lexicon known as the *Erya* 爾雅 (Approaching Refinement), there are two entries that mention *feng*. The first simply comments that there are 'earth-*feng*' (土蜂 *tufeng*) and 'tree-*feng*' (*mufeng* 木蜂). The earliest extant annotations, by the Western Jin scholar Guo Pu 郭璞 (276–324 CE), defined these as follows: 'Earth-*feng*: nowadays south of the Yangtze River large *feng* which make their nests in the ground are called "earth-*feng*"; they eat their children; also called "horse-*feng*" (*mafeng* 馬蜂) . . . Tree-*feng*: similar to earth *feng* but smaller. They make their nests in trees. In the region south of the Yangtze River they are called "tree-*feng*"; they also eat their children.'[5] The second *Erya* entry states that '*feng* lower their abdomens'.[6] The Qing commentator Hao Yixing 郝懿行 (1755–1825) understood this to mean that they did this to rest, not to sting, but it is not clear why the *Erya* compilers would record this unremarkable fact. Indeed, the Song commentator Luo Yuan 羅願 (1136–84) asserts that they lower their abdomens to sting.[7]

The first-century CE dictionary *Shuowen jiezi* 說文解字 (Explaining Graphs and Analysing Characters) is more forthright, defining *feng* simply as 'flying insects that sting people'. The entry for honey, which follows it, describes the liquid as the 'sweet maltose of *feng*', thereby noting the association between *feng* and honey, but not the fact that only certain types of *feng* produced it.[8] The *Fangyan* 方言 (Dialect Words), compiled by Yang Xiong 揚雄 (53 BCE–19 CE), also records several different names for types of *feng*, including a reference to *hufeng* 胡蜂, 'which are large and produce honey'. *Hufeng* seems to have referred to a range of honey-producing Vespinae.[9]

[4] Therefore I will use the term *feng* unless it is reasonably clear that it refers to bees.
[5] *Erya zhushu*, 9.14b–15a. These are probably references to various types of wasps which paralyse the larvae of other insects to feed to their own.
[6] *Erya zhushu*, 9.16a. [7] *Fengya xiaoji*, 4b; *Erya yi*, 268. [8] *Shuowen jiezi*, 13B.2b.
[9] *Fangyan*, 11.2b.

The character *feng* also appears in the *Shuowen jiezi* entry for the character *guo* 蜾, or *guoluo* 蜾蠃 'the potter wasp'. This became relevant to bees because, in the absence of any other explanation, later writers suggested that bees reproduced using the same process as *guo*. The entry reads: '*Guo: guoluo, pulu* 蒲盧, a narrow-waisted earth-*feng*. According to its nature given by Heaven and Earth, it has a narrow waist, is entirely male, and does not bear children. The *Shijing* 詩經 (Odes) say, "The *mingling* 螟蛉 has offspring, and the potter wasp carries them away on its back."'[10] Their appearance in the *Shijing* meant that the potter wasp and *mingling*, which is probably the snout moth, were bound to attract scholarly attention. In fact, Yang Xiong had already written about them a few years earlier in his *Fayan* 法言(Exemplary Figures): 'When the snout moth's larvae are about to die, they come across the potter wasp which will chant over them: "Be like me, be like me". After a while they do indeed resemble the potter wasp.'[11] These texts are almost certainly describing the potter wasps paralysing the snout moth's larvae and taking them to feed to their own larvae. Yet the ancients thought that the prey became new potter wasps; indeed *minglingzi* 螟蛉子 – 'a snout moth's offspring' – became another word for an adopted child. However, none of these early dictionaries, or their commentaries, or any other taxonomies written before the Song, discuss honeybees separately, probably because they are not mentioned in the *Shijing* or any other Confucian classics.

Cruel Bees

Before beekeeping was first mentioned in two late third-century CE texts, *feng* were always represented as something to be feared or a bad omen. The most common references were to their sting and venom. In an account (for the year corresponding to 638 BCE) in the *Zuozhuan* 左傳 (Zuo Commentary), the idea that *feng* are small but dangerous is repeated in a warning which Zang Wenzhong 臧文仲 gave to Duke Xi 僖. Zang asserted that the state of Lu should not underestimate the small state of Zhu because '*feng* and scorpions have venom – how much more is this true of states!' – the *chai* 薑 'scorpion' being the insect most commonly paired with *feng*.[12] In the *Guoyu* 國語 (Discourses of the States), a text also compiled during the Warring States period, we learn that, when the senior minister of the state of Jin, Zhi Yao 知瑤 (d. 453 BCE), made fun of two rival senior ministers during dinner, another powerful member of his clan cautioned him not to be complacent. He ended his warning by saying, 'Mosquitoes, ants, *feng* and scorpions can all

[10] *Shuowen jiezi*, 13A.48b. The *Shijing* quote comes from 'Diminutive' (*Xiao wan* 小宛; Mao 196).
[11] *Yangzi Fayan*, 1.5. For a full commentary see Nylan (2013), 7.
[12] *Chunqiu Zuozhuan zhu*, 395 (Duke Xi, year 22).

harm people – how much more is this true of rulers and ministers!'[13] In a rare reference to the image of *feng* being used symbolically, the *Zuozhuan* records how soldiers from the state of Zheng wounded the Jin minister Zhao Yang 趙鞅 (d. 476 BCE) and captured his '*feng* banner'. This was probably a standard with a *feng* image on it, perhaps meant to represent Zhao Yang's fearsomeness.[14] In another *Zuozhuan* passage, the eyes of the *feng* become a symbol of cruelty. When King Cheng 成 of Chu 楚 (in 626 BCE) intended to make his eldest son heir to the throne, his prime minister advised against it, saying that the tradition in Chu was to make the youngest son Crown Prince. In any case, his eldest son 'has the eyes of a *feng* and the howl of a jackal; he is a cruel person who must not be made heir'.[15] This story was included, with only minor changes, in Sima Qian's 司馬遷 first-century BCE *Shiji* 史記 (Records of the Grand Historian), thereby consolidating its role as a standard image to portray a cruel person.[16]

