BHRAMAROTPĪTĀDHARAḤ – BEES IN CLASSICAL INDIA

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Un' ape esser vorrei, donna bella e crudele, che sussurrando in voi suggesse il miele e, non potendo il cor, potesse almeno pungervi 'l bianco seno e 'n sì dolce ferita vendicata lasciar la propria vita.

Torquato Tasso

1. INTRODUCTION

Why have I decided to study bees in classical India?¹ The theme seems rather trivial. Everyone knows bees, both as the heralds of spring in poetry and as the makers of honey. However, there is much more to be said about them. I came to ponder more about bees when noting a couple of errors with names. Because of their large size and dark colour, some translators call the black bees of India humblebees (or bumblebees). This is completely wrong; the humblebees belong to a different genus, they form only small communities, produce very little honey and are quite rare in India. Another case concerns modern usage. In a seminar at the University of Helsinki, a student presented her interpretation of Premchand's short story 'Satī'.² Examining it, my attention was drawn to a passage with the Hindī word *bhaumrā*. The young Rājpūt heroine was attracting soldiers around her like a flower attracts these insects. Although there are a number of species of beetles visiting flowers, I could not accept 'beetles' as translation, not even when I found *bhaumrā* explained as a 'large black beetle' in McGregor's dictionary. A check with Śyāmsundar Dās's *Hindī śabdasāgar* brought the more acceptable sense of a 'bee'

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² *Mānsarovar* 5, 73–85.

and Turner confirmed that the word is derived from OIA *bhramara* (Pāli, Pkt. and Ap. *bhamara*). Of course, a Hindī speaker has no difficulty with the passage.

2. NAMES OF BEES

2.1 Indo-Aryan

In Sanskrit, bees have numerous names. They include *bhṛṅga, bhramara*⁴ and *ali(n)*. Several names are formed with *madhu* 'honey': *madhukara* (P) and *madhukṛt* (TS) both signifying the 'maker of honey', *madhuda* 'giver of honey', *madhupa* 'drinker of honey', *madhuvrata* 'devoted to honey', *madhulih* 'licker of honey', also *puṣpalih* and *puṣpandhaya* 'licker of flowers'. Occasionally, just *madhu* seems to serve as short hand for a 'bee'. Furthermore, we find *dvirepha* 'containing two r's (as *bhramara*)', *ṣaṭpada* 'six-footed' (also *ṣaṭcaraṇa* and *ṣaṭaṅghri* [in BhāgP 4, 29, 53]), *saragh(ā), indindirā, bambhara, bhasala, milinda, rolamba* (*lolamba*), *śilīmukha*, the Rgvedic hapax *āraṅgara*, etc. A number of these have parallels in Pāli and Prākrits. At times, many words for bees can also be used in the sense of 'insects' in general (see below).

Some names need a closer discussion here. *Sarágh* (fem.) appears in ŚpB 3, 4, 3, 14 (bees make honey, Kashi ed. 3, 3, 4, 14 *mádhu sāraghám iti ... sarágho madhukṛto*) and other Brāhmaṇa texts, vocalised *saraghā* in classical texts, but the derivation *sāraghá* as early as Rgveda (8, 4, 2 as honey, 10, 106, 10 perhaps as bee, see below). The etymology of the word was discussed by Charpentier (1919) who also equated it with *sarát* of RV 1, 112, 21 (dat.pl. 'to bees' according to Mayrhofer, then TS, etc.) and with the lexicographers' word *saraṭa* 'lizard'. The latter word is also found in MIA and even Marāṭhī, but according to Mayrhofer, it is not related.

Turner s.v. *bhramara*. Other dictionaries (e.g. Satyaprakāś and Miśra) confirm that Hindī *bhaumrā* as well as the tatsamas *bhṛmg* and *bhramar* can also have the sense of 'beetle', but 'bee' is certainly primary and McGregor should have given it. Note that Malayālis also have a tendency to mix beetles and bees (see 2.2 below).

⁴ Bhṛṅga is met as early as the AV (9, 2, 22 Kāma is superior to them), bhramara from the epics onward. Mayrhofer (KEWA and EWA) connects both with the humming, adding some Indo-Iranian and Indo-European parallels, but does not completely exclude the alternative explanation of a connection with bhram- 'to wander'.

On this, see Lüders 1916, who construes an original meaning of 'sting'. Note that in lexicography the word also has the meaning 'scorpion'.

Varāhamihira's Yogayātrā 3, 6 quoted below, where madhu is mentioned along with pigeons and owls. This use is not mentioned in the pw.

Explained in Alamkāra texts, e.g. Vāmana 5, 1, 15+. dvirepharathacaraņaśabdau bhramaracakravākau.

Pāli bhamara, madhukara and late ali (13th century, see Warder 2004: 807); Prākrit ali/āli, bhamara, bhasala, bhimga, mahuara, etc.

Like the possibly related *bhramara*, the word *bambhara* is, in Mayrhofer's opinion, connected with the idea of humming, but his Nuristani parallels show that the word must be quite early. The word *bhasala* occurs in classical texts, in lexicography also as *bhasalaṇa*. The word *milinda* 'bee' is quoted from the Bhāminīvilāsa, cf. Marāṭhī *milind*, Kannada *mēṭamba* and Telugu *milindamu* 'the black humble bee' (thus Mayrhofer and *DEDR* 5097, but see my note on humble-bees below). Both *indindira* and *rolamba* (in lexicography also *lolamba*) as a 'bee' are found in classical texts, the first perhaps corresponds to Pkt. *iddaṇḍa*. Mayrhofer (*EWA*) mentions for *rolamba* a not very similar Tamil parallel suggested by Burrow, but deems the etymology uncertain. The black bee is specified as *nīlāli* by Bhāmaha (2, 6, quoted below). According to the *Vedic Index, madhukṛt* is found in the TS (1, 5, 6 and 4, 2, 9), but seems here to denote cattle. As a 'bee', it is attested in the ŚpB 1, 6, 2, 1f. (1, 5, 1, 1f. Kashi ed. *yathā madhu madhukṛto nirdhayeyur*).

2.2 Dravidian

Checking *DEDR* for Dravidian languages, I found i.al. no. 3328 Tamil, etc., *tumpi* 'bee, male bee, dragon-fly'; in other languages related words are also used for beetles. In *TL*, *tumpi* as 'bee' is explained as *uyarnta cāti vanţu* 'a high-caste insect'. In Malayālam, however, it is explained by Gundert as 'a black beetle flying at night'. For cognates, *DEDR* also notes the sense of 'beetle' in Kota, Koḍagu and Parji, while 'bee' is attested in Kannaḍa, Tulu and Telugu. One can hardly confuse a beetle with a bee when it is still, but with a flying insect there is a certain similarity (e.g. the cockchafer). The more common confusion between bees and flies is contained in *DEDR* no. 533 Tamil $\bar{\imath}$ 'bee' with compounds $t\bar{e}n\bar{\imath}$ 'honey-bee' and $\bar{\imath}ccai$ 'fly' and with cognates in Malayālam, Irula, Kota and Toda all signifying a 'fly' (but Telugu $t\bar{e}nt\bar{\imath}$ 'large black bee').

2.3 Bees or flies?

Even OIA *mákṣa/mákṣikā* can refer to bees, in addition to flies. In the Rigveda, there are four passages where they are mentioned in connection with the Aśvins as carriers of honey. In RV 1, 119, 9 and 10, 40, 6 they bring honey to the Aśvins.¹⁰ In RV 7, 32, 2 the Aśvins are said to come to the honey-pressing like bees (or

The dictionaries, PW & pw, know only nīlālikulasamkula as a species of rose in lexicography (Dhanvantari).

RV 1, 119, 9 utá syấ vām mádhuman mákṣikārapan máde; 10, 40, 6 yuvór ha mákṣā páry aśvinā mádhvāsā' bharata.

flies?).¹¹ The Aśvins bring honey like bees in RV 10, 106, 10.¹² There have been attempts (Macdonell & Keith 1912 s.v. *makṣa*; Geldner's translation, Thieme 1965) to explain some of these passages as 'flies', but I would rather think that we have here bees and it was only later that *makṣa/makṣikā* became understood as a 'fly'. Much later, it was considered an ill omen, if flies made honey.¹³ But even then, a *madhumakṣikā* seems to be a bee. When I started this study, I was of the opinion that *makṣa/makṣikā* generally denoted a 'fly' and indeed, a number of references can be shown to support this. However, classical Indian literature often shows a confusion between different kinds of animals (cf. my discussion of *śalabha* and *pataṅga* in Karttunen 2003). Medical authors list *mākṣika* among the different kinds of honey and in the commentary of Dalhaṇa, the repeated word *makṣikā* can only be translated as a 'bee' (see 7.3 below).

The same ambiguity is also found in Pāli. In the Dīpavaṁsa (6, 11 makkhikā madhukaṁ karuṁ), flies are impossible. When the Dhammapada Commentary (1, 5, p. 59 and 2, 1, p. 166) speaks of good honey as nimmakkhikamadhu, this is translated by Burlinggame and the PTS Dictionary as 'free from flies'. Of course, good honey should be so, but it also should be 'free from (dead) bees'. In the first passage, the honeycomb was actually found in such a condition and this gives the further idea of being 'free from bees' to defend it. This is supported with Jātaka 51 (J 1, p. 262), where the rich, but undefended country is described as being like nimmakkhitamadhupaṭala 'honeycomb without bees'. Nevertheless, there is no shortage of passages where Sanskrit makṣikā or Pāli makkhikā clearly refers to flies. In fact, they are so numerous that I intend to deal with them in a separate study in future.

3. BEES IN NATURE AND HISTORY

3.1 Species of bees

There are different kinds of social bees preparing honey. The bee traditionally kept in Europe is known as *Apis mellifera* L. In South Asia, there are three species: the large *Apis dorsata* Fabr., variously called the hill bee, the rock bee, or the giant

RV 7, 32, 2 mádhvo ná mákṣaḥ sávanāni gacchatham. Thieme (1965: 224) explains the word here as 'flies'. On the connection of the Aśvins (Nāsatyas) with madhu and surā, see Parpola 2005: 21–22.

RV 10, 106, 10 āraingaréva mádhvérayethe sāraghéva; cf. RV 1, 112, 21 mádhu priyáin bharatho yát sarádbhyas.

AP 263, 29 madhu vā makṣikā kuryāt. The AITMS translation claims that this means 'sweet sound made by bees' which can hardly be considered a sinister omen. But it could also refer to 'bees making honey (in the house)', cf. 9.2 below.

honey bee.¹⁴ It lives wild in hilly areas all over South Asia and is said to produce excellent honey (but see 7.3 below). *Apis cerana* Fabr. (or *Apis indica* Fabr.), the tree bee or eastern honey bee, is the usual domesticated bee in South Asia. This is found even in the mountains. The third species is the small *Apis florea* Fabr., the flower bee or the little honey bee.¹⁵ It is found only on plains. They build their nests on trees and bushes, but also on and in houses. *Apis cerana* and *Apis florea* have just one single comb, but what *Apis dorsata* does is not clear (Watt 1889: 436).

The large black bees are properly speaking *Apis dorsata*, but often it is not possible to to differentiate them from *Apis cerana* in literature. According to texts, wild bees build their nests in trees and on precipices, and their honey is collected, often by wild tribes. They produce excellent honey (but see later Chapter 7), but they are also aggressive and therefore dreaded and dangerous.

3.2 Bee-Keeping in history

Bee-keeping or at least the collecting of the honey of wild bees started early both in India and elsewhere. The very existence of a common Indo-European word for 'honey' shows its great antiquity. There are prehistoric traces of bee-keeping in South Russia. Herodotus (5, 10) gave an account of bees in the country beyond Thrace. The ideas of Greek and Roman zoologists about bees can be found in Aristotle (*H. An.* 8 [9], 40, 623b–627b), Pliny (*N. H.* 11, 11–70) and Aelianus (*N. An.* 5, 10–13), and in addition, agricultural texts discuss the honey industry (e.g. Vergil and Columella). In the western world where sugar was practically unknown, honey was much appreciated as a sweetener.

In India, honey was already consumed and appreciated in the early Vedic period (see the RV passages quoted above), but there is little evidence of actual beekeeping.

I have long wondered what is *Bombinatrix glabra*, given in the *DEDR* as a name of black bee. The question remains somewhat open, but perhaps it is just a synonym for *Apis dorsata*. The source for *DEDR* seems to be Kittel's *Kannaḍa Dictionary* of 1894 and thus it is probably an old, now antiquated name. Unfortunately, the ITIS (*Integrated Taxonomical Information System*) does not recognise it at all.

Names according to An Annotated Catalogue of the Bee Species of the Indian Region. See also Hooper 1910: 511.

OIA mádhu, Greek μέθυ, Latin mel, OHG mito, also early Finno-Ugric loan, e.g. Finnish mesi 'honey, nectar of flowers' (FU *mete). Another Finnish word, mehiläinen 'bee' is, through FU *mekše, perhaps related with OIA makşikā. See Koivulehto 1994: 136 (mehiläinen) & 138 (mete) and Parpola 2005: 21. In spite of this, the IE words for the 'bee' widely differ, e.g. Latin apis, Greek μέλισσα, OHG bīa (OE bēo). An interesting, though antiquated source is Pott 1861.

3.3 Ideas of bees as animals

The literary motifs in India connected with bees are numerous. Their popularity can be seen from the fact that several anthologies contain a special division for the theme 'bee' (e.g. in the Śārṅgadharapaddhati and Vallabhadeva's Subhāṣitāvalī, see Chapter 9 below).

It is not easy to observe the senses and abilities of insects. A classification of animals in the Bhāgavatapurāṇa (3, 29, 28 ff.) rightly ascribes the olfactory sense to bees, but here a much higher category are those animals that perceive colours (as bees in reality do).

In many lists, bees are mentioned together with birds.

4. BEES IN LITERATURE

4.1 Bees and forest

In general, bees belong to the forest. The numerous poetic descriptions of forests, parks and gardens in Sanskrit poetry hardly ever omit to mention bees and their humming as staple characteristics. ¹⁷ A bee is glad, when it sees a forest with various flowering trees and fragrant breezes (BhNŚ 15, 30 N = 16, 22 Gh *kusumitam abhipaśyantīvividhatarugaṇaiśchannam/vanamanilātiśayagandhāḍhyambhramati madhukarī hṛṣṭā*). According to an unknown poet, the trees develop their scent for winds, shoots for the deer, bark for ascetics, flowers for bees, fruits for birds, their shade for those afflicted by heat and their trunks for the scent-elephants (*Jalhaṇa, Sūktimuktāvalī, according to Warder 2004: 959).

