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Front cover. General view of Site WNP-J-22\1, Al-Jabalain, White Nile State. Photo by Hamad Mohammed Hamdeen.

Metal anklets at Faras and other Meroitic sites: form, function, chronology and a response to Vila's 'gens à anneaux'

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Figure 1. Map of Kush showing sites discussed in this paper. Reproduced with permission of the Sudan Archaeological Research Society.

Introduction

Early in 1911, Firth (1911, 15; 1927, 229-233) excavated a cluster of 57 graves at Wadi es-Sebua designated 'Cemetery 150' (Figure 1). This modest site had been thoroughly plundered and yielded few antiquities. The objects that were recovered – a blown-glass bottle, some pottery, a sandstone *ba*-bird and a stela fragment – were nevertheless enough to assign it a Meroitic date. In its final publication, Cemetery 150 was allotted five succinct pages and, obscured by the mass of archaeological data that subsequently emerged from Lower Nubia, has seldom been referred to since. Grave 1 did, however, yield 'a first' for Meroitic archaeology: a pair of heavy copper-alloy anklets with engraved terminals.[1] These were found clasped around the ankle bones of an adult interment in an east-opening axial chamber grave that contained no other objects (Firth 1927, pl. 13e, 29e).

Contemporary with Firth's excavation, Griffith (1924; 1925) began to investigate a far larger Meroitic cemetery at the site of Faras, some 150km south of Wadi es-Sebua (Bishop-Wright 2023, 231-233). Of the 2220 excavated graves, 17 contained pairs of copper-alloy anklets analogous to Firth's example from Cemetery 150. These graves were also east-opening axial chambers that, with two exceptions, were devoid of additional objects (cf. Figure 17). Griffith (1924, 144; 1925, 58) assigned them to the earliest phase of the cemetery (late Ptolemaic) but only included five in the published preliminary report.

Analogous anklets have since been recovered from nine other Meroitic cemeteries below the 4th Cataract. They are always rare finds and usually come from east-opening axial chambers similarly devoid of antiquities. Their striking appearance has rendered them a staple of Meroitic displays in museum collections and examples have also featured in occasional exhibitions where they are habitually assigned

[1] 'Copper alloy' is used throughout this paper in lieu of 'bronze'. It is highly likely that these anklets are bronze and not brass but, until archaeometric analysis has been completed on at least one example to confirm this, the term 'copper alloy' is preferred.

to the Meroitic period (Sauquet and Vilalta 2003, cat. 133; Baud 2010, cat. 174). This dating originates with Griffith's analysis of Faras and has generally been accepted by other commentators (Catalan 1963, 91; Haycock 1972, 240; Fernández 1983, 661-662; Eisa 1999, 19). However, it is disputed by André Vila (1982b, 177-193; 1984) who, in his paper '*gens à anneaux, gens à cistes*', offers the only true consideration of anklets from Meroitic sites.

Vila (1982b, 191-193; 1984, 569) argued that all anklet graves associated with Meroitic sites are late and correspond to a discrete cultural group that moved into the Nubian Nile Valley in the terminal Meroitic period (4th century AD): a '*gens à anneaux*'. This hypothesis was based predominantly on iron anklets from Cemetery 2-V-20 at Missiminia (Abri) and did not benefit from access to Griffith's unpublished records from Faras.[2] Nevertheless, Vila (1984, 559, 569) asserted that both the iron and the copper-alloy anklets evidence the same group and that these so-called 'Anklet People' reused Meroitic graves. According to this argument, Griffith failed to recognise evidence of reuse at Faras and erroneously dated his anklet graves to the early Meroitic period (Vila 1982b, 192 cf. Griffith 1925, 58). Subsequent commentators then adopted Griffith's high chronology and, if Vila is to be accepted, all such anklets should be reassigned to a transitional phase between the terminal Meroitic and X-Group periods.

Recently, the present author proposed a new chronology of the Meroitic cemetery at Faras in which Griffith's early dating of the anklet graves was upheld (Bishop-Wright 2023, 237-241). Indeed, it was suggested that they belonged to the 3rd century BC and constituted the cemetery's inaugural phase. Thus, two conflicting chronologies for copper-alloy anklets currently exist: a high date (Griffith 1925; Bishop-Wright 2023) and a low date (Vila 1982b; 1984).

The purpose of this paper is to present the evidence for anklets at Faras and other sites and test the high date of the copper-alloy examples. So doing, it critically examines the hypothesis that the Meroitic cemetery at Faras was in use during the 3rd century BC and challenges the assumption that iron and copper-alloy anklets are contemporary. It also considers the suggestion that these objects correspond to an independent cultural group originating from the eastern or western desert (Vila 1982b, 193; 1984, 569; Bishop-Wright 2023, 240-241). Thus, this study of anklets is pertinent to broader questions of Lower Nubian chronology and settlement in the Meroitic period.

The discussion commences with a description of anklets from Meroitic Kush, with observations on their form, decoration, distribution and function. Following this, the evidence for the early date of the Faras examples is presented and tested against other sites. The chronology of these objects, and the reality of Vila's *gens à anneaux*, are then discussed and an attempt is made to reconcile the conflicting evidence from Faras and Missiminia. Supporting this are two appendices:

- Appendix A offers a description of every anklet grave from Faras, the majority of which are hitherto unpublished.
- Appendix B summarises the evidence for anklet graves from other Meroitic sites across Kush.

Form, decoration and distribution

The 17 pairs of anklets found at Faras are representative of a form that is henceforth referred to as 'Type 1' (Figure 2; Appendix A). Cast from solid copper-alloy, they are thick, penannular and typically semi-circular in section with slightly concave inner faces (Figures 3-6). Two pairs are differentiated by rounder forms with ovoid sections (Figures 4.A, 6-left). The maximum diameters range from 86-138mm and the weights from 892.0-2866.0g. The combined weight of a pair is therefore considerable: a little under 2kg for the lighter examples and almost 6kg for the heavier. All Type 1 anklets, other than those from Faras G.73,

[2] Now held by the Griffith Institute, University of Oxford.

Anklet Type	Material	Features
Type 1	Copper-alloy	Heavy, thick, penannular. Max. diam. >75mm. Weight seldom <1.0kg (each). Incised decoration on terminals, usually complex. Semi-circular or ovoid in section, e.g., Figures 3-6.
Type 2	Copper-alloy	Light, thin, penannular. Max. diam. <75mm. Weight <100.0g (each). Ovoid in section. Sometimes with overlapping terminals. Associated with immature burials, e.g., Figure 8.
Type 3	Copper-alloy	Constructed from thin wire. Annular or penannular. Undecorated. E.g., Woolley and Randall-MacIver 1910, pl. 35.7382.
Type 4	Copper-alloy	Cuff-like with a flat, recessed face, e.g., Usai *et al.* 2014, pl. 6; fig. 11.
Type 5	Iron	Thick and penannular. Max. diam. >75mm. Sometimes with simplistic designs on the terminals. Circular or ovoid in section, e.g., Vila 1982b, fig. 196.3, 5.

Figure 2. Table outlining a typology of copper-alloy and iron anklets from Meroitic sites.

have incised decoration on their terminals. Designs utilise a range of geometric motifs: crosshatching, parallel lines, triangles, circles and, occasionally, curvilinear patterns (Figures 6-7). The results recall the decoration of hand-made Nubian pottery, particularly that of the C-Group and Meroitic periods, and Eastern Desert Ware (Barnard 2008, 21-26; 2018, fig. 2-5; David 2019, 878; Hafsaas 2021, 163; Kilroe 2021, 160-163; Gates-Foster 2022, fig. 3-5). Parallels may also be found in tattoo designs, for example those preserved at Meroitic Aksha (Vila 1967, 368-377).

Griffith (1925, 59) noted traces of textile adhering to several Type 1 anklets and, on two examples in the British Museum (EA51576-7), this is still visible (Figure 4.F). The fabric remains are mineralised by corrosion and bonded to the surface of the anklets. On several pairs, such as a set in Manchester Museum (8527a-b), there are also irregular ovoid marks on the inside faces (Figure 4.E). Where visible, these marks are clustered towards the terminals. They could be products of the casting process, or they might be use-wear marks (cf. Griffith 1925, 59). Neither suggestion, however, is wholly satisfactory: if they were created during casting, it is hard to understand why they were not subsequently removed. Meanwhile, owing to the hardness of the metal, only prolonged and arduous use could explain their appearance through wear.

Regarding the manufacture of Type 1 anklets, it has been suggested by Millet (2015, 190) that two examples from Sedeinga were produced using the so-called 'lost-wax' process. While this is perfectly feasible, lost-wax casting requires specialist moulds and is better suited to hollow objects with fine detail (Hodges 1976, 72-73; Auenmüller *et al.* 2019, 147-149). Anklets could simply have been produced by sand-casting or by using an open mould of refractory clay. Following this, imperfections could be removed and decoration incised with hand tools.

Additional comments on manufacture are hampered by a lack of data concerning the extent of the Napatan-Meroitic bronze industry (cf. Edwards 1996, 28). Copper and tin (cassiterite) ores were known in the Eastern Desert and could have been exploited by nomadic groups in the 1st millennium BC (Rademakers *et al.* 2018, 519; Rademakers *et al.* 2022, 15-16). Meanwhile, bronze working is attested at Napatan-Meroitic Dukki Gel (Bonnet 2019, 182-183), and crucibles containing traces of copper alloy are published from Jebel Barkal (Iannarilli 2020, 137) and Meroe City (Tylecote 1982, 36). Until an archaeometric study has been completed, the question of how this evidence relates to the copper-alloy anklets remains open.

Figure 3. Copper-alloy anklets (Type 1) from Faras in the collection of the Metropolitan Museum of Art, New York. A) Gift of Oxford University Expedition to Nubia, 1926. B) Rogers Fund, 1913. Reproduced under Creative Commons Zero.

Figure 4. Copper-alloy anklets (Type 1) from Faras (A-F) and Sedeinga (G-H). E-F are not to scale. Photographs A-F by H.C. Bishop-Wright and reproduced with permission of The Trustees of the British Museum; Brighton & Hove Museums; the Ashmolean Museum, University of Oxford; Manchester Museum, The University of Manchester. Photographs G-H © V. Francigny/Sedeinga Mission.

Figure 5. Copper-alloy anklets (Type 1) from Faras. Not to scale. Photographs by H. C. Bishop-Wright and reproduced with permission of the Ashmolean Museum, University of Oxford; Manchester Museum, The University of Manchester.

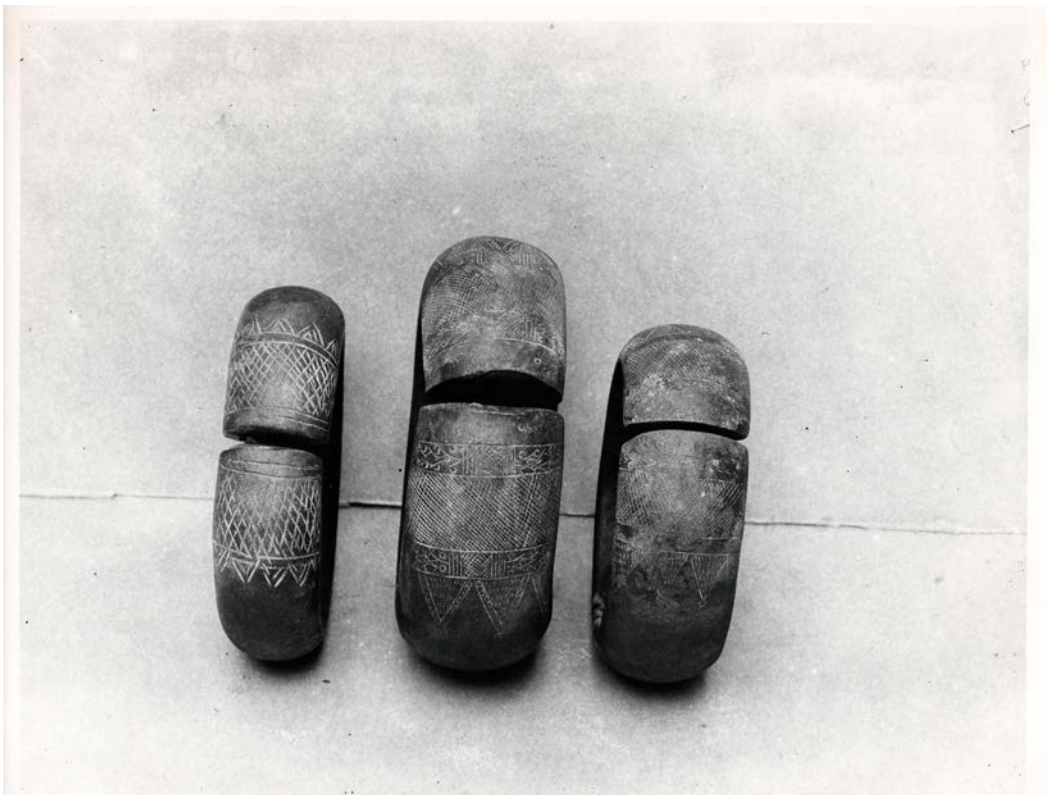

Figure 6. Copper-alloy anklets (Type 1) from Faras, showing incised terminals. Reproduced with permission of the Griffith Institute, University of Oxford.