In other texts, the sting of the *feng* becomes a simile for a very sharp weapon. According to the fourth-century BCE *Shangjun shu* 商君書 (Book of Lord Shang), 'The people of the state of Chu are alert, well-balanced and as fast as a whirlwind. They have iron lances made of the steel from Yuan, as sharp as a *feng*'s sting.'[17] Writing just slightly later, Xunzi 荀子 (c. 335–c. 238 BCE) notes that: 'The soldiers of Chu . . . use steel spears that are as nasty as [the sting of] *feng* and scorpions.'[18] A passage in the broadly contemporaneous Daoist classic *Laozi* 老子 (*Daodejing* 道德經) also represents *feng* as stinging insects, but for a different reason: 'If one has a great store of charismatic energy (*de* 德), one will be like a newborn baby. *Feng*, scorpions and poisonous snakes will not sting or bite, ferocious animals will not attack and birds of prey will not swoop.'[19] So, while a sufficiently cultivated practitioner of the Way might be able to stop *feng* from stinging, the nature of the *feng* remains the same. A similar idea appears in the Western Han *Da Dai Liji* 大戴禮記 (Record of Rites of Dai the Elder), which notes that, when a sage is in charge of a state, 'Dragons arrive and are not locked up, phoenixes descend and forget how to fly; stinging animals forget to pounce, birds with talons forget to attack; *feng* and scorpions do not sting children.'[20]

The negative associations of *feng* continue into the Han period. Sima Qian seems to have introduced the term *fengqi* 蜂起 'to arise like *feng*', or less literally, 'to swarm like *feng*'. This image of swarming *feng* is used to describe local strongmen, so seems neutral, but when taken in the context of the collapse of imperial authority after the death of the First Emperor of the Qin, Sima is

[13] *Guoyu*, 15.503 (Jin yu, 9). [14] *Chunqiu Zuozhuan zhu*, 1617 (Duke Ai, year 2).
[15] *Chunqiu Zuozhuan zhu*, 514 (Duke Wen, year 2). [16] *Shiji*, 40.1698.
[17] *Shangjun shu*, 5: 21.127 ('Ruomin' 弱民). Translation adapted from J.J.L. Duyvendak.
[18] *Xunzi jijie*, 10: 15.281–2 ('Yi bing' 議兵). [19] *Laozi zhushi ji pingjie*, 276.
[20] *Da Dai Liji jiegu*, 71.185.

clearly describing the violent anarchy which resulted as a multitude of local strongmen tried to increase their own power. This term is thereafter commonly used in historical writing to describe uprisings, banditry and successions of natural disasters. In another passage from the biography of the King of Qin (later the First Emperor), he is described as 'having the nose of a *feng* and long eyes, a powerful chest like a hawk and a voice like that of a jackal'.[21] Although 'the nose of a *feng*' seems to have been a way to explain that the king had a high nose, the intention was to describe how formidable he was, drawing on the fear in which *feng* were generally held.

In the *Lunheng* 論衡 (Discourses Weighed in the Balance), the first-century CE philosopher Wang Chong 王充 (27–c. 97 CE) discusses the characteristics of *feng* in several places, including which animals they resemble and how. Wang lists *feng* as one of the creatures that harm humans, along with tigers, wolves, vipers, snakes and scorpions. In his chapter 'On Poison' (*Yan du* 言毒), Wang explains that poison is a product of *yang*, which comes from the hot *qi* from the sun and, therefore, if someone is poisoned, it is like being burnt. Wang adds, 'Everything in the world that is born with this sun *qi* has poison. Of those things which are particularly poisonous, amongst insects there are vipers, snakes, *feng* and scorpions',[22] and 'If creatures are born in high, dry places, they are closer to that which is *yang*, and things which are *yang* hang down, so *feng* and scorpions have stings in their tails.'[23] Even honey, which is depicted positively in later texts, is treated with caution in the *Lunheng*: 'If one eats delicious foods, it does no harm. But if one eats just a bit too much honey, one is poisoned. Honey is a liquid from *feng*, and so *feng* are *yang*.'[24] But, apart from these passages in the *Lunheng*, the few other texts from this period which mention *feng* repeat the tropes discussed above.

The earliest extant story in which bees were portrayed as a bad omen is preserved in a fragment from the now lost *Hou Hanshu* 後漢書 (History of Later Han) compiled in the early third century by Xie Cheng 謝承 (182–254 CE). When a local governor, Jia Meng 賈萌, raised troops to attack Wang Mang 王莽, *feng* flew close to the yoke on Jia's chariot. A magistrate remonstrated with Jia that this was a bad omen and that he should not proceed. Jia ignored the prediction and was subsequently killed.[25]

The Emergence of Honeybees in Literature

The term *mifeng* 'honeybee' first appears in a Chinese translation of a Buddhist sūtra dating from 251 CE, where it appears as part of the longer compound *mifeng wang* 蜜蜂王 or 'honeybee-king' (in one place shortened

[21] *Shiji*, 6.230. [22] *Lunheng*, 23.2b. The word for poison and venom is the same in Chinese, *du*.
[23] *Lunheng*, 23.3b. [24] *Lunheng*, 23.1b–2a. [25] *Taiping yulan*, 950.3a.

to *fengwang* 蜂王). The latter became the usual word for the queen (understood to be a king) in later times.[26] However, we cannot know whether the translator, Kang Senghui 康僧會 (d. 280 CE), was using existing words, or if he made them up to translate the Sanskrit. The earliest extant text composed in Chinese which contains the term *mifeng* is the early fourth-century 'Mifeng fu' 蜜蜂賦 (Rhapsody on Honeybees) by Guo Pu. This is also the earliest example where *feng* are represented more positively. Although some of the tropes discussed above appear in this work, it depicts the bees very differently in most respects. Guo begins by exalting the status of bees among flying insects:

> Oh among the restlessly swirling myriad creatures, they are the aristocracy among the chaste insects.
> And there are the diverse small bees – they too take their place among the winged ones.

