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Bujangga Manik: or, Java in the fifteenth century: an edition and study of Oxford, Bodleian Library, MS. Jav. b. 3 (R)

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PART VI:

Things in Bujangga Manik

Bujangga Manik's documentation of material culture in fifteenth-century Java goes beyond ships and housing. Lists of perfumes, flavourings, dyes, metals, and glass items make up significant chunks of both the mundane and heavenly parts of the poem, with many of the same commodities being found in Sunda and in *sorga*, an idea encountered in other OSd texts (e.g. SA 469-674). In this section I will examine some of these commodities, noting their places of origin and particularly their roles in the medieval world. Many of the Indo-Malaysian commodities referred to in *BM* are discussed at length by Tom Hoogervorst (2011) and are well-known in the literature on the region. Others – particularly those from outside Indonesia – are less well-documented, and about those I have gone into more detail. I will start by looking at plants, animals, and botanical products in various contexts (VI.1) before moving on to metal, glass, and other manufactured goods (VI.2).

Indo-Malaysian historiography is dominated by political history and the (often dubious) exploits of elite heroes like Hayam Wuruk, Hang Tuah, and Siliwangi. Histories of 'Hindu-Buddhist' Java focus on diplomatic missions to China and the acts of kings and religious figures recorded in local inscriptions. Ordinary lives and interests are often left by the wayside. This is to the detriment of our understanding of the region as a whole, and it is also – if you ask me – rather boring, barely connected to life as it is actually lived. In the absence of the exhaustive documentation of daily life required for medieval microhistories, we must look for ways to slot ordinary people back into Southeast Asian history. Commodities offer us just such a path. As Joshua Specht (2019) has recently argued, commodities and their movements allow us to write global histories connecting disparate communities that do not rely on elite linkages. Plant products are often used by the rich and powerful – as, indeed, in *BM* – but they are grown, harvested, and transported by people who do not otherwise feature in the historical record.

Merchants travelled across the Indian Ocean on relatively predictable routes dependent on the regular cycling of the southwest and northeast monsoons (see Wheatley 1966:xviii-xx). 'Predictable' does not mean 'fast' – a round-trip from India to China and back would take three years using the monsoon cycle – but departures could be timed by the winds and currents. Ships from India to Melaka sailed between April and August, for example, while ships from Melaka to China departed between June and August (Miksic 2013:37-38). The monsoon cycle seems to have been discovered in the late first millennium BCE (see Hourani 1995:24-26), and exploiting the winds was a skilled activity for

experienced but mostly anonymous sailors and navigators (see Lewis 1973 for fifteenth-century travel on the Indian Ocean). Many of the commodities mentioned in *BM* came from outside the archipelago – harvested by anonymous skilled peasants elsewhere in the hemisphere – and they must have been brought to Sunda by sailors expertly traversing seas made dangerous by storms and piracy. References to commodities in texts like *BM* are much more than the dull cataloguing of irrelevant minutiae; they instead constitute traces of the lives and labour of people otherwise unheard and of the hemispheric connections they facilitated.



VI.1 Plants and Animals

In contrast to other medieval Indo-Malaysian texts like the *Deśawarṇana* and *Pararaton*, *BM* contains few references to animals or even animal products.³⁰³ Plants and botanical commodities take centre stage instead. These include Barus camphor, sandalwood, various bamboos, a couple of kinds of timber, and different types of incense. Animals appear infrequently and obliquely, chiefly in the form of civet (*dédés*) and in the taboos Bujangga Manik accuses his grandmother of having broken. The Portuguese sources' lists of trade goods corroborate *BM*'s items; they all seem to have been fashionable commodities on the Indian Ocean in the long fifteenth century.³⁰⁴

In this section I will examine the plants and animals used in textile production (VI.1.1); those among Jompong Larang's gifts to Bujangga Manik (VI.1.2); those growing in the land Bujangga Manik's soul enters upon his death (VI.1.3); those Dorakala uses to describe the appearance of the ascetic's soul (VI.1.4); and the more enigmatic items found in heaven proper, including the yak Bujangga Manik is said to ride. Textiles in OSd texts have already been amply discussed by Aditia Gunawan (2019) but, as elsewhere, I will focus on the hemispheric context of the goods described.

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VI.1.1 Textiles

Ameng Layaran returns home to find his mother outside working on several stages of textile production, from cleaning cotton to dyeing yarn (BM 158-164), and as noted above, weaving and dyeing feature strongly in *BM*'s depictions of women. A number of dyes are mentioned here, and others come up when describing the curtains (*kasang*) hung about the house. The weaving of cotton cloth has a long history in island Southeast Asia, and a specific term for 'weaving cloth', *tenun, can be reconstructed

³⁰³ A list of the plants and animals mentioned in the *Pararaton* can be found in I Gusti Putu Phalgunadi's translation (1996:46-47).

³⁰⁴ 'Long fifteenth century' used here in a rather different sense to that in Cooper and Mapstone (1997).

to PAn (ACD 8734). Cloths were certainly made in large numbers in Sunda in the Middle Ages, although none have survived from this period. Textiles from other islands have been radiocarbon-dated to the fifteenth century, however, including a beautiful heirloom cloth from Lampung (perhaps made in Java) that has been dated with 98.5% confidence to 1403-1501 (R. Barnes 2010:36), as well as several from Sulawesi and Timor. Weaving was traditionally an activity for women and it is sometimes described in the ethnographic literature on eastern Indonesia as the female equivalent of headhunting (as in Hoskins 1996:23 – see also B. W. Andaya 2004; R. Barnes and Kahlenberg 2010:12-13, 28-29).

Aditia Gunawan has already examined the intricacies of textiles and textile production in OSd texts, including *BM*, in a recent article (Gunawan 2019), and I do not see much purpose in simply replicating his findings here. I will, however, go over some of the botanical components of dyeing and weaving as found in the poem, particularly in their medieval/hemispheric context.

Fabric

The basic material of native Indo-Malaysian weaving traditions is cotton (*Gossypium arboreum*), which appears to have been used by MP speakers since prehistory (although there are no PMP terms for cotton, and it was probably introduced from India – Boivin et al. 2013:216; Reid 1988:90).³⁰⁵ The fabrics in the poem go under different names and they are not always easy to interpret even when attested in OJv sources; *bayabon*, for instance, is identified in OJED as ‘a particular kind of cloth’ without specifics (229:1). *Boéh*, which now means ‘(white) cotton cloth’ in Baduy Sundanese (Hasman and Reiss 2012:103), is used in OSd to refer to cloths of different materials and patterns – twenty-five types of *boéh* are listed in SSKK, for instance. Types of *boéh* in *BM* include *calingcing* (Sd for *Averrhoa bilimbi*, a small fruit tree, here probably a pattern rather than a dye – BM 213), and *lungsir*, plausibly interpreted as ‘silk’ (BM 189, 352, 1794, 1797 – cf. OJv *luñsir* ‘a kind of cloth (silk?)’ [OJED 1062:3]). *Luñsir* often features alongside *sutra* in OJv texts and is usually interpreted as ‘satin’ or ‘silk cloth’. Another term, *limur* (BM 394, 515), is also presumed to be a kind of silk (cf. OJv *limar*, *limur* – OJED 1029:1). Unfortunately it is not clear what distinguished the two, and I have rendered them both as ‘silk’ in the translation (with the original in brackets).

China, home of sericulture, has long been associated with silk – so much so that ‘(Maritime) Silk Road’ has been adopted as an umbrella term for trade out of China in late antiquity and the Middle Ages – but by the fifteenth century silk was also being produced across Afro-Eurasia from Japan to Italy. Cloths were certainly being woven from silk in the archipelago at this time; the fifteenth-century heirloom cloth from Lampung mentioned above was made with silk warp and cotton weft. Afanasij Nikitin reports that silk (шелкъ [šelkiš]), was produced in ‘Java’ (f.382v), and Pires mentions that parts of Sumatra produced silk, including Pasai (Cortese 1944:144). That said, Pires also mentions cloths

³⁰⁵ Before cotton, cloth was probably woven from the fibres of *Musa textilis* (abacá or ‘Manila hemp’), documented ethnographically across the Austronesian-speaking world (including Taiwan – Chen 1968:166).

of many kinds (most of them silks) as among the goods imported into Sunda (Cortese 1944:169), and it is clear from other sources that enormous amounts of cloth (silk and cotton) were being imported into the archipelago as a whole, as far east as Banda and Maluku. The shawl Bujangga Manik is wearing when seen by Jompong Larang is described as *sutra Cina* ‘Chinese silk’ (BM 254) and one of the types of umbrellas found in heaven is made of *sutra Keling* ‘South Indian silk’ (BM 1799) – *sūtra* being the Sanskrit word for ‘thread’ (cognate with English ‘sew’), whence the meanings ‘silk’ and ‘collection of aphorisms, sutra’.

