Aromatic essences in ancient Nubia: the sacredness of perfumes and incense in the Meroitic kingdom

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Introduction

The traditional outlook, widespread for a long time, has considered ancient Nubia a simple appendage of Egypt, from which the local populations would have derived most of their social, religious and artistic values. In the last decades, new inquiries and the revision of past ones have been showing that Nubian people were able to bring into being a rich own civilization, especially during the Meroitic period (270 BC – mid-fourth century AD). This was expressed in a polymorphic society (Baud 2010: 76-78) that was able to harmonize autochthonous elements and foreign influxes in a new peculiar culture (fig.1).

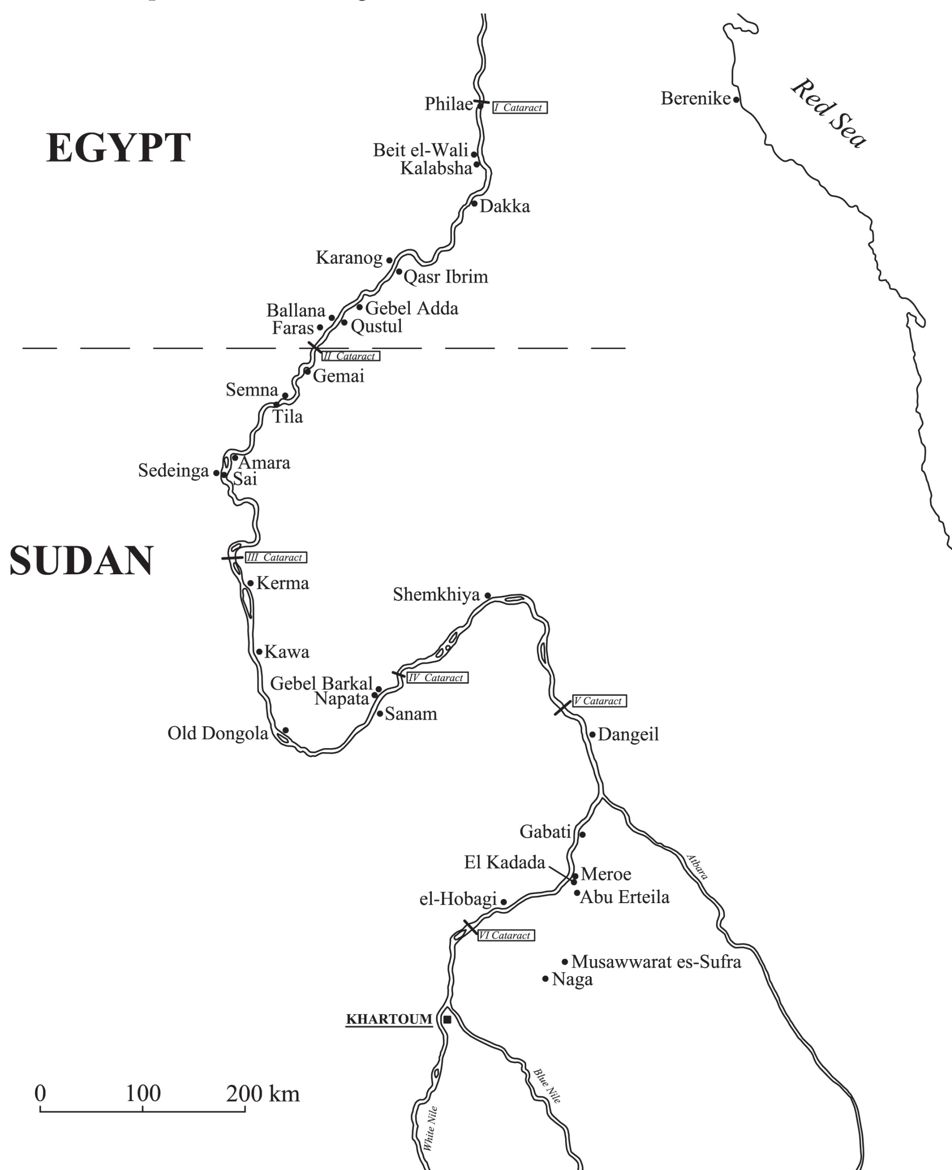

Figure 1. Map of Nubia showing sites quoted in the text (by Marco Baldi).

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Also daily customs and temple and funerary rituals linked to the consumption of perfumed oils, burnt incense and ointments, witness the heterogeneous nature of Meroitic Nubia: the strong and manifold Egyptian influence with its millenary tradition, together with Hellenistic and Asiatic goods, was revised to achieve original solutions enriching the indigenous heritage.

Perfumed oils were obtained from vegetal elements. Nubian people exported raw materials[1] and in turn received final products, especially from Egypt, while there is not sure evidence on a local production, except few epigraphic clues.[2] The use of recovered grinding stone for making perfumes, after etnographic observations, could not be verified until now (Meyer 2010).

The incense, very often used for manifold occurrences, was instead obtained from indigenous and imported resins. The term "incense" describes a range of aromatic substances derived from a variety of gums from trees of Burseraceae family, that produce a pleasant odour when burned. In archaeological literature it is usually used to indicate both frankincense, a gum resin obtained from trees of genus *Boswellia*, and myrrh, a gum resin extracted from trees of genus *Commiphora.*[3]

Although the organic material is rarely preserved, containers and tools, in addition to iconographic sources and comparisons with other cultures, indicate that the use of aromatic essences, suggested for Nubia already from late Neolithic era, became more common during the Meroitic period, especially in a high social level context. Tombs have yielded most of handiworks, that were used for funerary rituals and then were included among grave goods; nevertheless, a number of evidence in religious and residential buildings indicate that the consumption of these matters was really widespread in daily life for religious, medical and cosmetic purposes.