The idea that bees were 'chaste insects' (*zhen chong* 貞蟲) seems to derive from the second-century BCE *Huainanzi*, although it is probably linked to traditions around the potter wasp. A *Huainanzi* passage states: 'The movement of chaste insects enables them to sting with their venom.'[27] Although it does not specify which insects it is referring to, it is evident from later texts that they were understood to be *feng*. So, while Guo is clearly writing about honeybees, he seems to be borrowing from a broader tradition. He continues by admiring their flight:

> Near they float among flourishing gardens; afar they soar among the forests and valleys.
> Now soaring, now gathering;
> A restless mass in the breeze,
> Swirling like snowflakes,
> An indivisible mass.

Here swarming bees are not portrayed as something ominous or dangerous; instead their massed flight is seen as a thing of wonder. Guo goes on to describe the bees extracting nectar from flowers, to extol the mystery of honey production and its virtues, including its use in medicine, before turning his attention to the colony itself:

> Their banners are bright among the winged ones,
> And their palace gates count among the most solidly locked.
> Their punishments are more severe than those inflicted with battle axes,
> And their summons are quicker than an imperial call-to-arms.
> Their comings-together are not planned yet they all arrive at the same time,

[26] *Liudu jijing*, T.152 03.0034b12–c17.
[27] *Huainan honglie jijie* 淮南鴻烈集解, 16.553 ('Shui shan' 說山).

Their movements are restless yet they come together at the appointed time.
Their great king leads the people,
And all work together to produce the honey.[28]

Whereas in earlier texts *feng* were mainly described in regard to their harmful effect upon humans, or their traits were applied to humans in negative ways, in this text they are described positively as they appear in nature, with no interaction between bees and humans. Guo also introduces what was to become the predominant metaphorical understanding of bee colonies: as imperial courts. The stings are still there, but they now function as punishments to maintain order. They now have a king, which Guo calls *da jun* 大君 'great ruler' and, although Guo does not draw out moral lessons in the more specific way that later texts would, he clearly admires the order and industriousness of the bee colony.

So, by the early medieval period, the Chinese knew that bees had a 'ruler', even if they did not realize that this 'king' was in fact female. This suggests that some people had been observing bee nests quite closely. As honey-hunting had been practised in China for several millennia, presumably the hunters would sooner or later have noticed that there was a larger bee which had a different role, and indeed a different cell, from the others. So it seems odd that no earlier text mentions this. Intriguingly, Guo's poem was written within a few years of the first two texts to mention beekeeping, Huangfu Mi's 皇甫謐 (214–282 CE) biography of Jiang Qi 姜岐 (fl. 158–166 CE) in *Gaoshi zhuan* 高士傳 (Biographies of Men of Noble Character) and an entry in Zhang Hua's 張華 (232–300 CE) *Bowu zhi* 博物志 (Record of a Myriad Things).[29] Neither text says anything about the social structure of the colony itself – Huangfu only notes that Jiang kept bees, while Zhang describes a process of bee-baiting – but, since beekeeping was being practised by this time, it implies both that farmers would have had the opportunity to observe bees close up in a relatively controlled environment, and that they must have had some knowledge of the importance of the 'king', because that is crucial to the beekeeping process. Guo almost certainly had some knowledge of this; fragments of prose-poems he wrote about bull-ants and tortoises also survive, which suggests that he had an interest in the world of small animals.[30] So, although Guo's poem is about bees in the wild, and the chronological proximity of these three surviving texts is probably coincidental, there is likely to be some connection between the

[28] *Quan shanggu sandai Qin Han Sanguo Liuchao wen*, 120.6a–b. There are some missing lines in the transmitted text.
[29] *Gaoshi zhuan*, B.17a–b; *Bowu zhi*, 10.2a–b. For a discussion of the history of beekeeping in China, see Pattinson (2012).
[30] See *Quan shanggu sandai Qin Han Sanguo Liuchao wen*, 120.6b–7a ('Pifu fu' 蚍浮賦 and 'Gui fu' 龜賦).

spread of beekeeping and the emergence of texts which describe bees in more detail, and in a more positive vein.

At the same time, the belief that *feng* should be feared as stinging creatures persisted. This is illustrated by a well-known story in the *Shenxian zhuan* 神仙傳 (Biographies of Immortals), a text attributed to Guo's Daoist contemporary Ge Hong 葛洪 (284–343 CE). Ge tells how his great uncle, Ge Xuan 葛玄 (164–244 CE), once performed a trick at a dinner party to demonstrate transfiguration. First he ate a mouthful of rice, which turned into hundreds of large *feng* who flew over and alighted on a guest, but did not sting him. After eating for a while longer, Ge Xuan opened his mouth and all the *feng* flew back into it. He chewed on them, and they turned back into rice.[31] Ge's magic powers were impressive precisely because *feng* were seen as swarming, stinging insects that could not easily be controlled.[32]