Dyes

The dyes mentioned in *BM* also seem to be vegetable-based. Three dyestuffs are used as verbs in BM 162 and 282, *nelem nuar ñangkuduan*, where, following Aditia Gunawan’s interpretation, I have translated them as ‘dyeing black, yellow, and red’. These verbs describe the activities of Bujangga Manik’s mother and Ajung Larang. Only the third dye can be identified conclusively with a single species (see Gunawan 2019 for the others): *cangkudu* (*Morinda citrifolia*), the outside of the root of which is ground to produce a red (or brown) dye throughout the archipelago (cf. Malay *mengkudu*, OJv *wuñkudu* – OJED 2331:2).³⁰⁶ Other dyes are mentioned when describing the curtains, including *kacambang*, which is apparently to be identified with *Ardisia tenuifolia*, whose berries produce a black dye (according to Rigg 1862:183), and *laka*, which elsewhere in *BM* refers to the wood of *Myristica iners* but which here probably refers to lac, an imported dye derived from the secretion of an insect (*Kerria lacca*) which to this day carries ‘[a]n aura of luxury’ in Bali (Nabholz-Kartaschoff 2010:195).

One of the most interesting dyes mentioned is *sepang* ‘brazilwood’. This is the wood of the brazil or sappan tree (*Caesalpinia sappan*) that produces a red colour due to the presence of a chemical called brazilin (also found in a South American species, *Paubrasilia echinata*, whence the name of Brazil). *Sepang* goes back to PMP *səpaŋ, and it has relatives in Malay (*sepang*) and Javanese (*secang*), as well as in Chinese, where the word for ‘brazil’ is *sūfāngmù* (蘇枋木 – MC *su-pjang-muwk*, often shortened to 蘇木). This is often translated as ‘sappanwood’, but it was known by the name ‘brazil’ (*verzin*, *berçi*, etc.) in medieval Europe, where it was used for dyeing cloth and for making paints, just as it was in India and the Middle East. Brazil was exported from South and Southeast Asia, particularly from Sumatra, where the tree grows natively, and it has even been found among the cargo at medieval Southeast Asian shipwrecks (like the Longquan junk – Miksic 2013:201). Marco Polo attempted to grow a brazil tree in Venice from Sumatran seeds; they did not sprout, which Polo attributed to the colder climate.^{A58}

³⁰⁶ Blust reconstructed a PWMP protoform *baŋkudu ‘*Morinda citrifolia*’ (ACD 6843). WMP is no longer considered a valid clade, however.

Brazil is combined with other ingredients as it otherwise swiftly turns brown (Medlej 2020:56). It must be used freshly made. The Italian artist Cennino Cennini (c.1360-c.1427) recommended mixing kermes (a red insect dye) with brazil to strengthen blue paint in his *Libro dell'Arte* (c.1400), noting, as in *BM*, that skilled women were the best dye-mixers:

‘... it is an unusual ability to know how to make [brazil] properly. And know that making it is an occupation for pretty girls rather than for men; for they are always at home, and reliable, and they have more dainty hands’ (Cennini 1960[~1400]:39).^{A59}

Hayam, mentioned after *sepang* in *BM* 164, is unidentified. N went for ‘making chicken soup’ for the phrase *ngangen hayam* (cf. *MSd angeun*, the name for a soup or stew), but Aditia Gunawan is probably right to see this as the name of a dye and the line as a parallelism. He suggested to me that *hayam* could be *saliara* (Malay/Indonesian *tahi ayam* – *Lantana camara*), but this is a post-Columbian introduction and could not have featured in a fifteenth-century text.

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VI.1.2 Jompong Larang’s Gifts

Jompong Larang gives a number of valuable gifts to Bujangga Manik’s mother in hope of securing him as her husband. These gifts are not a dowry; dowries (payments from the bride’s family to the groom’s) are rare in an Indo-Malaysian context, and bridewealth (gifts provided by the groom’s family to the bride’s) is considerably more common (in both western and eastern Indo-Malaysia – e.g. Winstedt 1950:60-61). Jompong’s gifts should best be seen as initial prestations – more akin to a marriage proposal than bridewealth or dowry (Rooney 1993:37-38). Such gifts are an important part of marriage negotiations elsewhere in the archipelago, and, indeed, characterise relations between lineages even in situations that do not involve marriage (see e.g. Cooley 1962:26-50 for Ambon).³⁰⁷ The most important gifts – in terms of the number of lines of description devoted to them (*BM* 358-379, *BM* 463-494) – are betel quids. The association between marriage and betel is widespread in the archipelago, so this is not unexpected (e.g. Creese 2004:62 for quids as love tokens in *OJv kakawin*; Keane 1997:147 for Sumba).

Ajung Larang (on Jompong’s behalf) adds a number of more exotic commodities to the presents, and these are all said to be ‘perfumes from overseas’ (*bubura pe(n)tas sagala*, *BM* 391) – indicating perhaps that commodities’ exotic origins were as important in Sunda as they were elsewhere in the medieval world (see Freedman 2005). Several human-made products are added, including a waistband decorated with *wayang* figures, a *keris*, and a silk (*limur*) cloth. A fruit basket (*buah rembey*

³⁰⁷ The Dutch missionary Louis Onvlee, for instance, showed that the construction of a dam in Sumba was negotiated in the same way as a marriage between two lineages and involved the same initial gift-giving – see Onvlee (1949).

‘mixed fruits’, BM 397) is the final gift on the original list, although Ameng Layaran’s mother also mentions ‘jewels and gems’ and a ‘sandalwood raft’ (*rakit candana*), apparently made of camphor dipped in areca water and wrapped in cotton, in the later enumeration.

The gifts are a mix of local and foreign, botanical and artificial. There is some male-female symbolism apparent in some of the pairings, although some of the items appear to have been valued for their inherent properties (scent, medicine, etc.) and not for a particular symbolic role. I will address them here in the order in which they appear in the text.

Betel

Betel is a mild narcotic formerly chewed by both men and women and formerly popular in Java, where it has been largely replaced by tobacco. It is not the product of a single plant but of two (or more); a typical betel quid consists of a sliver of the seed of the areca palm (*Areca catechu*) wrapped in the leaf of a vine (*Piper betle*) trained to grow up areca trunks. Powdered lime (calcium oxide) is the most common addition to the quid, but other ingredients are sometimes added, including camphor, musk, gambir, and cloves (Rooney 1993:16).

Like many important Southeast Asian plant species, the areca palm was probably first cultivated in New Guinea, where its use appears to long antedate the arrival of Austronesian speakers (Kirch 1997:39-40). The palm has wild relatives in New Guinea, including *A. jobiensis* and *A. macrocalyx*, and their nuts are also chewed on the island (May 1984:143). There is no reliably reconstructed Austronesian or MP protoform for ‘areca’ or ‘betel’, and the absence of betel among the remains at Lapita archaeological sites in the Southwest Pacific suggests that its use outside New Guinea ‘may [...] be a phenomenon of the last two thousand years’ (Kirch 1997:217; Rooney 1993:14; see also Hoogervorst 2011:131-140). In OSd the name for ‘areca’ is *pinang* and ‘betel’ is *sereh* (MSd *seureuh*); these words have counterparts in Malay (*pinang* and *sireh/sirih* respectively), although finding out where these terms came from is not easy.³⁰⁸ Betel is still used on a daily basis in eastern Indonesia and is presented as a gift at a range of ceremonies and occasions. Its most common role in modern western Indo-Malaysia is in marriage ceremonies – Malay *meminang*, a verb derived from *pinang* ‘areca seed’, means ‘to ask in marriage’, for example (Rooney 1993:35) – a trait paralleled in eastern Indonesia and New Guinea. In fifteenth-century Java betel appears to have been considerably more common: Mǎ Huān says that ‘[the Javanese] receive passing guests without tea; they have only betel with which to entertain them’.^{A60} Betel chewing had in any case spread outside the archipelago long before *BM*’s time, and it

³⁰⁸ These terms lack clear Austronesian protoforms, so although they are widely shared in the Austronesian language family it is not obvious that they were known to the speakers of proto-Austronesian or even proto-MP. A dispersal of *pinang* to other MP branches (and other languages, including Chinese 檳榔 [pinyin: *bīnláng*]) from Malayo-Chamic has been proposed, with a possible Austroasiatic source.

was popular across mainland Southeast Asia, southern China (Fan 2010[1175]:127-28) and India (Dallapiccola 2003:13; Figure VI.1).



Figure VI.1. Betel chewing depicted in the *Ni‘matnāma-i Nāṣir al-Dīn Shāhī*, a Persian-language cookbook written in the Malwa Sultanate, central India, at the end of the fifteenth century. London, BL, IO Islamic 149, f.100v. See Titley (2005).