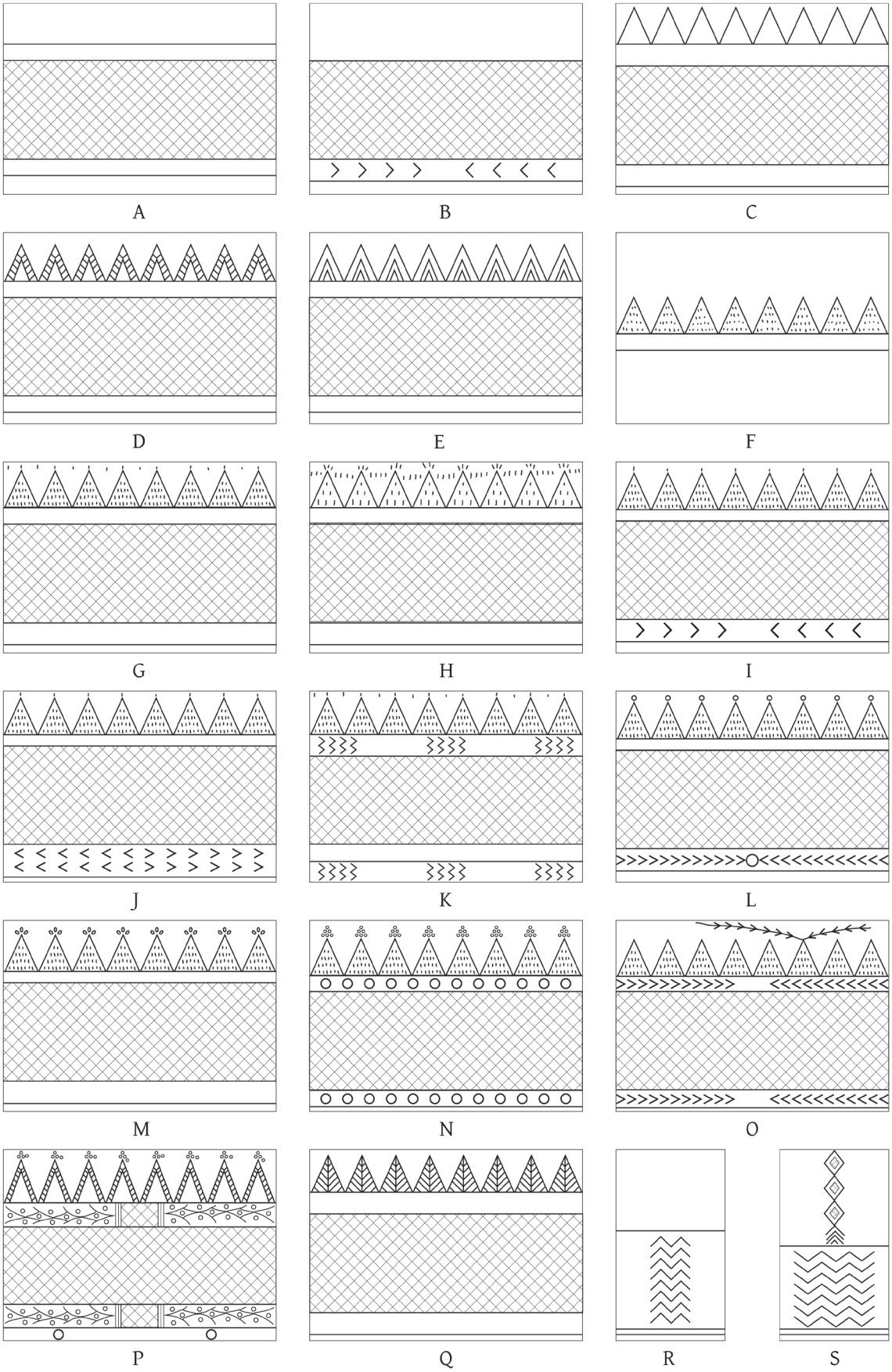

Figure 7. Schematic illustrations of incised decoration on copper-alloy (A-Q) and iron (R-S) anklets from Meroitic sites across Kush. © H. C. Bishop-Wright.

Turning to the distribution of Type 1 anklets beyond Faras, examples are published from ten further sites between Wadi es-Sebua in the north and Kerma in the south.[3] They are analogous to those from Faras in both form and decoration, perhaps originating from the same workshop. Beyond Faras they are rare finds; indeed, there are more examples of Type 1 anklets from Faras than all other sites combined. The cemeteries at Nag el-Arab and Nag Shayeg, both in the neighbourhood of Argin, are exceptional for having produced seven Type 1 anklets. Sedeinga is also notable for only producing Type 1 anklets that are ovoid in section (Figure 4.G-H).

Three graves at Faras (155, 158, 234) produced a variant that is markedly slimmer (Type 2; Appendix A). The examples from G.155/158 have simple incised designs on their terminals and were cast (Figures 7.B/G, 8.A), while that from G.234 is of thick copper-alloy ribbon that was conceivably bent into shape (Figure 8.B). These anklets are associated with the graves of children.

Also associated with the grave of a child was an anklet of thin copper-alloy wire (Type 3; Appendix A, G.1203). Similar objects are known from Karanog G.597 and Sedeinga II T 262 (Appendix B). Other than their basic function, they present no morphological or decorative analogies with either Type 1 or 2 anklets and are unlikely to belong to the same tradition.

A fourth copper-alloy form (Type 4) is only attested from a Meroitic cemetery at Al Khiday, Khartoum State (Usai *et al.* 2014, pl. 6-7; Appendix B). It has a flattened 'cuff-like' appearance with a recessed face. Morphologically and geographically, it does not correspond to the same tradition as Types 1-2.

A single iron anklet of uncertain form is also recorded at Faras, from the same grave that contained the Type 3 anklet (Appendix A, G.1203). Iron anklets such as this are known from other Meroitic sites and can be divided into two forms: those that are thick and heavy (Type 5), and those that are thin and light (Type 6). Typically, neither is decorated but some Type 5 examples with incised terminals are known from Nag el-Arab and Nag Shayeg (Catalan 1963, 33, fig. 20.10-11; Pellicer and Llongueras 1965, 138, fig. 32.3). Designs are simpler than those appearing on copper-alloy anklets, but still rely on geometric motifs (Figure 7.R-S).

It is significant that sites where iron anklets have been recorded seldom produce copper-alloy examples (Figure 9). Missiminia, for example, produced 12 pairs of iron anklets but just one pair of copper-alloy. Proportionally high numbers of iron anklets are also recorded at Soleb, Jebel Moya and Karanog, the only copper-alloy example from these sites being an atypical wire object from Karanog G.597 (Appendix B). Conversely, Faras, which evidences the greatest concentration of copper-alloy anklets of any known Meroitic site, produced just one iron anklet. In this regard, Nag el-Arab and Nag Shayeg are exceptional for yielding approximately equal numbers of copper-alloy and iron anklets. Otherwise, there is a general trend towards iron south of the 2nd Cataract.

Function

There can be little doubt that these anklets were intended to be worn on the lower leg. Most examples from Faras were recovered *in situ* around the fibula and tibia of the interment (Figure 10). Regardless of material or type, similar conditions are recorded at other sites. Indeed, the only anklets that were not associated with the lower leg are those that came from disturbed contexts.[4]

The question of whether anklets were worn in life, and were not simply funerary objects, is more troublesome. The immense weight of many of the Type 1 examples would inhibit movement, problematising their day-to-day use. Griffith (1925, 59) suggested that this was a deliberate measure to

[3] Appendix B: Aniba (Senessra), Argin (Nag el-Arab), Argin (Nag Shayeg), Gemai (5-X-40), Kerma (South), Missiminia (2-V-20), Qustul (Cemetery Q), Sedeinga (Sector II), Serra (Site 25), Wadi es-Sebua (Cemetery 150). The anklets found at Aniba (South) and Semna may also be of this type.

[4] For example, Appendix A, G.158, 186, 315, 317.

Figure 8. Copper-alloy anklets (Type 2) from Faras. A) Metropolitan Museum of Art, New York (Gift of Oxford University Expedition to Nubia, 1926). Reproduced under Creative Commons Zero. B) Photograph by H. C. Bishop-Wright. Reproduced with permission of The Trustees of the British Museum.

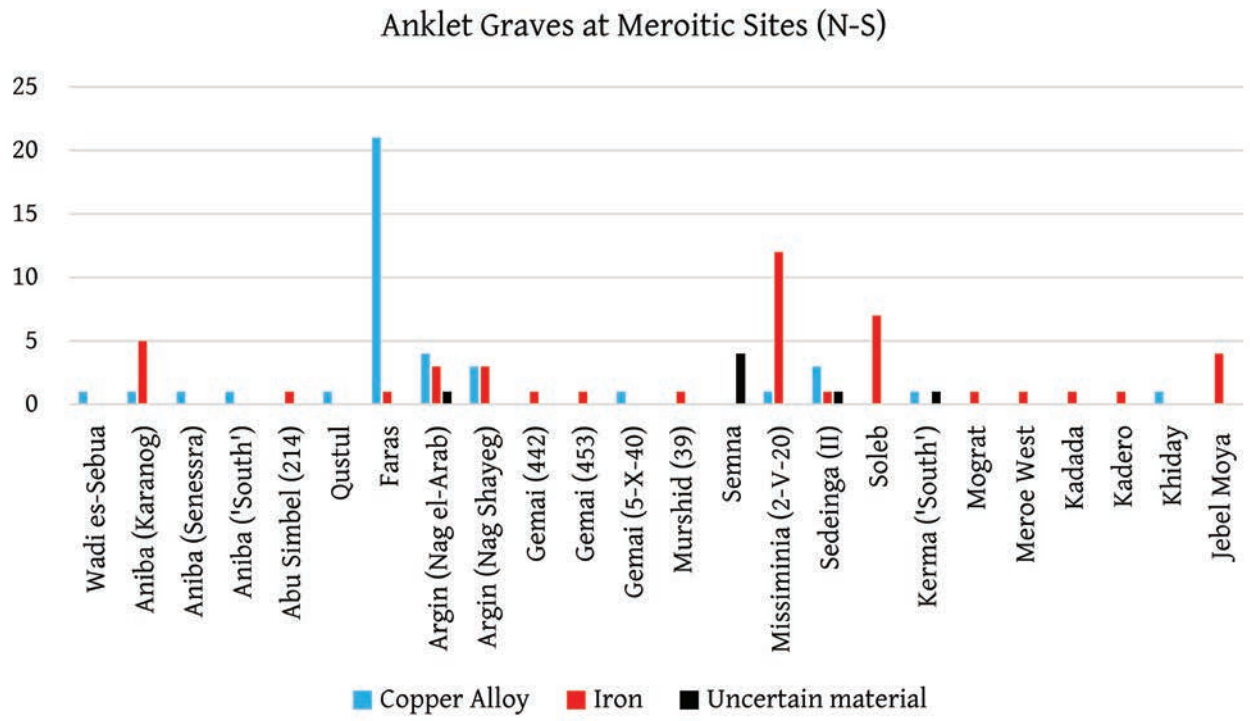

Figure 9. Chart showing the distribution of copper-alloy and iron anklets on Meroitic sites across Kush. For the data, see Appendices A-B. © H. C. Bishop-Wright.

encumber the (female) wearer to the extent that their activities were restricted to the domestic ('home-keeping') sphere. Clearly reflecting contemporary attitudes to women, the basic assumption that anklets *were* worn, and *were* predominantly female objects, is nevertheless supported by wider evidence.

Apart from a short palaeopathological study of teeth that was conducted in the field, no osteoarchaeological analysis was completed at Faras (Ruffer 1921, 156-165). Hence, the proposed association between anklets and female burials was largely speculative and, owing to the loss of all the human remains from the Meroitic cemetery, there is no prospect of rectifying this.[5] However, other excavations at Meroitic cemeteries have positively identified anklets with female burials (Catalan 1963, 91; Vila 1984, 559; Janot and Cartier 2021, 113). Even in multi-occupant graves with both male and female interments, it is always the female burial that is associated with metal anklets (Giorgini 1971, 351, M.8; Pellicer and Llongueras 1965, 128, G.568). Griffith's assumption that they were primarily feminine objects is thus confirmed.[6]

Regarding the use of anklets, the ovoid marks on the inside face of several examples might be signs of wear. If this is the case, and they were not merely products of the casting process, it would indicate prolonged use that contradicts any notion they were merely funerary objects. The traces of textile might also be the remains of padding intended to alleviate discomfort when worn. For this to be true, the entire anklet must have been wrapped as, where fabric is still discernible, it adheres to both the inside and outside faces. This would conceal the decoration and attenuate the aesthetic quality of the copper-alloy, counteracting the role these objects must have had as conspicuous expressions of status and wealth. Thus, it is more likely that the textile is simply the remains of funerary shrouds used to cover the interred or, perhaps, individually wrap the anklets prior to their burial (Yvanez 2012, 341-344; 2016; Janot and Cartier

[5] An unfortunate misunderstanding with the Nubian constabulary *c.* 1912 resulted in all the human remains being thrown into the Nile. See Griffith 1925, 80.

[6] Consideration of the nuances between anklets, gender, and age lies beyond the scope of this paper. For a thoughtful discussion of this issue focussing on 13th–12th century BC burials at Tell es-Sa'idiyeh (Jordan), see Green 2007.

Figure 10. Faras Meroitic Cemetery, G.194. Reproduced with permission of the Griffith Institute, University of Oxford.

2021, 111; Francigny 2021, 601).

Unless it was the practice to insert a protective layer underneath the anklet, possibly a greave, the proposed use-wear marks must have been caused by prolonged abrasion against the ankle bones. This could not have been a pleasant process and, considering their weight and doubt over how easily they could have been removed, it invites the possibility that they were associated with servitude (cf. Green 2007, 295). Here, ethnographic parallel with the Ovambo peoples of 19th century Ovamboland (northern Namibia and parts of southern Angola) is instructive.

It has recently been argued by Maritz (2019) that penannular copper rings (*manillas*) acquired by the Ovambo peoples from Portuguese ivory traders *c.* 1834-1850 were redeployed locally for use in slavery and were not simply objects of currency that were subsequently used for personal adornment. Weighing *c.* 800-3600g each, they were placed on the ankles of female captives acquired through raiding, with the intention of restraining them into domestic servitude. Maritz (2019, 16-17) discusses this in detail, but the situation is neatly summarised by the Swedish traveller Charles John Andersson (1827-1867), who visited the Ondonga Kingdom of Ovamboland in the mid 19th century (Andersson 1882, 218-219):

> 'On my first visit to Ondonga [...] it was customary for the fair sex to wear, as ornaments, heavy copper rings about the ankles. Now this fashion is altogether dispensed with, and the rings in question are used for a very different purpose, viz., to prevent servants and slaves, if suspected of the intention of running away, from carrying out their purpose; for when several of the rings are attached to the legs, which renders even the process of walking somewhat difficult, it is next to impossible for them to effect their escape.'