When the distinction between the terrible and the friendly forest (*aranya* and *vana*) is made – as often happens in epics and narrative literature – bees belong to *vana*. Usually, the sight of bees is exhilarating, but for hungry people looking for honey, the bees may become a real torment (Bhāgavatapurāṇa 5, 13, 10 *karhi sma cit kṣudrarasān vicinvams tan makṣikābhir vyathito vimanāḥ*). Their buzzing is

e.g. Mbh 1, 64, 5 *şatpadāghūrņitalatam* (scil. *vanam*); 3, 98, 13 *şatpadodgītaninadair vighuṣṭam*; 3, 146, 20; 3, 155, 52; 3, 296, 41 *mahāvanam* ... *bhramarair upagītam*, etc.; Bāṇa HC 8, 127 (234) *madhupamaṇjusiṇjājanita* & Kd 41 below; Kṛṣṇamiśra 4, 27+; Śaṅkara ŚTBh 27; Jayadeva Gītag 1, 27; Somadeva KSS 4, 2 (22), 103 *bhṛṇgīsaṃgītasundaram*; BhāgP 1, 6, 13 *bhramaraśriyah* (mountains); 3, 33, 18 *gāyanmattamadhuvratam* (garden); 4, 6, 12 *madāndhālivimurcchitam* (Mt. Kailāsa) & 4, 6, 29 (Kubera's garden); 4, 9, 63 *gāyanmattamadhuvrataiḥ* (royal garden); 4, 24, 22 (trees around a lake); 4, 25, 17 (garden); examples in BhNŚ 32, 300 N (32, 354 Gh; *vaṇam pagīdachappadam uvei esa kokilā*); Varāhamihira BS 19, 5 *vanāny alināditāni* & 24, 1 on the summit of Meru & 48, 7; Āryaśūra Jm 9, p. 156 & 24, p. 219; Vedeha's Samantakūṭavaṇṇanā 515. An exception is the Mahāvastu that (being not bound by poetic conventions of classical Sanskrit) in its descriptions of gardens elaborates on various flowers, but often omits to mention the usual birds, bees and other animals.

generally described as pleasant (for examples, see 4.6 below), but in a Jaina work, the noise of bees, disturbed when clusters of flowers were being cut from trees, sounded as if cries of pain came from the trees (*Vādirāja, Pārśvanāthacarita 4, 6 in Warder 1992: 320).

In the artificial gardens of Dhārā, the skilled engineers of King Bhoja had not only created bird and monkey robots, but even mechanical bees (*Śṛṅgāramanjarī quoted by Warder 1992: 156).

4.2 Bees and flowers

4.2.1 General

The most natural among the bee motifs of poetry, easily observed in nature by everyone, is the idea of flowers attracting bees. A flower without a bee is like a young woman in love without a lover (Śańkara ŚTBh 134). The subjects are drinking up the substance of a smiling king like quivering bees the flower, hardly touching it at all. But sometimes bees are so numerous that flowers break and collapse under their weight. In many cases, we note particular flowers attracting bees: The real favourites are various jasmines, mango, and lotus and waterlily, but a number of other flowers are also mentioned as visited by bees. My material provides the following instances:

4.2.2 Individual flowers

4.2.2.1 Jasmine. The various jasmines (*mālatī*, *navamālikā*, *kunda*, etc.) of India are often mentioned as particular bee flowers. They include bushes and creepers with large, fragrant white flowers. They are said to flower in the rainy season and open their flowers in the evening (Syed 1990: 498 ff.).

In texts, jasmine is one of the favourites of bees. Thus we find bees visiting jasmines, e.g. in Harşa Pri 2, 1+ (māladī, quoted above) and 3, 0 (māladī, below); Rājaśekhara KM 3, 2 bhamarakavaliantā mālaīmālia & VBh 1, 30; Kālidāsa Rv 16, 47 sāyamtanamallikā; Bhartṛhari Śrṅgāra 98 vikasatkundamādyadvirephe; Daṇḍin DKC 5, 148 madhukara iva navamālikām and Kā 1, 43f. mālatīmālā lolālikalilā as an example of śleṣa; Bāṇa Kd 29 & 175; Subandhu 48f. & 136 vicikilakalikāvivare mañju guñjan madhukaro & 137f. vikacavicikilarājir alikula-śabalā; Bilhana 40 antarnimagnamadhupākulakunda; *Maṅkha Śrīk 6, 70 (in

^{*}Amaracandra, Bālabhārata 40, 107 in Warder 2004: 577.

Harşa Pri 2, 1+ mahuarabharabhaggabaülamāladīladā; Dandin DKC 7, 176–177. lālasāli-langhanaglānaghanakesare; Bāna Kd 278 bhramarabharabhugnakesarajarjarakusumopahāraramyo ayam latāmandapah.

Warder 2004: 85); Somadeva KSS 13, 1 (104), 42 ff. *malatīlatā* ... (44) *āpatitāms tasyāḥ kusumeṣu śilīmukhān*; Śārṅgadharapaddhati 45, 15 (829 = Vallabhadeva 18, 740); Vallabhadeva 18, 742 & 743 *navamālikā*. Furthermore, there is a verse quoted by Syed 1990: 499 ex Sternbach, MSS 8438f. & Hāla (Weber) 442 on bees in jasmine.

There are several members of the genus *Jasminum* indigenous to South Asia and they do not all flower at the same time. What was said above (rainy season) applies to the common shrub *Jasminum sambac*, but *Jasminum arborescens* has flowers from winter to summer, *Jasminum calophyllum* in winter and spring, while *Jasminum cordifolium* blooms in January.²⁰ Thus, we need not wonder when we meet in texts blooming jasmine in other seasons. In one case, it is explained that bees like the jasmine (*kunda*) as it flowers early in the spring, when other trees have not yet opened their flowers (Vidyākara 8, 8 (159)). In the Śārṅgadharapaddhati 137, 13 (3931), they visit jasmine in wintertime (*kundānanditamattaṣaṭpadakule*). In Vallabhadeva 18, 742, the bee leaves *bakula*, *kunda* and *raktāśoka* and goes to the *navamālikā* jasmine. If *mālatī* and *navamālikā* primarily denote *Jasminum sambac* (as is often stated), it is possible that *kunda* refers to another kind of jasmine.

In lexicography (*PW* from the Rājanighaṇṭu), the jasmine is also called *bhṛṅgā-nanda*.

4.2.2.2 Mango. There is no need to present the mango (āmra, cūta, etc.). When flowering, it is often mentioned as another favourite of bees. Although spring has numerous flowers (anantapuspasya madhor), bees cling to mango (Kālidāsa KS 1, 27 cūte dvirephamālā saviśeṣasangā). Further: Mbh 3, 155, 60 sahakārān ... bhramarārāvān; Kālidāsa Māl 1, 13+ & 3, 13 & 4, 2 (cūta), Śak 1, 21+ (below) & 5, 8 paricumbia cūamañjarim; Śūdraka Mk 2, 0 (mahaārapādavam, see below); Bhavabhūti Mm 3, 3+; Rājaśekhara VBh 1, 4f.; Amaru 83 (78) cūtadrume mañjarīm ... bhrngānganāśobhinīm; Bhartrhari Śrngāra 86 sahakāra; Kālidāsa KS 3, 27 and Rv 6, 69 na hi praphullam sahakāram etya vṛkṣāntaram kānkṣati ṣaṭpadālī; Daṇḍin DKC Pūrvap. 5, 42 and again 43 rasālatarusu ... madhukarānām ālāpān; Subandhu 131 & 136; Śańkara ŚTBh 52 satpado 'pi madhusaurabhalobhād utsukaś carati cūtalatāyām; Jayadeva Gītag 1, 36 & 2, 20 (cūta in both); Somadeva KSS 9, 5 (55), 108 (below) & 13, 1 (104), 6 (T p. 411) āpatadbhiḥ śilīmukhaiḥ ... cūtamañjarī; Śārngadharapaddhati 45, 11 (825 = Vallabhadeva 18, 733 cūta) and 45, 15 (829 = Vallabhadeva 18, 740); Vidyākara 1103; *Jalhaṇa p. 73 & 209 (according to Warder 2004: 966, 987); BhNS 32, 298 N (352 Bh, below). Moreover, in the Buddhist Mahāvastu, mango and other trees are crowded with the humming and honey-making bees (3, p. 80g madhukaribhramareşu parigītā).

See the discussion of jasmine (both wild and cultivated) in India in Bhattacharjee 2004: 234 ff.

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In lexicography (PW from the Rājanighaṇṭu), mango is also called bhṛṅgābhīṣṭa.

4.2.2.3 Lotus and waterlily. The various kinds of lotus and waterlily (see Syed 1990: 607 ff.) are also often visited by bees: Mbh 5, 14, 8 padmāni ... satpadair upagītāni; Kālidāsa Śak 3, 37 (below) & 4, 7+ mahuarī pokkharamahum jeva ahilasadi, Vi 4, 40 padmam antahkvanitasatpadam; Śūdraka Mk 8, 32 na hi kamalam madhupāh parityajanti; Harsa Pri 2, 2 padma, 3, 0 kamalinī & 4, 8 rasam ... pātum gataś ... kamalasva bhrngah; Rājaśekhara KM 2, 13 pankaa & 19 kuvalaa & VBh 1, 39+ pamkeruhasamkāsamāülāim bhamaraülāim; Kālidāsa KS 5, 9 satpadaśrenibhir eva pankajam & 7, 16 lagnadvirepham ... padmam & 7, 62 & 8, 33 & 39, Rs 6, 14 dvirepho api avam ambujasthah, cf. 2, 14, Rv 5, 68 pracalitabhramaram ca padmam & 6, 13 ...dvirepham ... līlāravindam & 9, 27 abhiyayuh saraso madhusambhrtām kamalinīm alinīrapatatrinah; Dandin DKC 5, 138 quoted below; Śrīharṣa Naiṣ 19, 29 dhayati madhupaḥ ... madhūni saroruhām; Bhartrhari Śrngāra 47 nalinī; Subandhu 45 kumuda, 118 kumudapundarīka, 172 below, 215 & 250 both kumuda; Bilhana 3 kamala; Kşemendra Kalāv 1, 17 abjamadhukarī; Ksemīśvara 5, 10 madhupalingitamugdhasaroruha; Bhattajayanta Āg 1, p. 54 quoted below; Bhagavadajjukīya 27 icchāmi ... madhupavrato 'bhipātum ... iva komalam kamalam; Śankara ŚTBh 4+ pankajavana; *Amaracandra Bālabhārata 9, 37 & 29, 5 (in Warder 2004: 586); Somadeva KSS 12, 3 (70), 98 puşkarinīm hṛdyām apaśyam bhṛnganāditaiḥ & 12, 6 (73), 345 kumudvatī & 12, 17 (84), 24 kamala & 18, 5 (124), 134 (T p. 619) satpadaih abjesu; Śukasaptati 44; Śārṅgadharapaddhati 45, 1 (815) and 45, 11 (825 = Vallabhadeva 18, 733); Vallabhadeva 18, 729 & 730; Vidyākara 12, 3 (295) below; Bhramarāstaka 7; in examples in the BhNŚ 16, 55 N (17, 59 Gh, mattair dvirephais ca saroruhāņi ... aśūṇyāni sadā kriyante); 32, 85 N (84 Gh, kamalā aresum bhamaroṇavesum); 32, 211 (Gh, not in N); 32, 213 N (248 Gh, nalinīsamde chappadamuhule); 32, 276 N (325 Gh, kamalagabbhagehake ... chappadī); Vāmana 5, 2, 66+ (Cappeller = 65+ Jha; an example); Varāhamihira BS 12, 10f. (4.8 below). They are also found in Buddhist literature, e.g. in Āryaśūra Jm 19, p. 156 & 22, p. 184 and Divyāvadāna 30, 161.

In lexicography (*PW* from the Trikāṇḍaśeṣa), *alipriya* is given among the numerous lotus names.

4.2.2.4 Mādhavī. The *mādhavī* (also *atimukta*) creeper or *Gaertnera racemosa* is also called *Hiptage madablota*, but now apparently *Hiptage benghalensis* has superseded both as the valid botanical name. It is often mentioned in poetry as an erotic symbol, since it opens its flowers in spring (Syed 1990: 34 ff.). With bees, it is found, e.g. in Kālidāsa Vi 2, 7+ *adimuttaladāmaṇḍavo bhamarasaṃghaṭṭa-paḍidehim kusumehim*, Ŗs 6, 17, and Harṣa Ratn 3, 8+ *ṇivadantamattamahuara-*

kusumāmodavasida... māhavīladāmaṇḍavam, later in Śaṅkara ŚTBh 26 mādhavīkuñje ... madhupāṅganāḥ

In lexicography (PW from the Rājanighaṇṭu), it is also called bhṛṅgapriyā.

- **4.2.2.5 Aśoka.** The *aśoka* tree or *Saraca indica* (the often quoted name *Jonesia asoca* is not valid)²¹ is another erotic springtime plant with large red flowers (and with a special *dohada*). According to Syed (1990: 77 ff.), it flowers from February to April. It said to attract bees in *Amaracandra's Bālabhārata 7, 25 & Padmānanda 11, 5 (Warder 2004: 587, 594), Śārṅgadharapaddhati 45, 15 (829 = Vallabhadeva 18, 740) and Vallabhadeva 18, 742 (in both *raktāśoka*), and in Aśvaghoṣa BC 4, 45 *aśoko ... bhramarā yatra*. In Subandhu 137 (*madhukaranikarakirmīraḥ*), it remains uncertain whether *kirmīra* really is the 'ushoka' of Gray's translation.²²
- **4.2.2.6 Bakula.** The *bakula* (also called *kesara*) or *Mimusops elengi*, sometimes called Spanish cherry, is an evergreen tree with strongly fragrant, cream-coloured flowers appearing in April–May. It is mentioned as frequented by bees at least by Kālidāsa Rv 9, 30 *madhukarair akaron madhulolupair bakulam ākulam āyata-paṅktibhiḥ*; Harṣa Pri 2, 1+ (*baūla*, see above); Daṇḍin DKC 7, 176f. above; Śārṅgadharapaddhati 45, 2 (816) and 5 (819); Vallabhadeva 18, 742; and Jayadeva Gītag 1, 28 *alikulasaṃkulakusumasamūhanirākulabakula*.
- **4.2.2.7 Campaka.** The *campaka* or *Michelia champaka* is an evergreen tree with fragrant yellow flowers appearing from May to October (Syed 1990: 277 ff.). In connection with bees, it is found in Bhavabhūti Mm 3, 3+, Bāṇa Kd 304 *alinivahanipīyamānaparimalair api patadbhiś campakakuḍmalais*, further *Maṅkha Śrīk 6, 51 (Warder 2004: 85), *Amaracandra Padmānanda 11, 4 (Warder 2004: 594) and Bhramarāṣṭaka 2. In *Jinapāla's Sanatkumāracarita 9, 27, a necklace of bees is sitting on the garland of fresh campakas (*vibhāti navacampakasrag upaviṣṭabhṛṅgāvaliḥ*, quoted in Warder 2004: 690).

In lexicography (PW from the Rājanighantu), it is also called bhramarātithi.

4.2.2.8 Black Plum. The black plum (*jambu*, for the confusion with the English name – usually, but erroneously given as rose-apple – see Wujastyk 2003 & 2004)²³ as a bee flower is mentioned by Somadeva KSS 12, 2 (69), 95 *jambumahātarum*

Jonesia asoca was named, in honour of Sir William Jones, by Roxburgh, but the tree had earlier received the name Saraca indica from Linnaeus, and in botany, the earlier name is generally the preferred one.

²² In some web sources, *kirmīra* is identified as *Casearia championii* (family Flacourtiaceae).

The confusion started in the 18th century and was finally cleared up by Wujastyk (2003). According to him, the rose-apple (*Eugenia jambos* of Linnaeus, now called *Syzygium jambos*) is of South-East Asian origin and was introduced into India probably in the 16th century, while the black plum (*Eugenia jambolana* of Lamarck, now *Syzygium cumini*) is native.