Betel chewing requires certain tools and implements, although the paraphernalia exhibits significant geographical differences (see e.g. Beran 1988 for New Guinea; Rooney 1993:3 for Southeast Asia). In western Indonesia betel paraphernalia is based around the tray and receptacles for the various ingredients, as well as the specialised betel scissors (OSd *kalakatri*, probably from Tamil *kattari கத்திரி* ‘scissors’).³⁰⁹ Some of the words used in *BM*’s betel descriptions are difficult to decipher, however, particularly *pasileman*: N interpreted this to mean ‘betel tray’ (related to OJv *silēm* ‘depth’ – OJED 1766:11). It occurs in an apparent parallelism with the term *pasiboténg* (in N’s transcription), however, which I would tend to interpret as *pasi bo(n)téng* ‘cucumber slices’ (MSd *bonténg* ‘cucumber’). The phrase *dihānceng di pasileman* ‘arranged in the *pasileman*’ (BM 378) suggests something one could arrange something on top of, but *di* can also mean ‘among’ (cf. BM 1011) – betel quids arranged among slices of something? At a stretch this could be a reference to a citrus fruit, ‘lime slices’ (cf. MSd *limo* ‘small sour orange or lime’ [Rigg 1862:254]; OJv *limo* ‘a citrus fruit’, mentioned in the ninth-century OJv *Rāmāyana* [OJED 1030:4] – see the discussion in Hoogervorst 2011:151-157). *Pasileman* and the *pasi bo(n)téng* may be coincidentally similar in form, though, and I have stuck with N’s ‘betel tray’ interpretation in the translation.

Some of the phrases concerning betel processing are also rather tricky, particularly those using the term *batri* (BM 473-476, 485-486), which has a similar function as *benang* in making passive

³⁰⁹ The oldest surviving betel cutter is a fourteenth-/fifteenth-century Thai example (Rooney 1993:54).

meanings from active verbs; Danasasmita et al. (1987:136) connect it specifically with hard work and fatigue, and I have adopted this interpretation. Other betel descriptions are paralleled in MSd: BM 471-495 is similar to that documented by Rosidi (1995:146-148) in a *pantun* recorded in modern times, particularly the notion of women rolling quids on their bodies and finishing them on the breasts (*nganggeuskeun dina pinareup* – cf. BM 477) before giving them to a man. The phrase *batri no(ng)gong-siloken* ‘worked with the back turned towards the sun’ (BM 486) has an almost exact parallel in the same text.

‘*Tiwi* areca’ and ‘ivory areca’ are probably different *A. catechu* cultivars, as they appear by those names as plants encountered on Bujangga Manik’s way to heaven. *Tiwi* is hard to relate to any OSd, MSd, Malay, or Javanese terms, though I tentatively suggest that it is from Tamil *tīvi* (திவி) ‘tiger’, used as a metonym for aggression and excitement (cf. *tīviram* ‘pungency, sharpness’ – for both see Winslow 1862:244). Areca seeds vary somewhat; the twelfth-century administrator Fàn Chéngdà (范成大) describes several popular kinds of betel in Guǎngxī, most of them imported from Hainan Island (Fan 2010[1175]:127-128):

‘Those gathered at the time of Ascendant Spring [Shangchun] are made into “soft areca nuts”. Those gathered in summer and fall and dried are made into “rice areca nuts”. The smaller and pointy ones are made into “chicken-heart areca nuts”. Oblate ones are made into “big bellies”. All of these can give off an [identifiable] odor. Those preserved in a salty solution are made into “salty areca nuts”.’^{A61}

Other betel types appear to be the names of quids, including ‘queen of Pakuan’ and ‘pregnant lizard’ (BM 491). Unfortunately the referents of these are unknown. The quids included lime, specifically ‘rock lime from Karawang’ and ‘sea snail shell lime from Malayu [southern Sumatra]’ (BM 368-369). In the latter case the shells could have been taken from prehistoric middens in Sumatra and the Malay Peninsula; this practice is attested for the nineteenth century (Earl 1863:120).

Chewing betel causes one’s saliva to turn red when chewed, in any case, and frequent chewing leads to blackening of the teeth. It is also carcinogenic and can cause asthma attacks.

Resa Flowers

Resa flowers (*bunga resa*) are as yet unidentified, although the item occurs in other OSd texts, including *Séwaka Darma*. The fourteenth-century OJv *kakawin Pārthayajña* has the word *wěśah*, interpreted by Zoetmulder as ‘a rush-like plant (*Amomum maximum?*)’; a variant, *wrěśah*, is also given in OJED (2247:1). The genus *Amomum* is in the ginger family (Zingiberaceae) and includes cardamom; *A. maximum* produces large aromatic white flowers, and it certainly grows in Java, so it could be the referent of *resa*. The container (*juha*) for the flowers is also obscure; N chose ‘vase’, but it is not clear what kind of receptacle a *juha* was.

Civet and Oak Gall Powder

Ma(ñ)jakané is the name of a product made from oak galls (i.e. growths created by certain species of wasp laying eggs in the leaf buds of oak trees) imported from Persia or the Mediterranean. Noorduyn and Teeuw give this word as *majakané*, but the name may have included the homorganic nasal based on the Portuguese evidence and the modern Malay and Javanese names (both *manjakani*); Rigg (1862:265) gives *Majakani*, however, defining it as ‘gall nuts, imported from Persia’ and providing a spurious Persian etymology. The forms found in Indo-Malaysia likely derive from *maja* (‘bael’, *Aegle marmelos*, but also used in the names of other plants) or possibly Persian *māzū* (مازو) ‘a gall-nut’ (Steingass 1892:1137; cf. Hindi/Urdu *mājūphal*, Malay *akar kani*). The gall-nuts in question came from *Quercus infectoria*, the Aleppo oak, native to the eastern Mediterranean (as noted by Wilkinson 1932 #22710). *Q. infectoria* galls are particularly high in tannins – up to 60% of the gall, compared to only 17% in English oak (*Q. robur*) galls – and were in demand for ink production in the Middle East (Medlej 2020:30). Gall-nuts were also used in medicines: The powder was combined with musk, ambergris, and other ingredients to make a preparation called *sukk*, and the fourteenth-century Mamluk encyclopaedist al-Nuwayri (2016:223-224) includes this *sukk* in a recipe for a jam to ‘strengthen sexual appetite’ (among other things).

In Barbosa’s account *ma(ñ)jakané* appears as *magicam* or *mangicão*. He says:

‘...[western merchants] bring in exchange [...] some drugs which we do not have [in Portugal] called *pucho*, *cacho* and *mangicão* that they bring from the Levant, and other commodities which, by way of Mecca, come to Khambhat and then to Melaka’.^{A62}

This is thus one of the few Middle Eastern goods in *BM*. Trade between Southeast Asia and the Middle East was old even by the fifteenth century, as evidenced by the use of Byzantine and Sassanian glass in the manufacture of the fifth-to-seventh-century ‘Jatim’ beads from East Java, some of Java’s earliest known exports (Lankton et al 2008; Francis 2002:134-136).³¹⁰ It is perhaps surprising that more Persian/Middle Eastern commodities are not mentioned.

The marketing for Resik V Khasiat Manjakani, a feminine hygiene product currently on sale in Indonesia, states that it contains ‘*Ekstrak Manjakani dari Persia*’ and that it can help ‘tighten the muscles of the feminine area’, emphasising both the Persian connection and the feminine associations of the product.³¹¹ Whether there was a connection between *ma(ñ)jakané* and women’s health at the time of *BM* is difficult to say; *ma(ñ)jakané* appears only twice (in *BM* 384 and 497), in both cases paired

³¹⁰ This glass trade was also happening in the fifteenth century, with Venetian glass being brought to Melaka for bead production (Francis 2002:171).

³¹¹ ‘Pembersih kewanitaan dengan Ekstrak Manjakani dari Persia, membantu mengencangkan otot-otot kewanitaan, membersihkan dan menghilangkan bau tak sedap.’ See <http://www.kino.co.id/brands/personal-home-care/resik-v-manjakani/>. (Accessed 18-10-2018).

with *dédés*, the musk³¹² from a native civet-cat (*Viverricula indica*) likely now extinct in Java (cf. Malay *didis* – see ACD 2247). The civet may have been imported, however, explaining the line in BM 391 (‘perfumes from overseas’); *V. indica* was spread around the Indian Ocean by humans in late prehistory (Boivin et al. 2013:215), and civet is known to have been used and traded elsewhere in South and Southeast Asia (see e.g. Dallapiccola 2003:12). Donkin (1999:2) names several civet species from Africa and Asia which were kept in captivity with the musk extracted while the animals were still alive. It may be premature to read a masculine/feminine dualism into the pairing of *ma(ñ)jakané* and civet, although such a dualism would not be unprecedented in initial marriage prestations in island Southeast Asia (cf. Onvlee 1949).