It is possible that anklets from Meroitic sites were employed for a similar purpose as the *manillas* of the Ovambo, but a primary function as jewellery is still likely.[7] Anklets (*kholkhal*), both solid and hollow, are worn throughout present-day Sudan and Egypt (Eisa 1999, 56; Fahmy 2007, 34, 56). In the early 20th century, iron examples that were cupped on their outer faces to contain a pellet that tinkled with movement were also popular among Nuer and Dinka women in what is now South Sudan (Phillips 1930, 16). Anklets are also depicted on the funerary chapels at Begrawiya North and South, where they are commonly associated

[7] For a possible reference to anklets as shackles in 6th century BC Kush, see Herodotus 3.23: '... the king led them to a prison where all the men were bound with fetters of gold. Among these Ethiopians there is nothing so scarce and so precious as bronze.'

Figure 11. Queen with cuff-like anklets. Chapel of Beg. S. 4, north wall. Photographed 2018. © H. C. Bishop-

with female figures.[8] Here, two forms are present: the cuff-like Type 4 anklets (Figure 11) analogous to those excavated at Al Khiday (Usai *et al.* 2014) and, more commonly, the rounded Type 1 form that is attested in Lower Nubia (Figure 12).

Considering that anklets are depicted in the Meroe funerary chapels, that most examples were recovered *in situ* around the ankle bones of interments, the ethnographic parallels, and the possible use-wear marks, it is concluded that they were worn in life as objects of personal adornment. This does not preclude the possibility that they were also connected with servitude and, perhaps, had a function as 'currency' or stored wealth. Pairs of Type 1 anklets usually equate to >2kg of solid copper-alloy – a considerable quantity of refined metal. There is nevertheless a temptation to view anklet graves as poor, since they seldom contain other objects (cf. Vila 1984, 569). This is a mistake. In terms of material wealth, they are amongst the richest burials in Meroitic cemeteries.

Chronology I: anklets at Faras

Turning to the issue of chronology, it is necessary to review the evidence from Faras (Appendix A). Seventeen graves yielded pairs of Type 1 anklets. Excluding two that were destroyed prior to Griffith's excavations (385a/570), they were all axial chambers oriented SE-NW with the chambers on the NW side and the entrance on the SE (Figure 17). Where recorded, interments were extended on their backs, with their heads to the NW. This aligns with standard Meroitic burial orientation in Nubia and was the norm at Faras throughout the cemetery's use-life (Francigny 2016, 148).

The only atypical aspect of these graves was that the chambers opened on the SE side, meaning that the burial was inserted headfirst with its feet at the entrance (Figure 10). Of the 516 axial chambers recorded, only 111 were orientated this way. The usual practice, regardless of grave type, was to have the entrance to the chamber on the NW side. Thus, most burials were arranged with their heads at the opening. Furthermore, constituting just 27% of graves with diagnostic substructures, axial chambers were not dominant at Faras. The most numerous grave type, standard by the 1st century AD, was the brick-lined rectangular chamber.

Type 1 anklet graves therefore fall within a minority category that, considering both structure and orientation, constitutes <6% of graves at Faras. It is also significant that graves of this type were frequently

[8] Beg. S.4, north Wall (seated female); Beg. N.2, south wall (Isis, behind throne); Beg. N.8, north wall (female with sistrum); Beg. N.8, south wall (female, approaching rear of throne); Beg. N.10, south wall (female, approaching rear of throne); Beg. N.20, north wall (figure behind Isis and king?); Beg. N. 36, north wall (seated king), south wall (seated king). Perhaps also Beg. N.11, south pylon (on ankles of Horus); Bar. 5, north wall (seated king with bow). See Chapman and Dunham 1952, pl. 3a, 5c-d, 6a, 7b, 9, 15b, 20b.

Figure 12. Female figure with rounded anklets (left). Chapel of Beg. N. 8, north wall. Photographed 2018. © J. Yellin.

cut by later substructures dating from the 1st century BC to the 3rd century AD.[9] No SE-opening axial chamber, however, was ever recorded as cutting another grave. This suggests that they were constructed early in the site's development, when space was not an issue and the danger of encroaching on pre-existing graves was minimal. More generally, the type is associated with early Meroitic remains at Qustul Cemetery Q and Amir Abdallah (Bishop-Wright 2023, 234; Williams 1991a, 23; Fernández 1984, 53-54). Indeed, its use extends back to the Napatan period when it was frequently employed at both Sanam and Missiminia 2-V-6 (Griffith 1923, 76-77; Vila 1980, 25-26; 1982a, 110).

Leaving structure aside, Type 1 anklet graves usually contained no further objects. This is consistent across other sites and is the primary reason why they have presented such an issue to dating. It is true that G.73, 133 and 266 at Faras yielded 'scraps of thick glass', two arrowheads and a hand-made pottery cup, but these objects all came from disturbed contexts dissociated from the anklets (Appendix A). Thus, even if they could be located in present-day collections and shown to be chronologically diagnostic, they could not be used for dating.[10] The only exceptions are G.194 and 582, which did contain other *in situ* objects.

G.194 yielded a copper-alloy Achaemenid bowl (Figures 10, 13, 15.A), a hand-made pottery censer (Figures 10, 15.B), and a necklace of blue-white marbled glass cylinder beads strung with oblate rings of a vitreous material (Figure 14). The early dating of Achaemenid bowls at Faras has recently been discussed, but some repetition is necessary (cf. Bishop-Wright 2023, 237-240). These bowls correspond to a long-lived form that is present in Egypt from the Persian through to the early Ptolemaic period (cf. Strong 1966, 99; Dumbrell 1971, 35-36). It is possible that the shape came to be reproduced in Meroitic workshops, perhaps extending its production in Kush into the 1st century BC but, in Egypt, it ceases to appear from the early Ptolemaic period. Given Faras' proximity to the Egyptian frontier and the uncertain extent of Meroitic 'bronze' working, it is suggested that all the Faras examples be regarded as Egyptian imports and command dates no later than the 3rd century BC.

[9] Appendix A: G.133, 186

[10] For issues associated with the retrospective study of Griffith's excavations at Faras, particularly the haphazard dissemination of objects, see Francigny 2007; Bishop-Wright 2022, 90.

Figure 13. Copper-alloy Achaemenid bowl from Faras G.194. Photograph by H. C. Bishop-Wright. Reproduced with permission of the Ashmolean Museum, University of Oxford.

Figure 14. Bead necklace from Faras G.194. Not to scale. Photograph by H. C. Bishop-Wright. Reproduced with permission of the Ashmolean Museum, University of Oxford.

The censer in G.194 would also seem to be early. It is without *comparanda* in Lower Nubia, but a close analogue is published from Napatan Sanam (Griffith 1923, pl. XVI; Lohwasser 2010, 58-59, pl. 1, fig. 32). Similar vessels with open-work bases are also known from late-Napatan and early-Meroitic tombs at Begrawiya West and South, and Jebel Barkal.[11] These have been collated and discussed by Zach (1993), who suggests that they *might* be connected with a specific ethnic group that settled around Meroe *c*.5th–2nd century BC. Regardless, they would seem to represent a Kushite, as opposed to Egyptian, form that is most clearly associated with the early Meroitic period (Zach 1993, 437-443).

The necklace from G.194 possesses no qualities that preclude a similarly early date. Marbled-glass beads were manufactured in the Hellenistic period and the oblate rings have parallels from a late Napatan or early Meroitic grave at Sedeinga (Lankton 2003, 55-56; Rilly and Francigny 2013, 63-64; Then-Obłuska 2015, fig. 3.c5; Then-Obłuska and Wagner 2019, 35, pl. 28.1). Thus, every feature of G.194 – from its structure to its assemblage – indicates an early Meroitic, possibly even a late Napatan, grave. There is no indication in Griffith's field records that it was reused by the anklet burial. Indeed, there is no indication that *any* of the graves yielding Type 1 anklets at Faras were reused (*contra* Vila 1982b, 192).

Grave 582, in addition to its anklets, contained a copper-alloy bowl (Figure 15.D) and a toe-ring. The ring was simply constructed from copper-alloy ribbon that was bent into the form of a circle with overlapping terminals. It is not chronologically diagnostic and similar examples were present in graves throughout the use-life of the cemetery. The bowl is not a recognisably imported shape and cannot be used to suggest a specific date. Copper-alloy bowls of approximately hemispherical form are present at Faras across all phases and are seldom chronologically diagnostic. Nevertheless, the example in G.582 is unique for its depth and has some parallel with Napatan bronzes from Sanam (Griffith 1923, pl. XVI.1a; 1925, 59). It is, therefore, *suggestive* of an early date, particularly when viewed in conjunction with the censer from G.194.

[11] Dunham 1957, 42-43 (Bar. 15); 1963, 74 (Beg. W. 348), 248 (Beg. W. 258), 255 (Beg. W. 309), 422 (Beg. S. 97).

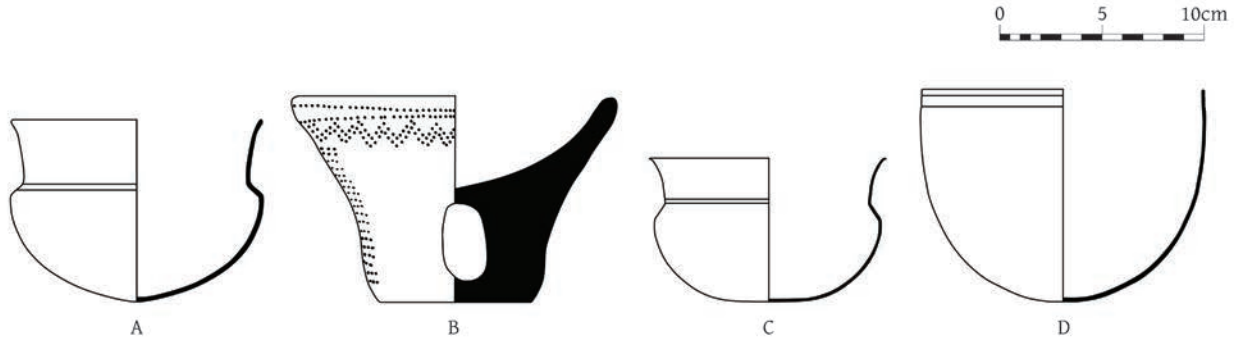

Figure 15. Bronze bowls and a pottery censer from anklet graves at Faras Meroitic Cemetery. © H. C. Bishop-Wright.

In addition to the 17 graves containing Type 1 anklets, four further graves yielded anklets of Types 2, 3 and 6. A pair of Type 2 anklets with overlapping ends came from G.155, which was little more than a child's niche cut into the *dromos* of an empty SE-entering axial chamber (Figure 8.A). The only other objects in G.155 were two necklaces of blue beads and cowrie shells that, owing to a lack of documentation, cannot be commented on further. A single Type 2 anklet was also recovered from disturbed earth (*radim*) 'near' G.158. It adds nothing to this consideration of chronology. A final pair were recorded from G.234, *in situ* with another Achaemenid bowl (Figures 8.B, 15.C). This was also an axial chamber that entered from the SE side via a sloping *dromos*. The burial was that of a child and, considering the bowl and grave structure, its anklets may be diminutive versions of Type 1.

The final two metal anklets from Faras were recovered from G.1203. This was a child burial containing an assortment of vessels, the most chronologically significant of which was a blown-glass *aryballos* of a type that does not appear in Egypt until the 2nd century AD (Shinnie 1967, pl. 82; Bishop-Wright 2024, 31). *In situ* on the right leg was a single copper-wire anklet (Type 3) and a single iron anklet (Type 5/6). Beyond the most basic analogy, neither the form nor the context of these objects is in common with any other anklets from Faras. Hence, it is suggested that they belong to a different tradition and period.

In sum, an early date for Type 1 anklets at Faras, perhaps 3rd century BC, is recommended by the consistent structure of their graves and the objects associated with them. Study of Griffith's field records presents no evidence that these graves were reused and Griffith's original conclusion that they correspond to the first use of the cemetery is maintained. The slimmer Type 2 form would also seem to belong to this period, perhaps representing objects made specifically for children. The only iron anklet from the site, meanwhile, came from a grave of markedly different character and is unrelated to the thicker copper-alloy examples.

Chronology II: anklets beyond Faras

Appendix B presents all the evidence for iron and copper-alloy anklets published from Meroitic sites beyond Faras. The purpose of this section is not to exhaustively analyse this data, but to ascertain whether any site contradicts the preliminary conclusions that Type 1 anklets are early Meroitic and that iron anklets correspond to a different tradition.

Vila (1982b, 177-178; 1984, 568) observed that, regardless of type or material, anklet graves on Meroitic sites were typically associated with axial chambers and seldom contained any other objects. Regarding grave structure, four exceptions to this are published from Abu Simbel (G.73), Nag Shayeg (G.68/131) and Qustul (G.235), but most anklet graves are, indeed, E/SE-opening axial chambers like those at Faras. Thus, Vila's first assertion is maintained.

A survey of the wider evidence also demonstrates that small assemblages are a universal characteristic of anklet graves. Fragments of wheel-made or hand-made pottery were occasionally recorded with Type 1 anklets, but they are restricted to four graves at Argin.[12] Of these, Nag Shayeg G.131 is the most significant as it contained fragments of *c.* 15 wheel-made vessels, contradicting the general impression that Type 1 anklet graves were 'aceramic'. G.131 is exceptional for presenting the only instance where a Type 1 copper-alloy anklet was found alongside a Type 5/6 iron anklet. Otherwise, these forms are never recorded together, and it is rare that Type 1 examples do not appear as matching pairs.[13] It is therefore plausible that the copper-alloy anklet in Nag Shayeg G.131 was pillaged and reused, explaining its divergent assemblage. No other material evidence is forthcoming from a wider survey of sites to dispute the early dating of Type 1 anklets recommended at Faras.

Vila (1982, 193; 1984, 569) also asserted that all anklet graves represent instances of post-Meroitic reuse. While unsupported at Faras, limited evidence for reuse is apparent elsewhere. Type 1 anklet graves with multiple occupants are attested around Argin, indicating that the graves were reopened over an extended period.[14] However, it cannot be said from the published evidence that the anklet burials represent the latest phase of these graves. Indeed, in both Nag el-Arab G.567 and Nag Shayeg G.68, they lie underneath later burials and appear to be the original occupants.