āśvāsayantam ... bhramarāravaiḥ. The 'plums' of this tree look, according to poets, like the bees flying among them and having their drinking bouts in jambu flowers.²⁴ This tree is said to be an important honey source for the *Apis dorsata* (Syed 1990: 293).

- **4.2.2.9 Pandanus.** The pandanus or screw-pine, Sanskrit *ketaka&/-kī*, Latin *Pandanus tectorius* (invalid name *Pandanus odoratissimus*) is a palm-like dioecious coastal plant flowering in the rainy season (Syed 1990: 230 ff.). With bees, it is mentioned by Rājaśekhara in KM 1, 29 *bhingāaḍḍhāakeaa* and VBh 2, 11 *bhṛṇgāgrāgrahakṛṣṭaketakadala*; also Śārṇgadharapaddhati 45, 8 (822 = Vallabhadeva 18, 724) and 45, 17 (831); Vallabhadeva 18, 732. A nice account is found in the Bhramarāṣṭaka 1: The fragrant yellow flowers attract the bee, but soon he becomes blinded by pollen and the thorns pierce his wings (*andhībhūtaḥkusumarajasā kantakaiś chinnapakṣaḥ*). However, we must here count on poetic license; in a website on gardening, it is stated that the pandanus is actually pollinated by bats and birds.
- **4.2.2.10 Amaranth.** The amaranth *Barleria cristata (kurabaka)* opens its red flowers in early spring (and like aśoka, also has a *dohada*, see Syed 1990: 220 ff.). It is visited by bees in Rājaśekhara KM 2, 44 *navakuravaavaccho* and Kālidāsa Rv 9, 29 *madhulihām madhudānaviśāradāh kurabakā ravakāranatām yayuh*.

In lexicography (*PW* from the Rājanighaṇṭu), amaranth is also called *bhramarā-nanda*.

- **4.2.2.11 Tilaka.** The word *tilaka* (or *lodhra/rodhra* seems to refer to two different trees or shrubs, *Clerodendrum phlomoides* and *Symplocos racemosa*. In any case, it is another erotic *dohada* plant. It is visited by bees at least in Kālidāsa Māl 3, 5 *tilakair lagnadvirephāñjanaiḥ* and Rv 9, 41 *alibhir ... kusumapanktinipātibhir ... ankitah ... tilakah* and again 9, 44.
- **4.2.2.12 Acacia.** The acacia *Albizia lebbek* (old name *Acacia sirissa*, Sanskrit *śirīṣa*) flowers in April–May (Syed 1990: 579 ff.). As a bee flower, it is found in Kālidāsa Śak 1, 4 *sirīṣa* and KS 5, 4 *padam saheta bhramarasya pelavam śirīṣa-puṣpam na punaḥ patriṇaḥ* the tender śirīṣa flower can bear the foot of a bee, but not of a bird.
- **4.2.2.13 Sandaltree.** I have found the sandaltree (*candana*, *Santalum album*) attracting bees mentioned in the Hitopadeśa 2, verse 161, p. 59 *kusumāni bhṛṅgaih*

Vidyākara 8, 6 (157) jambūnām kusumodareşv atirasādābaddhapānotsavāh ... madhukarīś, Syed (1990: 289) quotes this and also Hāla 532 (Weber). On both, see 5.3 below.

- ... *candanapādapasya* and in Śārṅgadharapaddhati 45, 16 (830 = Vallabhadeva 18, 748), also in Vallabhadeva 18, 753.
- **4.2.2.14 Basil.** The holy basil or *tulasī* (*Ocimum sanctum*) used as a garland and attracting bees we find in the BhāgP 3, 16, 20; 5, 25, 7 and 10, 35, 10.
- **4.2.2.15** Pārijāta. The Indian coral tree or *pārijāta* (*mandāra*) or *Erythrina indica*, a tree with red flowers appearing in the spring, is found with bees at least in Bāṇa Kd p. 320 *pārijātakusumamañjarīparimalākṛṣṭena ... madhukarajālena;* also Vidyākara 200 and BhāgP 10, 32, 11. When a pārijāta is available, the bee does not go elsewhere (BhāgP 4, 30, 32 *pārijāte 'ñjasā labdhe sāraṅgo 'nyatra sevate*). It is also one of the heavenly trees (see 4.2.3 below). On the tree, see Syed 1990: 432 ff.
- **4.2.2.16 Karņikāra.** The *karņikāra* or *Pterospermum acerifolium*, sometimes called the dinner plate tree, opens its large white or golden flowers in spring. Though it has hardly any fragrance, it is also mentioned as a bee flower in Somadeva KSS 9, 4 (54), 55 *karņikāram visaurabham vimuñcanty alayo* (they leave it in spring when the flowers are over) and in a stanza quoted by Syed (1990: 189) from the Mahāsubhāṣitasaṅgraha (8828).
- **4.2.2.17 Saptacchada** or *saptaparṇa*, the evergreen tree *Alstonia scholaris*, was also occasionally mentioned as a bee plant, although apparently opening its autumnal white flowers in the night (Bhāmaha 2, 82 quoted below). More often, the tree is noted for its repulsive odour and for its medicinal uses. On the tree, see Syed 1990: 591 ff.
- **4.2.2.18 Flame of the Forest**, or flame tree, is Sanskrit *kimśuka*, Latin *Butea monosperma* (earlier also *Butea frondosa*). It is a large tree that drops its leaves in winter and when leafless, opens its large, orange-red flowers in early spring, making an impressive sight (Syed 1990: 204 ff.). These flowers are mentioned as visited by bees in a stanza by Nīla (Vidyākara 8, 5 (156) *kośān bibhrati kimśukā madhukaraśreṇījuṣaḥ*). In the very next verse (Vidyākara 8, 6 (157) quoted below), bees mistake the red beaks of parrots for *kimśuka* flowers amidst green foliage although the tree flowers before the leaves appear.
- **4.2.2.19 Kovidāra** or *Bauhinia variegata* is another tree flowering in early spring, with fragrant, pink or purple flowers (Syed 1990: 245 ff.). Curiously, Kālidāsa has bees visit it in autumn (Rs 3, 6 *mattadvirephaparipītamadhupraśekaś ... kovidāraḥ*) and even more curiously, Syed quotes this as an example of the tree flowering in spring.

4.2.2.20 Silk-Cotton tree or kapok tree (*Bombax ceiba*, the name *Salmalia malabarica* is invalid) is Sanskrit śālmalī. Its red flowers are visited by bees in Śārṅgadharapaddhati 45, 2 (816).

4.2.2.21 Kadamba or the kadam tree (*Anthocephalus chinensis*, earlier *Anthocephalus cadamba* and *Nauclea cadamba*) has orange-yellow flowers, visited by bees in Śārngadharapaddhati 45, 15 (829 = Vallabhadeva 18, 740) and in *Jalhaṇa, Sūktimuktāvalī p. 224 (Warder 1988: 62, by Yogeśvara).

4.2.2.22 Tumbī is one of the numerous ambiguous plant names in Sanskrit. It is said to refer both to *Asteracantha longifolia* (family *Acanthaceae*) and the gourd *Lagenaria vulgaris*. According to Śārṅgadharapaddhati 45, 7 (821), the bee kisses the *tumbī* flowers when the jasmine withers.

4.2.3 Heavenly flowers

Even the heavenly flowers are visited by bees.²⁵ In Kālidāsa, the wish-granting tree (*kalpataru*) is dancing to the accompaniment of the song of bees, drunk with its fragrance (Vi 4, 12 *gamdhummāiamahuaragīehim ... naccaï kappaaru*). For Ralhaṇa, the bees of the wish-granting tree are in fact sapphires (ŚārṅgP 988, also *Jalhaṇa p. 109 according to Warder 2004: 974). His idea of bees' colour was, of course, bluish-black, not yellow. Another lost poet, Vallaṇa, gives the bee itself a heavenly origin: Born in the lotus flower of the heavenly lake and sporting with the flowers and ladies of heaven (Vidyākara 1026 *janma vyomasaraḥsarojakuhare mitrāṇi kalpadrumāḥ krīḍā svargapurandhribhiḥ ... bhṛṅga*).

The Vaijayantī garland given by Varuṇa to Lakṣmī (BhāgP 8, 8, 15) and the lotus garlands held by the same goddess (BhāgP 8, 8, 17 & 24) attract bees as does Viṣṇu's wreath of sylvan flowers (BhāgP 8, 20, 33).

In Harşa's Nāg 4, 28, Jīmūtavāhana's decision to commit self-sacrifice caused a shower of flowers of the heavenly *pārijāta* tree to fall on him, attracting bees with its smell (*āmodānanditālir nipatati* ... *puṣpavṛṣṭir nabhastaḥ*). These may be earthly bees, but in Kālidāsa (Rv 12, 102) the bees leave the temples of the guardian elephants of the regions to attend the shower of flowers the gods let rain on Rāma (*lokapāladvipānām anugatam alivṛndair gaṇḍabhittīr vihāya* ... *suravimuktam puṣpavarṣam papāta*).

²⁵ Harşa Nāg 4, 28; Varāhamihira BS 24, 1 (on the summit of Meru); BhāgP 8, 15, 12 & 20.

4.2.4 Bees' preferences

More flowers could be added from the lexicography, but even here we note that they are almost always from trees. In a pleasant grove, many different flowering trees attracted humming bees (Mahāvastu 3, p. 80 nānādrumā kusumitā madhukaribhramareșu parigītā). Note, however, that the greatest favourite is the lotus (together with the waterlily), while the jasmine or mango comes a close second. This is nicely illustrated by poets. Harşa made the lotus the permanent love and the jasmine a new attraction (Pri 3, 0 p. 26 Kale kamalinībaddhāņurāo vi mahuaro māladīm pekkhia ahiņavarasāsvādalambado). According to Śankara, the lotus is the permanent abode or husband of the female bee, while the mango has the role of her lover (ŚTBh 157 tatra kim vartase bhrngi nīrase sārase mudhā / nirgaccha tisthate ko 'pi cūtas tvaccumanonmukhaḥ). In Kālidāsa Śak 5, 8, the bee takes up the lotus abode only after having kissed the mango bud. In a verse of poet Chittapa quoted by Warder (1992: 334, translation only),²⁶ the bee rejects a number of its favourite trees, "remembering drinking the honey of fortune's play lotus". But even the poets often understood that bees had to go to the flowers available in each season (cf. 4.2.6 below).

4.2.5 Dangerous flowers

However, there is also a flower which is said to kill bees (*bhṛṅga/bhramaramārī*, *bhramarāri*), although it is apparently not mentioned in poetry. According to the Rājanighaṇṭu (quoted in *PW*), it grows in Mālava. In a verse quoted by Vidyākara (1074), the stupid bee leaves the fragrant flowers of aśoka, mimosa, jasmine and mango seeking the colourful, thorny safflower (*kusumbha*) and gets pricked.

4.2.6 Bees visiting flowers

The bees' attraction to flowers was commonly used in erotic symbolism. From this, poets derived the idea of kissing bees, being in love with flowers.²⁷ As the (male) bee is in love with flowers (here a lotus), it follows, by poetic logic, that the female bee is jealous (*Kavivallabha, Abhirāmacitralekha 1, 9 in Warder 2004: 893).

They are drinking the nectar of flowers and thus become stained with pollen,²⁸ but occasionally they are also content with just the odour (Kālidāsa Śak 3, 37

It is found in *Śrīdharadāsa, Saduktik. 1785 = *Jalhana p. 82 = *Bhoja, Śringārapr. p. 342 = *Bhoja, Sarasvatīkanthābharana p. 56, all unfortunately unavailable to me.

Kālidāsa Śak 1, 4 cumbiāim bhamarehim ... kesarasihāim & 5, 8 paricumbia cūamañjarim, Rs 6, 17 mattadvirephaparicumbitacārupuṣpā(h) ... bālātimuktalatikāh; Śārngadharapaddhati 45, 7 (821); Vallabhadeva 18, 743 & 746.

Harşa Pri 2, 2; Bāṇa HC 1, 13 (24) puspadhūlidhūsarair ... madhukarakulaih; Subandhu 45 (see 4.8 below); Śaṅkara, ŚTBh 157 (above); example in BhNŚ 32, 276 N (325 Gh

nanu kamalasya madhukarah samtuṣyati gandhamātreṇa). In Śaṅkara's ŚTBh 28+, the sweetly humming bees themselves open the buds with their tender feet (rutamadhuramadhukarataruṇacaraṇavidalita). Disappointed, they turn away from a tree without flowers or with buds still unopened or with blossoms already withering or short of nectar²⁹ or already visited by another bee.³⁰ When the rains come, lotus ponds no longer have flowers, and the bees turn away (Kālidāsa Rs 2, 14). In poetry, this was often taken as a mark of fickle or unfaithful character. "Leaving the mango, the bee swarm is gone to the jasmine, again it is gone to the red aśoka, then to the kadamba tree, remaining there for a long time, it proceeds from them to the lotus – people hating ordinary folk always seek for something new."³¹

4.2.7 Flowers in the night

As some flowers (day lotuses, lilies) close their petals for the night, the bees were supposed to remain imprisoned in these flowers.³² For the medieval bhakti poetess, it was a cold prison (Mīrābāī p. 85f. *rasika madhupa ke marama ko nahīm samujhata kamala subhāya*). Often they also hurried in the evening to leave the closing flowers (*Amaracandra Bālabhārata 9, 37 in Warder 2004: 585). They also habitually spend their nights in those flowers.³³ This is not strictly speaking true;

renupiñjaritacārugatiyā... chappadī) & 32, 298 N (352 Gh, cūdarenugundhidaggao... chappao); Bhattajayanta Āg 1, p. 54 padminyo viharatsaroruharajoraktāngabhṛngānganāḥ; Mahāvastu 1, p. 130g yām puṣpitām vanalatām bhramarāḥ pibanti puṣpāgame kusumarenuvicitrapakṣā; cf. Kālidāsa Rv 12, 102 (wings stained with ichor, madagurupakṣair). Also often in the Subhāṣita collections (e.g. Vidyākara 12).

No flowers or unopened buds in Kālidāsa Vi 4, 67 svakālavirahād viśrāntapuspodgamā ... madhulihām śabdair vinā lakṣyate; Śankara ŚTBh 46 ajātakusumāsu; Somadeva KSS 10, 5 (61), 118 apuspam bhramarās tarum ... muñcanti; Vallabhadeva 18, 750 puspaśūnyam; withered flowers in Śūdraka Mk 2, 0 kim hīṇakusumam mahaārapādavam mahuarīo una sevanti; Rāja-śekhara VBh 1, 4f. kundalatāyām vimukkamakaramdarasāe; Somadeva KSS 10, 6 (62), 84 parāmmukhī vyatītapuspakāle 'tra bhramarīva taror vane; Vidyākara 1030 & 1103; flowers short of nectar Somadeva KSS 9, 4 (54), 55 (see above under karņikāra).

Somadeva KSS 12, 17 (84), 24 parabhukte hi kamale kim aler jāyate ratiḥ; Mahāvastu 1, p. 130g nātrāpare madhukarāh praṇayam karonti. This is not strictly true; usually one bee does not empty the flower of nectar. A similar – and even more erroneous – idea was the belief that the lion accepts only his own fresh kill as food. See Karttunen 2009.