Ma(ñ)jakané also appears in *Séwaka Darma* (PNRI, L408), again alongside civet (*dédés*), although in the published text this is not explained (Danasasmita et al. 1987:28). Indeed, the line as published reads *dedes rase majaka nejasa*, splitting the final syllable from the word *ma(ñ)jakané*, and the text is left as-is in the accompanying Indonesian translation. *Jasa* in modern Sundanese is an intensifier – ‘very’ or ‘extremely’, usually in a negative sense (Rigg 1862:169; Coolsma 1913:130 *sub* DJASA) – but here it may simply mean ‘excellent’ *ma(ñ)jakané*. Here again Aleppo oak galls appear in a list of valued goods, perhaps supporting a long-fifteenth-century date for *Séwaka Darma*’s composition.

Jaksi and Kamisadi

Jaksi is a type of pandan (a plant in the genus *Pandanus*) whose leaves are used in weaving. In modern usage there are two varietals of *Pandanus tectorius* with the label, *jaksi bener* (‘true *jaksi*’) and *jaksi laut* (‘sea *jaksi*’), both important in the mat- and hat-weaving trades (Hofstede 1925). *Jaksi* is still a preferred pandan for weaving in Priangan because of the smoothness of the leaves (Rahayu, Sunarti, and Keim 2008:312). Why this should be given as a gift is not entirely clear, although Rigg (1862:343) notes that ‘[pandan leaves], especially those about the flower, being shred fine and mixed with flowers, are worn in the hair by young natives when they are busy courting’, which indicates some connection in Sunda between pandans and romance. In BM 385 and 498, *jaksi* is paired with *kamisadi* – a rather mysterious word. *Kamisadi* may be a type of pandan, but BM 499 – *dikukup ratna ko(m)balah* ‘covered with jewels and gems’ – may suggest militate against this. It could be a kind of fine (*adi*) robe (MSd *kamis* – Danadibrata 2006:313), in which case the word would come from Arabic *qamīṣ* (قميص) and ultimately from proto-Germanic via Latin. This is speculative, however.

Benzoin

N translates *kameñan* in BM 387 as ‘incense’, but it refers more specifically to benzoin (cf. OJV *měñan* [OJED 1136:9]; Mal *kemenyan* ‘benzoin’ [Wilkinson 1932 #16836]), a resin produced by trees

³¹² Musk and civet should strictly speaking be differentiated (as in Lambourn 2018:77).

in the genus *Styrax*, particularly the Sumatran species *S. benzoin*. It is frequently referred to in the accounts of the Portuguese *conquistadores* under the name *beijoin*, a corruption of the Arabic *lubān jāwī* ‘Sumatran frankincense’ (Donkin 1999:11; cf. Barbosa’s *lubamjavy*, and see Ibn Baṭṭūṭa’s comments [Lee 1829:199; Gibb and Beckingham 1994:876]). The Portuguese do not appear to have distinguished between the Sumatran and mainland Southeast Asian varieties (see e.g. Barbosa 2000[1516]:350). Benzoin is burned as incense, and in the archipelago it has been associated with magic (Endicott 1970:140; Winstedt 1950:25).

Sesame and Rosewater

In BM 389 and 502 two branches of sesame are said to be sprinkled with rosewater, the formula for which, *diteñuh ku aér mawar*, is encountered in other OSd texts, suggesting that rosewater was a valued commodity in late-medieval Sunda. Rosewater (*air mawar*) is also common in Classical Malay literature, and in fact the OSd word, *aér mawar*, is a transparent borrowing from the Malay, using Malay *aér* ‘water’ in place of Sundanese *cai*. The second part of the term, *mawar*, is a corruption of the Arabic *mā’ ward* (ماء ورد) ‘rosewater’ (Nasrallah 2010:138), the first part of which means ‘water’ (from proto-Afroasiatic **ma* ‘water’) and the second part ‘rose’, from Old Persian or Sogdian *ward* (and ultimately perhaps proto-Indo-European **wṛdʰos*, hypothesised source of Latin *rosa*).³¹³ This is therefore both an identifiable Malay and Arabo-Persian loanword.

Rosewater (*agoas rosadas*) appears in Barbosa’s list of items traded at Melaka by the Javanese and Gujaratis, appearing after opium (*anfīão*) and before saffron (*açafrão*), coral, copper, mercury (*azoigue*)³¹⁴, cinnabar (*vermelhão*), grains or chickpeas (*grās*)³¹⁵, *solias* (a type of cloth), saltpetre (*salitre*), and iron (Barbosa 1516[2000]:363). A similar list appears in Barbosa’s discussion of Siam, where it is said that rosewater was brought from Mecca and Aden and sold by weight in tinned copper casks.^{A63} Such lists are common in both Pires’s and Barbosa’s accounts, not only describing goods at Melaka but also at Khambhat and Jeddah; these lists are often repetitious, with the same commodities appearing all the way around the Ocean’s rim. Sesame (*Sesamum indicum*) grew locally in Java and elsewhere in the archipelago, presumably having been brought from India in prehistory – indeed, it is one of the earliest commodities mentioned in texts from the region, appearing in the fourth-century *yūpa* stones from Kutai in Borneo (Vogel 1918; Wisseman Christie 1995:260). It could easily have been imported as well. Interestingly, the combination of rosewater and sesame is occasionally found in medieval Middle Eastern recipes; the ‘Frankish [or: European] roast’ (الشواء الافرنجي) in a recently

³¹³ Hušang A’lam. *Gol. Encyclopaedia Iranica*. XI/1:46-52. Online version: <https://iranicaonline.org/articles/gol>. (Accessed 23-08-2020).

³¹⁴ The mercury trade appears in a number of Portuguese accounts, including Barbosa and Pires, and is corroborated by finds of mercury at shipwreck sites in the region. See Miksic (2013:139-140, 315-318).

³¹⁵ *Hobson-Jobson* (Yule and Burnell 2015:247) has an entry on this use of the word *grāo* ‘grain’ for ‘chickpea’. Whether it referred to chickpeas in Portuguese at the beginning of the sixteenth century is difficult to be sure, but in later uses the meaning is clear, and one of Afonso de Albuquerque’s letters is cited as evidence.

translated thirteenth-century Syrian cookbook, in which a lamb is rubbed with salt, sesame oil, and rosewater and grilled over coals, is a good example (C. Perry 2017:80-81).

Narawastu (and?) Agur-agur

Next in the list are *narawastu* and *agur-agur* (BM 389 and 502). Noorduyn translated *narawastu* as ‘spikenard’, a term which in English normally refers to *Nardostachys jatamansi*, a plant from the Himalayas (Donkin 1999:49), but this is a troubling identification. Polo says that ‘spikenard’ (*espî*) was one of the commodities found in Java, but this probably did not refer to *N. jatamansi*.^{A64} The word does not appear in OJv, but it is found in some Malay texts, including *Sulalat al-salāṭīn*. In Malay *narwastu* can mean ‘spikenard’ or ‘frankincense’, and it is used in the Malay Bible to translate the ‘spikenard’ used to anoint Jesus’s feet, although Wilkinson’s 1932 dictionary gives the species as *Andropogon nardus* and a Malay synonym as *serai wangi* (#24539). Rigg (1862:295) says *narawastu* is the ‘name of a grass with odoriferous roots [...] used as a perfume [...] *Andropogon Muricatus*’. The genus *Andropogon* has been broken up significantly since these two authorities were writing, however, and *serai wangi* (cf. OJv *sěre* [OJED 323:1]) is now said to be *Cymbopogon nardus*, citronella grass. Rigg’s ‘*Andropogon Muricatus*’ is now classified as *Chrysopogon zizanioides*, or vetiver, and this is also the species given on Malay Wikipedia for *narwastu*. Vetiver grows in Java and elsewhere in South and Southeast Asia and it is edible, unlike citronella grass. This would seem to better suit the context.

This *narawastu* appears to have been used in or otherwise associated with a kind of seaweed-derived jelly (*agur-agur*). The English word ‘agar-agar’, derived from Malay *agar-agar* and related to OSd *agur-agur*, now refers to a jelly produced from algae of the genus *Gracilaria*. In Indonesia, however, such jellies appear to have been made from algae in the genus *Euclidean*, particularly *E. muricatum* and *E. spinosum* (Tseng 1944:24). A search on the Malay Concordance Project site suggests that *agar-agar* appears by name in only a few Malay texts, none of them particularly early.³¹⁶ It is difficult to find information on the substance predating *BM* and it is popularly claimed (e.g. by the FAO [McHugh 1987]) that agar-agar was first produced in Japan in 1658 – three decades after the acquisition of MS Jav. b.3. (R) by the Bodleian and almost two centuries after the composition of the text. *BM* 390 seems to be the earliest reference to agar-agar by name anywhere.