Sedeinga II T 40 may also have been reused: the interment was found on a layer of wind-blown sand, indicating that the grave had been open prior to the introduction of the body (Janot and Cartier 2021, 112). This suggests the possibility that the grave structure predates the anklet burial and that its original occupant was removed. However, little contextual information is provided in the publication and no material corresponding to the hypothetical original burial was found (Janot and Cartier 2021, 111-122). Hence, if this grave was reused, the dates of the original interment and the installation of the anklet burial are impossible to determine.

A final instance of reuse is suggested by Serra G.97 (Appendix B). Here, the Type 1 anklet burial appears to be the latest addition in a multi-phase substructure comprising two graves. Aside from the anklets, fragments of textile and the remains of a wooden coffin, no objects were recovered. Hence, the situation is much the same as at Sedeinga II T 40 – it is impossible to comment on absolute chronology. Both graves might be explained by a limited amount of reuse amongst the 'anklet people' themselves, or by the suggestion that they represent instances when Type 1 anklets were plundered and reused in later burials.

Turning to the iron anklets, the conclusion from Faras that these objects were used in Nubia during the early centuries AD is substantiated. Grave 73 at Abu Simbel yielded seven Type 5-6 anklets as part of a large assemblage that included a blown-glass *unguentarium* of Roman date (Appendix B). Meanwhile, G.572 at Karanog contained a single Type 6 anklet *in situ* with an imported Roman *amphora* (Appendix B). These graves certainly recommend a mid-late Meroitic date, but to offer meaningful comment on the chronology of iron anklets it is necessary to consider Vila's analysis of Missiminia 2-V-20.

Vila (1982, 177-178, 187-193; 1984) presents a compelling case for the iron anklet graves at Missiminia representing instances of reuse. His argument comprises observations on the relative frequency of intact single-occupancy anklet burials, their cramped arrangement in the chambers, the presence of sediment underneath several burials, and the suggestion that the blockings of some graves had been reconstructed after partial collapse of the chambers. Based on the evidence presented, it is difficult to challenge this analysis. However, there is no material in the Missiminia anklet graves to support any absolute dates. Irrespective of their proposed reuse, the conclusion that they were post-Meroitic is merely interpretation

[12] Appendix B: Nag el-Arab G.567, G.585; Nag Shayeg G.87, G.131.
[13] Cf. Appendix B: Nag Shayeg G.87; Serra, Site 25, G.97.
[14] Appendix B: Nag el-Arab G.567, G. 576, G.585, G.587; Nag Shayeg G.68, G. 87, G.131.

supported by limited radiocarbon analysis recommending 2-V-20 generally as a late Meroitic cemetery (Vila 1982b, 192).

It should be stressed that 2-V-20 was the Meroitic zone of a multi-period necropolis that included extensive Napatan areas (2-V-6). Most of the site was also overlain by X-Group and Christian graves (Vila 1980, 5). Its chronology is, therefore, complex. Indeed, as suggested by Leclant (1975, 229 cf. Vila 1980, 11), some Napatan graves may have been reused in the Meroitic period. Thus, instances of reuse at 2-V-20 are not necessarily to be equated with post-Meroitic activity, particularly as less than 70.0m separated the main cluster of Napatan graves from the Meroitic area (Vila 1980, fig. 4). It should also be noted that the single pair of copper-alloy anklets from this site are not of the same 'massive' form with semi-circular sections present at Faras. They are slimmer and more alike to the rounded examples from Sedeinga (Figure 4.G-H).

Vila's core analysis of the Missiminia graves is not disputed here. However, the conclusion that the late dating of iron anklets can also be applied to Type 1 copper-alloy anklets is difficult to sustain against the wider evidence, particularly that from Faras. Furthermore, the underlying assumption that these two quite different forms correspond to the same group is problematic. As previously stated, there is a clear geographic division between sites with iron anklets and sites with copper-alloy, in only one instance are they found together in the same burial and, when other objects were included in the assemblages, Type 1 copper-alloy anklets are found with late Napatan or early Meroitic material, whereas iron anklets appear with imported objects of Roman date. The final section of this paper attempts to reconcile this contradiction and considers whether Vila's notion of an 'Anklet People' truly reflects the archaeological record.

Reconciling the evidence: anklet people or anklet *peoples*?

The fulcrum of Vila's argument that iron anklets at Missiminia are post-Meroitic is the conclusion that they reused Meroitic graves. The question is whether this argument can justifiably be applied to other sites and used to dispute the proposed high date of the Type 1 copper-alloy anklets across Nubia. Based on the evidence from Faras, it cannot. Hence, the 3rd century BC date of Type 1 anklet graves at Faras and other sites should be maintained.

The few objects found *in situ* with Type 1 anklets at Faras have been presented, discussed and approximately dated. They are, without exception, late Napatan or early Meroitic. If these graves were reused in the post-Meroitic period as Vila argues, it is unlikely that *only* early objects would be present. A response to this could be that the anklet burials simply redeployed objects that were already in the chambers of the graves and, since they exclusively reused the earliest graves at Faras, the objects too are early. However, this merely serves to emphasise a more serious flaw in the reuse hypothesis.

According to Vila (1982b, 193; 1984, 169-170), the hypothetical *gens à anneaux* arrived in Nubia and began to reuse graves at Meroitic cemeteries between the end of the Meroitic period and the commencement of the X-Group phase. This equates to the 4th century AD. By this point, the Meroitic cemetery at Faras was fully developed and comprised over 2000 graves densely packed across an area of *c.* 200m^2 (cf. Figure 16). There were at least four different types of grave substructure present, of which the most common was the brick-lined rectangular pit that constituted 53% of the cemetery (cf. Griffith 1924, 144-145). Since this form gained in popularity from the 1st century AD, it is weighted towards the later phases. Hence, by the 4th century AD, it would have been the most numerous, the least denuded and, as it was often combined with a quadrangular superstructure, the easiest to locate from the surface. In short, these graves were prime for reuse, yet not a single example contained a Type 1 anklet burial. Instead, the anklet burials were exclusively placed in SE-entering axial chambers that made up <6% of the total grave count.

Regardless of whether these axial chambers were reused, they are clearly associated with early objects – Achaemenid bowls, lotiform beakers, stemmed mirrors – that support both their assignation to the 3rd century BC and the wider argument that they constitute the inaugural phase of the cemetery (Griffith 1924, pl. XXXII.iiic, iva-c, LV.21; Bishop-Wright 2023, 237-241). They were also clustered towards the western half of the site, where the concentration of graves is high, and their superstructures, if they ever had them, would have been denuded by the 4th century AD (Figure 16).[15] Thus, it is extremely unlikely that an incoming group would have been able to identify these graves with enough accuracy to exclusively reuse *them* at the expense of all else. The improbability of this scenario logically precludes the argument that Type 1 anklet graves at Faras were the product of 4th century AD reuse.

The question of grave structure was not an issue for Vila's (1982b, 10) analysis at Missiminia where 78.8% of graves were axial chambers. Here, the hypothetical 4th century-AD anklet group simply reused the most numerous grave type and Vila's dating for the iron anklets can be maintained. The only way that this reuse model could be sustained for the copper-alloy anklets at Faras is if the incoming anklet group arrived much earlier in the site's chronology, when Faras was less developed and SE-entering axial chambers still dominated. This could only have been in the 3rd century BC, potentially earlier if any of these graves were the remnants of a Napatan presence.[16] Thus, even if the reuse argument is maintained, an early date for the anklet graves is still preferable.

Having dismissed the low chronology for the Type 1 anklet graves at Faras, the high chronology must be sustained. Owing to the analogy between Type 1 anklets across Nubia, it is logical to extend this to other sites presented in Appendix B. It only remains to reconcile this conclusion with Vila's analysis of iron anklets at Missiminia.

The simplest solution to the contradicting dates of iron and copper-alloy anklets, is to assert that they belonged to chronologically separate periods (cf. Fernández 1983, 662; Gerharz 1994, 241). This model aligns with the observation that these anklet types have different distributions across Kush (Figure 9). Furthermore, inserting a chronological division does not preclude the possibility that they were associated with 'Anklet Peoples' (pl.). Anklets can still be viewed as markers of a long-term Nubian tradition that even continued into the X-Group phase, when silver examples were used at Firka and Ballana (Emery 1938, 190, pl. 39.B; Kirwan 1939, 11, pl. IX.2). This maintains Vila's hypothesis that the *gens à anneaux* represents a group that is culturally differentiated from Meroe, but it modifies it to allow for multiple variants of 'Anklet Peoples' across a broader chronology.

The notion of 'Anklet Peoples' also aligns with the hypothesis that the first graves at Faras, of which the Type 1 anklets belong, correspond to an independent group that moved into the Lower Nubian river valley in the early 3rd century BC (Bishop-Wright 2023, 241). Representing a short-lived localism, these anklets then fell out of use at the beginning of the 2nd century BC, when Meroe became politically active in the territory and graves at Faras adopted standard Meroitic funerary practices (Bishop-Wright 2022, 105-106). If Vila's late dating of the iron anklets from Missiminia is maintained, it was not for another five centuries that anklet graves reappeared in 4th century AD Nubia, immediately after the collapse of the Meroitic kingdom. In a modified form with leonine terminals, silver anklets then continued into the X-Group period. Thus, three phases of anklet use, each associated with *les gens à anneaux*, emerge in Nubia: an early phase represented by Type 1 copper-alloy examples (3rd century BC), a later phase represented

[15] No superstructures are recorded in Griffith's field notes.

[16] Verwers (1961, 23-28) published some NK graves from Faras that Williams (1990, 34) re-dated to the Napatan period. Otherwise, Napata is the only major cultural phase across A-Group – Christian Nubia that is not represented at the site. It is possible that a limited number of empty graves in the 'Meroitic' cemetery, likely SE-entering axial chambers such as those of Sanam and Missiminia 2-V-6, represent a minor Napatan presence that has been obscured by the Meroitic phase.

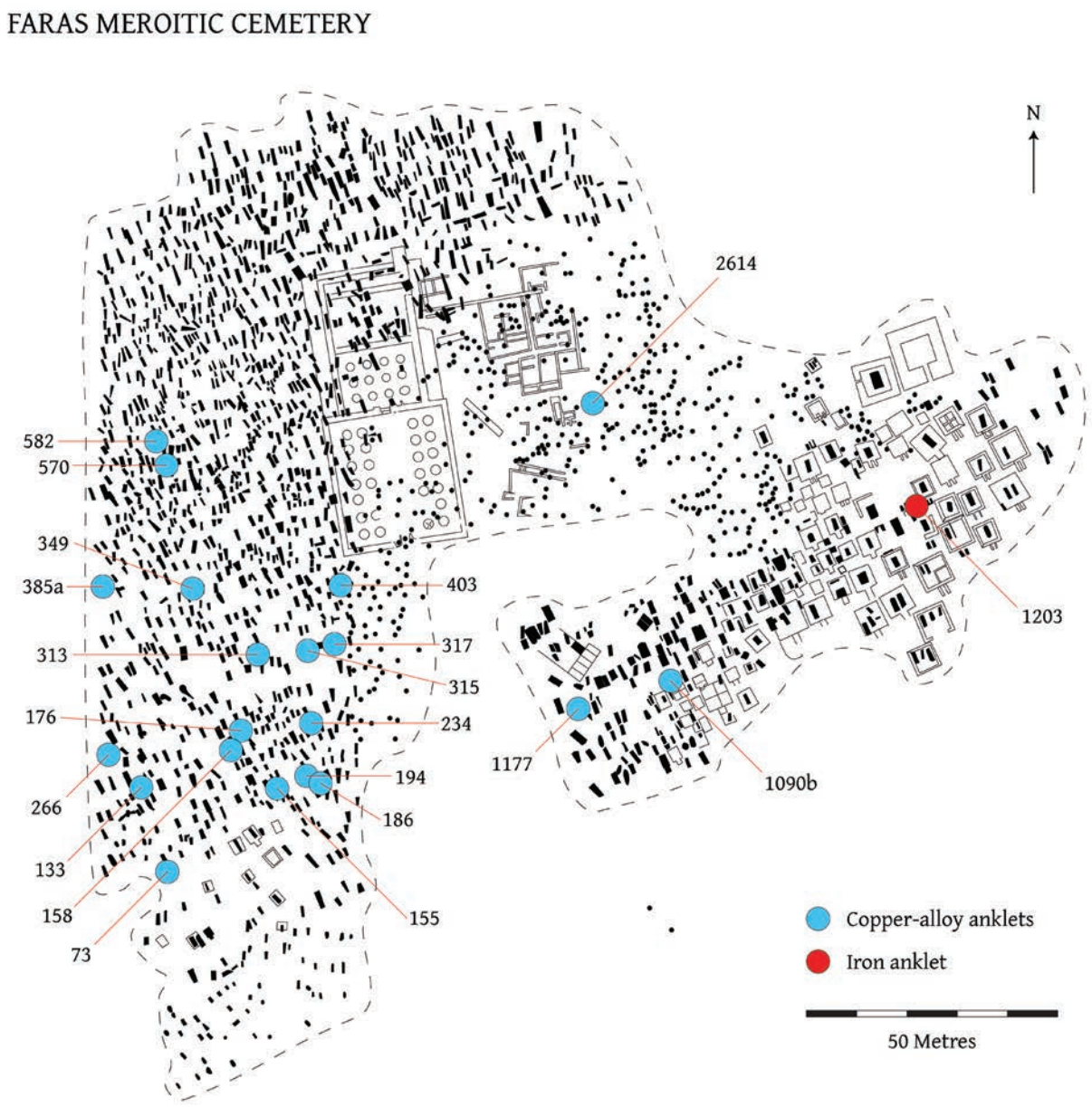

Figure 16. Plan of Faras Meroitic Cemetery showing the location of anklet graves © H.C. Bishop-Wright.

by Type 5 iron examples (4th century AD), and a still later phase represented by the limited appearance of silver examples (X-Group).

Summary and next steps

The primary concern of this paper was chronology and the presentation of unpublished material (Appendix A). It concludes that a 3rd century BC date for the Type 1 copper-alloy anklets best reflects the evidence, thus supporting the idea that these objects were associated with the inaugural phase of the Faras Meroitic Cemetery (Bishop-Wright 2023, 237-239). It also argues that Type 1 anklets represent a different tradition to the iron examples at Missiminia, but that both correspond to independent groups colloquially termed 'Anklet Peoples'.