Šārngadharapaddhati 45, 15 (829 = Vallabhadeva 18, 740) madhukaraganaś cūtam tyaktvā gato navamallikām, punar api gato raktāśokam kadambatarum tatah / tad api suciram sthitvā tebhyaḥ prayāti saroruham, paricitajanadveṣī loko navam navam īhate. A similar theme also in Vallabhadeva 18, 742 and 753 and in Bhramarāṣṭaka 2.

Kālidāsa KS 8, 33 vāriruhabaddhaşatpadam; Bāṇa HC 3, 55 (99) antarbaddhadhvanan-madhukareşu ... kumudeşu; Saumilla 132 kamala iva baddho madhukare; Śankara ŚTBh 4+; Vidyākara 867, 868, 947, 958, 960, 962, 967, 1084; Bhramarāṣṭaka 2.

Kālidāsa KS 8, 39 and Rv 8, 55 niśi suptam ivaikapańkajam viratābhyantaraṣaṭpadasvanam; Bāṇa HC 1, 6 (11) ṣaṭcaraṇacakre and Kd 197 (in a description of evening) praviṣatsu raktakamalodarāṇi madhukarakuleṣu & 299 mukulitaraktapaṅkajapuṭapraviṣṭamadhukari; Daṇḍin DKC 5, 138 antaḥsuptaṣaṭpadam ambujam; Subandhu 172 kuśeśayodarakoṭirakuṭīra-

bees always spend the night in their nests, although some humblebees and solitary bees may also sleep outside.

Sometimes, bees are said to visit those flowers that are open only at night.³⁴ The very existence of a flowering tree (*saptacchada*) can be inferred in darkness by the hum of bees around it (Bhāmaha 2, 82 example *anvamīyanta bhṛṅgālivācā saptacchadadrumāḥ*). Sometimes they hurry to leave these flowers in the morning in order not to be imprisoned during the daytime.³⁵ In an elaborate verse, we are told how the naughty bees, having long sported and drank honey in the cups of the white waterlilies, opened when touched by the moonlight, are going elsewhere, when the flowers are closing and their lustre is disappearing, thus showing no faithfulness in the calamity (Somadeva KSS 12, 36 (103), 214 *koṣeṣu vyalasannipītamadhavo ye kairavāṇām ciram labdhābhyantarasusthitā vikasatām induprabhāsamgame / te samkocam upāgateṣu vigalacchrīkeṣu teṣv anyato bhṛṅgāḥ – paśya kumāra – yānti malināḥ kasya sthirā hy āpadi)*.

There are, however, no real nocturnal bees; the night flowers are visited by moths and other nocturnal insects. And in any case, poets also described the joyous awakening of bees welcoming the morning sun (Bāṇa Kd 54, cf. ŚTBh 25 on bees and the morning breeze).

4.3 Bees and women (and men)

Beautiful women were said to attract bees who mistake them for flowers,³⁶ although they were not always welcome. Sometimes women's perfume or flower ornaments are mentioned as the reason for this attraction.³⁷ Sometimes it is just their sweet

kuţilaśāyini şaḍcaraṇacakre & 186 (in the evening) pārśve saṁcarantī kumudinyā bhramaramālā; Kṣemīśvara 1, 19 prātaḥ sarojagarbhe bhramarīva.

Bāṇa HC 1, 6 (10) kṛtamadhupamudi ... kumudavane & 6, 93 (168) samadhukararavani; Subandhu 45 kumuda; Somadeva KSS 12, 6 (73), 345 sā 'pi tasya karasparśād indor iva kumudvatī / vyālolanetrabhramarā prabodham prāpa tatkṣaṇam & 12, 17 (74), 43 sevamāneşu bhṛṅgeṣv apy aparam kumudākaram.

Śivasvāmin, Kapph 15, 21 kumudam alayaś; Śaṅkara ŚTBh 17 ramyendīvaramandirād iva bhayān niryānti puṣpandhayāḥ.

Kālidāsa Māl 2, 1+ (here makkhia could also be a fly), Śak 1, 21+ nomāliam ujjhia vaaņam me mahuara ahilasadi.

Kālidāsa Māl 3, 13+ mango blossom; Harşa Pri 2, 5+ flower perfumed hair, kusumaparimalasu andhavenīmahuarāvalī & 7+ to 8 perfume and lotus-face; Kālidāsa Rv 12, 27 Sītā's perfume, punyagandhena kānanam sā cakāra ... puspoccitaṣaṭpadam; Dandin DKC 6, 152 fragrance of lotus-face, mukhakamalaparimalagrahanalolān alinas tāḍayantī; Amaru 1 karṇapūralobhabhramadbhramara; Bāṇa HC 1, 3 (5) karṇāvatamsakusumamadhukarakulair and Kd 370 in flowers as ear-ornaments, madhukarabharaparyastam ca karṇāvatamsam & 381 śirasi kusumagandhalubdhena bhramatā bhramarakulena & 432 (ear-lotuses, karṇotpalamadhukarān); Subandhu 139 kuntalollalana(or -lasita)samkrāntaparimalamīlitamālāmadhuratajhankāraravamukharita; Vararuci Ubh 15+ asyāḥ paṭavāsagandhonmattā bhramanto madhukaraguṇāś; Āryaśūra Jm 28, p. 255. Bilhana 34 perfume of the lotus-face, vadanapankajagandhalubdhabhrāmyaddvirephacaya & 40 jasmine

breath,³⁸ or their lotus-feet are mistaken for real lotus flowers.³⁹ The same can also happen in the case of sweet-smelling men or of men's garlands and flower ornaments.⁴⁰ In the Kathāsaritsāgara, it is a mixture of blood and wine poured by an asura maiden on the king's head and the bees thus attracted also sting the unfortunate man (KSS 12, 6 (73), 164 ff. *etya bhṛṅgaiḥ ... aveṣṭyatāsurasutāpāna-siktāṅgagandhatah ...* (166) *tair daśyamānaś ca bhrṅgaih*).

According to Bāṇa, the swarm of bees on a woman's face looks like a veil,⁴¹ while the vassal chiefs seemed to have a beard of mourning with their faces darkened by bees attracted by their perfumed breath.⁴² Bees can also be frightened because of the tinkling bracelets of women (Śaṅkara ŚTBh 4+). In the Bhāgavatapurāṇa, Kṛṣṇa is surrounded by maidens and bees (10, 33, 25 *bhṛṅgapramadāgaṇāvṛto*).

There are some lively scenes of harassing bees in poetry. In erotic symbolism, the harassing bee represents an aggressive lover. Śakuntalā was afraid of them, understandably, and the king had to rescue her (act 1). Even Umā is harassed by bees in the Kumārasambhava (KS 3, 56 *dvirepha*) and the goddess Sarasvatī, too. There were attempts to drive them away. In Bāṇa, the princess is pursued by a swarm of bees, who, attracted by her pārijāta perfume, covered her like a blue veil (Kd 320 *madhukarajālena nīlapaṭāvaguṇṭhavibhramam iva*). This was the right moment for the hero to enter as in the Śakuntalā. Agitated, the lady waved her budlike hands, bracelets swinging, to get rid of the swarm of bees kissing her perfumed cheeks (Bilhana 34). The king was amused by the fear on the faces of his wives

wreath; *Mankha Śrīk 12, 90 (in Warder 2004, musk perfume). BhNŚ 15, 10 N (16, 8 Gh, in an example, garland, śobhate ... ṣaṭpadāviddhayā mālatīmālayā). Poet *Lakṣmaṇasena in Śrīdharadāsa's Saduktikarṇāmṛta 1061 (quoted by Warder 2004: 414) has a bee entering the ear-waterlily.

Kālidāsa Vi 4,42 madhukara... surabhim apāsyastanmukhocchvāsagandham; Rājašekhara VBh 1, 32 yacchvāsasaurabhabalād alayo valanti; Kālidāsa KS 3, 56 sugandhiniḥśvāsavivṛddhatṛṣṇam ... dvirepham; Bāṇa HC 4, 72 (129) niḥśvāsaparimalākṛṣṭamadhukarakulām, cf. 3, 55 (83) and Kd 366 mukhakamalaparimalāgatālivṛndam & 433 niśvāsamadhukarān; BhāgP 5, 2, 6 bhāṣaṇāmodamadāndhamadhukara & 8, 8, 43 mukhāmodānuraktālijhamkārodvignalolanam; Gonanda or Gotrānanda in Vidyākara 1641 (breath, also *Śrīdharadāsa 1045 and *Jalhaṇa p. 255 according to Warder 2004: 977).

Rājašekhara VBh 1, 39+; Bāṇa HC 3, 44 (83) kamalalobhanilīnāny alikulāny eva mukharāṇi pādābharaṇāni & 4, 59 (106f.) kamalalobhanilīnair alibhir; cf. BhāgP 1, 11, 26, comparing the devotees around Kṛṣṇa's feet to bees (nivāso ... sāraṅgāṇām padāmbujam). Warder (2004: 418–419) quotes a stanza from *Kavirāja's Rāghavapāṇḍavīya (1, 25) stating that the king is a bee to the foot-lotus of Fortune.

Flowers in Bāṇa Kd 175; garlands in Bhāmaha 2, 6 (example on Balarāma) lolamālā-nīlālikulākulagalo balaḥ; BhāgP 3, 15, 28 mattadvirephavanamālikayā & 40 alibhir virutayā vanamālayā; 3, 28, 15 and 3, 28, 28 (Viṣṇu's garland); 4, 4, 15 (Śiva's lotus-feet); a prince's flowery breath in Bāṇa HC 1, 9 mattamadhukarakulakolāhalamukhareṇa mukhena.

Bāṇa HC 1, 14 (262) vikacanayanakuvalakutūhalalīnayālikulasamhatyā nīlāmśukajālikayeva niruddhārdhavadanā & 3, 44 (83) nihśvāsākrṣṭamadhukarakulāny eva ramanīyam mukhāvaraṇam and Kd 320 (below) & 410 madhukarakulair ivācchādyamānā.

Bāṇa HC 2, 27 (48) ucchvāsasaurabhabhrāmyadbhramarapaṭalāndhakāritamukhair apahṛtalakṣmīśokadhṛtalambaśmaśrubhir.

molested by bees attracted to them by the odour of perfumes (Āryaśūra Jm 28, p. 255, verse 7). The vidūṣaka, anointed with scented unguent and wearing flowers on his head, is attacked by nasty bees (*duṭṭamahuarā*) in a garden (Harṣa Nāg 3, 2+). The bites of love-making are compared to the traces of stings of harassing bees (*Maṅkha Śrīk 12, 90). In the Pañcatantra of Pūrṇabhadra (1, 30b p. 122f. H), the silly ape tries to expel a harassing bee, and thus kills the king he is supposed to protect.⁴³

4.4 Bees and elephants

Now it is time to examine another common literary motif: Elephants in rut attract bees that are swarming around their temples, leaving their favourite trees. ⁴⁴ They are so eager for the musth secretion that they forget to beware of the flapping ears (Vidyākara 1115). But in a hermitage even elephants are compassionate and do not drive the bees away with the flapping of their ears (Bāṇa Kd 93 *ete ca na nivārayanti madāndhā api gaṇḍasthalībhāñji madajalapānaniścalāni madhukarakulāni sañjātadayāḥ karṇatālaiḥ kariṇaḥ*). They drink the musth of the face of Indra's elephant (Vallabhadeva 18, 736 *airāvaṇānanamadāmbu*). The same motif also applies to the god Gaṇapati who as a half-elephant also exudes of musth. ⁴⁵ Even a tree rubbed by elephants attracts bees as does also water where they have bathed. ⁴⁶

The story is not included in Edgerton's reconstruction. Instead of the bee, Jātaka 44 has a mosquito (*makasa*) and Jātaka 45 a fly (*makkhikā*). In the old Braj Hitopadeśa (Pāñcākhyāna) 3, 4 (Hertel 1916: 44–45) the point is spoiled by giving the monkey too much intelligence. It is only found in Hertel's manuscript B (see Hertel 1914: 51 ff.), but not in the Sanskrit Hitopadeśa or Lāl's later Braj version.

Bhāsa Karnabhāra 20 madasaritakapolam satpadaih sevyamānam ... vāranānām anekam; Kālidāsa Vi 4, 43b & 47; Harşa Pri 1, 12 (see below, in 4.8.); Kālidāsa Rs 2, 15, Rv 4, 57 madodgārasugandhişu kaṭeṣu kariṇām petuḥ pumnāgebhyaḥ śilīmukhāḥ (Mallinātha: śilīmukhā alayaḥ) & 6,7 madotkaţe recitapuşpavṛkṣā gandhadvipe vanya iva dvirephāḥ & 10,57 praṇayavatī ... bhramarī vāraṇasyeva madanisyandarekhayoḥ & 12, 102 (the world elephants, see above); Bāṇa HC 2, 30 (53) alikula and 31 (55) āpānamaṇḍapam madhupamaṇḍalānām and 7, 112 (205) madaprasravaṇavīthībhir alikulākālībhiḥ and Kd 189 (around elephant-posts) gajamadaparimalalobha-nirantaranilīna-madhukarapatalajatilaih & 198 (in the evening they leave the cheeks of wild elephants) madhukarakulaśūnyakapolabhittişu mattavāraņeşu & also in Kd 236; Subandhu 129 (the world elephant) diggajamadarekhevānanditāliganā & 177f. ghanataranilīna-madhukarapaṭala-mecakitapecika & 279 kariśatanipatitamadhukara; Kşemendra Kalāv 3, 2; Kṛṣṇamiśra 4, 25 kumbhabhitticyutamadanadirāmattabhṛṅgāḥ karīndrā; Śārngadharapaddhati .: na 1875.male hrsg. vonr la premi6-320.ya, 8, 754 and 2 is a somewhat modified version of Vallabhadeva 18, 753. is possible th45, 20 (834) and 45, 23 (837 = Vallabhadevadeva 18, 749); Vallabhadeva 18, 731 & 750; *Jalacandra in Śrīdharadāsa's Saduktikarņāmṛta (quoted by Warder 2004: 416); Pañcatantra often, e.g. 3, 2 (p. 185 H) karatatatodbhrāntamadajalasurabhiparimalākrstabhramaraganagītaramanīyamukhamandalam; BhāgP 5, 5, 30 (but makṣikā) and 8, 2, 23 feeding on musth: alikulair madāśanaiḥ; Āryaśūra Jm 2, p. 10 and 9 p. 75 (intoxicated by musth) mattabhramaropagītam.

⁴⁵ Bhavabhūti Mm 1, 1; Somadeva KSS 12, 1 (68), 1; Vidyākara 84 & 93.

Tree in Bāṇa Kd 50 vanagajakapolakandūyanalagnamadanilīnamattamadhukaramālena, water in Kālidāsa Rv 5, 43 athopariṣṭād bhramarair bhramadbhih prāksūcitāntaḥsalilapraveśaḥ ...

The smell attaches to lions killing elephants (Varāhamihira BS 12, 7 karikaṭamada-miśraraktāvalehāmuvāsāmusāridvirephāvalīnottamāngaiḥ ... mṛgendraiḥ). But when the musth is over, the bees turn away or mourn.⁴⁷ One would think that the insects attracted to the temporal glands of elephants were rather flies, but flies in general do not belong among the images of poetry.

On occasion, we also find elephants trampling lotuses or other plants and thus driving away bees.⁴⁸ One poet (Jalacandra in Śrīdharadāsa's *Saduktikarṇāmṛta according to Warder 2004: 416) accused the bee who without shame abandons the crushed lotus for the temples of the rutting animal crushing it.