The diffusion of perfumed oils

The actual knowledge on perfumed oils is mainly based on Meroe cemeteries, but significant findings have been brought to light in nearby el-Kadada, as well as in Lower Nubia and in northern Upper Nubian sites. Such essences were a common part of the richest grave goods from the first century AD until the fall of the Meroitic kingdom in the mid-fourth century, and in few known cases in the immediately next period.[4] In addition to libation vessels,[5] the containers of aromatic essences constituted in fact the liturgical assemblage, used for burial rituals, that the dead brought with him. Their content, suggested by the analogy with Mediterranean forms, has been confirmed by unguents that in some cases have partly survived dehydration, though analysis failed to identify them with precision.[6]

Oil and ointment flasks were usually set in number of one for each tomb, but in some cases they were two or more, sometimes placed in wooden boxes.[7] Anyway, the specific number of containers would have not meant different rituals, as suggested by tomb N18 in Meroe: the preserved box could contain nine samples, but only seven were still inside; the other two, found on the burial surface, were evidently took for making the funerary rite. The placing of more perfumed oil bottles, although the ritual needed one or two ones, had maybe to reflect the high social status of the dead (Lenoble 1998: 135; Dunham 1957: 149-52, fig. 98).

1 Some texts quote e.g. a "Nubian Herb" (Byl 2012: 77). In some cases Nubian goods were object of tribute to pharaohs (for a Nubian tribute scene from the temple of Ramses II at Beit el-Wali, see AA.VV. 2010: fig. 116). For Nubians depicted on Apadana bringing offerings to Achemenid king, see Fantusati 1999: fig. 21.

2 The 3rd Dynasty tomb of Hesure, at Saqqara, shows the depiction of thirty-nine fragrant oils; in one name, *tpj ḥ3t stj šm ʿsmʿj,* Altenmüller (1976: 23, n. 13) has identified a Nubian oil.

3 Incense was more rarely obtained from other trees, as some ones of genera Acacia (family Fabaceae) and Pistacia (family Anacardiaceae).

4 For Lower Nubian X-Groups see Adams 1986: 187. In Upper Nubia, for the emblematic case of el-Hobagi see Lenoble 1994.

5 For libation rituals see Lenoble 1995.

6 For Sai see Geus 1996: 1187; Welsby and Anderson 2004: cat. 310-11. In a glassware at Gebel Adda Millet has identified attar of roses, but it is unclear on which bases (1963: 159).

7 Among emblematic cases, in Sedeinga tomb WT6 were twelve samples (Leclant 1973), whereas in Meroe they were nine in N18 (Dunham 1957: 147 n. 21-3-652, 21-3-680, fig. 98a-d) and eight in W179 (Dunham 1963: 177 n. 22-2-404, 22-2-411, 22-2-415, 22-2-417, 22-2-419, 22-2-426, 22-2-428a, b, fig. 132a).

In the tombs that were not disturbed by robbers, the artefacts respectively linked to libations and pouring of perfumes are often close each other, usually in proximity to the head of the corpse: according to Lenoble, who reported the case of el-Kadada, this could suggest a link between the two rites, that mutually became stronger (Geus and Lenoble 1985: 75; Lenoble 1998: 130).

It is however unclear if Meroites knew the exact original use context of the different ware typologies that were imported with their contents and that were often imitated – *balsamaria, unguentaria, aryballoi, lekythoi* and *alabastra*. Their distribution does not appear to follow specific rules, neither in the tombs which had two or more essence vessels, that have showed an uniform or heterogeneous corpus. At the evidence, different wares accomplished the same ritual.

Besides, in Meroe tombs, despite a rich assemblage the total lack of *aryballoi*,[8] that were frequent items in the rest of the kingdom and in same Butana, does not find a clear explanation. For unclear reasons, this typology was not considered suitable for the tombs of the most important Meroitic persons.

The perfumed oil flasks recovered in the Meroitic assemblages had been made from manifold materials. According to Manzo, this reflects the point of view of the ancient users, who primarily considered shape and function of the artefacts rather than their material, despite the modern scholars' distinctions (2013: 340).

For the funerary equipments a specific material was however sometimes preferred to its technological properties or its social value; especially glass flasks were only in the wealthier tombs of the main political centres. Generally speaking, glass has been rarely attested in the Meroitic sites,[9] and always in poor quantities (Gradel 2009: 114-16),[10] with the exception of Sedeinga, whose cemetery yielded a greater number of evidence.[11]

Essence containers constitute a very good rate of glass findings, and in Meroe cemeteries glass remained the only material for these wares during the entire lifecycle of the kingdom. At least regarding the higher social level tombs, which have had greater archaeological attention until now, Lenoble has suggested that only a glass production, which imitated imported artefacts, was destined to funerary equipments in the capital (Lenoble 1998: 134).[12]

The dating of known pieces in Nubia allows to distinguish two phases of the diffusion of glassware. During Hellenistic times glass remained a high social status material,[13] and its occurrence is limited to the most relevant centres of Meroe and Gebel Barkal (Dunham 1957; 1963). After the Roman conquer of Egypt, and particularly from the second century AD, import goods were more widely distributed;[14] although in a few samples, glassware spread in the richest tombs of the major administrative centres[15] on the whole of the Nubian territory (Edwards 1996: 32; Gradel 2009: 115-16).