Regarding these Anklet Peoples, some progress has been made in considering their origin. Based on the present evidence, it would seem that they were associated with non-Meroitic groups that moved into the Nubian river valley when Meroe's political control of the region was weak, first in the 3rd century BC and, later, in the 4th century AD. This hypothesis aligns with the distribution of Type 1 anklets, which are only confirmed on sites between Kerma and Wadi es-Sebua. However, considering their apparent use on

funerary chapels at Begrawiya North and South, and the southern-Meroitic link posited by the censer in Faras G.194, the possibility remains that Type 1 anklets could belong to a broader Kushite tradition. The concentration of archaeological work in Lower Nubia may have skewed the available data to project the appearance that these objects are exclusively northern. Hence, while their association with Lower Nubia certainly reflects current evidence, future finds from the Butana could necessitate revision.

Beyond the consideration of form, function, chronology and cultural associations, the question of anklet production has scarcely been addressed. To explore this satisfactorily, it is necessary to engage with scientific methods that lie beyond the scope of this paper. Archaeometry, therefore, constitutes the 'next step' in the study of metal anklets from Meroitic Kush.

A variety of analytical techniques to further this study are available. Microscopic examination could confirm or refute the presence of use-wear marks and shed light on production techniques. X-ray fluorescence (XRF) or mass spectrometry (ICP MS) could also be used to determine the precise alloy of copper, perhaps indicating where these anklets, or at least their raw materials, came from (cf. Rademakers *et al.* 2022). There is also the possibility that radiocarbon dating could be carried out on traces of textile still adhering to several examples from Faras. Owing to the mineralised state of the fabric, the efficacy of this is uncertain, but it certainly warrants further investigation (Margariti *et al.* 2023, 7). Finally, while no human remains survived from Faras, osteoarchaeological material was preserved from Missiminia and sent to Limoges for study by Ginette Billy (1985, 9). This material included remains from eight anklet graves and, if located, could be submitted for radiocarbon dating to test Vila's conclusion that the iron anklets are, indeed, post-Meroitic.[17]

Acknowledgments

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Appendix A: Anklet Graves at Faras Meroitic Cemetery[18]

Faras, G.73 (unpublished)

Structure: SE-NW axial chamber (Figure 17). Entered from the SE via a sloping *dromos*. The chamber was offset on the NE side and partly lined with stone slabs on the SW side and at the foot.

Burial: adult, intact, extended on back, head NW, arms to sides, hands on pelvis.

Assemblage:

- Pair of Type 1 anklets (Figure 4.B). Copper alloy. Semi-circular in section. No decoration visible. *In situ* on ankles. Diam. *c.* 100mm, h. *c* .34mm. Brighton and Hove Museums, 281481.1-2.
- Outside the blocking of the chamber, in the *dromos*, Griffith noted 'scraps of thick and very decayed glass'. Whereabouts unknown.

Documentation: GIFA photograph nos 175-176; field card 1/73.

[17] See Billy 1985, 96-100: 2-V-20 G.65, 116, 121, 148, 193, 320, 334, 339 cf. Appendix B.

[18] With the abbreviations: diam. = 'diameter'; h. = 'height'; wt. = 'weight'; l. = 'length'; w. = 'width'; GIFA = 'Oxford University Griffith Institute Faras Archive'. For the periodisation of Faras Meroitic Cemetery, see Bishop-Wright 2023, 235-237, fig. 6.

Faras, G.133 (unpublished)

Structure: SE-NW axial chamber (Figure 17). Entered from the SE via a sloping *dromos* with a single step. The upper portion of the *dromos* was cut by G.106, which contained late Meroitic pottery (3rd century AD; Period 3B).

Burial: adult, crushed, extended on back, head NW, arms to sides.

Assemblage:

- Pair of Type 1 anklets. Copper alloy. Semi-circular in section. Incised terminals. *In situ* on ankles. Diam. *c.* 104mm, h. *c.* 40mm, wt. *c.* 1280g (each). Ashmolean Museum, Oxford, AN1960.994.1.
- Two single-barbed arrow heads. From the *radim* (i.e. disturbed context). L. 35mm. Whereabouts unknown.

Documentation: GIFA photograph no. 217; field card 1/133.

Faras, G.155 (unpublished)

Structure: lateral chamber (Figure 17). Uncertain orientation. Cut into the *dromos* of G.120A (SE-NW axial chamber, entrance SE; no diagnostic dating material).

Burial: immature, extended on left side, knees flexed, arms to sides, hands on pelvis.

Assemblage:

- Pair of Type 2 anklets (Figure 8.A). Copper alloy. Overlapping ends. Ovoid in section. Incised terminals (Figure 7.G). *In situ* on ankles. Diam. 65/63mm, h. 20/15mm. Metropolitan Museum of Art, New York, 26.4.111a-b.
- Two strings of blue glaze beads and cowrie shells. *In situ* on neck. Ashmolean Museum, Oxford, AN1912.700-1(?).

Documentation: GIFA photograph no. 232; field card 1/155.

Faras, G.158 (published)

Structure: SE-NW rectangular pit. Brick lined and probably vaulted. Entrance at NW end.

Burial: none recorded.

Assemblage:

- Five pottery vessels (2nd-3rd century AD; Period 3A). In the chamber. For the forms, see Griffith 1924, pl. XXVI.liiib, XXIX.lxixb-c, XXIX.lxxia, XXIX.lxxiiid, XXXI.lxxxiiia.
- Single Type 2 anklet. Copper alloy. Ovoid in section. Incised terminals (Figure 7.B). In the *radim* 'near the tomb'. Diam. 55mm, h. 15mm, wt. 79g. Ashmolean Museum, Oxford, AN1912.299.

Documentation: GIFA Photograph no. 234; field card 1/158; Griffith 1925, 93.

Faras, G.176 (unpublished)

Structure: SE-NW axial chamber (Figure 17). Entered from the SE via a sloping *dromos*.

Burial: adult, disturbed, extended on back, head NW, left arm to side, left hand on pelvis, right arm displaced.

Assemblage:

- Pair of Type 1 anklets. Copper alloy. Semi-circular in section. Incised terminals (Figure 7.C). *In situ* on ankles. Diam. *c.* 86mm, h. *c.* 19mm. Staatliche Museen zu Berlin, ÄM 20981.

Documentation: GIFA photograph nos 243-244; field card 1/176.

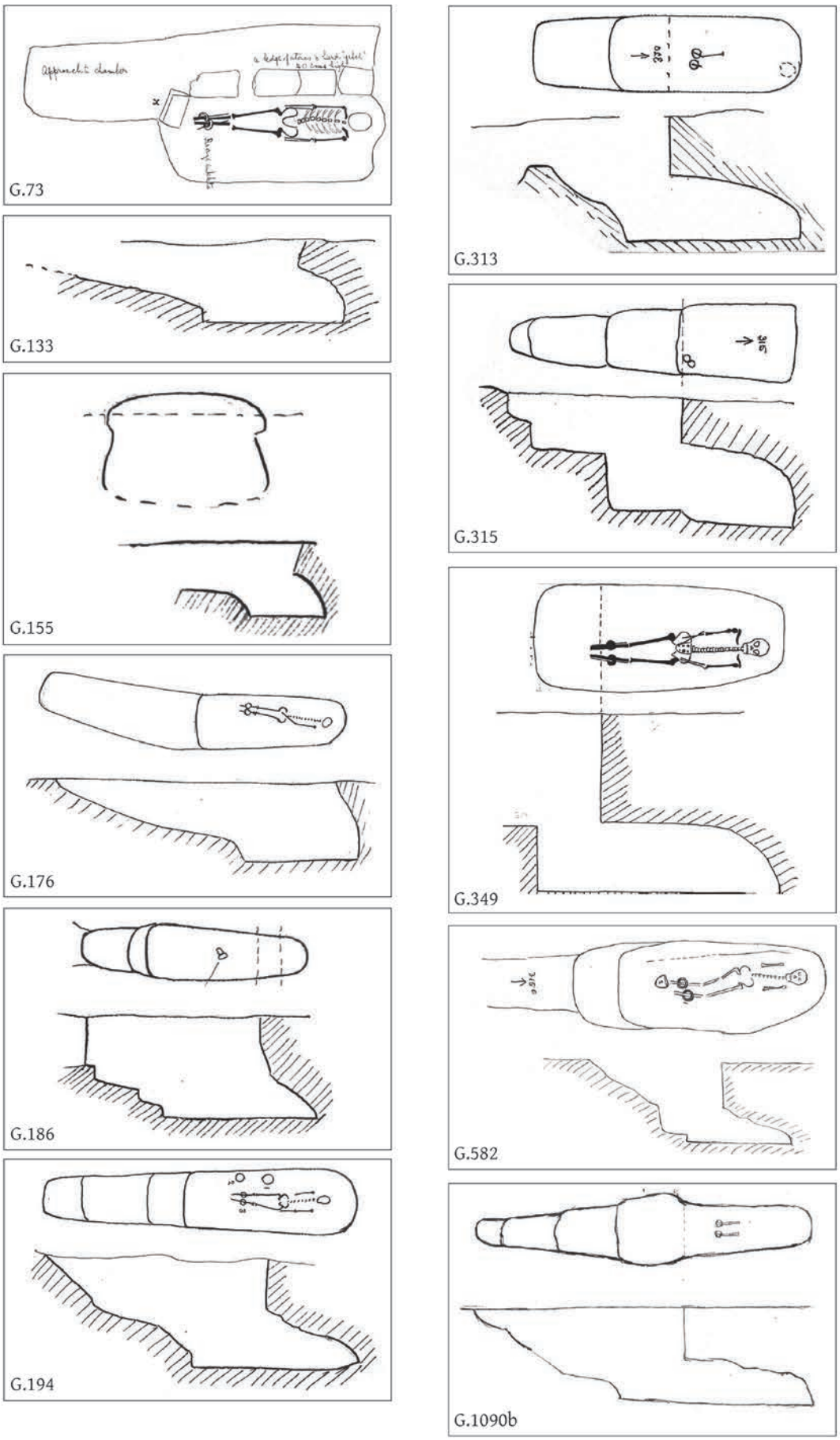

Figure 17. Sketch plans of anklet graves at Faras Meroitic Cemetery. Taken from Griffith's inked field cards. Not to scale. Reproduced with permission of the Griffith Institute, University of Oxford.

Faras, G.186 (unpublished)

Structure: SE-NW axial chamber (Figure 17). Entered from the SE via a stepped *dromos*. The *dromos* was cut by G.159, which contained late Meroitic pottery (2nd-3rd century AD; Period 3B).

Burial: none recorded.

Assemblage:

- Pair of Type 1 anklets (Figure 3.A). Copper alloy. Semi-circular in section. Incised terminals (Figure 7.G). In centre of chamber. Diam. 113/114mm, h. 42/40mm. Metropolitan Museum of Art, New York, 26.4.110a-b.

Documentation: GIFA photograph no. 250; field card 1/186.

Faras, G.194 (published)

Structure: SE-NW axial chamber (Figure 17). Entered from the SE via a sloping *dromos* (Figure 10).

Burial: adult female(?), intact, extended on back, head NW, arms to sides, hands on pelvis.

Assemblage:

- Copper-alloy 'Achaemenid bowl' (Figure 13; 15.A). On the right side of the right femur. Diam. 125mm, h. 90mm. Ashmolean Museum, Oxford, AN1912.300.
- Hand-made pottery censer with geometric relief decoration (Figure 15.B; Bishop-Wright 2023, fig. 10). To the right of the right ankle. Diam. 165mm, h. 102mm. Ashmolean Museum, Oxford, AN1912.301.
- Pair of Type 1 anklets (Figure 5.A; 6-centre). Copper alloy. Semi-circular in section. Incised terminals (Figure 7.P). *In situ* on ankles. Diam. 134/138mm, h. 44/45mm, wt. 2746/2866g. Ashmolean Museum, Oxford, AN1912.302.
- String of blue and white marbled-glass cylinder beads with vitreous ring beads (Figure 14). In the chamber. Ashmolean Museum, Oxford, AN1912.303.

Documentation: GIFA photograph nos 252, 759; field card 1/194; Griffith 1924, pl. XL.2, 6, 11, 12; 1925, 94.

Faras, G.234 (published)

Structure: SE-NW axial chamber. Entered from the SE via a stepped *dromos*.

Burial: immature, intact, extended on back, head NW, arms to sides, hands on pelvis.

Assemblage:

- Copper-alloy 'Achaemenid bowl' (Figure 15.C). On the right side of the right femur. Diam. 118mm, h. 71mm. British Museum EA51589.
- Pair of Type 2 anklets (Figure 8.B). Copper alloy. Ovoid in section. Undecorated. *In situ* on the ankles. Diam. 53/52mm, h. 10/9mm, wt. 27.3/26.5g. British Museum EA51590.

Documentation: GIFA photograph nos 260, 759; field card 1/234; Griffith 1924, pl. XL.7, 10; 1925, 94.

Faras, G.266 (published)

Structure: SE-NW axial chamber. Entered from the SE, *dromos* not recorded. Cut by G.266A, which is only recorded in the preliminary report (Griffith 1925, 95).

Burial: adult, intact, extended on back, head NW, arms to sides, hands on pelvis.

Assemblage:

- Pair of Type 1 anklets. Copper alloy. Semi-circular in section. Incised terminals (Figure 7.C). *In situ* on ankles. Diam. *c.* 115mm, h. *c.* 35mm. Musée Art & Histoire, Brussels, E.3514a-b.[19]
- A hand-made pottery cup of coarse Brown Ware, with marks of chopped straw. Slipped red on the outside and inside rim (Griffith 1924, pl. XXIX.lxxb). Recovered from the *radim*. Whereabouts unknown.

Documentation: GIFA photograph nos 268, 269, 715; field card 1/266; Griffith 1925, 95.

[19] My thanks to Dr Vincent Francigny for sharing the accession numbers of Faras objects in Brussels.

Faras, G.313 (unpublished)
Structure: SE-NW axial chamber (Figure 17). Entered from the SE via a sloping *dromos*.
Burial: heavily disturbed. Ankle bones were in place at the SE end of the chamber, and the skull was smashed at NW end.
Assemblage:
- Pair of Type 1 anklets (Figure 4.C). Copper alloy. Semi-circular in section. Traces of textile. Incised terminals (Figure 7.J). *In situ* on ankles. Diam. 135/132mm, h. 45/45mm, wt. 2050.3/2031.0g. British Museum EA51576.
- Cowrie shell 'pierced for stringing', found in the *radim*. Whereabouts unknown.