Guo's 'Mifeng fu' does not seem to have directly inspired any further literary interest in bees, although there are a few more positive references to them in poems from the late fifth and sixth centuries. Bees are inevitably associated with flowers and spring, as in the poem 'Yong yuanhua shi' 詠園花詩 (In Praise of Flowers in the Garden) by the period's major poet, Yu Xin 庾信 (513–581 CE): 'The swallows return [carrying flowers] to the caltrop rafters, bees carry them in their mouths to the honey-house.'[33] However, for all the Tang's literary prolificacy, the poetry and prose from that period seems to have added little to the knowledge of bees or, indeed, *feng* in general. In the *Quan Tang wen* 全唐文 (Complete Prose of the Tang Dynasty), only the 'Ben feng dui' 奔蜂對 (Response to the Ruler on Potter Wasps) by Lu Guimeng 陸龜蒙 (d. 881 CE) makes an extensive reference to *feng* of any sort, in an imaginary account of music master Shi Kuang's 師曠 response to Duke Dao 悼 of Jin 晉 (586–558 BCE) after the latter saw a potter wasp building its nest.[34]

There are more references to *feng*, particularly honeybees, in Tang period poetry. Some poems expand upon the themes first seen in poetry from the Six Dynasties, situating bees with flowers in spring, now often accompanied by butterflies, or they repeat some of the negative images discussed earlier. A late Tang exchange between the poets Bai Juyi 白居易 (772–846 CE) and Liu Yuxi 劉禹錫 (772–842 CE) demonstrates how allusions to early *feng* texts would be used in later references to bees, and to the literary metaphor of a bee colony comprising a ruler and his officials. Liu's poem 'Zhou ju chishangting du yin' 晝居池上亭獨吟 (Reciting Alone during the Day in the Pavilion by the Pond) pursues the idea that *feng* educate their offspring: 'The sun at its zenith, the

[31] Quoted in *Yiwen leiju*, 78.1328–9.
[32] Although Ge Hong certainly wrote a book with this title, scholars doubt that the transmitted version is the same one. See Pregadio (2008), 887–8.
[33] *Yu Zishan jizhu*, 303–4. [34] *Quan Tang wen*, 801.16b–17b.

trees' shadows are straight; alone I recite poems in the pavilion by the pond. Quietly I watch the bees (*feng*) as they teach; at leisure, I think of the upright bearing of the crane.'[35] The phrase translated here as 'bees as they teach' (*feng jiaohui* 蜂教誨) is an allusion to the *Shijing* song discussed above about the potter wasp raising snout moth larvae as its own. The next couplet in that *Shijing* song is, 'Teach your son, so that he will be a worthy successor [to the throne].'[36] Although nothing in Liu's poem proves that the *feng* he was watching were specifically bees, this seems more likely than him watching potter wasps with snout moths. If this supposition is correct, it illustrates how the characteristics of another type of *feng* could be attributed to bees, further instances of which I will discuss below. The idea that bees teach their children does not appear much in subsequent texts, but this image fits well with later depictions of bee colonies as imperial courts ruled by Confucian virtue.

Bai Juyi's response includes the couplet: 'Seeing pairs of butterflies one knows they are a faithful couple; when bees swarm one sees the king and his officials (*jun chen* 君臣).'[37] This is an early example of the phrase *jun chen* being used in association with bees; it would become more common later on. Bai uses it again in a characteristically light-hearted poem composed at a spring banquet held in the prefectural *yamen* (probably after his demotion to lowly posts in Jiangxi or Sichuan between 815 and 820 CE): 'Do not mock our crude customs and don't be deceived by the poverty of these offices. Even the nests of bees and ants, by nature have a ruler and officials.'[38]

By the Northern Song period, printing was widespread in China, and a far greater number of works from this period have survived. These include more texts about bees, although they only represent a tiny proportion of a small number of texts about animals. The most significant early Song writing is an essay by Wang Yucheng 王禹偁 (954–1001), 'Ji feng' 紀蜂 (On Bees), which recounts a conversation that Wang had with a monk at Yuanhe Temple 元和寺 in Shangzhou 商州, in what is now southern Shaanxi province. There were many bees around the temple, and the monk described the 'king', its 'princes' and its cell in some detail; the monk also asserted that the 'king' had no venom, and that the bees would not sting when near their ruler. He further mentioned that swarming bees were a nuisance for local farmers, so they would poke thorns into the king's cells to kill the princes and stop the colony from swarming. However, the most significant passage is Wang's response to the monk, as he projects Confucian virtues onto the bees:

> I like the fact that the king has no venom, so it seems that he rules by virtue. I also like that all the king's sons themselves become kings: it seems that there is a single surname and a single ruler [in each colony], each with its set place in the hierarchy. I also like that

[35] *Liu Yuxi ji jianzheng*, 22.629. [36] *Mao shi zhengyi*, 12C.2a ('Xiao wan' 小宛; Mao 196).
[37] *Bai Juyi ji*, 730. [38] *Bai Juyi ji*, 217.

when the bees are near the king, they do not dare sting; it seems that the laws are clear. I also like that there is a balance in how much honey is taken; it is like a tithe. However, the practice of poking thorns into the king's cell and killing his children is extremely cruel.[39]

Although short, Wang's reflections are the earliest to elaborate upon the ruler–official idea in Confucian terms. There was a hint of this in Guo Pu's rhapsody, but Wang is the first to ascribe specific governmental virtues to bee colonies. Although not stated explicitly, Wang also seems to suggest that the bees offer a model of imperial rule which humans rarely attain; certainly the bees behave better than humans killing the bee 'princes', which foreshadows some later interpretations of bee colonies.