Glass *balsamaria*, usually blue-green coloured and up to 10 cm high, appear frequent artefacts ever from first century AD (Hofmann 1978: 201-208; Nenna 2010: 126) (fig. 2). The ovoid, squat or round body is completed from a long cylindrical neck, whereas are rarer colourless ovoid forms

8 The sherds of a handle and a neck have been found in Meroe city (SNM 23008).

9 Glass is mainly known from burials, whereas few finds have been reported from settlements. For Meroe see Shinnie and Anderson: 235; for Tila Island see Edwards 1996: 106-114.

10 Although sometimes ruthless, the action of robbers cannot justify the complete lack of glassware in so many cases.

11 The setting of Sedeinga on trade routes from western desert to Nile valley and its probable character of customs site, could explain the greater quantity of import goods. Nevertheless, few coeval necropolises have been methodically excavated, therefore the available data are still absolutely partial.

12 Although some scholars have suggested an autochthonous production of glass (Leclant 1973; Lenoble 1998: 134), the topic has been much debated (among most recent papers, with further bibliographic references, see e.g. Cool 1996; Edwards 1996: 31-32; Gradel 2009; Nenna 2010).

13 It was likely only object of diplomatic exchanges.

14 The known poor quantity of glassware in the Nubian territory makes however hard that the imports were the result of trades, but they were more likely object of diplomatic exchanges, payments of taxes, gifts or souvenirs.

15 In Lower Nubia, for Semna see Žabkar and Žabkar 1982: 25-26; for Faras see Griffith 1924: 153, pl. XXXI/Ia-IIIj; Shinnie 1967: 130 ff., pl. 82; for Karanog see O'Connor 1993: 154 n. 132-33; Török 1989: 147 n. 215, 148 n. 221; Woolley and Randall-MacIver 1910: 72, pl. 38; for Ballana see Williams 1991: 158-59, pl. 95. See also Ricke 1967: fig. 64/b12/3, b11/9. In Upper Nubia, for Kerma see Reisner 1914: fig. 7; 1923: figs. 20, 60-61; for Sai see Francigny 2012: pl. 13; Geus et al. 1995: fig. 13/b; Vercoutter 1979: fig. 11e; Welsby and Anderson 2004: cat. 310.

Figure 2. Meroe, Urban cemetery, Balsamarium. *Marbled glass. 1st century AD (after AA.VV. 2010: cat. 165).*

whose neck is narrower at its bottom. Some ones are incised or decorated with applied threads. The first century ledge rims were later replaced by out-flared ones, common during third and fourth centuries.

In the second century tombs have been found the more ancient imported glass *unguentaria*, with conical footless base, long cylindrical neck and ledge rim (fig. 3). Greatly widespread round-bellied two-handled *aryballoi*, from heavy pale green or colourless glass, seem to be appeared during the following century; their body is often decorated with round and linear incisions (fig. 4).

The occurrence of glass footed handled long-necked *lekythoi*, with cylindrical body and a wide mouth, seems instead to be limited to the western cemetery of Meroe (Dunham 1963: 161 n. 22-2-167, fig. 117a (W 125), 166 n. 22-2-194 (W 126), 172 n. 22-2-235, fig. 125i (W 130), 177 n. 22-2-417, 22-2-419 (W 179)). The only known example of glass two-handled *amphoriskos*, with an elongated pointed shape and an oblique rim, has came from Sedeinga (AA. VV. 2010: cat. 166; Wildung 1997: cat. 438).

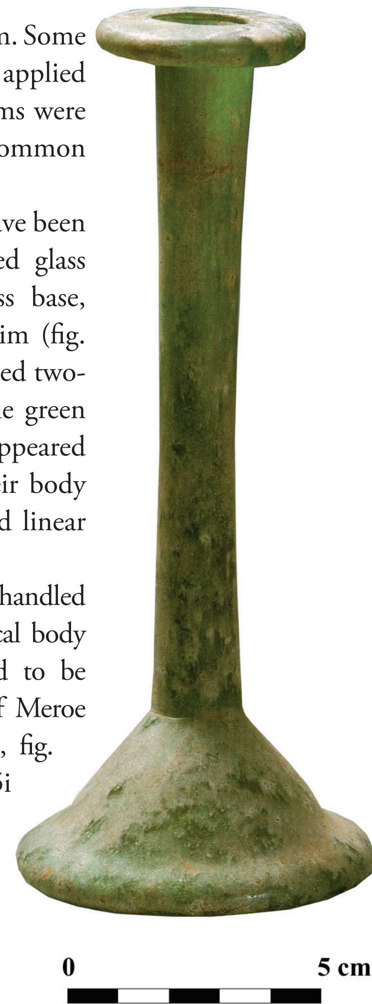

Figure 3. Sedeinga, Unguentarium. *Glass. 2nd – 3rd century AD (after AA.VV. 2010: cat. 167).*

The funerary glass however remained a very rare good among provincial élites,[16] whose burial equipments have included imported pot-wares[17] and their local wheel- and handmade fine,[18] and rarely less depurated,[19] ceramic imitations,[20] whereas a *faience* production was rarer.[21] In a few cases, the local copies were from Mediterranean bronze containers.[22]

In addition to almost slavish imitations, in some cases there was a freer local interpretation of foreign prototypes, by creating original items. For example, at el-Kadada a peculiar vase, thought for containing perfumed oils, seems to combine the shape of a pyxis with shoulder and rim typical of *aryballoi* (Lenoble 1998: 133, fig. 1/4).

In the same site has been brought to light a very singular janiform two-handled ceramic flask (AA.