Barus Camphor

Camphor is a white crystalline substance produced by several tree species, including *Cinnamomum camphora* from China and Northeast Asia and several tall gregarious forest trees in the genus *Dryobalanops* from island Southeast Asia, notably *D. aromatica* and *D. lanceolata* (see Donkin 1999; Hoogervorst 2011:185-188; Ptak 2000). The word ‘camphor’ is one of a handful of Malay (or other MP) words that entered European languages in the Middle Ages; *kapur*, the Malay word that was

³¹⁶ The Malay Concordance Project. <http://mcp.anu.edu.au/Q/info.html>. (Accessed 03-08-2020.)

loaned to the west, came from PMP *kapuR ‘lime, calcium carbonate’ (ACD 10045, whence also OJv *apu* ‘lime’, also found in *BM*). It seems to have been applied to any white powder resembling lime, including camphor.³¹⁷ Camphor appears as *kāfūra* (كَافُورًا) in the Qur’ān (76:5) and as *kāpūr* in the mid/late-first-millennium Zoroastrian *Greater Bundahišn* (Anklesaria 1908:118), as well as in a range of other texts in other languages. Southeast Asian *Dryobalanops* camphor trees were probably first described by Táng-era author Duàn Chéngshì (段成式, d.863) in chapter 18 of his ‘Miscellaneous Morsels from Yōuyáng’ (酉陽雜俎) (Donkin 1999:54).³¹⁸ In medieval Arabic texts camphor (كافور) was said to be

‘used for heat-related conditions. In summertime, it is used to flavour dishes. It is believed to induce euphoria, check tooth decay, and prevent it from spreading. However, over sniffing it will cause insomnia, inhibit sexual desires, and whiten the hair. Its cold and dry properties can be balanced by mixing it with musk and ambergris’ (Nasrallah 2010:655).³¹⁸

Barus on the North Sumatran coast was famous across medieval Afro-Eurasia for its camphor (from *D. aromatica*) – so famous, in fact, that *kapur barus* ‘Barus camphor’, the form found in *BM*, became a generic word for ‘camphor’ in the archipelago, with the formula replicated in other languages (e.g. Polo’s *canfara fāsūrī* – Français 1116, f.77ra) (see Drakard 1989 and 1990 for overviews of the region’s history). In Arabic Barus was known as *Fanšūr*, first appearing in the c.851 account of Sulaymān the Merchant (al-Sirafi 2017:5, 91; al-Mas‘udi 2007:92), probably from the Malay *pancur* ‘to flow’, the name of a place near modern Barus.³¹⁹ Marco Polo used a variant of this name – which was frequently distorted by copyists, however, as in the *Fanfur* in the Irish version (formerly Derbyshire, Chatsworth House, now University College Cork, Boole Library, The Book of Lismore, f.130r). Al-Nuwayri said that the region’s camphor was ‘the finest of all types’ (2016:209). It is notable in this context that *kapur Barus* is one of the few perfumes to appear in heaven in *BM* (BM 1693).

The camphor is said to be in a *cupu* – a small round lidded box made of metal, wood, or ivory (cf. OJv *cupu* – OJED 339:11). The word comes from Tamil *ceppu* (செப்பு – Burrow and Emeneau 1984 #2772; Winslow 1862:204), and is thus one of several Tamil loans into OSd, perhaps via OJv. Barus, known in Tamil as *Vārōcu* (வாரோசு), appears incidentally to have had strong South Indian connections in the Middle Ages, with Tamil inscriptions found there, including one dated 1088

³¹⁷ ‘Camphor’ is often claimed to come from Sanskrit *karpūra*, but this appears to be a back-formation from the Malay-derived Pali name.

³¹⁸ Camphor was used for a range of different purposes in the Middle Ages, and in Europe and the Middle East it was a common ingredient in gunpowder – as in the 1411 Vienna Büchsenmeisterbuch (Vienna, ÖNB, Codex 3069, f.2v). See also Donkin (1999:161).

³¹⁹ Edmund Edwards McKinnon has doubted the identification of Pancur with Barus, arguing that it was further north, near Aceh. See his lecture: 2013. *Ancient Fansur, Aceh’s ‘Atlantis’*. Institute of Southeast Asian Studies, Singapore. <https://www.youtube.com/watch?v=-1F1JDyCAks>. (Accessed 03-08-2020.) Tomé Pires explicitly connects the two, however (Cortesão 1944:161 – Paris MS, f.146r).

(Subbarayalu 2012:38-47). A Coptic priest writing c.1200, Abū al-Makārim, says that several Christian churches, among them one dedicated to the Virgin Mary, had been built in the area by ‘Nestorians’ (i.e. members of the Church of the East, which then included South Indian St Thomas Christians).³²⁰ A letter from the Cairo Geniza suggests that a Jewish merchant died at Fanṣūr in the thirteenth century as well (Donkin 1999:114; Wolters 1970:208n38). Whether Christians still lived in the area in the fifteenth century is not known, but sporadic references in the accounts of Conti (Bracciolini 2004[1448]:138) and Varthema (1535[1510]:f.67v) suggest that there were Christian communities in the archipelago pre-1511.

*

Bujangga Manik rejects Jompong Larang’s gifts, seeing in them a disturbing symbolism: He says that the sandalwood raft (*rakit candana*) tells him that Jompong is ‘always sick’ (*sakit salama*). The areca water (*cipinang*) symbolises her tears (*cimata*). He does not want to hurt Jompong, telling his mother to let her down gently (BM 586) – but he does not love her, and instead professes love for the teaching he received at Damalung. Bujangga Manik thus begins his ascetic practice by rejecting Jompong, marriage, and worldly things (paralleled in SA 225-329).

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VI.1.3 Plants En Route to Heaven

After Bujangga Manik dies, his body and essences fall away and he travels to the afterlife as a soul or pure self (*atma*). This soul comes upon an open road in a beautiful settled land similar to the one it had just left behind, with buildings at each crossroads and ground swept clean by a broom. Several plants are described as growing in this land before the lacuna at the end of f.27; among these are *patah* flowers and two kinds of areca, as well as *ha(n)delem* (*Graptophyllum pictum*) and cultivars of *Cordyline fruticosa* known as *hañjuang* and *handong* (BM 1475-1477 – noted also among the heavenly plants in *Sri Ajnyana* [SA 536-593]). Further botanical items are mentioned by Dorakala, the door guardian; these are addressed separately below.

Noorduyn and Teeuw (2006:393) left *patah* untranslated; conceivably, it refers not to a species of plant but to plants arrayed in rows (cf. OJv *patah* ‘arrangement (in lines)’ [OJED 1317:5]). It is otherwise difficult to explain the term. The two types of areca, *tiwi* and *ading*, have been discussed above. The interesting part of the section describing them is the apparent simile comparing the areca palms to *parasi* (BM 1470), aka *Curculigo latifolia*, which can act as an artificial sweetener. Zoetmulder

³²⁰ The text survives as one manuscript (dated 1368) divided into two - Paris, BnF, Arabe 307 and Munich, Bayerische Staatsbibliothek, Cod.arab. 2570. The description of Barus’ churches is in the undigitised Paris manuscript (f.110v – Evetts 1895:300, ١٣٩). The editor of al-Makārim’s text, B. T. A. Evetts (1895), mistakenly attributed authorship to Abū Ṣāliḥ al-Armanī, an error repeated in Adolf Heuken’s article on Christianity in Indonesia (2008:5). In fact al-Armanī was the owner of the manuscript. See Zanetti (1995).

(OJED 1291:3) notes that *parasi* is listed ‘among the delicacies’ in the late OJv *Nawaruci* after *dodol*, a sweet made of palm sugar, coconut milk, and rice flour. Rigg notes that if a person drinks water after eating *parasi* ‘it has a pleasant, sweet taste’ (1862:354). The simile in *BM* may refer to the manner in which *parasi* leaves cluster together. It could also be an error for *kumarasi* ‘blooming’, as in *BM* 1474; *ku-* and *pu-* occasionally seem to be confused in *BM* (cf. *Cikutrapinggan*, the Ciéla map’s *Ciputrapinggan*), so this interpretation is speculative.

Handelem (MSd *handeuleum*) is *Graptophyllum pictum* (synonym *Justicia picta*), a shrub with purple flowers native to island Southeast Asia and New Guinea. In New Guinea several parts of the plant are eaten as vegetables and it is also used medicinally to treat ulcers (May 1984:63; Nala 2003:33). The leaf is the useful part of the plant, still marketed under the Sundanese name *handeuleum* in modern Indonesian *jamu* (Beers 2001:185). Rigg notes that the plant ‘is often planted over the after birth’ (1862:141), although he does not elaborate.



Figure VI.2. Red *handong* (*Cordyline fruticosa*) in the Kuala Lumpur Botanic Garden. Photograph by Varvara Andrianova-West, November 2018.