Documentation: GIFA photograph no. 277; field card 1/313.

Faras, G.315 (unpublished)
Structure: SE-NW axial chamber (Figure 17). Entered from the SE via a stepped *dromos*.
Burial: none recorded.
Assemblage:
- Pair of Type 1 anklets (Figure 4.E; 5.C). Copper alloy. Semi-circular in section. Traces of textile (now removed). Incised terminals (Figure 7.G). At SE end of chamber. Diam. 117/114mm, h. 42mm. Manchester Museum 8527a-b.

Documentation: GIFA photograph no. 278; field card 1/315.

Faras, G.317 (unpublished)
Structure: SE-NW axial chamber. Entered from the SE via a stepped *dromos*.
Burial: none recorded.
Assemblage:
- Pair of Type 1 anklets. Copper alloy. Semi-circular in section. Incised terminals (Figure 7.K). In the centre of the chamber. Diam. 126/126mm, h. 44/43mm. Staatliche Museen zu Berlin, ÄM 20980, 21728.

Documentation: GIFA field card 1/317.

Faras, G.349 (published)
Structure: SE-NW axial chamber (Figure 17). Entered from the SE. The *dromos* was destroyed by G.350, which contained no diagnostic material for dating.
Burial: adult, intact, extended on back, head NW, arms to sides, hands on pelvis.
Assemblage:
- Pair of Type 1 anklets (Figure 4.A, F). Copper alloy. Ovoid in section. Traces of textile. Incised terminals (Figure 7.C). *In situ* on ankles. Diam. 112/111mm, h. 22/21mm, wt. 892.0/943.0g. British Museum EA51577.

Documentation: GIFA photograph 766; field card 1/349; Griffith 1924, pl. XL.5; 1925, 96.

Faras, G.385a (published)
Structure: indeterminate. Completely cut away by G.385 (a brick-lined rectangular pit containing no diagnostic dating material).
Burial: ankle bones only, aligned on a NW-SE axis. Possibly the remains of an extended burial that, unusually, was aligned with its head SE and feet NW.
Assemblage:
- Pair of Type 1 anklets (Figure 6-left). Copper alloy. Ovoid in section. Traces of textile. Incised terminals (Figure 7.E). *In situ* on ankles. Diam. *c.* 123mm, h. c. 33mm. Sudan National Museum, Khartoum.

Documentation: GIFA photograph nos 295, 766, 768; field card 1/385a; Griffith 1924, pl. XL.3; 1925, 96.

Faras, G.403 (unpublished)

Structure: SE-NW axial chamber. Entered from the SE via a sloping *dromos*.

Burial: fragments, disturbed, extended on back, head NW.

Assemblage:

- Pair of Type 1 anklets (Figure 4.D; 5.B). Copper alloy. Semi-circular in section. Traces of textile. Incised terminals (Figure 7.I). *In situ* on ankles. Diam. 121/115mm, h. 40/40mm, wt. 1314.0/1369.0g. Ashmolean Museum, Oxford, AN1912.712.1-2.

Documentation: GIFA field card 1/403.

Faras, G.570 (unpublished)

Structure: indeterminate. Destroyed prior to Griffith's excavation.

Burial: disturbed, ankles only, orientated SE-NW.

Assemblage:

- Pair of Type 1 anklets. Copper alloy. Semi-circular in section. Incised terminals. *In situ* on ankles. Diam. *c.* 110mm, h. 40mm. Pitt Rivers Museum, Oxford, 1912.89.77.1-2.

Documentation: GIFA field card 1/570.

Faras, G.582 (published)

Structure: SE-NW axial chamber (Figure 17). Entered from the SE via a sloping *dromos*.

Burial: adult, extended on back, head NW, arms to sides, hands missing.

Assemblage:

- Pair of Type 1 anklets (Figure 6-right). Copper alloy. Semi-circular in section. Incised terminals (Figure 7.L). *In situ* on ankles. Diam. 115/115mm, h. 40/40mm, wt. 1227.0/1203.0g. British Museum EA51555.
- Deep copper-alloy bowl (Figure 15.D). *In situ* at right foot. Diam. 141mm, h. 105mm. British Museum EA51557.
- Toe ring of coiled copper-alloy wire. With remains of right foot. Diam. 18mm, h. 4mm. British Museum EA51556.

Documentation: GIFA photograph nos 759, 760; field card 1/582; Griffith 1924, pl. XL.4, 8, 9; 1925, 100; Bishop-Wright 2023, 240, fig. 9.

Faras, G.1090b (unpublished)

Structure: SE-NW axial chamber (Figure 17). Entered from the SE via a sloping *dromos*. This grave lay underneath the SW corner of a quadrangular superstructure (*c.* 3.0m^2) associated with G.1090, 1090d and 1090z. These latter graves contained dateable material of the 1st-2nd century AD (Period 2B) and are published by Griffith (1925, 128-130).

Burial: disturbed, leg bones only, oriented SE-NW.

Assemblage:

- Pair of Type 1 anklets. Copper alloy. Semi-circular in section. Incised terminals. *In situ* on ankles. Diam. *c.* 90mm, h. *c.* 23mm. Sudan National Museum, Khartoum, 3770(?).

Documentation: GIFA field card 1/1090b.

Faras, G.1177 (unpublished)

Structure: SE-NW axial chamber. Collapsed, but entered from the SE via a sloping *dromos*.

Burial: crushed, extended on back, head NW, arms to sides, hands on pelvis.

Assemblage:

- Pair of Type 1 anklets (Figure 3.B). Copper alloy. Semi-circular in section. Incised terminals (Figure 7.G). *In situ* on ankles. Diam. 114/110mm, h. 42/40mm. Metropolitan Museum of Art, New York, 13.125.51a-b.

Documentation: GIFA photograph 545; field card 1/1177.

Faras, G.1203 (published)
Structure: child's grave of indeterminate form. Dated to the 2nd-3rd century AD (Period 3A).
Burial: immature, intact, on side with knees flexed to the pelvis, head NW.
Assemblage:[20]
- Pottery jar (Griffith 1924, pl. XIX.xivf). At head of interment. Whereabouts unknown.
- Blown-glass aryballos. At head of interment (Shinnie 1967, pl. 82). H. 75mm, w. 80mm. Sudan National Museum, Khartoum 699.
- Fragments of another glass vessel, apparently of the same form. Whereabouts unknown.
- Copper-alloy 'feeder' cup. National Museum of Scotland, Edinburgh, A.1912.459.
- Silver wire earring. At head of interment. Whereabouts unknown.
- Blue glaze beads. At neck of interment. Whereabouts unknown.
- Single Type 3 anklet. Copper-alloy wire. Undecorated. *In situ* on right leg. Diam. 50mm. Whereabouts unknown.
- Single Type 5/6 anklet. Iron. Undecorated. *In situ* on right leg. Whereabouts unknown.

Documentation: Griffith 1924, pl. LIV.15; 1925, 134.

Faras, G.2614 (unpublished)
Structure: SE-NW axial chamber. Entered from the SE via a sloping *dromos*.
Burial: adult, intact, extended on back, head NW, arms to sides, hands on pelvis.
Assemblage:
- Pair of Type 1 anklets. Copper alloy. Semi-circular in section. Incised terminals (Figure 7.D). *In situ* on ankles. Wadi el-Neel University Museum(?).[21]

Documentation: GIFA photograph no. 617; field card 1/2614.

Appendix B. Anklet Graves at other Meroitic sites (arranged alphabetically)

Abu Simbel, Cemetery 214
G.73. Lateral chamber with two interments: adult (flexed); immature (flexed). Large assemblage, including late Meroitic pottery and fragments of a blown-glass unguentarium (3rd–4th century AD). Seven plain, iron anklets (Type 5/6) with the immature burial (see Emery and Kirwan 1935, 429-430. Cf. Näser 1999).

Al Khiday
G.47. Circular chamber. Adult female (contracted, head S). Pair of Type 4 anklets. Copper alloy. Undecorated. Also, three hand-made pottery vessels. C^{14} date in the Classic-Late Meroitic period (see Usai *et al.* 2014, 192, pl. 6-7).

Aniba, South
G.55. Axial chamber(?). Few details, other than that this grave contained a pair of 'copper' (alloy?) anklets, two copper bracelets and a copper vessel. Further examples may also have come from this site (see Bakr 1967, 14, 16. Cf. Vila 1984, 564).

Aniba, Senessra
Unknown grave. Pair of Type 1 anklets. Copper alloy. Incised terminals (Figure 7.G) (see Bakr 1963, pl. X.A.).

[20] Objects 5-8 are absent from the field card. They are listed only in Griffith's (1925, 134) preliminary report.
[21] My thanks to Prof. Michael Zach for kindly passing on a photograph of a bronze anklet from Faras in the Wadi el-Neel University collection (pers. comm. 20 July 2022). The identification of this object with Faras G.2614 is based on analogy of the incised decoration sketched on the field card and, until records can be consulted, remains tentative.

Aniba, Karanog

G.1. E-W axial chamber, entrance E. Adult female (extended on back, head E, hands at pelvis). Pair of Type 6 anklets. Iron. Undecorated (see Woolley and Randall-MacIver 1910, 16-17, pl. 35.7378, 7381).

G.2. E-W axial chamber, entrance E. Two disturbed interments (adult male; adult female). Pair of Type 6 anklets. Iron. Undecorated. Also, a pottery jar and pot-stand (see Woolley and Randall-MacIver 1910, 16-17, pl. 35.7344, 7345).

G.8. E-W axial chamber, entrance E. Adult female (extended on back, head W, hands at pelvis). Pair of Type 6 anklets. Iron. Overlapping terminals. Undecorated. Also, fragments of textile and traces of wood from a bier or coffin (see Woolley and Randall-MacIver 1910, 16-17, pl. 35.7376, 7379).

G.513. E-W axial chamber, entrance E. Three interments: adult female (extended on back, head E, hands at pelvis); immature (contracted); fragments of a further burial. Pair of Type 6 anklets. Iron wire. Undecorated. Also, a pottery cup and a leather shoe (see Woolley and Randall-MacIver 1910, 198-199, pl. 35.7309, 7311).

G.572. E-W axial chamber, entrance E. Fragments of three interments: two male, one female. Single Type 6 anklet. Iron. Undecorated. Also, two iron signet rings, two wooden kohl sticks, beads, a pottery amphora (2nd–3rd century AD cf. Hofmann 1991, 242) and two pottery bottles (see Woolley and Randall-MacIver 1910, 208-209).

G.597. E-W axial chamber, entrance E. Adult female (fragments). Single Type 3 anklet. Copper-alloy wire. Undecorated. Also, beads, a pottery jug, two pottery cups and two pottery bowls (see Woolley and Randall-MacIver 1910, 212-213).

Argin, Nag el-Arab

G.567. E-W axial chamber, entrance E. Adult female (extended on back, head W, hands at pelvis) underneath a further adult burial. Pair of Type 1 anklets. Copper alloy. Incised terminals (Figure 7.I). *In situ* on ankles. Also, fragments of a wooden coffin and fragments of wheel-made pottery (see Pellicer and Llongueras 1965, 127).

G.568. W-E axial chamber, entrance W. Two adult interments (1 male, 1 female), both flexed. Pair of Type 6 anklets. Iron. Undecorated. With female interment. Also, fragments of a spouted amphora (see Pellicer and Llongueras 1965, 128).

G.576. E-W axial chamber, entrance E. Two adult interments (1 male; 1 female). Pair of Type 1 anklets. Copper alloy. Incised terminals (Figure 7.I). *In situ* on the ankles of the female (see Pellicer and Llongueras 1965, 129).

G.585. E-W axial chamber, entrance E. Adult female in the chamber (extended on back, head W, hands at pelvis); remains of two further burials in the *dromos*. Pair of Type 1 anklets. Copper alloy. Incised terminals (Figure 7.C). *In situ* on ankles of female. Also, fragments of a tall, hand-made pottery bowl (see Pellicer and Llongueras 1965, 130, fig. 32.1, pl. XVIII.1a-b; Sauquet and Vilalta 2003, cat. 133).

G.587. E-W axial chamber, entrance E. Mature female in the *dromos*; mature male (extended, hands at pelvis) in the chamber. Pair of Type 1 anklets. Copper alloy. Incised terminals (Figure 7.Q). With female interment. Fragments of wooden coffin with the male (see Pellicer and Llongueras 1965, 131, fig. 32.2, pl. XVIII.2; Sauquet and Vilalta 2003, cat. 133).

G.624. E-W axial chamber, entrance E. Two interments, both adult female (extended on backs, heads W). Pair of Type 6 anklets. Iron. Undecorated. Also, a hand-made pottery bowl and some beads (see Pellicer and Llongueras 1965, 136, fig. 32.5, pl. XVIII.6h).

G.636. E-W axial chamber, entrance E. Mature male (extended on back, head W). Single Type 5 anklet. Iron. Incised terminals (Figure 7.R). Also, a hand-made pottery beaker (see Pellicer and Llongueras 1965, 138, fig. 32.3).

G.644. E-W axial chamber, entrance E. Three interments: adult female (extended on back, head W), in chamber; adult male (flexed), at entrance to chamber; immature, in *dromos*. Pair of anklets of undisclosed material and type. *In situ* on the ankles of the female (see Pellicer and Llongueras 1965, 139).

Argin, Nag Shayeg

G.68. E-W lateral chamber, chamber S. Two superimposed adults, both female. Pair of Type 1 anklets. Copper alloy. Incised terminals. *In situ* with the lowermost interment. Catalan 1963, 31, pl. VII.2.

G.78. W-E axial chamber, entrance W. Two interments: adult female in chamber (head W); adult male (?). Pair of Type 5 anklets. Iron. Incised terminals (Figure 7.R). *In situ* with the female. Also, fragments of wheel-made pottery (see Catalan 1963, 33, fig. 20.10, pl. VII.2-D).

G.87. E-W axial chamber, entrance E. Two interments: adult male (head W); adult female (head W). Single Type 1 anklet. Copper alloy. Incised terminals (Figure 7.N). Context uncertain. Also, fragments of wheel-made pottery (see Catalan 1963, 35, fig. 20.8, pl. VII.2-C).