16 Among rare known examples, at el-Kadada were brought to light an *aryballos* (Lenoble 1998, pl. I) and other unidentified fragments (Geus 1982: 184).
17 According to Török (2011: 277 ff.), there was a Mediterranean production specially made for the Meroitic market.
18 The greater known assemblage of fine pottery imitations from Roman essence glassware imports has been found in Classic-Late Meroitic el-Kadada, that yielded a heterogeneous corpus of oil flasks, among which a peculiar *amphoriskos;* the ceramic specimens were usually set on beads textiles to avoid the contact with the floor, and were often associated, for liturgical (?) purposes, with little bronze cups (Lenoble 1998). A flask from Shemkhiya is peculiarly covered by impressions (Żurawski 2008: 153-56, fig. 20), maybe imitating the embossed surface of many glass and metal prototypes (see Manzo 2013: 350); some glass perfume flasks with embossed surface have been discovered in Meroitic burials (Ricke 1967: abb. 64/b12/3; Woolley and Randall-MacIver 1910: pl. 39).
19 For a coarse *aryballos* from Gabati see Edwards 1998: 146, fig. 6.16 <1401>.
20 For the skeumorphism in Meroitic pottery see Manzo 2013. For workshops producing these imitations see Török 2011: 253 ff.
21 For a *faience aryballos*, recently unearthed at Dangeil, see Anderson and Salah 2011: 85, pl. 21.
22 For examples of imported bronze oil wares, for Faras see Griffith 1924: pl. LV/4-6; for Karanog see Woolley and Randall-MacIver 1910: pls. 30, 32.

Figure 4. Semna, Aryballos*. Glass. 3rd – 4th century AD (after AA.VV. 2010: cat. 168).*

VV. 2010: cat. 121; Lenoble 1998: 133-34, figs. 1/3, 3; Manzo 2013: 350-51, fig. 2/c), that was for sure a local production judging from fine ceramic material (fig. 5). The two human faces, partly broken, show the aesthetic canons of Meroitic ba-statues (Francigny 2010b); wadjet forms were impressed for making eyes and other pieces were roughly applied for moulding hairs, ears and noses. This ware does not reproduce a Meroitic form,[23] but it finds its models, freely reinterpreted, in Egyptian and northern Mediterranean anthropomorphic prototypes (Lenoble 1998: 134).[24]

The decorative motifs chosen by Meroitic artisans, although rarely used, confirm the religious character of these imitations, as expressed from the apotropaic value of wadjet and uraei, and from a possible soteriological reader of sorghum and human face.

The sacredness of the aromatic essences

The diffusion in many provincial aristocratic burials, and more rarely in popular ones, of ceramic imitations of perfume flasks, probably with the linked rituality, is expression of the influence of the Meroitic religious institutions in marginal contexts. In addition to their meaning as prestige goods marking rank, the adoption of objects and habits that were typical of the royal funerary rites, sometimes paralleled by similar monumental tombs, highlights the desire to imitate the patterns of the richest and important figures of the kingdom. Reproducing elements of the royal ideology and its soteriological outlook, it was hoped to share the faith of the king in the afterworld,

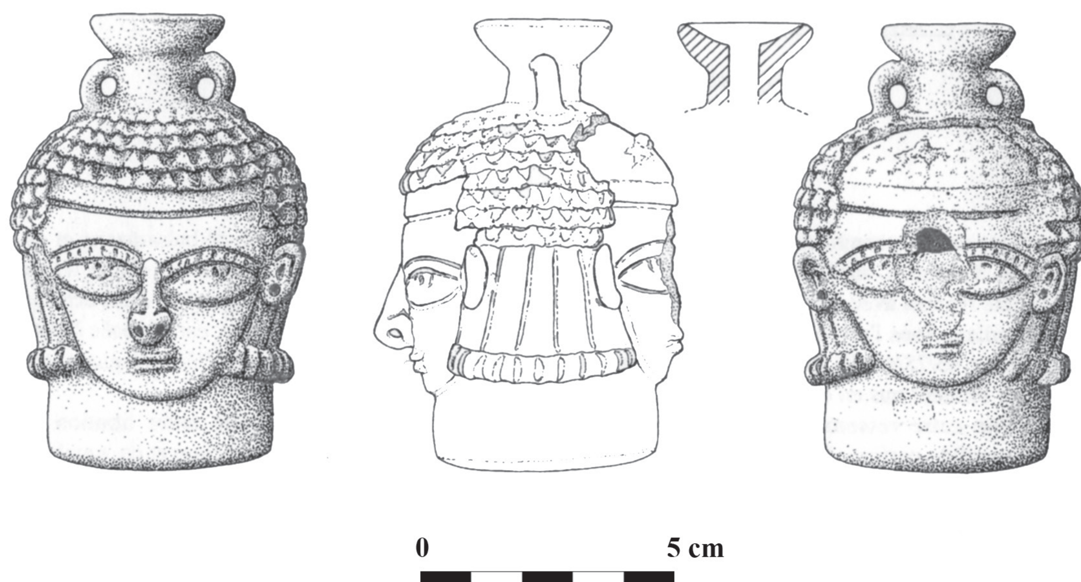

Figure 5. El-Kadada, Perfumed oils flask. Pottery. 3rd – 4th century AD (after Lenoble 1998: fig. 3).

23 The late Meroitic tomb 22 in Kerma yielded an anthropomorphic, but no janiform, ceramic *alabastron* (Reisner 1914: fig. 7; 1923: 44).

24 For an imported glass janiform flask see Millet 1963, fig. 10. See also the bronze Hellenistic human headed *situla* from Faras tomb 71 (AA.VV. 2010: fig. 118; Griffith 1924: 163, pl. LIII/2).

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achieving the deification through unction and libation rituals.