4.5 Further attractions for bees

In Bāṇa, cakravāka ducks attract bees as the smell of lotuses is attached to them (Kd 196 *kamalinīparimalaparicayāgatālimālākulitakaṇṭhaṁ* ... *cakravākamithunam*). A similar case is also found in Subandhu (185). In the stanza of Kālidāsa mentioned above (Rs 2, 14), the bees leave the lotus ponds, deprived of flowers at the onset of the rainy season, and are attracted by the tail-feathers of dancing peacocks, mistaking the colours for flowers.

In addition to lotus-feet and perfumes (see 4.3), we occasionally also hear of aromatic incenses attracting bees. Burning aloes do the trick in Subandhu (140 *dagdhakṛṣṇāguruparimalāmodamohitamadhuvrata* & 142 *dahyamānamahiṣākṣādisugandhidravya-saurabhākṛṣṭapuropavana-ṣaṭpadakulasamākulam*). Even fragrant, perfumed wind is sufficient.⁴⁹ Vādībhasinha (*Gadyakarṇāmṛta 4, p. 199 according to Warder 1992: 326) had two girls quarreling over the merits of their bath powders. The case is settled by demonstrating which one was fragrant enough to attract bees.

A late author depicts bees swarming in a tavern, attracted by the smell of wine and forming a dark screen (perhaps to hide the drunkards from the sight of others). ⁵⁰ This could well be true, but certainly flies were even more interested. Bees eagerly buzzing at wine are also found in Mankha's *Śrīkanṭhacarita (14, 27 in Warder 2004: 90). At Damayantī's wedding, the town was decorated with garlands skilfully

gaja unmajja.

⁴⁷ Turning away in Śūdraka Mk 1, 12 parivarjayanti ... samśuşkasāndram avalekham iva bhramantah kālātyaye madhukarāh karinah kapolam; mourning in Bhavabhūti Mm 9, 33 dānajyānivişādamūkamadhupavyāsangadīnānano; Bāṇa HC 2, 22 (37) dinakaradūyamānadviradadīnavadanāśyānadānaśyāmikālīnamūkamadhulihi (in summer's heat).

Somadeva KSS 6, 7 (33), 208 gajapīditā padminīva parikṣiptakabarībhramarāvaliḥ; BhNŚ 32, 336 (Gh, not in N).

⁴⁹ Bāṇa HC 3, 55 (98) *parimalākṛṣṭamadhukṛti*; BhNŚ 32, 340 (Gh, not in N).

Vatsarāja: Karpūracaritabhāņa 27+ parimalāhūtarolambacakravālakakrtanīlatoraskaraņīvibhramam viveśa śaundikāgāram.

made of cloth and perfumed, so that even bees were confused (Śrīharṣa Naiṣ 15, 14 *madhuvratānām api dattavibhramāḥ* ... *srajaḥ*).

4.6 Bees, spring, and Kāma

Bees belong to the spring, the season of Kāma, therefore the hum of bees was taken by poets as a romantic sound inciting love. In early Tamil, too, bees were among the symbols of love (Tolkāppiyam 3, 1038 <code>vantē</code>). The notes of flutes and the song of girls are compared to their humming⁵¹ and the humming itself to the twang of Kāma's bow and other erotic sounds.⁵² They sing the auspicious song of Kāma (Śaṅkara, ŚTBh 26 <code>kurvantyānaṅgasaṅgītamaṅgalaṁ madhupāṅganāḥ</code>). Bees are often described as being mad or intoxicated (<code>matta</code>) with spring or with the supposedly intoxicating nectar of flowers.⁵³ In Harṣa Nāg 3, 8, they have a drinking bout (<code>āpānottaram anubhavantīva</code>) and in Pri 2, 2, the drunken bees sing indistinctly (<code>gāyanty avyaktavācaḥ kimapi madhuliho vāruṇīpānamattāḥ</code>). Vallabhadeva 18, 734 calls nectar <code>puṣpāsava</code>.

Bees and cuckoos (*kokila*, the koel) and their voices are often mentioned together as symbols of spring and love.⁵⁴ The voices of koel and bee are heard in the twang of Kāma's bow (Bhagavadajjukīya 18 *parabhṛtamadhukaranāda-jyāghoṣaḥ*

Songs in Śūdraka Mk 4, 27+ mahuaravirua via mahuram vajjadi vamso; Harşa Ratn 1, 25 śrutvā te parivāravāravanitāgītāni bhrngānganā; flutes in Bāna Kd 395 madhukaramadhurābhyām vamšābhvām

Śańkara ŚTBh 27 tankārah smarakārmukasya; Somadeva KSS 16, 1 (111), 35 śuśruve kusumāmodamādyanmadhukarāravah / kāmenāropyamānasya kārmukasyeva niḥsvanaḥ; Bhāmaha 3, 22 example neyam virauti bhṛngālī madena mukharā muhuḥ / ayam ākṛṣyamāṇasya kandarpadhanuso dhvanih; Vidyākara 186.

Mbh 3, 150, 23 mattaṣaṭpada & 3, 229, 13 mattabhramara; Kālidāsa Rs 6, 17 mattadvirepha, Vi 4, 12 gandhonmāditamadhukara; Šūdraka Mk 4, 27+ kusumarasamattāo via mahuario; Harṣa Ratn 3, 8+ mattamahuara; Bāṇa HC 1, 8 (15) mattamadhupa and 2, 34 (62) madanāndhamadhukarakula and Kd 283 kusumasamayamada iva madhukarān paravaśām akarot; Subandhu 215 muditamadhukarakula & 250 mattamadhukara & also 264; Śūdraka Padma 10 samadamadhukaraḥ (kālaḥ); Śārṅgadharapaddhati 137, 13 (3931); BhNŚ examples in 16, 55 N (17, 59 Gh, above), 32, 140 (N & Gh) mattamahuaragaṇa and 32, 298 N (352 Gh) jātiphullapāṇamattao ... chappao, also 32, 287 N (339 Gh) pavītamadhumattā chappadikā; Vāmana 2, 2, 23+ mattālisamgha (example, in autumn); Bhāmaha 3, 22 above & 4, 27 (examples); BhāgP 3, 33, 18 gāyanmattamadhuvratam (udyānam), also in 4, 9, 63 and 8, 15, 12, further 4, 6, 12 madāndhāli, 5, 2, 6 madāndhamadhukara, 3, 15, 28 & 3, 28, 15 mattadvirepha, 3, 21, 41 & 4, 24, 22 mattabhramara, 8, 2, 15 mattaṣaṭpadanirghuṣṭam, 8, 8, 15 madhunā mattaṣaṭpada; Varāhamihira BS 48, 7 kusumarasapānamattadvirepha; Āryaśūra Jm 21, p. 175 & 28, p. 258.

Mbh 3, 98, 13; 3, 146, 20 pumskokilaninādesu şatpadābhiruteşu ca; Kālidāsa Māl 4, 2 parabhṛtikā bhramarī ca, Vi 4, 12 & 4, 56; Bhavabhūti Mm 3, 3+; Harşa Ratn 1, 16+; Rāja-śekhara KM 2, 2; Kālidāsa Rs 6, 21 & 24 & 27, Rv 9, 26 satpadakokilakūjitam; Daņḍin DKC Pūrvap. 5, 42f. & 43; Bāṇa Kd 303; Śūdraka Padma 2 & 6 & 10; Bhagavadajjukīya 9+ (with peacock) morakoilamattabbhamaramahurārāvasamghuṭṭam & 18; Jayadeva Gītag 1, 27 & 11, 4; Jalhaṇa, *Sūktimuktāvalī p. 73 (Warder 2004: 966); Somadeva KSS 9, 4 (54), 56 kokilānām ca kūjitaih rutair alīnām & 9, 5 (55), 113 kokilabhramaradhvanim; BhNŚ 15, 80 N (16, 59 Gh,

kāma[h]). People longing for absent or unwilling lovers cannot stand to hear bees' buzzing.⁵⁵ The erotic association of bees was also the reason for the bee-names of the queen's attendants in some plays.⁵⁶ In the Mahābhārata (3, 249, 10), Bhramara is a male name.

An example in the Nāṭyaśāstra compares a woman's body to the lotus-lake. Her face is the lotus, her eyes the bees (netrabhrngākulā), her smiling teeth the geese, her hair the lotus leaves, and her breasts the pair of cakravāka ducks (BhNŚ 15, 76 N = 16, 58 Gh, lotus-faces with eyes as bees, netrāḍhyam bhramarasahitam paṅkajam iya, also in 15, 103 N = 16, 80 Gh).

In mythology, bees form the string of Kāma's bow with which he shoots his flowery arrows. 57 They are also attracted by his flag, tainted with pollen (Kālidāsa Rv 9, 45 *dhvajapaṭaṁ madanasya ... kusumakesarareṇum alivrajāḥ ... anvayuḥ*). Furthermore, the line of hair on the belly of beautiful women (*romarāji*) is said to resemble this bowstring of bees. 58 In the Amaruśataka, the young woman's mouth resembled a line of bees, when she tried not to show the languor of love to her parents (96 Bailey *mukhena ... śvāsāyāsasamākulālisaraṇivyājena*). When Kāma was burnt by Śiva's flame, the bees, who formed his bow-string, were mourning him (KS 4, 15 *alipaṅktir anekaśas tvayā guṇakṛtye dhanuṣo niyojitā / virutaiḥ karuṇasvanair iyaṁ guruśokām anurodatīva mām*). Bees and their hum are also listed among Kāma's subsidiary weapons. 59 But the cruel Kāma even torments bees

example) *bhramaraparabhṛtānām kaṇṭhanādaiḥ*; Varāhamihira BS 48, 7; Āryaśūra Jm 21, p. 175 & 31, p. 293.

Subandhu 131; Vararuci Ubh 29+ anibhṛtamadhukararavena (note that quandoque bonus dormitat Homerus: Ghosh translates this 'hearing loud songs of the cuckoo'); Jayadeva Gītag 2, 1 & 2, 20 & 5, 4 dhvanati madhupasamūhe śravanam apidadhāti.

e.g. in Bhāsa's Daridrācārudatta 1,11+ Madhukarakā, in Kālidāsa's Māl act 3 Madhukarikā. These bee-names seem to be rather exceptional (cuckoos being more common). Hilka (1910: 117–118) in his list of personal names derived from animals knew only the Mālavikāgnimitra. The BhNŚ suggests flowers for servants in plays, not bees: 17, 97 N (19, 34 Gh) nānākusumanāmānaḥ preṣyā kāryās tu nāṭake.

Kālidāsa KS 4, 15 alipanktir anekaśas tvayā gunakrtye dhanuşo niyojitā & Md 71 cāpam ... şatpadajyam, Rs 6, 1 dvirephamālāvilasaddhanurgunah; Dandin DKC Pūrvap. 1, 3 quoted below for hair & DKC 3, 114 bhramaramālāmayī jyā; Subandhu 136f. (the twang) mañju muñjanmadhukaro makaraketos tribhuvanavijayaprayāṇaśankhadhvanim iva cakāra; Somadeva KSS 9, 5 (55), 108 lagnālimālāmaurvīkāh puṣpeṣaḥ ... cūtavallīdhanurlatāḥ & 12, 18 (85), 7 alimālāmaurvīkāh & 13, 1 (104), 6 āpatadbhiḥ śilīmukhaiḥ smaracāpalatevātra ... cūtamañjarī & 16, 1 (111), 7 niṣpetuḥ puṣpavallībhyaḥ saśabdā bhringarājayaḥ / māravīra-dhanurmuktā iva nārācapanktayah, i.e. arrows; Vidyākara 331; Pseudo-Śankara SL 6 dhanuḥ pauṣpam maurvī madhukaramayī. They are certainly bees, although Mani, in Keralan fashion, calls them beetles (Mani 1975 s.v. Kāma; cf. 2.2 above).

Dandin DKC Pūrvap. 5, 44 marvīmadhukarapanktinīlimalīlayā romāvalim. Das (1991: 21–22) quotes a subhāṣita where the romarāji (here romāvali) is the stem of the breast-lotuses which have nipples as bees. Note also BhNŚ 15, 189 N (16, 140 Gh) where the romarāji is a swarm of bees around the flower of the lotus-navel, nābhikamalavivarotpatitabhramarāvalīva.

⁵⁹ Kṛṣṇamiśra 1, 12 & 4, 13, cf. Śaṅkara ŚTBh 3.

(Harşa Pri 3, 9 *abhinavarāgakṣiptā madhukarikā vāmakena kāmena*). In Nepal, at least, bees are also connected with Kṛṣṇa as Mādhava (Majupuria 1977: 182).

4.7 Bees and other gods⁶⁰

In a pleasant and holy grove, there are neither gadflies nor mosquitoes (Mbh 3, 145, 19f. adamśamaśake deśe), but bees belong even to the abodes of gods (Indra's paradise in BhāgP 8, 15, 12 & 20). According to the Bhāgavatapurāṇa, those living in Vaikuṇṭha hum the praise of Viṣṇu (BhāgP 3, 15, 18 bhṛṅgādhipate harikathāṁ gāyamāne) so that cuckoos and other birds stop their singing in order to listen to them.⁶¹ In another passage, bees sing the praise of Lakṣmī, who, sitting in a swing, is herself praising Viṣṇu's exploits (BhāgP 2, 9, 13 śrīr ... preṅkhaṁ śritā yā kusumākarānugair vigīyamānā priyakarma gāyatī). In the imagination of Bhoja, Lakṣmī's glances are bees for Viṣṇu's lotus-face (*Śrīdharadāsa 329 in Warder 1992: 174–175).

The bees swarm around Śiva's and Kṛṣṇa's lotus-feet (BhāgP 4, 4, 15 Śiva; 6, 3, 33 kṛṣṇāṅghripadmamadhuliṇ). The bees around the apsarases are compared to students chanting Sāmaveda and Upaniṣad (BhāgP 5, 2, 9 sāma sarahasyam).

God Brahmā is the bee of Viṣṇu's navel-lotus, humming Vedic texts, from him many verses (or schools) spring forth. In the same way, Śiva is the bee of Pārvatī's lotus-mouth. ⁶² Pārvatī herself has a bee form (or a form surrounded by bees), called Bhrāmarīdevī. ⁶³ In 4.4, we saw that Gaṇapati with his elephant head is as likely to attract bees as the earthly musth elephants. Also in Buddhist context: Vidyākara 17 (by Buddhākaragupta) the face of Padmapāṇi and 25 (by Vallaṇa) the face of of Mañjuśrī are garlanded by bees. For a poet, bees can also be the eyes of forest deities (Kālidāsa Rv 9, 52 *bhramarasankramitekṣaṇavṛttayaḥ ... vanadevatāḥ*). The Agnipurāṇa (105, 6), recognises Bhṛṅga (or Bhṛśa) and Mṛga as minor gods.

In medieval Kṛṣṇa bhakti, we encounter an interesting development of a bee motif. The starting point seems to be the BhāgP 10, 47. Kṛṣṇa, as the king of Mathurā, sent his messenger Uddhava (later Ūdha) to the longing gopīs to explain them that they would, with the help of yoga, find Kṛṣṇa in their own inner selves. However, unhappy with such nirguṇa bhakti, the gopīs wanted Kṛṣṇa in person and, seeing a black bee (thus resembling the black Kṛṣṇa), they addressed the insect with

⁶⁰ Cf. 4.2.18.

