PG 1237, Royal Cemetery of Ur: Patterns in Death

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This article discusses the identity of the people buried in the Great Death Pit PG 1237, a mass grave of the Royal Cemetery of Ur, and the ways they died and entered the shaft. Admittedly, the evidence required to positively solve the many taphonomic and osteological questions involved does not exist, because of the way the site was excavated and published in the early twentieth century. Nonetheless, the original excavators' skill and unquestioned care in mapping and recording still prepares the ground for new alternative interpretations. As the 'Rams Caught in a Thicket' (two statuettes found in the mass grave) may have been the front parts of lyres, and almost all the dead might have entered the shaft impersonating musicians, singers and dancers, the paramount importance of music in the funerals of Sumerian elites is emphasized. New radiographic evidence recently suggested that some of the buried persons were killed violently, refuting the traditional theory of a voluntary mass suicide by poison. The bodies of the victims might have been formally prepared and serially brought to the pit in burial groups. Stratigraphy and spatial distribution reveal consistent depositional patterns dictated by specific rituals, as already proposed on the basis of more limited evidence by other authors. Formal arrangement and ritualism, in turn, support Woolley's identification of the graves as sacred constructions and thus reaffirms their royal character. The article ends by considering the historical meaning of the nature of these impressive funerals at the verge of the political unification of Mesopotamia by the house of Sargon.

State of the question

PG 1237, or the Great Death Pit (Fig. 1), was excavated in Ur's Royal Cemetery by Leonard Woolley, his wife Katharine and a team of very skilled workers in the winter of 1928–9 (Woolley 1934, 113–34). In terms of excavation and field recording, Woolley, evidently ahead of his time, stands out as one of the most successful archaeologists of the twentieth century. The importance of the discovery, and the quality of the work done by the original excavators, is attested to by the unbroken interest in the Royal Cemetery of Ur which has resulted in new ideas in the fields of stratigraphy, chronology and history (Pollock 1985; Nissen 1966; Dyson 1976; Moorey 1977; Reade 2001; 2003b; Marchesi 2004), anthropology of state formation (Pollock 1991a; 2007a,b; Cohen 2005), physical anthropology (Molleson & Hodgson 2003; Soltysiak 2006), ethnobotany (Miller 1999; 2000; Tengberg *et al.* 2008), gender and role archaeology (Pollock 1991b; McCaffrey 2008; Cheng 2009; Gansell 2007), history of technology (La Nice 1995) and history and social context of ancient music (Barnett 1969; Rakic 1998; de Schauensee 1998; 2002; Cheng 2009; see also Aruz & Wallenfels 2003; Zettler & Horne 1998; Irving & Ambers 2002; and in particular Tinney 1998; Winter 2010).

The graveyard was situated in the centre of the city thus making it better controlled by the seats of power and reflecting the ideological and political centrality of elite funerals (in the sense of McCauley & Lawson 2007). The site was the burial ground of various elite groups for a relatively long time (Pollock 1985; 1991a,b), as the most commonly accepted

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chronology for the Royal Cemetery ranges from 2600 to 2450 BC (Reade 2001; 2003a; McCaffrey 2008, 176).

The aim of this article is to develop the interpretation of PG 1237 in terms of its formation and taphonomy, an effort already begun for this and other graves of the Cemetery by other scholars (Winter 2010; Gansell 2007).

The Great Death Pit is a slightly irregular diamond measuring 8.5 × 7.5 m with the corners oriented to the cardinal points. Its plan (Fig. 1) was published by the excavator in 1934 with north at the lower right. While this orientation made the position of the contents more easily understandable, it obscured the actual geometry of the Pit and its burials in relation to the cardinal points. Therefore in the present article the same plan is published with north at the top (Fig. 2) and its sloping access on the eastern side of the northern corner.