As deducible from wares and offering tables, in the funerary context perfumed oils had to purify the corpse through its ritual unction,[25] made in different way depending on specific ware used for (Lenoble 1998: 127 ff.). Narrow necked forms with slightly out-flared rim would have allowed the partial or total unction of face or body of the dead, whereas round bodied forms with ledge rim indicate aspersion or dumping. Further suggestion is the unction through the direct contact of the wares against the body: the neck limited the dripping of the oil and the ledge rim prevented its dispersion (Lenoble 1998: 128).[26]

Besides, several Greek-Roman depictions highlight the importance of handles or belts to allow the suspension of round- and flat-bottomed containers.[27] As suggested by some survived examples,[28] it is therefore very likely that added elements were fixed to handles or neck of the wares in order to help the dumping.

On early Meroitic chapels in the royal cemetery of the capital, winged Isis, in the act of giving a new life to royal neo-Osiris, or an officiant pour out some perfume from an upside-down flask.[29] In the late period the dumping is only on offering tables, and coeval royal chapels. Coeval royal chapels often show a different rite: the officiant holds an elongated tool, whose proximal end is hawk-headed, whereas the distal one represents a hand on which is a sort of vase, set nearby a royal figure. In the Lenoble's opinion, inside it there is a perfume that spreads or incense that burns, depending on reading of the swinging element which comes out: a flare or the representation of the scent (1998: 136). Other scholars, including the writer, see the flare of burnt incense whose effluvium reaches the nostrils of the royal figure (Yellin 1990: passim; Török 1997b: 514).

This iconography, that had an ancient Egyptian origin,[30] had been also portrayed on early Meroitic chapels, on a little scale and in a marginal position of the overall relief.[31] In later chapels it conquered a greater role, by occupying most of one or more walls[32] and by being depicted in royal tombs in Jebel Barkal, too (fig. 6).[33] In the last Kushite pyramids the depiction of this ritual partly left the space to libation scenes by Anubis and Nephtys, very recurrent on the offering tables.

Especially from late first century BC, on royal chapels the seated tomb owner, carved near a niche containing a figure of Osiris, receives libations and/or incensement, from a prince but mainly from a variety of Egyptian gods. Offerings made to the dead ruler by gods themselves, and the performing of rituals not just for Osiris, but also for the tomb owner, are unEgyptian elements; it was supposed that the tomb owner was considered to be Osiris himself (Yellin 1995: 2875), and libations and incensement or unction had to contribute to deify the dead, transfiguring him/her in neo-Osiris.[34] In fact, as well as the god statues in the temples received incense, unction and

25 For an epigraphic source on the purifying function of perfumed oils see e.g. the text in raised hieroglyphs north of the Kawa Amon temple T door (Török 2002: 107).

26 Acts on a few offering tables can also suggest such interpretations. See e.g. the table C 40164 at Karanog (Woolley and Randall-MacIver 1910: pl. 20).

27 E.g., the portraits of Greek athletes sprinkling their own body with oil from *aryballoi*.

28 At el-Kadada, a glass *aryballos* had a bronze ring inserted in a handle (Lenoble 1998: 128, pl. I). At Faras, bronze handles were often attached by metal rings put in the *aryballoi* handles (Griffith 1924: 153, pl. XXXI/Type 1b). At Karanog tomb G 45, a glass *aryballos* was enriched by two twisted bronze rings passing inside its handles (Woolley and Randall-MacIver 1910: 249, object 7352, pl. 38).

29 See e.g. Beg. N 7 (Chapman and Dunham 1952: pl. 4E), Beg. N 8 (Chapman and Dunham 1952: pl. 5C), Beg. N 13 (Chapman and Dunham 1952: pl. 11A, B).

30 As in state cults, Meroitic funerary religion conciliated indigenous elements with a strong Egyptianisation.

31 See e.g. Beg. N 12 (Chapman and Dunham 1952: pl. 10B) and Beg. N 13 (Chapman and Dunham 1952: pl. 11A).

32 See e.g. Beg. N 2 (Chapman and Dunham 1952, pl. 15A, B), Beg. N 6 (Chapman and Dunham 1952: pl. 16B) and Beg. N 22 (Chapman and Dunham 1952: pl. 18B, C). The depiction of this ritual on more walls of the same chapel, also through tools with more vases, could suggest the contemporary use of different perfumes and explain the presence of manifold oil containers in some tombs (Lenoble 1998: 136-37).

33 Especially in pyramids 2, 3, 4, 5, 6.

34 The combination of libations and incensement is evident in Beg. N 7, on which south wall is depicted, on the lower part, a priest who pours out the libation with right hand and holds the incensement tool in left one (Chapman and Dunham 1952: pl. 5A).

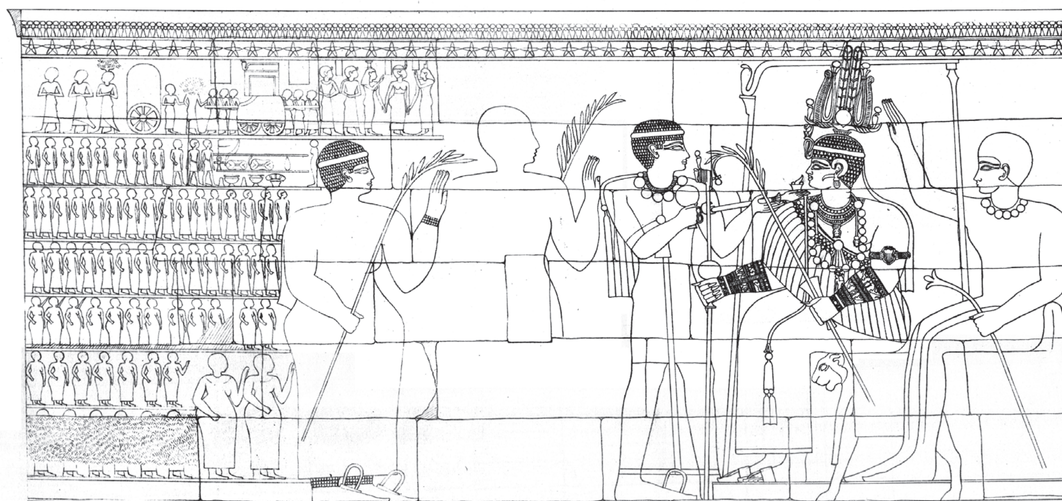

Figure 6. Meroe, Northern cemetery, Pyramid N6, Funerary chapel, South-western side. 2nd half of the 1st century BC (after Chapman and Dunham 1952: pl. 16b).