Categorizing *Feng* and Bees

By the second half of the eleventh century, these ideas had become integral to more scholarly discourse. In his *Pi Ya* 埤雅 (Augmenting the *Erya*), Lu Dian's 陸佃 (1042–1102) commentary on the *feng* entry for the *Erya* is more expansive than its predecessors:

Feng have two audiences [per day], at which time they stream to where their lord is. All the *feng* hover around [him] like a bodyguard. Their punishments and orders are strictly enforced, and they have a proper sense of the relationship between the ruler and his officials. The *Hua shu* 化書 [Book of Transformations] states, '*Feng* have a ruler, which is in accordance with the rites.'[40]

The ideals and practices of officials serving their ruler are elaborated upon in the section of the tenth-century *Hua shu* which Lu is quoting from. Its Daoist author Tan Qiao 譚峭 asks whether there is any essential difference between animals and humans, since some animals have characteristics normally associated with humans.[41]

Although Lu does not clearly state that he is referring to honeybees, the patterns he describes suggest that he is. Later in this entry, he refers to them collecting nectar from flowers to make honey, calls their combs honey-spleens (*mipi* 蜜脾), and comments that they are also called wax-*feng* (*lafeng* 蠟蜂). He notes that, while honey is the sweetest food on earth, beeswax is flavourless, even though it was made by treading honey. But Lu also quotes the *Shijing* and *Erya* passages about the *feng*'s sting, explaining that 'its venom is in its tail and it lowers its tail like a sharp weapon (*feng* 鋒), which is why it is called a *feng*'.[42] As a whole, Lu Dian's entry for *feng* does not significantly challenge the old categories, although of course he was bound by the structure of the

[39] *Xiaoxu ji*, 14.6b–7a. A full translation of the monk's description can be found in Pattinson (2012), 242.
[40] *Pi ya*, 21.4a. [41] *Hua shu*, 4.41–2 ('Ren hua' 仁化). [42] *Pi ya*, 21.4b–5a.

Erya. However, without making an explicit change, he spends more time describing the honeybee than earlier such texts, and he draws attention to their supposed virtues, which indicates that such understandings had taken hold by this time.

In the *Erya yi* 爾雅翼 (Wings of the *Erya*), another commentary on the *Erya* written about a century later, the scholar Luo Yuan gives honeybees a category of their own. His preceding general section on *feng* begins by asserting that all *feng* are male and chaste. After noting that yellow, narrow-waisted (*xi yao* 細腰) *feng* are called *zhifeng* 稚蜂 'young-*feng*', he first quotes the *Liezi* 列子: 'The entirely female ones are called "large-waisted" (*da yao* 大腰); the entirely male ones are called *zhifeng*', explaining that 'this means they have no male or female, but metamorphose (from larvae into *zhifeng*) themselves'.[43] Luo then refers to the *Huainanzi*, which he says maintains that *feng* are 'chaste insects, which is to say they have no desires', and the assertion in Zhang Hua's *Bowu zhi* that *feng* take the larvae of certain other insects and make them their own sons.[44] While the *Huainanzi* passage only mentions venomous creatures, and the *Bowu zhi* text only refers to *feng* in general, it would seem that Luo believed these characteristics to be true of all *feng*, including honeybees.[45]

After describing the *feng*'s nests and stings, Luo inserts his entry for honeybees. He begins, 'Honey-*feng* are like *feng* but smaller and are good at making honey.' He repeats what earlier texts said about tree- and earth-*feng*, then continues, '[The bees] people keep these days are smaller and slightly yellow, and their waists and abdomens are about the same size, like flies and cicadas. Those who like to keep bees use a hollowed-out log big enough to hold several bushels, put the *feng* in it and nurture them, making a small hole just big enough for them to go in and out.'[46] Next he quotes an account of bee-baiting in the fifth-century *Yongjia diji* 永嘉地記 (Record of Yongjia Commandery), a text similar to Zhang Hua's, and supplements it with a more detailed description of contemporary knowledge and practice, similar to Lu Dian's description of the bees supporting their king and not daring to return to the hive without pollen.[47]

Although, in the section on *feng*, Luo had mentioned a kind of wasp whose sting could kill people, most of his account about stings appears in the honeybee section. As noted earlier, Luo defines 'lowering the abdomen', as specifically meaning 'to lower the abdomen to sting with its venom'. He goes on to note that: 'Nowadays when the narrow-waisted ones sting people, they pull out their stings and fly away. When honey-*feng* sting people and the sting

[43] *Erya yi*, 267. Just before this, Luo explains that the 'entirely female' species refers to tortoises and the like.
[44] *Erya yi*, 267. [45] *Erya yi*, 267. [46] *Erya yi*, 267–8.
[47] For the *Yongjia diji* account, see *Taiping yulan*, 950.3b.

goes into their flesh, they cannot take it out again and the *feng* soon dies.'[48] Luo ends this section by recounting some of the early stories about *feng* swarms being inauspicious, which suggests that he thought honeybees were also the culprit of these stories.

His entry for honeybees is followed by one on the potter wasp, which Luo describes as a 'narrow-waisted black *feng*'.[49] After repeating the tradition that potter wasps could turn snout moth larvae into its own children through incantation, he quotes Tao Hongjing's 陶弘景 (456–536 CE) criticism that these traditions were 'absurd' (*miu* 謬) and that, in reality, the potter wasp was feeding its own larvae with small green spiders and other insects. Although Luo is reluctant to accept that the *Shijing* could be wrong, he admits that Tao's view is more 'in accordance with the nature of things'.[50]

Luo provides the most detailed account of bees, expanding more than Lu, or even challenging, some of the earlier understandings of *feng*. Significantly, he creates a new category for honeybees that is separate from wasps and other *feng*, even though the text of the *Erya* itself does not provide any basis for this. Nonetheless, he still mixes old folklore with empirically observable phenomena and, from a modern point of view, appears to slip between these categories. However, neither this text nor any of the other texts which differentiate between several types of *feng* were trying to establish a proto-scientific taxonomy of *feng*; they were recording inherited or observed phenomena, with a view to explaining the classics, as in the case of the *Erya* commentaries, or they were simply recording things that interested them.[51]

Nevertheless, by the twelfth century, Chinese scholars had built up a more sophisticated taxonomy for *feng* and the honeybee had gained greater prominence as a category in its own right. The defining characteristic of honeybees seemed to be that it was possible to capture and keep them for their honey and beeswax, although some physical features, such as their wider waist and barbed sting, were considered important too. However, although these commentaries sometimes mentioned the imperial nature of bee colonies, they did not generally attribute particular moral values to them in the way that more literary texts did.