⁶¹ Cf. BhāgP 3, 8, 31 where the Vedas in the form of bees (*madhuvrata*) praise Viṣṇu. Note that the word in 3, 15, 18 is *bhṛṅgādhipa*, explained by Dave (1985: 66) as the drongo. However, it is hard to imagine the drongo giving special praise to Viṣṇu with its poor singing voice.

Brahmā in Somadeva KSS 9, 4 (54), 32 brahmā te nābhikamale svādhyāyodyan mṛdu-dhvaniḥ / tadbhūtānekacarano 'pyeṣa ṣaṭcaraṇāyate (see also Tawney's transl., note on p. 526); Siva in Kālidāsa KS 8, 23 pārvatīvadanapadmaṣaṭpadaḥ.

Kinsley (1987: 239, note 23), suggesting an erotic function for this form and referring to the *Devībhāgavatapurāṇa 10, 13 and MkP 89 (Devīmāhātmya 11), 49f.

their longing rather than Ūdha. But in later Sant poetry (Sūrdās, Nanddās et al., see Hawley 1984: 47, 62–63, 98 ff.), Ūdha himself is the bee and a great number of so-called Bhramargīt poems are addressed to him by gopīs.

4.8 Bees and seasons

Although mainly connected with spring in poetry, bees are also active in the rainy season and autumn, visiting seasonal flowers.⁶⁴ However, an unexpectedly hard wind and rain force them to remain in the tree's hollow (Kālidāsa Māl 4, 2 *madhuraravā parabhṛtikā bhramarī ca vibuddhacūtasaṅginyau / koṭaram akāla-vṛṣṭyā prabalapurovātayā gamite*). Another problem is that in autumn there are few flowers available (Śārṅgadharapaddhati 45, 11 (825) = Vallabhadeva 18, 733).

Summer is too hot and dry for bees (Bāṇa HC 2, 22 (37) above), but even the summer flowers are visited by them (Kālidāsa Rv 16, 47). During a hot afternoon, bees seek the coolness of flowerbuds (Kālidāsa Vi 2, 22 nirbhidyopari karṇikāra-mukulāny ālīyate ṣaṭpadaḥ). They leave the elephant's temples for the shadow under its large ear-lobes (Harṣa Pri 1, 12 tyaktvā kapolaṁ viśati madhukaraḥ karṇapālīṁ gajasya).

The frosty winter is really a hard time for bees.⁶⁵ Due to the ambiguity of the words, it is not always certain that it is frost and not just dew that is making lotuses cold. In a stanza quoted by Vidyākara, they have to drink honey mixed with cold (dew or frost) inside the waterlily in the wintry dawn (12, 3 (295) *kumudvatyāḥ koṣe madhu śiśiramiśram madhuliho lihanti pratyūṣe*). The bees may even collapse under the weight of frost, but again recover with the warmth of the sun (Bhaṭṭa Nārāyaṇa 2, 7f.).

For bees in spring, several passages have already been quoted and referred to. Let it just be added that a common alternative name for spring (*vasanta*) is *madhu* 'honey' or *mādhava* 'honeyed' (see Vogel 1971: 290, 315 with references).

4.9 Bees and arrows

The prince Vṛṣasena enveloped Arjuna's chariot with his arrows, like a tree in blossom with bees (Bhaṭṭanārāyaṇa 4, 9+ kusumita iva tarur muhūrtena śilīmukhaiḥ

⁶⁴ Subandhu 118f. (rainy season) jaladakālasarasīva gandhaparibhramadbhramaramālānu-mīyamāna-jalamūlamagna-kumudapundarīkā; Kālidāsa Rs 2, 14 & 15 (rainy season) and 3, 6 (autumn); BhNŚ examples in 32, 87 N (86 Gh) gāyante bhamarā ramme pāusae (ramye prāvṛṣi) & 32, 330 (Gh, not in N); Vāmana 2, 2, 23+ (example); Varāhamihira BS 12, 10f. indīvarāsannasitotpalānvitā śaradbhramatsatpadapanktibhūṣitā.

Harşa Pri 4, 8 dagdhā himena; Bāṇa HC 8, 131 (241) bhramarīnām iva himahatakamalākarakā-tarānām; Subandhu 45 śiśirahimaśīkarakardamitakumudamadhyabaddhacaraneşuşaţcaraneşu; Śivasvāmin, Kapph 8, 52; Śārngadharapaddhati 137, 6f. (3924f.) and 13 (3931). On winter and snow in Sanskrit literature, see Karttunen (forthcoming).

pracchādito dhanamjayasya rathavaraḥ). Bees and the arrows of a hunting king were also compared by Somadeva (KSS 7, 8 (42), 6). Note that the word śilīmukha denotes both 'a bee' and 'an arrow'. On another occasion, I have discussed the more common comparison of arrows with locusts (Karttunen 2003).

4.10 Black bees

The bee is as dark as a mountain (Divyāvadāna 30, 161 nīlāñjanācalasavarṇa). Accordingly, the black bee as a symbol of the dark colour was used in many comparisons. It is especially common for the black hair of beautiful women or boys:⁶⁶ Viṣṇu's black curls in the BhāgP (4, 7, 20 nīlālakabhramaramaṇḍita-kuṇḍalāsyaḥ), an escaped lock before the lotus-face of Rādhā (Jayadeva Gītag 12, 15 bhramaracayam racayantam ... alakam). In connection with a sinister omen, a swarm of black bees resembled Durgā's hair (Bāṇa HC 5, 82 (148) kālarātri-vidūyamānavṛjinaveṇībandhavibhramam ... bhrāmaram paṭalam).

Black bees are also used as a comparison for black eyes and their side glances, ⁶⁷ and for brows above the lotus-eyes. ⁶⁸ A more elaborate comparison is given in Śańkara ŚTBh 59: a mark of musk on the forehead is the bee, with the eyebrows as its expanded wings (*tilakam mukhanālīke madhupam madhulolupam / śańke sańkocaracitau pakṣau lolekṣaṇe bhruvau*). In Jayadeva, Rādhā asks for antimony that is blacker than the bee (Gītag 12, 13 *alikulagañjanam añjanakam*).

Occasionally, we meet black bees as a comparison to the darkened nipples of the pregnant queen's lotus-breasts, to bruises on lotus-like hands, and to anklets on lotus-feet.⁶⁹ Additionally, they are compared to the sprouting beard on the lotus-face of a young Brahman and to a black horse,⁷⁰ to storm clouds, to darkness in

Women in Viśākhadatta 5, 23; Bhartrhari Śringāra 5 apākariṣnur alinījiṣnuh kacānām cayaḥ; Dandin DKC Pūrvap. 1,3 tasyā rolambāvalī keśajālam and DKC 3, 114 quoted above; Kṣemīśvara 5, 9 bhramaraughanīlakuṭilāḥ; Śainkara ŚTBh 122 alikālakeśi & 145 venījitamadhupālīvainī; BhāgP 4, 26, 23 nīlālakāli (the queen's hair) and 5, 2, 13; BhNŚ 16, 24 te bhramaranibhe kānte (Gh, the corresponding verse in N omits bees); Divyāvadāna 30, 161 varnālipattrasadṛśā-yatakeśa. Boys or young men in Dandin, DKC Pūrvap. 2, 22 madhukarāyamāṇakākapakṣam; Kṣemīśvara 5, 10; Varāhamihira BS 105, 10 bhramarodarasannibhaiḥ keśaiḥ; Jātaka 526 (5 p. 205) bhamarayannehi kesehi.

Kālidāsa KS7,62 vilolanetrabhramarair, the same also in Rv7,11,Md35 madhukaraśrenidīrghān kaṭākṣān & 47 madhukaraśrīmuṣām; Daṇḍin DKC 5, 138 quoted above; Somadeva KSS 9, 2 (52), 152 netrabhramara; of a prince in Kālidāsa Rv 5, 68 cakṣus tava pracalitabhramaram ca padmam. The pupil of a lotus-eye as a bee in Kṣemīśvara 1, 19 apāṅgavalitatārā ... bhramarīva.

⁶⁸ Subandhu 61 *vilocanakuvalayabhramarapanktibhyām*; Jayadeva Gītag 3, 5.

Nipples in Kālidāsa Rv 3, 8 stanadvayam tiraścakāra bhramarābhilīnayoh sujātayoh pahkajakośayoh śriyam; bruises in Somadeva KSS 12, 18 (85), 26 ālīnabhramarau padmāv iva hastau kiņānkitau; anklets in Rājaśekhara KM 2, 13.

Beard in Somadeva KSS 13, 1 (104), 180 navīnaśmaśrumadhupaśrenīśritamukhāmbujah, cf. also Vidyākara 8, 27 (178); horse in Mahāvastu 1, p. 108g bhrnganīlam ... turagaratanam.

the evening, and to the peak of a mountain encircled by a net of clouds.⁷¹ A more sinister image is presented to us in the case of fallen soldiers with arrows sticking out like bees covering lumps of wax or honey (Kālidāsa Rv 4, 63 *bhallāpavarjitais tesām śirobhih ... tastāra saraghāvyāptaih sa ksaudrapatalair iva*).

5. BEES' NESTS AND BEE SOCIETY

5.1 Beehives

Bees' nests are large and easily attract attention. They are often situated in hollow trees. ⁷² Sometimes they hang down from tree branches. ⁷³ There are beehives around a village or (in an unfortunate case) even inside a house (*madhu vā jāyeta* BaudhGS 1, 3, 6, 1; JaimGS 2, 7, cf. König 1984: 151). The Śārṅgadharapaddhati also asserts that bees may build their nest in a house (2552 *udvāsayitum veśmani saraghāḥ kurvanti yan madhucchatram*).

Trees containing beehives were not suitable for making furniture (Varāhamihira BS 79, 3), but they are valuable to one looking for honeycombs (Jātaka 4, p. 205). Hundreds of beehives are seen in the Vindhyas (Bāṇa Kd 41 *madhukośaśatā*). According to the *Bhaviṣyapurāṇa 1, 12, 54 (according to König 1984: 35), it takes long time to construct a honeycomb or an anthill.

In the mountains, the beehives are often situated on precipices. John D. Smith (2002) has collected eleven passages from the Mahābhārata containing the popular wisdom of the stupidity of one who, in his eagerness to get honey, does not see the precipice (often applied to Kauravas challenging the Pāṇḍavas).⁷⁴ Although quite common in the Mahābhārata, the simile seems not to appear elsewhere (as was also noted by Smith).

Clouds in Śūdraka Mk 5, 2 megho ... bhṛṅganīlo; Varāhamihira BS 19, 4; darkness in Rāja-śekhara VBh 3, 5+; peak in *Vijayasena's Revamtagirirāsu quoted in Warder (2004: 529).

Kālidāsa Śak 4, 7+ kodarasambhavā vi mahuarī and Māl 4, 2 above; Varāhamihira BS 79, 3; Dalhana on Suśruta Sūtra 45, 133 quoted below in 7.2.

Rāmāyana 2, 50, 8. Look at the honeycombs, amassed by honeybees on one tree after another, they hang down large as buckets (paśya dronapramānāni lambamānāni ... madhūni madhukāribhih sambhrtāni nage nage).

See Mbh 2, 55, 4 madhu vai mādhviko labdhvā prapātam nāvabudhyate / āruhya tam majjati vā patanam vādhigacchati; 3, 225, 21 madhu prapasyanti na tu prapātam; 5, 50, 26 viṣamam nāvabudhyante prapātam madhudarsinaḥ; 5, 53, 6; 5, 62, 20–31 developed into a narrative; 7, 49, 11; 7, 108, 10; 11, 1, 30; 12, 83, 45 just madhuprapāto; 12, 297, 7; and 821* after 3, 159, 6

5.2 Swarming bees and their king

The ruler of the beehive was called the 'king' of bees, instead of the queen that biology has shown her to be. The mere term *bhṛṅgarāja* is not sufficient evidence for the idea of a bee king as it has also another meaning (see 5.3), but see, e.g. Praśnopaniṣad 2, 4, where the (swarming) bees follow the bee king whether he goes up or down (*makṣikā madhukararājānam utkrāmantam sarva evotkrāmante tasmimś ca pratiṣṭhamāne sarva eva prātiṣṭhante*). In the BhāgP, the bee king is called *bhṛṅgādhipa* (3, 15, 18) and *madhuvratapati* (3, 16, 20). The same error, king instead of queen, was also committed in classical West.⁷⁵

A swarm (*kula*, *gaṇa*) of bees is often mentioned in texts, but usually this seems to refer only to the numerous bees visiting flowers. However, the passage of the Praśnopaniṣad just quoted seems to speak of the real swarming of bees, when they move on in order to start a new colony.

5.3 Bees' enemies

Occasionally some bees' enemies are mentioned in texts. In my opinion, the *bhṛṅgarāja* can hardly be the humblebee of van Buitenen,⁷⁶ but rather a bird, the fork-tailed black drongo (*Dicrurus macrourus* and related species, see Dave 1985: 62 ff.), feeding on bees and other insects. The case is thus similar to the lion called *mṛgendra*, the king of deer, which he eats.⁷⁷ In the zoological classification developed by medical authors, *bhṛṅgarāja* is included in the *pratuda* class of birds (Caraka Sūtra 27, 50, Suśruta Sūtra 46, 67). In the KAŚ 1, 20, 7, it is listed among protected birds. Its voice is described with the verb *kūjati* (Suśruta Kalpa 1, 32).⁷⁸ In Varāhamihira (BS 53, 44 & 63), Bhṛṅgarāja is a minor deity.

Aristotle, H. an. 5, 21, 553ab and 8 (9), 40, 623ab, etc.; Vergil, Georgica 4 often, e.g. 67 ff. and 201 ff., Aelian, N. an. 5, 10f., and Pliny H. N. 11, 17, 52–54.

Frequently in the Mbh translation (e.g. in book 3: 146, 20; 150, 23; 155, 52; 175, 7). The same also in the *DEDR*. But van Buitenen is not quite consistent here. In Mbh 3, 155, 75 (a list of kings), he translates *bhṛṅgarāja* as 'bee-king' and in 3, 155, 47 (a list of birds) as 'shrike' (i.e. drongo). The word humblebee (or bumblebee) is sometimes used in the sense of the black Indian bees, but this is rather misleading. The real humblebees belong to a different genus (*Bombus*). They visit flowers and prepare honey, just like bees, and do not harass bees. According to http://www.britannica.com/eb/article-9018065?hook=235212, they are absent from most of Africa and from the lowlands of India. From the site http://www.nhm.ac.uk/research-curation/projects/bombus/oriental.html we further learn that in South Asia, they are restricted to the Himalayas. Some authors explain *bhṛṅgarāja* as just a large bee (Banerjee 1980: 185). The *PW* has both meanings from lexicography: 'eine grosse Bienenart' from Hemacandra and 'ein best. Vogel' from the Trikāndaśesa.

On lions, see Karttunen 2009. Note that among the animal categories of Ayurveda, the *bhṛṅga-rāja* is listed in the *pratuda* class of birds (Suśruta Sūtra 46, 67, Caraka Sūtra 27, 50, and Vāgbhata Sūtra 7, 72).

But note that kūjati also applies to the humming of bees (dvirepha in Vallabhadeva 18, 737, also 752 with utkūjati and the onomatopoetic 'r r'.