libations, and were made up, the same treatment had to be reserved to the dead by allowing his/her sacralisation (Lenoble 1998: 138).[35]

Despite their non-finding in royal equipments, wooden tools with a final hand, analogous to depicted ones, have been brought to light in northern aristocratic burials, by confirming the real making of this ritual during funerary ceremonies.[36] Besides, the funerary equipment of all social classes dead included cosmetic materials and tools, especially but not only for women, having therefore a double value: going along to the dead to the afterworld and assuring his/her divinization.

Cosmetic instruments, known for Nubia from late Neolithic (Rampersad 1999: passim) and Kerma periods (Bonnet 1990: 71-86), were in fact a very recurrent occurrence in Meroitic burials, whereas it is rarer their finding in residential contexts. The more typical equipment is a set to contain and apply galena (*kohl*), a plumbiferous mineral, easy to be found, used for eye paint[37] also in present Sudan. In addition to some ceramic[38] and metal[39] samples, the very arid climate of Lower Nubia has allowed the preservation of wooden *kohl* tubes,[40] locally made from indigenous[41] or imported[42] woods. The tubes, usually closed through a lid, are of different shapes,[43] but more often circular, and sometimes enriched from ivory or bronze inlays and decorated with geometrical or religious motifs. The sets were completed by iron and bronze tools for applying galena.[44]

There are then attested in many burial equipments locally made coarse ware ceramic dishes on a stand, having different possible heights (fig. 7);[45] they are often identified as offering trays, but,

35 Among iconographical examples of censing a god statue, for the Meroitic Amon temple at Amara see Török 2002: 256. An instrument with an hand-formed end found in a Kawa temple suggests that a similar rite was really made (Macadam 1955: 170).

36 In pyramid 1 at Gebel Adda (see Millet 1963, p. 163, fig. 15). Its lack in royal burials could be due to robbers or disintegration of wood.

37 For Ballana and Qustul scientific analysis have allowed the identification as galena (Williams 1991: note 80). For earlier identification see Lucas and Harris 1962: 80-84.

38 See e.g. Beg. N 18 (Dunham 1957: pl. LXXI/B).

39 For a Meroitic bronze tube see Beg. N 30 (Dunham 1957: fig. 114 n. 21-3-470).

40 For Ballana and Qustul see Williams 1991: 152 ff.; for Karanog see Woolley and Randall-MacIver 1910: pl. 23; for Gebel Adda see Millet 1963: passim. In Upper Nubia, for Sai see Vercoutter 1979: fig. 10/d.

41 The use of *Zizyphus spina-christi* has been recognized for a *koh*l tube from Ballana (Williams 1991: 103 note 19).

42 For the employ of *Dalbargia* sp. at Sai see Welsby and Anderson 2004: cat. 312.

43 For peculiar zoomorphic tubes from Gebel Adda see Millet 1963: figs. 11-12.

44 Fragments of galena have been found e.g. in burials at Ballana (Williams 1991: 162) and Sedeinga (Leclant 1973: note 75).

45 A funerary bronze sample, of local production too, has been found in the tomb W154 in Meroe western cemetery (Dunham 1963: 235 n. 22-2-359). In the same cemetery has been brought to light a *faience* stand typologically linked to Cypriot-Phoenician metallurgy (AA.VV. 2010: cat. 161; Pierrat-Bonnefois 2010: 121).

especially during late and post-Meroitic period, they were used as incense burners. It was suggested that this function spread to replace the perfumed oils, whose importations had decreased (Lenoble 1994: 95; 1998: 138-39). Such incense-burners, often found with charcoal, were sometimes placed outside the burial chamber and used to purify the tomb (Francigny 2010a: 256).[46]

Figure 7. Meroe, Western cemetery, Tomb W108, Incense burner. Pottery. 1st century BC – 1st century AD (after Wildung 1997: cat. 409).

On the other hand, the conception of incense as sanctifying element is evident in the temple context. In the Amon temple T at Kawa, the king performs the purification of a pellet of incense before a ram-headed Amun, and in the scene legend "incense" is written as *snṯr*, also meaning "being made a god". In this case the king was initiated to his royal office and divinity was transferred to him, formally unifying him with the god (Macadam 1955: 94, pl. XIX/b; Török 2002: 106) (fig. 8).[47]

46 For the purifying function traditionally assigned to the incense see e.g. the Great Triumphal Stela of year 21 of Piye (Eide et al. 1994: 62-112).

47 For analogous cases, for the Dakka temple see Lobban 2003: fig. 13; for the Mandulis temple at Kalabsha see Byl 2012: 200; for the south front of the Apedemak temple at Musawwarat es Sufra see Hintze 1962: fig. 9; for the scene on the top of a donation stela of Aryamani at Kawa Temple A see Macadam 1949: pls. 32-33; for a stela of Adikhalamani from Philae see Farid 1978: pl. 9. See also the scene incised on a bronze bowl found at Gemai (Török 2002: 276-78, fig. 43; Wildung 1997: cat. 304).