The upper part of PG 1237 had been disturbed by later trenches. In the northeast edge and south corner the walls were supported by mud bricks; floor and walls were partially plastered with mud and coated with mats. It was interpreted as the funerary pit of a nearby rich royal grave which had been looted and completely destroyed by robbers. This latter might have been located 4 m to the southeast of the eastern corner (Woolley 1934, 114), but only a heap of limestone rubble and precious beads in a secondary context were left *in situ*. An undisturbed 'offering table' made of bricks coated with bitumen, built over a very damaged mud-brick compartmented structure (possibly part of the complex), was excavated to the northeast of the eastern corner. Pit PG 1232, located nearby to the southwest and containing a cart, skeletons of animals and containers for food, may have belonged to the same extended burial complex. The excavators discovered the remains of 68 'women' in gorgeous ritual dress, set in discontinuous rows on the floor and an isolated group of six 'males' (Woolley 1934, 116). Some of the buried individuals (13–15, possibly 16) lay below a pile of four or five crushed and corroded lyres (two in silver, one with gold fittings, and possibly one or two similar wooden lyres with copper stags in front: Woolley 1934, 123 & pl. 113).

The excavators, who saw the dead retinues as a sign of the aspiration of the ruling houses to a semi-divine or divine status (1934, 33–42), notoriously interpreted PG 1237 as the main scene of a ritual mass suicide.[1] The story, widely published with the famous illustrations that appeared in the *Illustrated London News* (Zettler 1998, 25) had a dark fascination, somehow softened by the idea that people voluntarily accepted a sedating poison and were buried alive, to follow their masters into the afterlife. In Woolley's famous words

> … There seems to have been no violence done to the men and women who crowd the death pit, but that they drank quietly of the drug provided and lay down to sleep … it was a privilege rather than a doom pronounced on them … (they) were translated to a higher sphere of service (1934, 41–2).

This reconstruction was dramatized by the baroque splendour of the personal attires, and by vivid narrative details like the story of a woman who had no time to fix a silver ribbon in her hair, and hurried to die with her companions keeping the rolled ribbon clutched in her hand (see Zettler & Horne 1998, cat. 46, p. 102, although this might have been also a case of cadaveric spasm, following Knüsel *et al.* 1996). Although this version soon became very popular, it met a variable fortune with the specialists. Opposition was immediate. For Smith and Böhl (quoted by Woolley 1934, 38–40; see Marchesi 2004, 163–5), the main occupants of the graves were not kings and queens but rather priests and priestesses interpreting sacred marriages with the city's gods, the others being people sacrificed for assuring the fertility of the land. Moortgat (1949, 65) while accepting the royal identity of the main burials, proposed that kings and queens also interpreted sacred marriages. The idea of high-ranking priests and priestesses, refuted by Woolley in the excavation report, was later resurrected in different forms by Moorey (1977) only to be rejected again by Marchesi (2004, 163–86) and more recently by McCaffrey (2008).

Kramer (1963, 129), while defining the buried individuals as 'human retinues' did not comment on the cause of death. His caution was later shared by historians who ignored or understated the factual evidence, partly for a lack of trust in archaeological

1. Paraphrasing Woolley, under the conditioning of their belief in the afterlife and attachment to the dead kings and queens, people would have dressed with care and entered the shaft, row after row, in a ceremonial procession. Here, dipping a small cup into a large communal copper cauldron, they drank a powerful poison with a sedating drug (opium or hashish), and took their established place. After falling to the ground, everybody was rapidly buried, with a mass of precious personal ornaments, part of a highly decorated wooden frame of a tent or 'canopy', and no fewer than four to five lyres in gold, silver, copper and wood inlaid with semiprecious materials. As the lyres and the 'canopy' were found above the corpses, the excavator concluded that somebody at the end had come down to arrange some of the bodies and objects into their final position (Woolley 1934, 35). Finally, the Great Death Pit was gradually filled in and paved at intervals with clay-plaster floors for celebrating other funerary feasts there and leaving more offerings.