Hañjuang and *handong* both refer to types of *Cordyline fruticosa* (cf. OJv *andoñ* [OJED 79:5]; *Mal lenjuang*), a plant likely first cultivated in New Guinea (Kirch 1997:37). *C. fruticosa* is principally decorative and the red variety is frequently grown on the boundaries between paddyfields in Java – a practice paralleled in other parts of the Indo-Pacific (Figure VI.2; May 1984:51). In light of its presence at the boundary between life and death in *BM*, it is noteworthy that in modern Java the plant is often planted in cemeteries, a role also played by other ornamental plants (e.g. *Codiaeum variegatum*, ‘garden croton’) and found elsewhere in Indonesia and the Pacific (Nombo and Leach 2010:44).³²¹ *C. fruticosa*

³²¹ See Codrington’s comments on decorative plants in island Melanesia, particularly crotons (*Codiaeum variegatum*) and ‘dracaenas’ (i.e. *C. fruticosa*) (1891:304).

has also been used medicinally; on the Rai Coast of Papua New Guinea, for instance, the heated sap is applied to treat sores (Nombo and Leach 2010:68-69).

C. fruticosa comes in several varieties. OJED notes the existence of both red and green forms, and Wilkinson's 1932 dictionary of Malay gives four varieties, 'red', 'green', 'white', and *batu* ('stone'). This variety is only hinted at in *BM*; BM 1479, the final line in f.27v immediately before the lacuna, has three missing syllables. It begins *ha(n)dong bang deng ha-* before being cut off. N reconstructed the next word syllable as *-ndong*, not unreasonably given the *panéléng* that ends the line in the manuscript. I would tentatively reconstruct BM 1479 as *handong bang deung handong ijo* (or: *héjo*) 'red cordyline with green cordyline', given the parallelism of *bañ* 'red' and *ijo* 'green' in Javanese *kidung* (OJED 205:14.1).

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VI.1.4 'Signs of Heaven'

When Dorakala finally assents to Bujangga Manik's request to enter heaven (BM 1633-1648), he says that the ascetic's body is more fragrant than opium, more valuable (*mahabara*, from Skt/OJv *bhāra* 'heavy, weighty' [OJED 213:6]) than sandalwood (*candana*), and sweeter (*amis*) than massoy bark. These, Dorakala says, are the signs of heaven (*éta na ki(ng)kila so(r)ga*, BM 1641). These words find parallels in *Séwaka Darma* (see VI.2 above), suggesting that at least two of the substances in question were almost proverbial for their heavenliness in late-medieval Sunda, and all three substances are interesting as commodities in the medieval world.

Opium

Candu 'opium' probably comes from Tamil *caṅṭu* (ஈண்டி), originally 'chaff' or 'empty husk' and later opium for smoking (Winslow 1862:158). The word could alternatively refer to another kind of aromatic preparation (cf. Malayalam *cāntu* – Burrow and Emeneau 1984 #2448), but 'opium' appears to be the primary meaning of the term in the archipelago (OJv, MJv, Malay *candu*) and Noorduynd and Teeuw (2006) treat it as such.

The opium poppy (*Papaver somniferum*) originated in western mainland Eurasia, and across Afro-Eurasia it was used for medical (and recreational) purposes in the Middle Ages. The medieval trade in opium on the Indian Ocean is known in large part from the accounts of the Portuguese, in which the drug is known as some variation on *afião*, a loan from Arabic 'afyūn (أفيون – from Greek ὄπιον). It is likely that opium came to Java from further west, perhaps from Egypt, where poppies were reported to grow in profusion and whence it was exported in huge volumes (Nasrallah 2010:748). It is this Egyptian opium to which Chaucer refers in *The Knight's Tale* ('fine Theban opium')^{A66} (Emerson 1919:105), and the connection is further made explicit by Pires, who also uses the name 'Theban opium'

(*opio tebaiqo*) when describing northern Egypt (Cortese 1944:9; Pires 2018:58). This is the only commodity in *BM* whose most likely origin is African.

Sandalwood

At least two kinds of Asian timber are known as ‘sandalwood’, including a red variety that comes from an Indian tree known as *Pterocarpus santalinus*. This was used throughout medieval Afro-Eurasia as a perfume and food colouring, and in OJv it was known as ‘African sandalwood’ (*candana jěngi*) (Donkin 2003:110). The unmodified word *candana*, however, usually referred to white sandalwood (*Santalum album*) – a more valuable product. The name is from the Sanskrit *candana*, which has the same meaning and same form in OJv and OSd (Malay: *cendana*), and which probably came from a Dravidian source (Donkin 1999:14; Hoogervorst 2011:33; Burrow and Emeneau 1984 #2448).

S. album is a small parasitic tree native to the Indonesian archipelago. Although often claimed to be native to India, perhaps due to its cultural importance there (and the fact that the words for it are Dravidian), the tree is in fact from the Lesser Sundas, and early European sources do not mention India as a source of white sandalwood (although it has been transplanted there more recently, apparently with difficulty – Donkin 2003:15-17). Timorese sandalwood was particularly esteemed, and Antonio Pigafetta says, dubiously, that Timor (mentioned in the *Deśawarṇana* [14.5d]) was the sole producer of the product.^{A67} Pires says:

‘[t]he Malay merchants say that God made Timor for sandalwood and Banda for mace and [Maluku] for cloves, and that this merchandise is not known anywhere else in the world except in these places’ (Cortese 1944:204).^{A68}

Barbosa (2000[1516]:391-392) gives a similar description, saying that merchants from across Asia visited Timor to acquire the wood. Early fifteenth-century Chinese poems about Timor corroborate this, as does Wāng Dàyuān (116, 117), who visited the island (which he knew as 古里地悶 [pinyin: *gǔlǐ dìmèn*]) in the fourteenth century (Ptak 1983). The *candana* *BM*’s poet was familiar with was therefore probably harvested by non-Hindu-Buddhist people on Timor, where societies were based around weaving and headhunting (see Cunningham 1965; Hägerdal 2012; McWilliam 2007; Schulte Nordholt 1971). The fifteenth century represented a peak in the construction of fortified hilltop sites in Timor, incidentally, correlated with both competition for the sandalwood trade and El Niño-related drought (Lape and Chao 2008).

Massoy Bark

BM 1642 contains one of *BM*’s more intriguing commodities: *kulit masui* ‘massoy bark’. Massoy (*Cryptocarya massoy*) is a forest tree that grows in western New Guinea, specifically on the

Bomberai Peninsula, a piece of land that juts out into the Banda Sea just east of Seram (see Ellen 2003:137-38; Rigg 1862:275). The northwestern part of the Peninsula is known as Onin, and this appears to have been the name by which the region was known in medieval Java; Ellen (2003:164-165) says that it is still used in Seram to refer to both Onin/Bomberai specifically and to New Guinea at large. Rumphius – one of the most detailed sources for massoy exploitation, albeit considerably later than *BM*'s time – says that massoy did not grow in Onin itself but was instead sourced from further east, and that outsiders were not allowed into the woods to gather massoy themselves (see also Marsden 1831:128-129; de Ricci 1884:14). Rumphius nonetheless conferred upon massoy the Latin name *Cortex Oninius* ‘Onin bark’ (2011:89). The etymology of ‘massoy’ is not known; where it grows it is reportedly known as *ai kor* (Rumphius’ *aykora*), the first word clearly Austronesian (PAN *kaSiw [ACD 7794], cf. Mal, Sd *kayu*). Roy Ellen (p.c.) speculates that ‘massoy’ may have originated among the languages of the Gorong Islands southeast of Seram, as the people of these islands likely brought the bark to Java.

BM says that *kulit masui* is ‘sweet’. The fragrance is often compared to coconut and cinnamon, but I smell an additional note akin to ethyl acetate or pear drops. Contact with the skin causes it to feel unbearably hot, and Beekman, Rumphius’ translator, notes that the ‘sap will cause itching blisters’ (Rumphius 2011:89).³²² It nonetheless has a pleasant aroma. The earliest description of massoy use in Java is Miguel Roxa de Brito’s in the 1580s; he says that the Javanese used the powdered bark as both perfume and medicine, ‘[grinding] it and rub[bing] their bodies with it, as an ointment, even when in good health, and they spend a lot of money on it each year’ (Sollewijn Gelpke 1994:133; Ellen 2003:67-68). The earliest references to massoy in western Indo-Malaysia are older, though. Massoy is mentioned in the late-fourteenth- or early-fifteenth-century Malay *Hikayat Raja Pasai* alongside other commodities sent to Majapahit from eastern Indonesian vassals:

‘...and those from the east, coming from Bandan and Siran and Larantoka each with their offerings [i.e. as tribute], there’s wax, there’s sandalwood, there’s massoy, there’s cinnamon, there’s nutmeg and cloves, lots of them all piled up, and yet more of ambergris and musk’.^{A69}

A further reference is found in the *Deśawarṇana* (14.5), where *Wwanin* – i.e. Onin – appears as one of supposed Majapahit’s dependencies. Onin’s most important ‘commodity’ was probably enslaved people (alongside bird-of-paradise plumes – Ellen 2003:4, 134), but this *Wwanin* can nonetheless be interpreted as an oblique reference to massoy. This trade was probably in the hands of people from in and around Gorong and southeastern Seram, who transported the bark directly to Java (a distance of around 2,000 kilometres, taking about two weeks at sea, as noted by Conti and others [Ellen 2003:54; Rumphius 2011:90]). The Seram/Gorong people kept the Papuans ignorant of the prices massoy could

³²² I experienced this when I accidentally touched a vial of massoy oil to my nostril.

reach, trading the bark for trinkets and poor iron blades (Kamma and Kooijman 1973:1-2; Rumphius 2011:90).