A Nubian history of the incense

Although most of the Meroitic rituals had an Egyptian origin, the burning of incense in a funerary and religious context is known for Nubia from very ancient times, and during Meroitic period dishes on high stand as incense burners have been brought to light in ceremonial[48] and residential[49] buildings.

Figure 8. Gemai, Tomb 115, Incised bowl. Bronze. 1st century BC – 1st century AD (after Wildung 1997: cat. 304; Török 2002: fig. 43).

Stone incense burners found in A-Groups cemeteries,[50] mainly at Qustul,[51] mostly dated between late 4th and early 3rd mill. BC, highlight in the Nubian land a custom unknown in coeval Egypt (Török 2011: 42-43). The best-known burner, from tomb L 24 (Seele 1974; Williams 1986: 108-109, pl. 34), was decorated with incised Egyptian motifs whose exact meaning has been being a much debated subject.[52]

The lack of chemical analysis on residual burnt substances found at Qustul does not allow to know their source, but, considering the verified involvement of A-Groups in international trade,[53] one cannot exclude a foreign origin. It has been particularly deduced a trade network of coeval and later Nubians with Horn of Africa,[54] where it was likely located the land of Punt (Kitchen 1990: 173), that was the incense-producing region par excellence to the Egyptians. Nubian people assured for

48 For Musawwarat es-Sufra see Edwards 1999: 22, pl. IX/778; Seiler 1999: abb. 63, taf. XII/2-7.

49 For Kawa see Török 2002: 293; for Meroe see Grzymski 2003: 69, fig. 30/P. 2, 9, 18, pl. XIII/c; Robertson and Hill 2004: pl. III/b; Shinnie and Bradley 1980: figs. 42, 133, 135; Török 1997a: fig. 130/x-51, 52; for Abu Erteila see Baldi 2013: 237, fig. 7.

50 A-Groups culture developed in lower Nubia between 3800 and 2800 BC.

51 About thirty samples (Williams 1986).

52 See Michaux-Colombot 2010 with further bibliographic references.

53 See e.g. Hatke 2013: 4; Török 2011: 42.

54 Pottery from Gash Delta, in eastern Sudan, suggests a Nubian influence during third mill. BC (see Hatke 2013: 4 with further bibliographic references).

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a very long time the trade intermediation between Egypt and Africa, including Punt (Roy 2011).[55]

In an Edfu temple a Ptolemaic inscription, therefore contemporary to the early Meroitic period, listing trees producing the incense called *ʿnty*[56] differentiates resins of Punt from that of Nubia, considering Punt incense superior and Nubian one inappropriate for religious use (Chermette and Goyon 1996: 66). In addition to earlier sources,[57] this suggests the existence and use of unidentified incense trees that were indigenous of Nubian territory, or that were however perceived as Nubian by the Egyptians. There are also significant the epithets reserved in the Egyptian texts to Dedwen, a Nubian god who represented Nubia and its resources, especially incense, from a very early date (Kormysheva 2010: 223-31; PT 803, 994, 1017, 1476; CT IV, 375, 377).[58]

Apart from some genera, as *Acacia* and *Santalum* (Asensi Amoros 2003), whose low quality resins were unlikely imported by the Egyptians, no incense tree species are known for Nubia, whose had access mainly to species as *Boswellia papyrifera* and *Commiphora gileadensis* from nearby overland regions (Boivin and Fuller 2009: 137-40, fig. 9) (fig. 9). In addition to pinaceous resins at Qasr Ibrim (Evershed et al. 1997), the samples of incense trees recovered in Meroitic and post-Meroitic sites were attributed to these two genera: *Commiphora gileadensis* at Meroe (Shinnie and Anderson 2004: 366 n. MR7-8, MR7-9) and Berenike (Cappers 2006), and an unidentified species of genus *Boswellia* at Qasr Ibrim (Evershed et al. 1997).

As suggested by literary sources and archaeological evidence, Meroe was a stage of several trade routes from and to Asia, Egypt and central Africa. One cannot therefore exclude that the incense for sacral uses was among import goods from abroad.[59]

The poor enough quantity of recovered remains is due to the amorphous nature of frankincense, that makes it easily overlooked during archaeological excavations. Nevertheless, the heterogeneous diffusion of incense burners and survived organic materials, brought to light in different contexts, highlight the manifold employs of the incense during the Meroitic period. Among domestic uses, an erotic ritual provided for women vaginal fumigations before sexual relations with their own husbands. In the absence of written and iconographical sources, ethnoarchaeological comparisons has allowed to attribute this function to potwares put inside a hole into the floor.[60] The woman squats over the hole, naked under a blanket which traps the fragrant smoke, that in present Sudan is usually obtained from sandalwood or other locally available aromatic substances.

55 Regarding possible contacts with Nubia, Egyptian inscriptions affirm that Puntites traded with their neighbours (Kitchen 1990: 174-77), and at Kerma, a 1700 BC painting depicts a very similar landscape than Puntite one depicted in reliefs from Ḥātshepsūt temple (c. 1480 BC) (Boivin and Fuller 2009: 140 with further bibliographic references). An evidence about early Nubian involvement in Egyptian trade with Punt has recently brought to light at Wadi Gawasis, the Red Sea port from which Egyptians sailed to Punt, at which Nubian third and second mill BC. sherds have been found (Manzo 2010). A relevant iconographic source of Egyptian-Nubian trades is at Qurna in the tomb of Khaemhat, Overseer of the granaries of Upper and Lower Egypt under Amenhotep III (XVIII Dynasty, 14th century BC) (Pino 2005). For a recent Raman analysis on resins from Egyptian sites, that has confirmed the use of unEgyptian species, see Edwards et al. 2004: especially 224, 230-32, fig. 16.