The most specific bee-eaters among birds are the members of the *Meropidae* family, but they are apparently not mentioned in literature at all. Dave (1985: 147 ff.) identifies them as śārṅga and quotes a number of text references, but has nothing connected with bees. The tiny honey guides (*Indicatoridae*) are rare Himalayan birds, without any known Sanskrit name (Dave 1985: 126). Perhaps they were known to the honey-collecting tribes (as their relatives are in Africa), but literature seems to be silent. Honey was collected by low-caste people and the poets were not familiar with their methods.

Monkeys, bears and badgers are known to be often raiding bees' nests for honey. In literature, beehives were broken open by monkeys seeking for honey (Subandhu 261f. *golāṅgūlabhagnamadhupaṭala*), or licked by monkeys and bears, thus disturbing the bees.⁷⁹ In the Dhammapada commentary (1, 5, p. 59), a monkey found a stick with a honeycomb (*nimmakkhikaṁ daṇḍakamadhuṁ*), broke it, put the honey on a plantain-leaf and offered it to the Buddha.

In a humorous verse ascribed to Rājaśekhara by Vidyākara (8, 6, (157)), parrots mistake bees visiting jambu flowers for ripe berries, peck and drop them (*kīrāḥ pakkaphalāśayā madhukarīś cumbanti muñcanti ca*). However, the bees, too, seeing the red beaks of these green birds mistake them for the red flowers of the flame of the forest tree (4.2.2.18) amidst green leaves and fly to them (*kimśukataroḥ patrair abhinnatviṣām puṣpabhrāntibhiḥ āpatanti sahasā cañcūṣu bhṛṅgāṅganāḥ*). The same idea is found in the Brhamarāṣṭaka 5. Syed (1990: 289) also quotes another from *Hāla (532 Weber) with a similar idea about a monkey, who dares not take the jambu fruit remembering being stung by a bee earlier.

Men, too, can be bees' enemies. Thus smoke was used to destroy bees (*madhu-karā vā dhūmena bādhitā bhavanti*) – either beehives built in an unwanted place or to obtain honey without danger, we may suppose – and the Mahāvastu (1, p. 20 & 23) promised a rebirth in a hell for people doing this.⁸⁰ On the other hand, Majupuria (1977: 182) mentions a Nepalese tradition of bees attacking armies. The same author asserts that bees do not sting if one is holding one's breath.

6. BEESWAX

In addition to bees and their nests, we find various bee products mentioned in literature: Beeswax or Sanskrit *siktha(ka)*,81 honeycomb and honey (Chapter 7

⁷⁹ Bāṇa HC 2, 26 (45) acchabhallagolāṅgūlalihyamānamadhugolacalitasaraghāsaṅghātais.

Mv 1, p. 20 yehi ... madhukarā vā dhūmena bādhitā bhavanti & p. 23 yehi ... madhūni tāmbulena (so Jones for -lāni) vā agninā bādhitāni bhavanti. The use of smoke in order to kill bees or to keep them quiet seems to have been widely known in the antiquity. See Aristotle, H. an. 8 (9), 40, 623b, Vergil, Georgica 4, 230, and Pliny, H. N. 11, 45.

The dictionaries (*PW, pw*, Edgerton) quote mainly lexicographical sources. According to the PTS Dictionary, Pāli *sitthaka* is attested in the Vinaya 2, 107, 151 *sitthatelaka* 'oil of beeswax' and 2, 116 *madhusitthaka*. Note that *siktha*, Pāli *sittha*, also means 'a lump of boiled rice'.

below). Another name for beeswax is *madhūcchiṣṭa*,⁸² e.g. in the Mahābhārata. From the epic, we learn that it was used to anoint cudgels (Mbh 3, 268, 20 *sa madhūcchiṣṭamudgara*) and to seal a basket (3, 292, 7), but more often we meet it used in cosmetics.

Pale as beeswax without honey is used in comparisons. Like Kādambarī's lip in Bāṇa (Kd 395 *madhūcchiṣṭapaṭṭapāṇḍuram adharam*). Damayantī used beeswax to brighten the lustre of red lac on her lips and Śrīharṣa, always fond of word-play, compared this to a bee forsaking honey in order to drink the nectar of her lower lip.⁸³ In Kālidāsa, beeswax is also applied to the lower lip of a lady (KS 7, 18 *kimcin madhūcchiṣṭavimṛṣṭarāgaḥ ... adharoṣṭhaḥ*). According to Varāhamihira (BS 16, 25), beeswax belongs to the planet Jupiter.

Beeswax was used in moulds for casting metals. This was known to the author of the Carakasamhitā (Śā 3, 16) who mentioned the various wax moulds (madhūcchiṣṭavigraheṣu), giving various shapes for metal as a comparison with genetics, each species giving birth to its own kind. Beeswax was also used for seals (Kṣemendra Kalāv 8, 5 sikthakamudro). The medicinal uses of beeswax will be discussed in the next chapter.

7. BEES IN MEDICINE

In medicine, fat, ghee and wax were added to medicinal smoke made of the best drug plants (Caraka Sūtra 5, 25 *vasāghṛtamadhūcchiṣṭair yuktiyuktair varauṣadhaiḥ* ... *dhūmam ācaret*, cf. Vāgbhaṭa AH Cikitsā 3, 75). Together with other oily substances, *madhūcchiṣṭa* is used in cauterisation (Caraka Cikitsā 25, 103).

Bee stings can be painful and meeting a swarm of wild black bees is positively dangerous. It seems obvious that physicians were asked for help. And yet, even in the very full treatment of toxicology in Suśrutasamhitā (Kalpasthāna), there is no special chapter on bee stings. We find *bhramara* included in the general list of the *pittaja* type of insects (8, 9), but apparently bee sting was just taken as a variety of the *makṣikā* type of stings (in 8, 35).

Bees themselves were used as an ingredient in magical preparations.⁸⁴ Without success, I have looked for other medical uses, but Āyurveda seems to be silent. In Nepal, according to Majupuria (1977: 182), bee-venom therapy is used for rheumatism, arthritis, etc.

For the alternative madhuśiṣṭa in the Rāmāyaṇa and Finno-Ugric evidence for its early origin, see Parpola 2005: 21.

⁸³ Śrīharşa Naiş 15, 43. According to Warder (2004: 547), Addahamānu's Samneharāsayu (187) mentions a cosmetic for the lower lip made of mixed wax, camphor and sandalwood (but apparently no lac to give colour).

⁸⁴ KAŚ 14, 3, 78 (ali, to cause impotence); Agnipurāṇa 315, 16 (satpada, to cause leprosy).

8. HONEY

8.1 Preparing honey

Bees' ability to make honey (*madhu*) was a cause of permanent wonder. They are capable of making honey (*madhu madhukṛto nistiṣṭhanti*) of the nectar of quite different trees, collecting it into one taste (*rasa*), and there one particular nectar cannot claim that I am the nectar of this particular tree (*amuṣyāham vṛkṣasya raso smīti*, Chāndogyopaniṣad 6, 9, 1f.). The use of many flowers of different kinds and quality for obtaining honey was also emphasised by Suśruta (Sūtra 45, 143 *tat tu nānādravyarasaguṇavīryavipākaviruddhānām ... saṃbhavatāt*).

The bees make honey for others. Doing this, they do not disturb the flowers and they collect honey from different places (flowers) like alms (Agnipurāṇa 161, 9). The wise king (Parīkṣit) is like bees, capable of drawing the best out of everything. The wise king (Parīkṣit) is like bees, capable of drawing the best out of everything.

An interesting account of the preparation of honey is found in the Mahāvastu.⁸⁸ In the same text, honey made by bees is used as a comparison for good smell and taste (3 p. 69 *ksudramadhusadrśāni*).

On Gandhamādana mountain, there was miraculous honey not prepared by bees (madhupītam amakṣikam, why not 'unstained by flies'?), but nevertheless situated on a craggy precipice (maruprapāte) and guarded by venomous snakes. It is said to have great medical virtues (Mbh 5, 62, 20 ff., cf. Smith 2002). On Supārśva mountain, there was a great Kadamba tree from the hollow of which flowed five sweet streams of honey (BhāgP 5, 16, 22 yas tu mahākadambaḥ supārśvanirūḍho yās tasya koṭarebhyo viniḥṣṛtāḥ pañcāyāmapariṇāhāḥ pañca madhudhārāḥ).

⁸⁵ Viśākhadatta 2, 11 jam uggirei bhamaro aṇṇāṇam kuṇaï tam kajjam, for Aśoka in Dīpavamsa 6, 11 and Mahāvamsa 5, 31 bees made honey for Asoka (akamsu satatam tassa madhūni madhumakkhikā).

Mbh 5, 34, 17 yathā madhu samādatte rakṣan puṣpāṇi ṣaṭpadaḥ; Dhammapada 4, 6 (49) yathāpi bhramaro puppham vaṇṇagandham aheṭhayam / paleti rasam ādāya; Aśvaghoṣa BC 26, 40 (Tibetan).

BhāgP 1, 18, 7 sāranga iva sārabhuk, cf. 4, 18, 2 sarvataḥ sāram ādatte yathā madhukaro. If the text were intact, we would probably have a more elaborated form of the same in the Mahāvastu 1, 297f. quoted below.

Mahāvastu 1, p. 297f. (gāthā) As the bees come together and cull the essence of various flowers, gathering in their mouths and on their feet ... (lacuna) (298) Through their concerted efforts is made a juice that is sweet of taste and smell, and that, pressed together, becomes choicest honey, goodly in colour, taste and smell, and useful as food and medicine (yathāpi te madhukarā nānāvidhām kusumarasām grahetvā / tundehi pādehi ca samharitvā ... // sāmagriye bhavati rasagandhayoso tam samstṛtam bhavati madhu praṇītam / varṇena gandhena rasenupetam bhaisajyabhakteṣu ca tam upeti).

8.2 Obtaining honey

Jungle tribes and low-caste people collect and sell honey and wax.⁸⁹ They used to bring honey or honeycombs to the king as gifts (Milindapañha 4, 2, 22, p. 155 Tr = 117 Sastri *yathā* ... *puriso rañño cakkavattissa madhum vā madhupiṇḍikam vā* ... *abhihareyya*). Honey prepared from Himalayan flowers is praised as sweet in Mbh 2, 48, 5 *himavatpuṣpajam caiva svādu kṣaudram*.⁹⁰ The Śabaras had vessels made of leaves for keeping honey (Bāna Kd 63 *acchitraparnabaddhamadhuputaih*).

Professional honey collectors or dealers (*mādhvika*) are occasionally mentioned in texts, but Gautama forbids this trade for Brahmans. In the Mahāvamsa, we meet three brothers making a living from the honey trade, two of them obtaining it and one selling it in a shop in the town (5, 49 *pubbe kira tayo āsum bhātaro madhuvāṇijjā / eko madhum vikkiṇāti, āharanti madhum duve*). The seller, the future Aśoka, then donates some honey as alms to a Paccekabuddha and has to explain this to his brothers. In another narrative, a poor villager brought a honey pot to the town market, but stumbled and thus caused the first chain in a series of accumulating accidents leading to a massacre (Tantropākhyāna 2, 15, Sanskrit text p. 55f. according to Warder 1992: 89 ff.). In the Dhammapada Commentary (2, 1 p. 166), a hermit offered honey to a guest, but we are not told whether he collected it himself or obtained it from forest people. It is characterised *nimmakkhika*, which Burlinggame translates 'free from flies', but perhaps it could also be interpreted as honey found 'without bees'. We had a similar case (1, 5 in the same text) earlier.

However, honey collecting could also be dangerous as the bees attack the collector (Mbh 3, 34, 68 *amitraḥ śakyate hantum madhuhā bhramarair iva*). The BhāgP makes a point that honey, difficult to obtain, is found through killing its owner, the bee (7, 13, 35 *kṛcchrāptam madhuvad vittam hatvāpy anyo haret patim*).

8.3 Consuming honey

Honey was used in food and drink, in medicines and in magical potions (KAŚ 14,1, 21 & 24). Unfortunately, its sweetness could also be used to hide the pungent taste of poison (Ksemendra Kalāv 3, 1 *visam iva madhunā sahitain*).

⁸⁹ HC 7, p. 124 K, (227 C & Th) in the description of foresters, honey (bhārāmiś ca madhuno mākṣikasya) and wreaths of compressed (or easily obtained) wax (lambamāna-lāmajjakajūṭajaṭānām apatvacām).

Of. Moorcroft 1841: 50 ff. on bee-keeping and honey in the Western Himalayas. Smith (2002) quotes a modern account of Nepalese honey collectors.

Mādhvika, e.g. in Mbh 2, 55, 4; Varāhamihira BS 15, 9 mākṣika among trade items presided over by Pūrvaphālguna, and 42, 5 on times for storing up and selling honey; prohibited for Brahmans in GautDh 7, 12, cf. Gopal 1969: 262.

At the time of the finishing of this study, I have procured a copy of this rare edition and can thus confirm the reference from the text itself.

There were several types of honey distinguished in literature, especially by medical authors. Thus Caraka (Sūtra 27, 243 ff., also AS 6, 98) has *mākṣika*, *bhrāmara*, *kṣaudra* and *pauttika* kinds of honey, while Suśruta (Sūtra 45, 133) lists these four and four additional ones (*chātra*, *ārghya*, *audāka*, *dāla*). Suśruta has a whole chapter devoted to honey, its different kinds and their uses (Madhuvarga in Sūtra 45, 132–147).

Different kinds of honey and beeswax are also listed in the Amarakośa (2, 10, 1921 = Gopal's 2, 9, 107 madhu kṣudram mākṣikādi madhucchiṣṭam tu sikthakam) and some Jaina texts. Gopal (1969: 258–259) attempts to identify these. His biology is not very exact (Sastry 2006: 51–52 is still worse), but I think we can agree that bhrāmara comes from Apis dorsata, mākṣika, which is the best kind, from the cultivated Apis cerana, and kṣaudra⁹³ from the small Apis florea. For the rest, Gopal suggests some further, probably non-existing species or subspecies of bees, but there is also great difference in honey made from different flowers and this seems to me to be a more likely explanation.