G.131. E-W lateral chamber, chamber N. Two interments: adult male; adult female. Single Type 1 anklet. Copper alloy. Incised terminals (Figure 7.C). *In situ* on ankle of female. Single Type 5 anklet. Iron. Incised all over (Figure 7.S). *In situ* on ankle of female. Also, fragments of *c.* 15 wheel-made pottery vessels and, with the female, beads and silver earrings (see Catalan 1963, 44, fig. 20.9, 11, pl. VII.2-A, 2-B).

G.152. Indeterminate structure. Adult female. Pair of Type 5/6 anklets. Iron. *In situ* on the ankles. Also, fragments of wheel-made pottery and some vitreous(?) earrings (see Catalan 1963, 47).

Begrawiya West (Meroe West)

G.460. Rock-cut chamber with masonry superstructure. Interment (extended, head W). Suggested to belong to Dunham's (1957, 6-7) Generation 30-40 (*c.* 3rd–2nd century BC). Single Type 5/6 anklet. Iron. Form uncertain. Also, fragments of a granite basin, fragments of 2+ iron arrowheads, fragments of pottery, and various beads (see Dunham 1963, 279).

El Kadada

Sector 75. NNE-SSW axial chamber. Interment (extended on back, head S, legs flexed). Pair(?) of Type 5/6 anklets. Iron. Form uncertain. Also, a hand-made pottery aryballos, beads and small bronze rings (finger/ear) (see Geus 1979, 14, pl. 9b).

Gemai, 5-X-40

G.81. E-W axial chamber, entrance E. Reused in the Christian period. Pair of Type 1 anklets. Copper alloy. Incised terminals (Figure 7.H). Associated with the original – 'Meroitic' – burial. Adams 2005, 65-69, 81, fig. 27, pl. 14a-4/6, 14b-6/7.

Gemai, Cemetery 442

G.1. NE-SW axial chamber, entrance NE. Immature (extended on back, head SE). Pair of Type 6 anklets. Iron. Incised terminals (Figure 7.R). *In situ* on legs. Suggested to have been plated with silver. Also, fragments of textile (see Säve-Söderbergh 1981, 180, pl. 99.1).

Gemai, Cemetery 453

G.4. NW-SE chamber, under a stone tumulus. Adult (contracted on right side, head NW, hands at face). Fragments of a Type 5/6 anklet. Iron. Also, a metal ear pendant, fragments of cord, and fragments of a pottery cup, ribbed amphora, pottery bowl and pottery jar (see Säve-Söderbergh 1981, 181).

Jebel Moya

G.520. Pair of Type 6 anklets. Iron. Undecorated. Associated with an adult female burial. Also, a lip stud, four pottery bowls and a stone tool (see Addison 1949, 295). Museum of Archaeology and Anthropology, Cambridge, 1953.308.

G.608. Single Type 6 anklet. Iron. Undecorated. Associated with an immature burial. Also, beads, cowrie shells and a lip stud (see Addison 1949, 299).

G.1433. Single Type 6 anklet. Iron. Undecorated. Associated with an adult female burial. Also, a coil of silver wire and some beads (see Addison 1949, 355).

G.1769. Pair of Type 6 anklets. Iron. Undecorated. Associated with an adult burial. Also, a copper earring (see Addison 1949, 351). Museum of Archaeology and Anthropology, Cambridge, 1953.377.

Kadero

G.197. Pair of Type 5/6 anklets. Iron. Associated with a female grave (see Krzyżaniak 1998, 156).

Kerma, South Meroitic cemetery

T.045. Pair of Type 1 anklets. Copper-alloy. Semi-circular in section. Incised terminals (Figure 7.G). Associated with a female burial. A further pair was found by a local resident (no context) (see Bonnet 1980, 59-60). Musée d'Art et d'Histoire, Geneva, 025959.

Missiminia, 2-V-20

G.63. E-W axial chamber, entrance E. Adult female (extended on back, head W, hands at pelvis). Pair of Type 5 anklets. Iron. Undecorated. *In situ* on the ankles. Also, a bead necklace. Vila 1982b, 39-40, fig. 33.

G.65. E-W axial chamber, entrance E. Three superimposed interments: adult (extended on back, head E – uppermost); remains of two further adults, disturbed but evidently once extended with heads W.
Pair of Type 5 anklets. Iron. Undecorated. *In situ* on the ankles of the lowermost interment (see Vila 1982b, 40-41, fig. 34).

G.116. E-W axial chamber, entrance E. Remains of five interments (heavily disturbed). Pair of Type 5 anklets. Iron. Undecorated. *In situ* on the ankles of the lowermost interment (see Vila 1982b, 57, fig. 50).

G.121. Lateral chamber, chamber N. Two adult females (extended on backs, heads W, hands at pelvis), superimposed. Pair of Type 5 anklets. Iron. Undecorated. *In situ* on the ankles of the uppermost interment (see Vila 1982b, 59, figs 51-52).

G.124. E-W axial chamber, entrance E. Three interments: two adults in the chamber (extended on backs, heads W, hands at pelvis); a further burial (extended on side, head S, hands at face, lower legs missing). Further displaced human remains in the shaft. Single Type 5 anklet. Iron. Undecorated. Isolated on the surface, above the shaft (see Vila 1982b, 60, fig. 53).

G.148. E-W axial chamber, entrance E. Adult female (extended on back, head west, arms at pelvis, lower legs displaced). Single Type 5 anklet. Iron. Undecorated. With the displaced ankle bones (see Vila 1982b, 65, fig. 58).

G.178. E-W axial chamber, entrance E. Immature (extended on back, head W, hands at pelvis). Pair of Type 6 anklets. Iron. Undecorated. Overlapping ends. *In situ* on ankles. Assortment of beads at neck (see Vila 1982b, 77, figs 72-73).

G.193. E-W axial chamber, entrance E. Disturbed remains of six adults, displaced throughout chamber and shaft. Pair of Type 6 anklets. Iron. Undecorated. *In situ* on displaced ankle bones near base of chamber. Also, a leather sandal. Vila 1982b, 82-83, figs 81-82.

G.230b. Lateral chamber cut into shaft of an E-W axial chamber. Adult (extended on back, head W), disturbed. Pair of Type 6 anklets. Iron. Undecorated. *In situ* on ankles (see Vila 1982b, 105-106, figs 107-108).

G.313. E-W axial chamber, entrance E. No interment recorded. Pair of Type 6 anklets. Iron. Undecorated (see Vila 1982b, 134, fig. 143).
G.320. E-W axial chamber, entrance E. Adult (extended on back, head W), disturbed. Pair of Type 5 anklets. Iron. Undecorated. *In situ* on ankles. Also, beads (see Vila 1982b, 138, fig. 149).
G.334. E-W axial chamber, entrance E. Adult female (extended on back, head W). Pair of Type 5 anklets. Iron. Undecorated. *In situ* on ankles. Also, beads (see Vila 1982b, 147-148, figs 159-160).
G.339. E-W axial chamber, entrance E. Adult female (extended on back, head W). Pair of Type 1 anklets. Copper alloy. Incised terminals (Figure 7.A). *In situ* on ankles. Also, beads and an uninscribed schist stela (see Vila 1982b, 149-150, figs 161-162).

Mograt Island, MOG034
F025. Intrusive burial in a small Bronze Age(?) tumulus. Adult female (flexed on left side, head W).
Pair of Type 5/6 anklets. Iron. Undecorated. *In situ* on ankles. Also, some fragments of wood that were C^{14} dated to the early Meroitic period (see Weschenfelder 2015, 164-165, fig. 16).

Murshid, Site 39
Iron anklets are listed among the finds from a Meroitic cemetery excavated at Murshid. Further details are absent (see Donner 1967, 74).

Qustul, Cemetery Q
G.235. E-W lateral chamber, chamber S. Two interments: infant in shaft (extended on back, head W); adult female in chamber (in coffin). Pair of Type 1 anklets. Copper alloy. Incised terminals (Williams 1991a, fig. 76a; 1991b, 25).

Sedeinga, Sector II[22]
II T 40. E-W axial chamber, entrance E. Adult female lying in chamber on a layer of wind-blown sand (extended on back, head W, feet E). Pair of Type 1 anklets (Figure 4.G). Copper alloy. Ovoid in section. Traces of textile. Incised terminals (Figure 7.C). *In situ* on ankles. Diam. 119mm, h. 29mm, wt. 1303.2g. Fragments of pottery may also have been recorded in the *dromos* (see Millet 2015; Janot and Cartier 2021, 111-121, fig. 77a-b). Musée du Louvre, Paris, E 32517; Sudan National Museum, Khartoum 27451.
II T 67. Uncertain grave structure. Adult female, in coffin. Pair of Type 1 anklets (Figure 4.H). Copper alloy(?). Ovoid in section. Traces of textile. Incised terminals (Figure 7.C). Diam. 109/105mm, h. 28/25mm, wt. 840.0/765.5g (see Baud 2010, 131, cat. 174 ; Millet 2015). Musée du Louvre, Paris, E 32538; Sudan National Museum, Khartoum 27483.
II T 151. Uncertain grave structure, oriented E-W. Interment (extended on back, head W). Pair of anklets similar in form to Type 1. Uncertain material, possibly lead. Decoration unconfirmed. *In situ* on ankles. Unpublished.
II T 159. Uncertain grave structure, orientated E-W. Interment extended on back, head W. Pair of Type 6 anklets. Iron. Undecorated. *In situ* on ankles. Unpublished.
II T 262. Lateral chamber. Immature (extended on back). Pair of Type 3 anklets. Copper-alloy wire. Undecorated. *In situ* on ankles. Also, three bead necklaces and a faience amulet of the goddess Shu that is of Napatan date (see Rilly and Francigny 2013, 63-64; Then-Obłuska 2015, 37).

Semna, South
A Meroitic cemetery at Semna South was excavated 1966-1968 by the University of Chicago Oriental

[22] My thanks to Dr Vincent Francigny for kindly discussing the Sedeinga evidence and sharing unpublished details of these graves (pers. comm. 26 April 2024).

Institute, under the direction of L.V. Žabkar. Comprising some 494 Meroitic graves and 66 X-Group graves, it never reached full publication. The preliminary report mentions four pairs of metal anklets, one of which had incised decoration (see Žabkar and Žabkar 1982, 22).

Serra, Shirfadik, Site 25

G.97. ESE-WNW axial chamber, entrance ESE. Lateral chamber cut into the *dromos* of the axial chamber. Adult *in situ* in axial chamber (extended on back, head WNW, hands at pelvis). Disturbed interment in lateral chamber (extended, head originally WNW). Pair of Type 1 anklets. Copper alloy. Semi-circular in section. Incised terminals (Figure 7.F, O). Uniquely, this 'pair' of anklets are mismatched in both form and decoration. *In situ* on ankles of axial chamber burial. Also, fragments of wooden coffin and textile in the axial chamber.

The chronology is complex: the lateral chamber cuts the *dromos* of the axial chamber, yet the blocking of the axial chamber cuts the lateral chamber. It can therefore be suggested that the axial chamber was the older construction and that it was cut by the lateral chamber. Later, the axial chamber was reused by the anklet burial, partly destroying the interment in the lateral chamber. Hence, there would seem to be three phases of use, of which the anklet burial is the latest. Without radiocarbon dates for the fragments of coffin or textile, applying absolute dates to any of these phases is impossible (see Säve-Söderbergh 1981, 89-90, pl. 30, 99.1-2).

Soleb, Meroitic Cemetery

M.2. E-W axial chamber, entrance E. The *dromos* was cut by another grave (M.4.) containing a hand-made pottery jar of a type common in the early Meroitic period. Four interments in the chamber: two adults (heads W); two immature. Pair of Type 5/6 anklets. Iron. Undecorated. Also, a fragment of pottery in the *dromos* (see Giorgini 1971, 349).

M.8. E-W axial chamber, entrance E. Three interments in the chamber: adult (male), adult (female) and immature, all oriented with heads W. Remains of further interment were found in the shaft. Pair of Type 5/6 anklets. Iron. Undecorated. Also, fragments of pottery in the shaft and one fragment in the chamber (see Giorgini 1971, 349).

M.32. E-W axial chamber, entrance E. Adult female in the chamber (head W). Pair of Type 5/6 anklets. Iron. Undecorated. *In situ* on ankles. Also, a cowrie shell necklace and two ivory arm rings (see Giorgini 1971, 356).

M.37. E-W axial chamber, entrance E. Adult female in the chamber (head W). Pair of Type 5/6 anklets. Iron. Undecorated. *In situ* on ankles. Also, a fragment of pottery in the chamber (see Giorgini 1971, 356-357).

M.40. E-W axial chamber, entrance E. Two disturbed interments: adult female (head W); immature (head W). Pair of Type 5/6 anklets. Iron. Undecorated. *In situ* on ankles of female. Also, two bead necklaces (see Giorgini 1971, 357).

M.44. Double lateral chamber, chambers N and S. Two interments: adult female (N chamber); immature (S chamber). Pair of Type 5/6 anklets. Iron. Undecorated. *In situ* on the ankles of the female. Also, fragments of pottery in the shaft (see Giorgini 1971, 357-358).

Wadi es-Sebua, Cemetery 150

G.1. NW-SE axial chamber, entrance SE. Adult (extended on back, head W, hands at pelvis). Pair of Type 1 anklets. Copper alloy. Traces of textile. Incised terminals (Figure 7.M). *In situ* on ankles (see Firth 1927, 230, pl. 13c, 29.e).

References

Adams, W. Y. 2005. *The West Bank Survey from Faras to Gemai, 2. Sites of Meroitic and Ballaña Age*. Sudan Archaeological Research Society Publication Number 13. BAR International Series 1335. Oxford.

Addison, F. 1949. *Jebel Moya: Text and Plates*. The Wellcome Excavations in the Sudan 1. London.

Andersson, C. J. 1882. *Notes of Travel in South-Western Africa*. New York.

Auenmüller, J., G. Verly, and F. W. Rademakers. 2019. 'Bronze casting artefacts from the Qubbet El-Hawa - moulds, materials, and experimental methods', in G. Verly, F. W. Rademakers, and F. Téreygeol (eds), *Studies in Experimental Archaeometallurgy: Methodological Approaches from Non-Ferrous Metallurgies*. Louisville, 141-160.