56 The other term used by the Egyptians to define incense, *snṯr,* indicated a resin of species *Pistacia terebinthus* (Nielson 1986: 14), widespread in several near eastern regions and therefore available closer to Egypt.

57 In his biography inscribed in his tomb at Aswan, VI Dynasty explorer Harkhuf (23rd century BC) records the incense among goods that he brought in Egypt from Nubian land of Yam (the same text quotes, among imported goods, *ḫs3jt*, that Török 2009: note 100 has hypothetically interpreted as an aromatic material). Besides, a mention of *ʿnty* from Nubia (ToNehesy) is in the Chronicle of Osorkon (XXIII Dynasty, 8th century BC) (Caminos 1958: 126, 134), but Nubian *ʿnty* is however extremely rare in Egyptian written sources. The Egyptian terms for the offerings of perfumes, unguents and incense, *irj.mdt*, and the linked ritual, *ir.t dw mdt*, are derived from *mdt*, in turn derived from the Lower Nubian territory that was source of aromatic incense (Forbes 1955: 4, 43). See also Pino 2005: 102.

58 For the reference to Dedwen as Kushite god in Election Stela of Aspelta, see Eide et al. 1994: 234.

59 Innes Miller 1974: passim.

60 For the archaeological evidence see e.g. Eigner 2002: 21, abb. 8. For present day examples, for sedentary groups see e.g. Eigner 2007: 114, pl. 10; Welsh 2005: 19, pl. 6; for nomadic groups see Bradley 1992: 51.

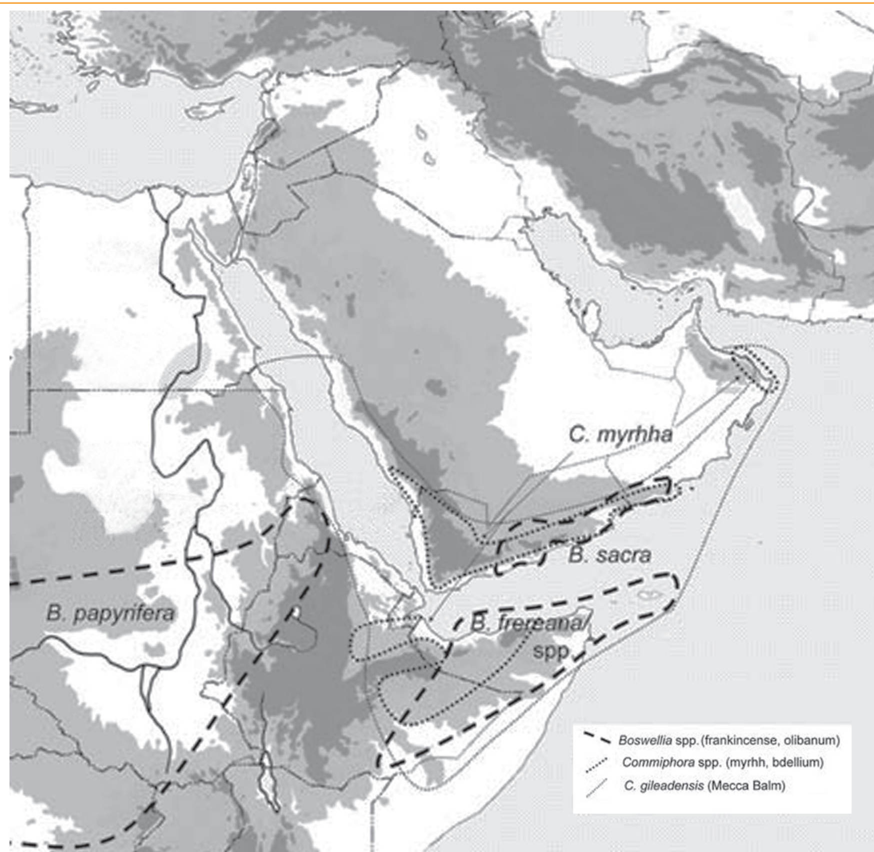

Figure 9. Areas of main economic frankincense and myrrh species (after Boivin and Fuller 2009: fig. 9).

Conclusions

The very partial deciphering of the Meroitic writing and the unreliability of classical authors, influenced by a widespread fable and mythical vision of African populations, leave to archaeology and archaeometry our knowledge of Meroitic civilization, whose nature has been primarily deduced from funerary and temple structures.

From the beginning of the last century, archaeological work in Nubia has been yielding the evidence of an original and heterogeneous civilization, which was able, especially from the Meroitic period, to create a peculiar syntax between the rich autochthonous heritage and several foreign influxes.

The diffusion of aromatic substances and the religious meaning linked to their use, are examples of the Meroitic capacity to receive customs of foreign extraction and revise them in accordance with indigenous traditions. A high number of evidence reveal aspects of the Meroitic daily life, but especially the sacredness attributed to perfumed oils, incense and cosmetic equipment. It was increased by regular and several importations, that enriched the long-lived Nubian religious and soteriological beliefs and encouraged a peculiar local craft production.

Our knowledge of source, employ and sacral meaning of aromatic essences is nevertheless still partial. In addition to the impossibility to read Meroitic writing, this is particularly due to the hard preservation of organic materials and to the little attention that the Nubian archaeology has usually reserved to residential buildings, in favour of religious and funerary structures. Further inquiries would particularly allow a clearer picture of the less-known Meroitic daily life.

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