New Guinea was known exclusively through foreigners' accounts until comparatively recently; these references to Onin and massoy are among the earliest mentions of the island or its products. They remind us that at least part of New Guinea was integrated into the regional economy in the late Middle Ages, part of a hemisphere of cultural and economic interactions stretching as far as Iceland, Zimbabwe, and Japan. Fifteenth-century Chinese ceramics have been found at sites in western New Guinea (Swadling 2003:136; see also Wright et al. 2013:29), and the growth of the sultanates of Ternate and Tidore, a result of the hemispheric clove trade, was felt as far east as Biak before the arrival of Europeans (see folklore to this effect in Kamma 1975.A:40-42; also Knauff 1993:32-33; O'Connor, Spriggs, and Veth 2006:16 for the south coast). It should not surprise us to read of Papuan products mingling with Egyptian and Chinese ones in medieval Java.

A reference in Pires' *A Suma Oriental* suggests that New Guinea was known by the name 'Papua' in Melaka at the time (although Swadling [1996:33] suggests this was a name for the Raja Ampat Islands specifically).³²³ Papua seems to have been treated in island Southeast Asian folklore in much the same way Southeast Asia was in European and Middle Eastern traditions – as a place of monsters. Pires says:

'...they say that in the island of Papua, which is about eighty leagues [≈444 kilometres] from Banda, there are men with big ears who cover themselves with them. I never saw anyone who saw anyone else who had seen them. This story should be given no more importance than it deserves' (Cortesão 1944:222).^{A70}

New Guinea is the second-largest island in the world and its extreme geography – with mountains so tall they host glaciers barely 400 kilometres from the equator, and with extraordinary precipitation and cloud cover throughout (Marshall and Beehler 2007:3-8; Nightingale 1992:10-11) – meant that few inhabitants would have heard of Onin, let alone Java. The area around the Papuan Gulf was probably completely isolated from these developments, and indeed the archaeological evidence suggests that the south coast of New Guinea went through a protracted period of economic stagnation from the seventh century to the fourteenth represented by the absence of ceramic production (a period known to archaeologists as the 'Papuan hiccup' – Skelly and David 2017:488). The medieval world was bigger than commonly imagined, however, and it should not surprise us that parts of New Guinea were involved in trade with places as distant as Java at this time.

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³²³ The distance recorded by Pires is compatible with either Raja Ampat or New Guinea, and shortly afterwards New Guinea came to be known as 'Papua' in any case.

VI.1.5 After Dorakala's Assent

Once Bujangga Manik is in heaven he walks uphill to a bathing place, where he removes sweat from his body. After this he is instructed to proceed along an iron path to another building fitted with ivory pillars and silver capitals, where he is supposed to beautify and perfume himself. The perfumes here are encountered elsewhere in the text – sandalwood, Barus camphor, and civet. A vial of sesame oil also seems to be present.³²⁴ A leaf-length lacuna follows f.31v and the last line is incomplete; it begins with the word *pucuk*, used elsewhere in *BM* to mean ‘sprout’ or ‘blade’ but which here may refer to ‘puchuk’ (Barbosa’s *pucho*) aka *costus* (*Saussurea costus*), a herb from the Himalayas common in the archipelago at the time (and particularly popular in China – Miksic 2013:100). The lacuna means we cannot be sure of this, however.

When the text resumes Bujangga Manik is being lifted onto a decorated palanquin atop a white yak (*camara* – from Sanskrit [Monier-Williams 1899:388]). Yaks (*Bos grunniens*) do not tolerate high heat or low altitude environments well (Bonnemaire 1984), and there is therefore little question of their ever having been shipped to Java; this may seem to place the identification of the *camara* in doubt. Yaks are mentioned, however, in early South Indian texts (as in the Old Tamil *Puranānūru* [புறநானூறு] – Hart and Heifetz 1999:84), and there are Sanskrit- or Pali-derived words for them in the languages of mainland Southeast Asia (e.g. Khmer *chaamrəy* ចាមរ៉ៃ), lands similarly inhospitable to yaks.³²⁵ The verb *tumpak* ‘mount, ride’ does not work if the word here is ‘fly-whisk’ (Skt *cāmara*) rather than ‘yak’ (Skt *camara*). The seat on the yak’s back is replete with gemstones and pearls (the poem’s only reference to the latter – BM 1765), as well as curtains and carved dragons and peacocks. It has a *lingga* (phallus?) made of gold. Everything about it is said to be beautiful and expensive.

Bujangga Manik’s sacred soul is compared to a *sekar pamuja*, a flower given as an offering at a temple. Seated on his yak he hears music played on metallophones and gongs, and the poem describes a lavish landscape of banners and umbrellas. The white silk banners, apparently attached to *bunghang* bamboo poles (species unidentified), are compared to the splendid movements of the great egret (*ku(n)tul*, *Ardea alba modesta*). Lightning, rainbows, and a celestial glow light up the scene as the text comes to an abrupt finish.

³²⁴ N interpreted this as ‘asana oil’, where *asana* is a tree, *Terminalia tomentosa*. A derivation from *wangsa* ‘noble’ seems more likely.

³²⁵ Yaks were known in medieval Europe, incidentally, albeit not by name. The thirteenth-century Flemish Franciscan William of Rubruck says: ‘[The Tanguts] have very strong oxen, with very hairy tails like horses and hairy bellies and backs. They are lower than other oxen but much stronger. They draw the great houses of the Mongols, and have slender, long, curved horns, so sharp that it is always necessary to cut off their points. The cows will not let themselves be milked unless sung to. They have the nature of bulls; if they see a man dressed in red they leap at him to kill him’.^{A71}

There are some enigmatic terms here, including *uñut* (BM 1795), which I prefer to emend to *hañut* ‘be carried away’ (cf. OJv *hañut* ‘throw sth. into the river, let it be carried away’ – OJED 589:1). N treated it as a noun and left it untranslated. *Pajalé* (BM 1806) is also difficult to identify and might not be botanical, especially as it is paired with *ratna* ‘jewels’. It may be related to Malay/Indonesian *jali*, however – a native Southeast Asian cereal, ‘Job’s tears’ (*Coix lachryma-jobi*), from PMP *zelay (ACD 8724). The seeds of *C. lachryma-jobi* have been used for ornamentation in the archipelago for at least five thousand years (Glover 1971:17, cited in Fox 1977:75) and in New Guinea the seeds are still worn as beads (Craig 1988:14; Hoffman 2014:8; May 1984:82). This identification with Job’s tears is conjecture, however, and the MSd name for the plant, *hanjeli*, may militate against it. There are also difficulties with BM 1804, *tapok térong omas ngora*, probably intended to describe the *lingga omas* (‘golden *lingga*/phallus’) in the preceding line. N interpreted it as ‘térong calyxes of light gold’. *Térong* is the word for ‘aubergine’ in some dialects of MSd (Rigg 1862:494), and it may be relevant that Dempwolff (1938) originally reconstructed an MP protoform *teruŋ ‘be cylindrical’ (although this is rejected by Blust). *Tapok* could be MSd *tapuk* ‘piled in a heap’, or it may be related to OJv *tapuk* ‘emerge’ (OJED 1949:6), but it too is mysterious.

It is perhaps unsurprising that the items in heaven should be harder to identify than those on Earth. Nonetheless, it should be clear that many of these items are the same as earthly ones, and that in certain respects heaven as envisioned in medieval Sunda was a grander and more orderly version of the mundane world.



VI.2 Metals and Miscellaneous Items

A number of metal, glass, and paper items are mentioned at several points in *BM*, chiefly in the descriptions of heaven, where some of the paths (*lurung*) are said to be made of metal. Umbrellas and glass items also appear occasionally in the narrative. One metal object also features among the gifts Jompong Larang brings, however – a *keris*, a kind of ceremonial Javanese knife.