Bakr, A. M. 1963. 'Fouilles de l'université du Caire à 'Aniba (1960)', *Fouilles en Nubie (1959-1961)*, 111-114.

Bakr, A. M. 1967. 'Rapport préliminaire sur les résultats des fouilles entreprises par la mission archéologique de l'université du Caire dans la région d'Aniba en Nubie. Saison 1961-1962', *Fouilles en Nubie 1961-1963*, 1-26.

Barnard, H. 2008. *Eastern Desert Ware: Traces of the Inhabitants of the Eastern Deserts in Egypt and Sudan during the 4th-6th Centuries CE*. BAR International Series 1824. Oxford.

Barnard, H. 2018. 'Eastern Desert Ware', *Céramiques Égyptiennes au Soudan Ancien: Importations, Imitations et Influences. Cahiers de la céramique égyptienne 11*, 279-302.

Baud, M., ed. 2010. *Méroé un Empire sur le Nil*. Paris.

Billy, G. 1985. *La nécropole de Missiminia. V. Études Anthropologiques. La prospection archéologique de la vallée du Nil au sud de la cataracte de Dal (Nubie Soudanaise)*. Paris.

Bishop-Wright, H. C. 2022. 'Dying for a drink on the Meroitic frontier: imported objects in funerary assemblages at Faras, Sudanese Nubia', *Mare Nostrum: Estudos sobre o Mediterrâneo Antigo. A Antiguidade do Nordeste Africano*, 87-121.

Bishop-Wright, H. C. 2023. 'Chronology, correspondence analysis, and Lower Nubia in the 3rd century BC: a reassessment of the Meroitic cemetery at Faras', *Sudan & Nubia* 27, 230-246.

Bishop-Wright, H. C. 2024. 'Glassware from the Meroitic cemetery at Faras, Sudanese Nubia', *Annales du 22e Congrès de l'Association Internationale pour l'Histoire du Verre*, 25-36.

Bonnet, C. 1980. 'Kerma 1979-80. Les fouilles archéologiques de Kerma (Soudan)', *Genava* 28, 31-62.

Bonnet, C. 2019. *The Black Kingdom of the Nile*. Cambridge, MA.

Catalan, M. P. 1963. *La Necropolis Meroitica de Nag-Shayeg, Argin (Sudan)*. Madrid.

Chapman, S. E. and D. Dunham. 1952. *Decorated Chapels of the Meroitic Pyramids at Meroë and Barkal*. Boston, MA.

David, R. 2019. 'Ceramic Industries of Meroitic Sudan', in D. Raue (ed.), *Handbook of Ancient Nubia*, 875-895.

Donner, G. 1967. 'Preliminary report on the excavations of the Finnish Nubia Expedition', *KUSH* 15, 70-78.

Dumbrell, W. J. 1971. 'The Tell El-Maskhuta bowls and the "Kingdom" of Qedar in the Persian period', *Bulletin of the American Schools of Oriental Research* 203, 33-44.

Dunham, D. 1957. *Royal Tombs at Meroë and Barkal*. The Royal Cemeteries of Kush IV. Boston.

Dunham, D. 1963. *The West and South Cemeteries at Meroë*. The Royal Cemeteries of Kush V. Boston.

Edwards, D. N. 1996. T*he Archaeology of the Meroitic State. New Perspectives on Its Social and Political Organisation*. Oxford.

Eisa, K. A. 1999. *Le Mobilier et les Coutumes Funéraires Koushites à l'Époque Méroïtique*. Wiesbaden.

Emery, W. B. 1938. *The Royal Tombs of Ballana and* Qustul, Vols 1-2. Cairo.

Emery, W. B., and L. P. Kirwan. 1935. *The Excavations and Survey Between Wadi Es-Sebua and Adindan 1929-1931: Text and Plates*. Cairo.

Fahmy, A. 2007. *Enchanted Jewelry of Egypt: The Traditional Art and Craft*. Cairo.

Fernández, V. M. 1983. *La cultura alto-meroitica del norte de Nubia*. PhD. Thesis, Universidad Complutense de Madrid, Madrid.

Fernández, V. M. 1984. 'Early Meroitic in Northern Sudan: the assessment of a Nubia Archaeological Culture', *Aula Orientalis* 2 (1), 43-84.

Firth, C. M. 1911. *The Archaeological Survey of Nubia Bulletin No. 7 (1910-1911)*. Cairo.

Firth, C. M. 1927. *The Archaeological Survey of Nubia, Report for 1910-1911*. Cairo.

Francigny, V. 2007. 'Faras oublié', *Mélanges offerts à Francis Geus, Cahier de recherches de l'institut de papyrologie et d'egyptologie de Lille* 26, 99-106.

Francigny, V. 2016. *Les coutumes funéraires dans le royaume de Méroé: Les enterrements privés. Paris.* Paris.

Francigny, V. 2021. 'Death and burial in the Kingdom of Meroe', in G. Emberling and B. B. Williams (eds), *The Oxford Handbook of Ancient Nubia*, 589-603.

Gates-Foster, J. 2022. 'New archaeological evidence for the indigenous peoples of the Eastern Desert in the Ptolemaic and Roman eras', in H. Cuvigny (ed.), *Blemmyes: New Documents and New Perspectives,* 61-73.

Gerharz, R. 1994. *Jebel Moya*. Meroitica 14. Berlin.

Geus, F. 1979. 'Rapport annuel d'activite 1978-1979. Fouille de sauvetage a El Kadada (III), 22 octobre - 16 décembre 1978', *Service des Antiquites du Soudan Section Francaise de Recherche Archaeologique*, 4-37.

Giorgini, M. S. 1971. *Soleb II, les Nécropoles*. Firenze.

Green, J. D. M. 2007. 'Anklets and the social construction of gender and age in the Late Bronze and Early Iron Age Southern Levant', in S. Hamilton, R. D. Whitehouse, and K. I. Wright (eds), *Archaeology and Women: Ancient and Modern Issues*, 283-311.

Griffith, F. L. 1923. 'Oxford excavations in Nubia', *University of Liverpool Annals of Archaeology and Anthropology* 10, 73-171.

Griffith, F. L. 1924. 'Oxford excavations in Nubia', *University of Liverpool Annals of Archaeology and Anthropology* 11, 115-125, 141-80.

Griffith, F. L. 1925. 'Oxford excavations in Nubia'. *University of Liverpool Annals of Archaeology and Anthropology* 12, 57-172.

Hafsaas, H. 2021. 'The C-Group people in Lower Nubia: cattle pastoralists on the frontier between Egypt and Kush', in G. Emberling and B. B. Williams (eds), *The Oxford Handbook of Ancient Nubia*, 156-177.

Haycock, B. G. 1972. 'Landmarks in Cushite history', *The Journal of Egyptian Archaeology* 58, 225-244.

Hodges, H. 1976. *Artifacts: An Introduction to Early Materials and Technology*. London.

Hofmann, I. 1991. 'Der Wein- und Ölimport im Meroitischen Reich', in W. V. Davies (ed.), *Egypt and Africa: Nubia from Prehistory to Islam*. London.

Iannarilli, F. 2020. 'Natakamani and the bronze oil lamp. Some evidence of metallurgy from Jebel Barkal'. *Sudan & Nubia* 24, 133-138.

Janot, F. and F. Cartier. 2021. *Sedeinga en Nubie soudanaise : Réminiscences archéologiques (1991-1998)*. Kaïros.

Kilroe, L. 2021. 'Meroitic black-burnished wares at Faras: shared motifs and symbols across Sudan', *Bulletin de Liaison de la Céramique Égyptienne* 30, 153-174.

Kirwan, L. P. 1939. *The Oxford University Excavations at Firka*. London.

Krzyżaniak, L. 1998. 'Kadero: excavations 1997', *Polish Archaeology in the Mediterranean* 9,154-157.

Lankton, J. W. 2003. *A Bead Timeline. Volume I: Prehistory to 1200 CE*. Washington DC.

Leclant, J. 1975. 'Fouilles et travaux en Égypte et au Soudan, 1973-1974', *Orientalia, NOVA SERIES 44* (2), 200-244.

Lohwasser, A. 2010. *The Kushite Cemetery of Sanam. A Non-Royal Burial Ground of the Nubian Capital, c. 800-600 BC.* London.

Maritz, N. 2019. 'The truth about Ovambo women's copper ankle rings', *The South African Archaeological Bulletin* 74 (209), 16-24.

Margariti, C., G. Sava, T. Sava, M. Boudin, and M.-L. Nosch. 2023. 'Radiocarbon dating of archaeological textiles at different states of preservation', *Heritage Science* 11, 1-13.

Millet, M. 2015. 'Restauration d'un ensemble d'objets en métal du Soudan', *La Recherche au Musée du Louvre 2013*, 189-190.

Näser, C. 1999. 'Cemetery 214 at Abu Simbel North. Non-elite burial practices in Meroitic Lower Nubia' in D. A. Welsby (ed.), *Recent Research in Kushite History and Archaeology. Proceedings of the 8th International Conference for Meroitic Studies*, 19-27.

Pellicer, M., and M. Llongueras. 1965. *Las Necropolis Meroiticas del Grupo 'X' y cristianas de Nag El Arab*. Madrid.

Phillips, U. B. 1930. *Nilotics and Azande*. New York.

Rademakers, F. W., T. Rehren and E. B. Pusch. 2018. 'Bronze production in Pi-Ramesse: alloying technology and material use', in E. Ben-Yosef (ed.), *Mining for Ancient Copper: Essays in Memory of Beno Rothenberg*, 503-525.

Rademakers, F. W., G. Verly, P. Degryse, F. Vanhaecke, S. Marchi and C. Bonnet. 2022. 'Copper at ancient Kerma: a diachronic investigation of alloys and raw materials', *Advances in Archaeomaterials* 3 (1), 1-18.

Rilly, C, and V. Francigny. 2013. 'Sedeinga 2012: a season of unexpected discoveries', *Sudan & Nubia* 17, 61-65.

Ruffer, M. A. 1921. *Studies in the Paelaeopathology of Egypt*. Chicago, IL.

Sauquet, S, and S. Vilalta. 2003. *Nubia: Los Reinos del Nilo en Sudán*. Barcelona.

Säve-Söderbergh, T. (ed.) 1981. *Late Nubian Cemeteries*. The Scandinavian Joint Expedition to Sudanese Nubia 6. Copenhagen.

Shinnie, P. L. 1967. *Meroe a Civilization of the Sudan*. London.

Strong, D. 1966. *Greek and Roman Gold and Silver Plate*. London.

Then-Obłuska, J. 2015. 'Beads and pendants from Sedeinga, Nubia', *BEADS: Journal of the Society of Bead Researchers* 27, 29-45.

Then-Obłuska, J. and B. Wagner. 2019. *Glass Bead Trade in Northeast Africa: The Evidence from Meroitic and Post-Meroitic Nubia*. Warsaw.

Tylecote, R. F. 1982. 'Metal working at Meroe, Sudan'. *Meroitic Studies. Proceedings of the Third International Meroitic Conference Toronto 1977. Meroitica 6*, 29-42.

Usai, D., S. Salvatori, T. Jakob and R. David. 2014. 'The Al Khiday cemetery in Central Sudan and its "Classic/Late Meroitic" period graves', *Journal of African Archaeology* 12 (2), 183-204.

Verwers, G. J. 1961. 'Trial excavations in the Faras region', *KUSH* IX, 15-29.

Vila, A. 1967. *Aksha II. Le cimetière méroitique d'Aksha*. Paris.

Vila, A. 1980. *La nécropole de Missiminia. I. Les sépultures napatéennes. La prospection archéologique de la vallée du Nil au sud de la cataracte de Dal (Nubie Soudanaise).* Paris.

Vila, A. 1982a. 'Analyse de sépultures péri-Napatéennes à Abri', *Meroitica* 6, 105-122.

Vila, A. 1982b. *La nécropole de Missiminia. II. Les sépultures méroïtiques. La prospection archéologique de la vallée du Nil au sud de la cataracte de Dal (Nubie Soudanaise).* Paris.

Vila, A. 1984. 'Gens à anneaux, gens à cistes', *Meroitica* 7, 557-570.

Weschenfelder, J. 2015. 'Preliminary report of the second and third field Seasons at the Bronze Age cemetery MOG034 on Mograt Island, Sudan', *Der Antike Sudan. Mitteilungen der Sudanarchäologischen Gesellschaft zu Berlin e. V.* 26, 153-168.

Williams, B. B. 1990. *Twenty-Fifth Dynasty and Napatan Remains at Qustul: Cemeteries W and V*. Excavations between Abu Simbel and the Sudan Frontier 7. Chicago.

Williams, B. B. 1991a. *Meroitic Remains from Qustul Cemetery Q, Ballana Cemetery B, and a Ballana Settlement. Part 1: Text and Figures*. Chicago.

Williams, B. B. 1991b. *Meroitic Remains from Qustul Cemetery Q, Ballana Cemetery B, and a Ballana Settlement. Part 2: Registers and Plates*. Chicago.

Woolley, L. and D. Randall-MacIver. 1910. *Karanòg, the Romano-Nubian Cemetery. Text and Plates.* Eckley B. Coxe Junior Expedition to Nubia, Vols. 3 and 4. Philadelphia.

Yvanez, E. 2012. 'Les textiles des nécropoles méroïtiques de Saï'. *Cahier de recherches de l'Institut de papyrologie et d'égyptologie de Lille* 29, 331-344.

Yvanez, E. 2016. 'Textiles and funerary rituals. The wrapping of offerings at Meroe and El-Hobagi', *Sudan & Nubia* 20, 75-81.

Žabkar, L. V. and J. J. Žabkar. 1982. 'Semna South. A preliminary report on the 1966-68 excavations of the University of Chicago Oriental Institute Expedition to Sudanese Nubia', *Journal of the American Research Center in Egypt* 19, 7-50.

Zach, M. 1993. 'Gedanken und Reflexionen zu einem meroitischen Kermiktypus - ein Beitrag zur afrikanischen Komponente der meroitischen kultur', in È. E. Kormysheva (ed.), *Ancient Egypt and Kush. In Memoriam Mikhail A.Korostovtsev*. Moscow, 436-453.