Bees and Politics

In response to the turmoil witnessed by the Song dynasty, as it lost the northern half of its empire to the Jurchen in 1125, and later, after it had collapsed

[48] All the quotes above are from *Erya yi*, 268. [49] *Erya yi*, 268.

[50] *Erya yi*, 269. For the Tao Hongjing passage, see *Bencao jing jizhu* 本草經集注, B.276 ('Chong shou' 蟲獸).

[51] For a detailed discussion of the question of taxonomies in early Chinese texts, see Sterckx (2002), chapter 3.

completely in the face of the Mongol invasion, literary works emerged which used bees to make statements about current or recent political events, a practice that was much rarer in China than in Europe.[52] Notwithstanding the leading Neo-Confucian philosopher Zhu Xi's 朱熹 (1130–1200) dismissive view that 'bees and ants only understand the relationship between ruler and official and little else', Song and Yuan texts presented bees as a model of ideal service and order, against which human society was judged.[53]

An early Southern Song example is a rhapsody entitled 'Fengya fu' 蜂衙賦 (Rhapsody on the Bee Colony) by the poet and official Zhou Zizhi 周紫芝 (1083–1155). At some point after the Song court resettled in the south, Zhou composed this rhapsody in which he used the bee colony as metaphor for the loyalty of officials to their ruler, attacking those who had not remained loyal to the Song. After ascribing the values of wisdom and dutifulness to bees – the latter because they allegedly kill those bees that are insufficiently assiduous in their duties – and praising their skill in producing sweet honey and honeycombs, he continues:

> If their residence is not secure,
> The king moves to another location;
> Seeing where the king has gone,
> The crowd of winged ones soar up,
> And hasten towards Him,
> Concerned that He has suffered disaster or injury.
> Where the king has stopped,
> They do not fly up in great displays,
> But gather at the capital and build the state,
> Until they again sit in the Hall of Brightness (Mingtang 明堂),
> As Lord and officials.
> The rituals and ceremonies are performed with rhythm and grace,
> Living in peace without incident,
> The officials' rites are favourable,
> And they are loyal, not abandoning their ruler,
> Even in tumultuous times.

Zhou does not mention the bees again after concluding that it is inauspicious for officials to turn their back on their ruler and abandon the state, but his poem has taken the bee analogy further than the earlier examples we have seen, now ascribing to bees more specific virtues associated with the imperial court.[54] Guo Pu described swarms of bees settling and building a palace and Lu Dian had touched upon some governmental ideals, but Zhou is specifically emphasizing the need for discipline and loyalty on the part of the bee officials.

[52] See, for example, Wilson (2004), 106–39; Preston (2006), 53–92. [53] *Zhuzi yulei*, 4.33a.
[54] *Taicang timi ji*, 41.9a–10a.

Writing after the Song dynasty had been defeated and replaced by the Yuan, Dai Biaoyuan 戴表元 (1244–1310) used the behaviour of bees to suggest that it was better to work for the new regime than to dream about reviving one that no longer existed. Dai, who seems to have kept bees himself, begins his long poem 'Yi feng xing' 義蜂行 (Ballad of the Dutiful Bees) by recounting how an old man living in the mountains loves bees just as he loves flowers, protecting the hive when the bees go out, while 'borrowing' *jie* 藉 some of the honey to help him make a living. Dai describes the bees travelling far and wide over the countryside to find sweet nectar, which they then haul back and present to the king, without taking any for themselves first. However, one day the 'great bee' *dafeng* 大蜂, i.e. the king, goes out, carelessly showing off his finery, whereupon he is attacked by a dragonfly and eaten by a toad. At first the other bees fly around frantically but, unable to find their king, they eventually settle down. Dai says that he saw all this when he visited the old man, who told him that bees reproduce very quickly and will come together to perform their duty. After the old man reminds Dai of stories of kingdoms that only existed in dreams and could never be found again, and further stresses the bees' ability to look ahead and work together in unity, Dai decides that people should not dwell on the past. He ends the poem saying, 'The new house just established, the bees not yet strong/ The old house abandoned, it has fallen into the mud.'[55] While the bees respond differently in each poem – the king in Zhou's poem survives, while that in Dai's is killed, probably reflecting the fate of the respective Song emperors – in both cases the worker bees' commitment to rebuilding the state is paramount. Both poems project a sense of duty, rank and ritual order onto bees, even if Zhou's vision seems more severe than Dai's.

The longest single poetic work on *feng* from the imperial period was the 'Feng fu' 蜂賦 (Rhapsody on Bees) written in the early Yuan by Liu Shen 劉詵 (1269–1351), a native of Ji'an 吉安 in Jiangxi. Liu was only a child when the Song fell, but he knew some of the Song loyalists' ideas, and was possibly drawing on these when he wrote his rhapsody. Liu's piece is notable both for the level of detail in which it describes the supposed characteristics of bees, and for suggesting that bees are superior to humans in certain ways. In his brief preface he states that he is compelled to record the nature of bees because they know that attending court is the foremost obligation that officials owe their ruler, and that to die in the service of one's ruler is a cardinal moral principle.