In this connection, we must also note Dalhaṇa's comments on the list given by Suśruta. It deserves to be quoted almost entirely (Dalhaṇa on Suśruta Sū 45, 133):

pingalā mahatyo makṣikāḥ puttikāḥ, tadbhavam pauttikam / anye maśakopamamakṣikāḥ kṛṣṇavarṇāḥ puttikā iti vadanti / bhramarāḥ pra-siddhāḥ, tadbhavam kṣaudram / pingalavarṇā mahatyo makṣikā, tad-bhavam bhrāmaram / makṣikāḥ pingalā eva svalpāḥ kṣudrāḥ, tad-bhavam mākṣikam / anye atyalpā makṣikā ity āhuḥ / pītakā pingalā eva caga iti loke yat kurvanti chatrakākāram himācalavane tat chātram / madhukavṛkṣapuṣpebhyo jaratkārvāśramodbhavam / sravaty ārghyam madhu prāhuḥ śvetakam mālave janāḥ / tīkṣṇatuṇḍās tu yāḥ pītavarṇāḥ ṣaṭpadasannibhāḥ / arghā nāma ca tadbhūtam ārghyam ity apare jaguḥ/... udālakāḥ kapilakīṭāḥ svalpāḥ prāyaśo valmīkeṣu madhu cinvanti, tadbhavam auddālakam / dālam iti dalam patram taduparisthitam dālam / anye tu kapilā eva svalpatarā makṣikāḥ prāyeṇa vṛkṣakoṭarodbhavā dalā ity ucyante, tadbhavam dālam iti //

Tawny large bees are puttikas ('dolls'), hence (is derived) pauttika (honey), others say that puttikas are black-coloured bees resembling mosquitoes. Proper bees are bhramaras, hence bhrāmara (honey). Tawny small bees are kṣudras ('tiny), hence kṣaudra (honey). Tawny-coloured large bees are makṣikās ('flies'), hence mākṣika (honey), others say (they are) very minute bees. When yellow or tawny ones make 'caga' (noise) and build an umbrella-shaped (hive) in the Himalayan forest, that is chātra (honey). Produced in Jaratkāru's āśrama from the flowers of madhuka trees, (this) whitish liquid honey is pronounced by the Mālava people ārghya (honey); and those with sharp sting and yellow colour, resembling insects, are called arghas, derived from them is ārghya (honey) as others say ... Uddālakas, small yellow insects, usually prepare honey in white ants' mounds, hence auddālaka (honey). Dāla (derived from) dala, i.e. leaf, based on this (is the

⁹³ This is probably same as the kşudramadhu in the Mv 3, p. 69. The term kşaudra also in Mbh 2, 48, 5 (above), but this refers to the Himalayas, where Apis florea is not found.

name of the) dāla (honey); but others call dalas the yellow bees usually coming out from tree hollows, hence dāla (honey).

We see that there were already different opinions about what kind of bees prepared each of these sorts of honey. It is possible that these different opinions were due to geographical differences.

In Āyurveda, honey is much used in medicines, anointing and diets (see Jolly 1977, index s.v. honey). It is said to be the best among the drugs alleviating phlegm and bile (Caraka Sūtra 25, 40 śreṣṭham ... madhu śleṣmapittapraśamanānām). Suśruta (Sūtra 45, 132) and Vāgbhaṭa (AH Sūtra 5, 51f.) list several cases where it is useful. In popular medicine, the honey of *Apis florea* is particularly reputed to have medicinal properties in some regions (Hooper 1910: 511). In Surapāla's Vṛṣṣāyurveda, honey is often an ingredient in the various medicinal liquids given to trees (see Das's Index p. 584 s.v. 'Honig').

Occasionally, honey can also be pungent in flavour (Agnipurāṇa 281, 8 madhuro 'pi kaṭuḥ [ed. kraṭuḥ?] pāke yac ca kṣaudram prakīrtitam), even a cause of stomach problems (cf. Watt 1890: 270). Suśruta (Sūtra 45, 143f.) points out that honey is made by poisonous insects (saviṣamakṣikāsambhavatāt), therefore it should not be heated or taken with hot things. Vāgbhaṭa warns that it can be fatal, when taken heated, in heated condition, or season, or together with hot food (AH Sūtra 5, 53 uṣṇam uṣṇārtam uṣṇe ca yuktam coṣṇair nihanti tat).

In fact, it seems that the best honey did not come from the large black *Apis dorsata*, although this is often the idea given by texts (and adopted by many Indologists), but from the smaller species (*Apis cerana* and *Apis florea*). Of the honey of *Apis dorsata*, collected and sold in the traditional way, Watt (1889: 435) had no favourable opinion: "The honey [...] is commonly of very inferior quality, being contaminated by pollen, the juices of larvae, & c. It is also commonly thin and liable to fermentation." Perhaps this is why it was sometimes mixed with water (as *madhūdaka*). ⁹⁴ The exaggerated fame of *Apis dorsata* honey is perhaps due to the fact that collecting it is much more dangerous than that of the lesser species.

8.4 Honey preparations

According to Gopal (1969: 257), *madhuśarkarā* or honey-sugar is crystallised from honey in a few days. It is generally mentioned in medical works (Caraka Sūtra 27, 242, Suśruta Sūtra 45, 166, Vāgbhaṭa AH Sūtra 5, 52). Dalhaṇa's commentary on the Suśruta passage gives a clear definition: *pākāt kālāntaraśoṣaṇād vā*

⁹⁴ See e.g. Caraka Sūtra 27, 323 and Cikitsā 6, 46.

ghanībhūtāvayavam madhu śarkarātulyatvāt madhuśarkarā ity ucyate. For medical purposes, honey was also mixed with sesame oil. 95

The honey-based *madhuparka* offering is given to the honoured guest to drink (*dadhisarpir jalam kṣaudram sītā ca* 'dadhi, ghee, water, honey, and candy'). Honey mixed with ghee was offered to the Buddha in the Mahāvastu (3, p. 304f. *madhusarpisamyuktam tarpaṇam*, then just *madhutarpaṇam*). The honey used for this purpose, of course, was choice and exquisite, having good colour, smell and taste.

Honey-based mead was the favourite drink of Nordic Vikings. It seems that a similar preparation was also known in India. Often it was called just *madhu* 'honey'. The Viṣṇusmṛti 22, 83f. lists *mādhvīka* among the ten intoxicating drinks forbidden to a Brahman, but allowed for a Kṣatriya and a Vaiśya. Jolly's translation speaks of a liquor distilled (so early?) from the sweet *madhūka* flowers, but this kind of drink is the *mādhūka* mentioned a little before (and translated by Jolly as the same). Therefore, I agree with Gopal that *mādhvīka* is made of honey. Manu (11, 94/95) has *mādhvī* as a kind of *surā* and the commentators variously explain it as made of honey or flowers. It is probably the same as Caraka's and Vāgbhaṭa's (AS Sū 6, 130 & AH Sū 6, 75) *madhvāsava*. In the passage quoted above, Watt said that the honey of *Apis dorsata* is liable to fermentation – perhaps this was an additional cause for its popularity.

The Greeks and Romans occasionally liked to sweeten their wine with honey (Latin *vinum mulsum*). The Carakasamhita recommends a drink suitable for the rainy season to be wine or other alcoholic drinks mixed with honey and a little water (Sūtra 6, 39 *pibet kṣaudrānvitam cālpam mādhvīkāriṣṭam ambu vā*).

9. SOME FURTHER IDEAS ABOUT BEES

9.1 Bees in allegories

Sometimes bees were used in allegories. Thus, there is the famous comparison of the man in the well: Even in his great danger, the man is happy to taste honey dripping from the nest of wild bees.⁹⁹ Too elaborate to be fully cited here is the

Garaka Siddhi 7, 20 mādhutailika, mixed with (cow's) urine and salt, cf. Śārńgadharasamhitā 3, 6, 29.

Often mentioned in Grhya- and Dharmasūtras, also in Manu 3, 119f. See Kane 1997: 542 ff. and Gopal 1969: 256–257 (both with references).

⁹⁷ Aalto 1963: 18, cf. *madhvāsava* in Caraka Sūtra 27, 187.

Olivelle, note ad locum. Olivelle himself accepts honey, but does not specify the opinions of commentators. I have only Kullūka available to me and he explains it as made of flowers (madhukavṛkṣo madhus tatpuṣpaiḥ kṛtā sā mādhvī). See also Aalto 1963: 22 and Gopal 1969: 257.

⁹⁹ Mbh 11, Chapter 5 (and explanation in 6).

long illusion parable of Somadeva (KSS 12, 3). In it, the bees represent living beings, alternately drinking good or evil actions in the form of the foam of a bull and a donkey representing the righteousness and unrighteousness. According to Amaracandra (*Bālabhārata 40, 107 according to Warder 2004: 577), the dependants drink up the substance of a smiling king, just like a flower is emptied by quivering bees. For Kavirāja (*Rāghavapāṇḍavīya 1, 25 in Warder 2004: 418–419), the king is a bee to the foot-lotus of fortune.

9.2 Bees as omens

There are omens derived from bees as early as in the Jaiminīyagṛhyasūtra (2, 7 *madhu vā jāyeta*, bees making honey in a house). Bees inside a house as a sinister portent are also met in Bāṇa (HC 5, 82 (148) quoted above) indicating the death of the king, and again (6, 106 (194f.) *madhusaraghāsaṁghāta*) indicating an imminent war. Varāhamihira also noted the appearance of bees and other insects in houses, caityas and toraṇas as sinister portents. ¹⁰⁰ According to Jagaddeva 2, 54, the bees coming inside a house both in dream and during the daytime (*madhumakṣikā viśanti svapne divase 'thavā gṛham*) forebode death or bad luck for the owner. However, König (1984: 151) refers to Ramlal's (in *North Indian Notes and Queries* 5 (1895): 52) account of a popular belief that bees and termites living in an empty house or at the town gate are auspicious. König also refers to the BaudhGS 3, 3, 23, 17 & 3, 4, 20, 1. ¹⁰¹

The Vasantarājaśakuna (15, 2) briefly mentions bees (*bhṛṅga*) flying left as a good omen.

9.3 Bees in dreams

We just saw that bees entering a house are a sinister portent even when seen in a dream. Even before this, Jagaddeva 2, 23 listed *ṣaṭcaraṇa* among insects considered bad omens when seen in a dream. Dreams of being stung by leeches, bees, serpents and flies (gadflies?) foretold recuperation for the sick and wealth for the healthy persons (Śārṅgadharasaṁhitā 1, 3, 26 jalaukā bhramarī sarpo makṣikā vāpi yaṁ daśet / rogī sa bhūyād ullāghaḥ svastho dhanam avāpnuyāt). At least in Nepal, according to Majupuria (1977: 182), a dream of bee swarms foretells that

¹⁰⁰ VM:BS 46, 70 gṛhacaityatoraṇeṣu ... madhuvalmīkāmbhoruhasamudbhavaś cāpi nāśāya, see also 97, 8 on beehives as portents.

I cannot locate the first passage in the Mysore edition. The second is on p. 376 where madhuna upaveśane and valmīkapuṣkarotpanne are listed among inauspicious buildings and places.

Von Negelein gives as parallels the Yogayātra 3, 6 and *Mayūracitra in Adbhutasāgara 588 and *Kathaśruti ibid. 725 (these two unavailable to me). In the Yogayātra, Varāhamihira explains pigeons, owls, or bees (kapotakolūkamadhūni) descending on the king's standard or flywhisk as a bad omen.

a friend will betray one, while the dream of bees making honey foretells that one will need money

9.4 Bees and poison

In an earlier article (Karttunen 2001), I have discussed the traditions about finding out the existence of poison from the exceptional behaviour of various animals. Monkeys and birds were considered more important for this purpose, but among other indications of poison, the Matsyapurāṇa (219, 18) claims that a bee starts humming in its proximity.

9.5 The 'bee instrument'

In the Mahāvastu (3 p. 407), a list of musical instruments includes the *bhramarikā*, perhaps a sort of humming instrument. Edgerton in his dictionary suggests 'humming-top'. The word is also found in Pāli (e.g. *bhamarikam bhamanto viya* in Jātaka 537 = 5, p. 478) and in Ardhamāgadhī. In 4.6, we saw that Bāṇa (Kd 395) compared the sweet flutes of the Kinnaras to the humming of bees. The humming itself was considered a sort of sweet music as it symbolised the pleasures of springtime.

10. POEMS ON BEES

There are also some special poems on bees. The *Bhramarāṣṭaka* is a small poem of eight verses. It belongs to the great number of spurious works that were later ascribed to Kālidāsa. The text was long ago edited by Haeberlin. Among its eight stanzas, the last is identical (with minor variants) with Vallabhadeva 18, 754 and 2 is a somewhat modified version of Vallabhadeva 18, 753.

Some anthologies contain a separate division for bees. In the Śārṅgadharapaddhati, this is Pariccheda 45 Madhukarānyoktayaḥ containing 23 stanzas numbered 815–837. In Vallabhadeva's Subhāsitāvalī, the corresponding section (18. Bhramarāḥ) contains the stanzas 724–756.

The model of Kālidāsa's Meghadūta produced a number of dūta or sandeśa poems with various (more or less romantic) messengers used. Few poets seemed to heed Bhāmaha's warning (1, 42) that the use of messengers such as clouds, winds, the Moon, the bee, or various birds, contains the doṣa called *ayuktimat* (incongruous, as they cannot speak). Thus we have, for instance, the *Bhramaradūta* by Rudra

Nyāyavācaspati Bhaṭṭācārya (edited in the Kāvyamālā)¹⁰³ and another anonymous sandeśa using bees as messengers. On both, see Krishnamachariar 1937, § 323 (with note 14), also on bees as messengers in § 170. Furthermore, there is a modern *Bhramarasandeśa* by Makalinga Sastri (born 1897) of Madras, see ibid. § 746.¹⁰⁴

11. FALSE BEES

Finally, we must also note some false bees. Instead of moths flying to the light and used by burglars to extinguish lamps, Dandin (DKC) spoke of bees. 105 'Bees' (alivṛndaiḥ) were also accused of destroying crops (Matsyapurāṇa 131, 50). These were rather locusts or moth larvae. The six-legged satpada can rightly be any insect (as they all have six legs), but often the word was used only for bees. The other way round, one may think that the words for a bee can also more generally refer to an insect (like the Hindī and Malayālam words for 'bee' and also for 'beetle' mentioned above). In any case, I think that in the just-mentioned instances, the word for 'bee' should probably be translated as 'insect'. Amarakośa (2, 6, 1040) identifies saraghā as madhumakṣikā, but is this a 'bee' or rather a 'fly'? Flies are also attracted by honey. 106 Bees are listed somewhat later in another passage, 107 and just before saraghā, the word makṣikā is glossed as nīlā, evidently a fly (or even the black bee!).

12. CONCLUSION

Visiting flowers, making honey, humming loudly, harassing people – the bees were always easily noted. At an early stage, they became part of the standard imagery of Indian poetry, used – as we have seen – in remarkably varying ways. The biology was often quite inexact, but the poets probably did not know better and did not care. While the unseasonal flowering of the aśoka tree when touched by the feet of young women was a common poetic motif, we have seen several examples of bees visiting certain flowers in the wrong seasons or at night, both against biological facts. Often it is even difficult to keep bees and flies separate. In a way, I think my collection

¹⁰³ Unfortunately not available to me.

¹⁰⁴ Unfortunately, the New Catalogus Catalogorum ends with Brahmasūkta thus leaving out most of these texts.

This motif has been fully discussed by me in Karttunen 2003. It refers to the natural behaviour of moths (patanga) and has nothing to do with bees.

Note the Buddhist proverb about making sweets although they attract flies: yathā na mṛgāḥ santīti yavā nopyante / yathā na makṣikāḥ patantīti modakā na bhakṣyante //

AK 2, 6 madhuvrato madhukaro madhulin madhupālinah / 1045 / dvirephapuṣpalidbhṛngaṣaṭ-padabhramarālayaḥ / 1046 /

has shown Nīlakantha's reproach to be true: That great trouble is wasted by poets in praising the insect called bee, instead of praising virtues.¹⁰⁸

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Nīlakantha Kalividambana 35f. stutam stuvanti kavayo na svato gunadaršinah / kītah kaścid alih nāma kiyatī tatra varnanā //

Frustrated by the difficulty of giving exact references to certain texts with available editions, I have taken the trouble to identify the pages of old standard editions in the margins of my copies of modern Indian editions (e.g. of the Kādambarī and Vāsavadattā).

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