Keris

The *keris* (‘kris’) is a long Javanese dagger with a blade that broadens asymmetrically at the hilt, often with a flamberged edge and a short handle. The origins of the *keris* are murky, but the weapons appear in a number of *kakawin* and *kidungs*, as in the thirteenth-century *kakawin Sumanasāntaka* (28.7), where ‘evil people’ (*wwañ doṣa*) are said to ‘roam about, carrying ropes and kris with which to stab’ (*amawa tali lawan kris pamrañ-mrañña habalañan*) (Worsley et al. 2013:142-143). By the fifteenth century the weapons were being worn by Javanese men of all ages, as noted by

Mã Huãn, Tomé Pires, and others, and they were exported as far east as Maluku (Andaya 1993:65). The prominence of the *keris* made it an icon of the region in European accounts. Camões refers to the *keris* (in the plural – *os crises*) in the *Lusíadas* (X:44):

‘[...] The poisoned arrows you’ve made,
The *crises* with which I already see you armed —
Amorous Malays, valiant Javanese,
You will all make obeisance to the Portuguese.’^{A72}

Keris today are famous for their curves, but the ones depicted in the Sukuh forge relief have leaf-shaped blades (Figure V.3 above), as does the fourteenth-century ‘Knaud Kris’ (Figure VI.3). The *keris* the *BM* poet was thinking of may thus have had a leaf- or tongue-shaped blade, although that is not certain: Some surviving sixteenth-century *keris* have the classic waves (*luk*), including one brought to Austria at the beginning of the seventeenth century (Vienna, Weltmuseum, inv. no. 91.919ab), as do some so-called *keris Majapahit*, at least some of which likely date to the Majapahit period (Frey 1988:8-11).



Figure VI.3. The ‘Knaud Kris’, the oldest dated Javanese *keris*, which bears a (now-faded) date equivalent to 1342. Interestingly, a man with a blowgun is depicted on the other side of the blade. Amsterdam, Tropenmuseum, inv. no. TM-6046-1.

Though they were certainly used in combat, medieval *keris* could be elaborately decorated, and they appear to have had ceremonial roles for as long as we have records of them. They are still given in payment for fines in Kanékés communities and the phrase *keris sapucuk* is still used when the weapons are given as gifts or in such payments (Hasman and Reiss 2012:104). They often have ritual and magical uses in communities both in and outside Java (e.g. Endicott 1970:163).

The *keris* is described as *maléla*. N translated this as ‘plain steel’, as in many modern Indo-Malaysian languages it means simply ‘steel’, but the word actually comes from *Malyāla*, referring to

Malayali people and Kerala in South India; the meaning ‘steel’ is derived (OJED 1095:8). South India was known across the medieval world, particularly in the Middle East, for its production of high-carbon crucible steel (the famed ‘wootz’, its English name probably derived from a word for ‘steel’ in a Dravidian language – cf. Malayalam *ukku* [ഉക്కు]), see Burrow and Emeneau 1984 #661 [Bronson 1986; Pearson 1795; Srinivasan 1994]). The change from *Malyāla* to *maléla* is a product of OJv sandhi, so this must be an OJv loanword. That the word originally referred to Indian crucible steels seems likely, but whether it still referred to Indian steels specifically in the fifteenth century is debatable.

Khorasani Iron

Purasani is a corruption of *Khurāsānī* (Classical Malay *khersani*), which in Arabic and Persian is simply an adjective for things from Khorasan, a historical region of eastern Persia and Central Asia; al-Nuwayri says, for instance, that a melon varietal was known by the name (al-Nuwayri 2016:187). In *BM*, and more widely in island Southeast Asia, *purasani* (and others like it) came to refer to a specific steel, apparently from Khorasan (as in OJv – OJED 1452:8; Jákl and Hoogervorst 2017:210). It appears as *kuraysani* in the Malay *Nītisārasamuccaya*, a legal text written in the Sumatran kingdom of Dharmasraya; stealing it would result in a fine of five *mas* (Kozok 2015:70, 77; Mahdi 2015:210-211).^{A73} This can be compared to Chinese 鑛鐵 (pinyin: *bīntiě*) ‘finely fused iron’ (Kroll 2017:24), which Mills (1970:88) says was ‘fine steel [...] brought from Persia’, used in Java for the manufacture of *keris* (Mā Huān, 55). It can also be connected to ‘Damascus’ steel, a controversial term for what was probably Indian crucible steel pattern-welded with other metals to forge more attractive and cold-resistant blades. The first account suggesting that Indian steels were used in Persian blades dates to 1679 (Tavernier, cited in Bronson 1986:23), but accounts of Persian patterned steels are older (Polo refers to a metal called *ondanique* ‘wavy’ from Kerman, for instance – Français 1116, f.15r). That *purasani* is used in the architecture of heaven suggests that it was valued for its attractiveness as well as its strength.

Interestingly, Nikitin says that in ‘Java’ ‘Khorasani soldiers are paid a salary of one *tenka*³²⁶ a day each, both the great and the lesser’^{A74} and that people from Khorasan were encouraged to settle down and marry local women (Zenkovsky 1974:346).

Umbrellas

Umbrellas have a long history in Southeast Asia, appearing in some of the earliest extant reliefs. Although associated with ‘Indianised’ elite culture, the Sundanese word *payung* ‘umbrella’ is a native term (cf. Malay *payung*, Blust’s PWMP **payuŋ*). Some of *BM*’s umbrellas are made of South Indian silk (*sutra*), and feature golden or ivory finials. Paper umbrellas are also mentioned: The word for

³²⁶ An amount of money, probably from Tatar *tamga* ‘a tax levied by the Tatars; properly a seal on merchandise’ (Michell and Forbes 1914:xlii).

‘paper’, *ke(r)tas*, is from Arabic *qirtas* (قرطاس), ultimately from Greek χαρτης ‘sheet of paper’. The word was in use in Malay at this time, as evidenced by the 1492 Chinese-Malay glossary, where the equivalent of 紙 ‘paper’ is given as 各路刺答思 (pinyin: *gèlùlādāsī*) (Edwards and Blagden 1931:734 #252). The meaning of *qirtas* varied over time; Joumana Medlej (2020:14) notes that it originally referred to papyrus and was used as such in the Abbasid period, but in later contexts it meant ‘rag paper’, as in the twelfth-century Cairo Geniza texts discussed by Elizabeth Lambourn (2018:85n.o; 95).

Mirrors

The ‘gilded Javanese mirrors’ mentioned in BM 1689 as among the beautifying tools in the heavenly pavilion may have been similar to surviving East Javanese-era mirrors in modern museum collections, although most of these are said to date to before the fifteenth century. Such mirrors typically consisted of flat polished copper-alloy discs with convex backs attached to T-shaped handles, some of which bore inscriptions in a so-called ‘quadratic’ script (e.g. Oxford, Ashmolean Museum, inv. no. EA1991.71; see also Leiden, UBL, OD-35120; for other ‘quadratic’ inscriptions see Griffiths and Lunsingh Scheurleer 2014). Others were decorated with scenes from Hindu mythology, like a hollow-cast handle in the Museum Nasional depicting Garuḍa (inv. no. 5754 – Fontein 1990:276-277; Figure VI.4).



Figure VI.4. A copper-alloy mirror handle depicting Garuḍa paying homage. East Java, date unknown. Leiden, UBL, OD-3511; Jakarta, Museum Nasional, inv. no. 5754.

Chinese Manufactured Goods

China was the source of enormous quantities of manufactured goods in the Middle Ages, particularly ceramics, large amounts of which have been recovered from shipwrecks and other archaeological sites in Southeast Asia. *BM* features remarkably few words for them: We hear about

gilded Chinese boxes (*ebun Cina*), and the mysterious term *juha*, a container of some kind in which the *bunga resa* were apparently kept (BM 497, 1694), but the specifics of these are not clear. Thai and Vietnamese ceramics – which have also been excavated from sites in West Java (Andaya and Andaya 2015:105) – are similarly absent. Chinese copper cash (for which see Heng 2009:161-167) is known from many sources to have been used in Java at this time – Mǎ Huān notes that ‘[c]opper coins of [...] successive [Chinese] dynasties are in current use universally’ (Mills 1970:88).^{A75} In *BM*, though, the only ‘currency’ mentioned is cloth (*kaén*), which Bujangga Manik uses to pay for his trip to Bali – a reminder, if any were needed, that texts and excavations often tell different stories.

Glass features several times, particularly Chinese glass. Unfortunately the glass industry in early-Míng China is poorly known and it is not possible to identify likely centres of production for the items mentioned in *BM* (Miksic 2013:338). Derek Heng’s work on Sino-Malay trade (2009) does not even mention trade in Chinese glassware. It is possible this ‘Chinese’ glass actually came from somewhere else – *Cina* being used in some Indo-Malaysian languages as a synecdoche for all foreign lands (e.g. *Sina Jawa* ‘China Java’ in Adonara [R. H. Barnes 2004:32]) – but this seems unlikely given *BM*’s other Chinese references.

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