He begins the poem by explaining that people and all other living things were equal when the world was created, and they became branches of a tree with the same root. One only came to rule over the world because of a difference in degree of natural endowment. Liu suggests that the reason humans have not

[55] *Shanyuan wenji*, 28.8a–9a.

realized how similar bees are to humans is either because bees are so small that people have not bothered to look closely at them, or because people are afraid of being stung, so dare not approach them. Next, he describes how bees build their nests on cliffs in the spring and then, after divining a suitable site and time, move to set up a new capital, which Liu compares to a new branch of a family moving to its residence, or a wise ruler granting a fief to his sons. The new palace is built by the bees working side by side and, as the bees carry pollen back to the nest between their thighs, the 'government stores' become filled to overflowing. Liu describes the bees in military terms several times: they fly in ranks like an army, set up sentry posts around the nest and 'tiger troops dressed in black' defend the many gates; again, lazy bees are killed. Twice a day all the bees attend court, showing appropriate decorum and reverence. Then, on a day of leisure, the king will go out on an inspection tour across the hills and mountains, overseeing his subjects. But, when the king's rule weakens, the mass of bees 'vow not to desert him', but leave their garden of floral paradise and, in dejection, either starve themselves to death like the Shang dynasty adherents Bo Yi 伯夷 and Shu Qi 叔齊, or kill themselves, which the five hundred soldiers loyal to the general Tian Heng 田衡 chose to do rather than serve the new Han dynasty, when they heard that Tian had killed himself.[56] Then Liu mentions the ancient idea of *feng* as venomous insects to be avoided, contrasting this with the more recent view that they are a model of moral order:

> Alas! Getting stung by the venom,
> Is the concern of the Zhou *Odes*;
> That they had venom like the scorpion,
> Was what the *Spring and Autumn* texts warned against.
> Who would have known that such small animals
> Would observe the Five Constant Relationships in full.[57]

A few lines later, Liu lists the ways in which bees' behaviour reflects some cardinal Confucian moral values:

> Their attending court on a regular basis,
> Is like being trustworthy and observing the rites;
> Thinking carefully about what they do,
> Is being ingenious and clever;
> Single-mindedly willing to die to repay their ruler's kindness,
> This is to resolve to be dutiful;
> Cutting from the comb and giving it out,
> This is kindness born of benevolence.

[56] For the story of Bo Yi and Shu Qi, see *Shiji*, chapter 61; for Tian Heng, see *Shiji*, 94.2646–9.
[57] The Five Constant Relationships refer to humaneness, right action, ritual decorum, wisdom and trustworthiness.

After again emphasizing how important it is to be willing to die from loyalty to one's ruler, Liu concludes by stating that he wrote this rhapsody to exhort future generations, by illustrating how bees are superior to humans.[58]

Dutiful and Auspicious Bees

During the Ming and Qing periods, there were very few significant texts about bees or *feng*, and they were depicted in broadly similar ways to that of Song times. Bee colonies were nearly always understood as imperial courts and the bees' dutiful service to their monarch was their most admired trait. The *Dantu xianzhi* 丹徒縣志 (Dantu County Gazetteer) recounts an episode from the end of the Zhengde reign period (c. 1520) in which a swarm of bees was escorting its king by Mount Beigu in Zhenjiang when a bird of prey swooped and killed the king. The rest of the bees remained beside the dead king and all died within a matter of days. When the scholar-official Yang Yiqing 楊一清 (1454–1530) heard about this, he ordered his servants to bury them, and he wrote on the tombstone: 'Tomb of the Dutiful Bees'. He also wrote a funerary oration for the event.[59]

The Ming loyalist scholar Chen Hongxu 陳弘緒 (1597–1666) wrote an essay on beekeeping in the late 1640s while hiding out in his mountain estate to the west of Nanchang, in which he saw bees as the epitome of order in disordered times. He notes, factually but probably with the fall of the Ming in mind, that if the king is lost the bees will fly around aimlessly. He then turns to the theme of discipline in the colony, here in relation to the bees' stings: 'If the sting goes in deeply the bee will lose its sting. The king watches the bees come back in and, if a bee has lost its sting, the king knows that it has wantonly injected all its venom into a person, whereupon he will order the other bees to bite that bee to death.'[60] He follows this with an unacknowledged quote from the beekeeping section in his friend Song Yingxing's 宋應星 (1587–1666?) *Tiangong kaiwu* 天工開物 (Works of Heaven and the Inception of Things), describing what we now know to be the queen's mating flight as a royal excursion in which the king is escorted by attendants.[61] Chen concludes his essay by reflecting how there is such admirable order amongst the bees compared to humans: 'When I think about how so many people are dying in war, flood and drought, with the bones of the dead everywhere, I just wish to rest amongst the bees, day and night watching them come and go, gather and disperse, so I can examine the order of things. But how can I achieve this?'[62]

[58] *Guiyin wenji*, 1.5b–7b. [59] Quoted in *Gujin tushu jicheng*, 170.46.
[60] 'Yangfeng ji' 養蜂記, in *Dunsutang liushu*, 2.34b. [61] *Dunsutang liushu*, 2.34b–35a.
[62] *Dunsutang liushu*, 2.35a–b.

Chen's essay reflects what seems to have been the widespread view at this time – that bees are auspicious. He begins, 'Whenever bees come to someone's home that family will certainly prosper. The family will burn incense and cut coloured ribbons to welcome them, and they will report it to the ancestors and pray that the family will flourish.'[63] Later he reports that people in the mountain regions who do not have almanacs to refer to, for divining appropriate dates, observe the direction in which the bees swarm to decide when to hold weddings, construct buildings and plant crops.[64] The fact that such beliefs were common is confirmed by Hao Yixing in his *Fengya xiaoji* 蜂衙小記 (Short Record of the Bee Colony): 'Families which keep bees say that the day upon which bees swarm is certainly an auspicious day.' Hao remarks that he has tested this and found it to be true.[65]

Finally, an earlier story in the *Yongjia xianzhi* 永嘉縣志 (Yongjia County Gazetteer) recounts that, in the spring of 1433, while the local Prefect was teaching at the Confucian school, a swarm of bees flew in escorting a larger bee, and settled on the rafters. The Prefect pronounced that this was an omen that one of the students would come first in the next Metropolitan Examinations, which duly happened.[66] Such accounts stand in stark contrast to stories from the early period, in which the appearance of bees usually portended death.