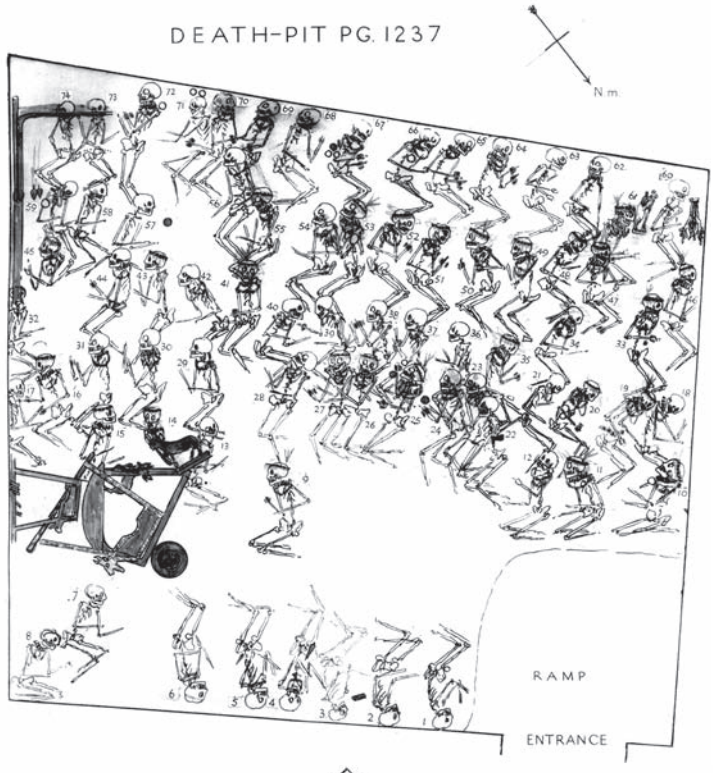

Figure 1. *PG 1237, the general plan as published by the excavator (Woolley 1934, vol. II, pl. 71). The arbitrary view allows an easier appreciation of the details of the burials, but it also obscures its cardinal orientation.*