Conclusion: Changing Perceptions

The texts discussed in this chapter trace a clear transformation in the way bees were viewed in China over the centuries. In early texts it is usually difficult to tell which kind of *feng* was being described and there were only limited taxonomies of *feng* and similar insects. *Feng* were almost always associated with violence, cruelty and bad luck. They were most commonly mentioned together with scorpions. Human characteristics do not seem to have been projected onto *feng*, but certain physiological and other features of *feng* were projected disparagingly onto humans. From the time of Guo Pu's 'Rhapsody on Honeybees' onwards, more positive associations, including straightforward associations with spring and flowers, began to emerge, although the number of significant references to *feng* remained small. Very gradually then bees gained a clearer identity of their own and, by the Song period, there were more detailed taxonomies of *feng*, including bees. By this period, the idea that a bee colony is like an imperial court with a ruler and officials was clearly established, and the most sophisticated meditations on bee colonies appeared from the Song through the Yuan. In these, human characteristics – especially

[63] *Dunsutang liushu*, 2.34a. [64] *Dunsutang liushu*, 2.35a. [65] *Fengya xiaoji*, 3b–4a.
[66] Quoted in *Gujin tushu jicheng*, 170.46.

Confucian values of duty, order and ritual – were projected onto bees, either as ideals to emulate, or to criticize the political choices made by others. These remained the dominant themes associated with bees.

Why did these changes in the representation of bees and clearer differentiation of *feng* take place? Without saying much about pre-Song representations of *feng*, some scholars have suggested that there is a link between the development of the beekeeping industry during the Song and increased literary output about bees. If beekeeping was more widespread, more people were probably observing bees more closely, which might have resulted in a better understanding of bee behaviour and more writing about them.[67] But, while this is almost certainly part of the answer, it is also problematic. Li Lu suggests that the invention of printing meant that more texts on beekeeping were published, which in turn led to improvements in beekeeping techniques.[68] What is more likely, however, is that the spread of printing enabled more texts about bees to be preserved; we cannot be certain that there were no earlier texts about bees which might have revealed similar themes. Indeed, while we cannot establish any definite link between the emergence of more positive representations of bees in the fourth century and the spread of beekeeping, it is clear that both strands had been evolving in parallel well before the Song. Moreover, there is little specific evidence for significant advances in beekeeping technology during the Song, or for beekeeping becoming more widespread. Li cites a poem by the eminent writer Su Zhe 蘇轍 (1039–1112), which describes how an old man captured a swarm using a combination of smoke and honey-bait to coax the bees first into a bag and then into a hive, as evidence of developments in beekeeping practices at that time.[69] However, we know that smoke was also being used at least a century earlier to make it possible to gather larvae for food from wild nests, and it is likely that the technique had been known for some time before that; we have also seen that bee-baiting was known by the late third century.[70] Furthermore, most honey and bee larvae were still gathered from the wild, rather than from bees kept in hives. While extracting honey and larvae from the wild requires knowledge about bee colonies and mastery of certain techniques – not least to avoid being stung – it is not a skill in which significant technological advances are likely to take place.[71]

The projection of more Confucian virtues onto bees from the Song onwards coincides with the rise of Neo-Confucianism, suggesting another explanation

[67] See, for example, Li Lu (2013), 150; Gao Lieguo (2011), 55. [68] See Li Lu (2013), 150.
[69] Li Lu (2013), 150. [70] *Lingbiao luyi* (*xia*), 7a–b.
[71] Describing honey sources in the late Ming, Song Yingxing notes that 80 per cent still came from the wild. It seems unlikely that the situation during the Song would have been markedly different. See *Tiangong kaiwu*, 66.

for why bees started being represented more positively. Yet, these Confucian values affirmed in the Song and later literary texts about bees are, in fact, standard ones associated with Chinese imperial courts: loyalty, ritual decorum, dutifulness, discipline, working together for the good of the 'kingdom' and industriousness (unlike in Europe, bees' industriousness was always portrayed as in the service of the king, not as an economic good in its own right). We have also seen that Zhu Xi remained unimpressed by bees despite their observance of the ruler–official relationship. However, these Song and Yuan works are interesting as moral responses to the political crises of the times they were written and because, in them, bees became associated with a perfect social order that humans could not achieve.

The fact that the appearance of bee swarms came to be viewed as auspicious rather than a bad omen is another major change from earlier times, which seems to have begun during the Song. Again, the relative scarcity of texts from the pre-Song period makes it difficult to be sure when and why this change occurred, but it seems likely that it was based on economic reasons: if a farming family knew how to keep bees, the arrival of a swarm meant increased income from the sale of honey and beeswax. If people had learnt how to control bees, this would have reduced their fear of them – at least to some extent.

Nevertheless, it is true that long experience of honey and bee larvae hunting, as well as beekeeping, would have led both to a more sophisticated understanding of bees, including being able to distinguish between bees and other *feng*, and to bees being viewed with less fear. So, while it is problematic to ascribe changes in the representation of bees to conditions specific to the Song, a greater familiarity with these insects probably provided the environment in which richer and more positive representations of bees in literature could emerge. At the same time, however, we have seen how a writer's political and social circumstances, within broader social and ideological changes, could be as much a factor in describing animal behaviour as direct observation.