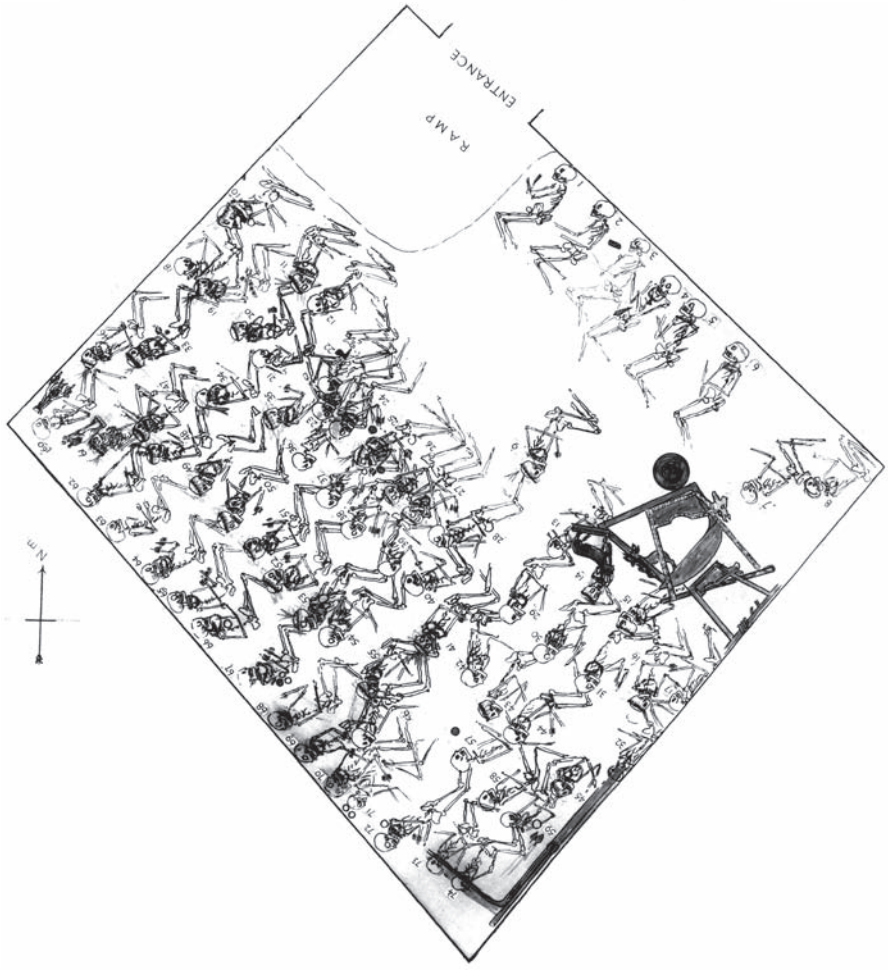

Figure 2. *The diamond of PG 1237 after its cardinal orientation (i.e. with the north at the top) has been restored.*

data not supported by textual evidence,[2] and partly because such cruel mass killings did not fit with the general reverence of the 'ethnic genius' of the highly evolved Sumerians (Kramer 1963). Childe, in contrast (1969, 153–4), while comparing the royal graves at Ur with those excavated at Abydos in Egypt, spoke without ambiguity of 'gruesome ceremonies' involving the mass killing of retinues.

In fact, the Royal Cemetery is not mentioned in important manuals such as Nissen (1988), Liverani (1988) and Postgate (1994); nor in recent works on Mesopotamian religion and Sumerian funerary rituals (Mander 2009; Katz 2007). McCaffrey (2008), who spends forty pages defending the plausible thesis that some of the principal female burials in the Royal Cemetery belonged to 'female kings' (see Marchesi 2004), does mention the retinues and attendants buried in the royal graves, but only incidentally refers to their 'sacrifice'. Once more, the attention goes to the glittering show of the elite burials, and not to the mass killing of many (presumably) lower-class individuals, many of whom were probably women. From this point of view, it is as if Woolley had never excavated there, or as if the funerary rituals discovered in the Royal Cemetery had nothing to do with Sumerian religion.

In contrast, many authors still accept the traditional version of a mass suicide by self-poisoning (i.e. everybody entered the shaft singing and planning to die there: Pinnock 1993, 125; Pettinato 2007; Reade 2003b, 95; Black *et al.* 1992, 104–5 or Bertman 2003, 283). Pollock (2007a,b; and Irving & Ambers 2002) also argues for some form of suicide. Others consider Woolley's explanations valid, but admit that 'the circumstances were a little romanticised' (Crawford 2004, 154).[3] Woolley's cultic suicide theory is still very influential.

Some archaeologists state more simply that retainers were killed in groups during the funerals (e.g. Forest 1996, 216–17; Cohen 2005, 3). While Gansell (2007, 29) openly defines the Royal Cemetery as '… a site of human sacrifice', Marchesi (2004, 154) rightly criticizes the use of this term. In fact, '… *sacrifice* denotes the ritual killing of a living being … as an offering to a deity to obtain or to maintain the favour and the protection of the latter', and, he argues, there is no evidence of a similar aim in the Royal Cemetery.

But interpretation goes on. Winter (2010, 228) reviews the thesis that in Sumerian culture the dead kings and queens, upon their arrival to the underworld, were meant to present people and artefacts as gifts to its rulers, a circumstance recalling the funerary furnishings of the Royal Cemetery (see also Cohen 2005; Tinney 1998). According to Charvát (1993, 306–7; 2002, 226) most of the bodies belonged to people who had died after the main occupant, joining him or her in the graves over the course of time, thus reaffirming their links to their leaders. He also suggests that the bodies were manipulated and possibly excarnated. Leick considers Woolley's reconstruction as an example of the '… power of narrative strands in archaeological assessment' (Leick 2002, 115) and the voluntary-suicide theory as an expression of a Victorian sensibility about death. He states that, ultimately, none of Woolley's evidence for his interpretation stands up to scrutiny.

Leick also gives credit to Charvát's theory of secondary burials. A similar explanation is given by Sürenhagen (2002), who suggests that the 'attached' bodies (those accompanying the principal grave) were progressively extracted from the main chambers to make space for the new burials. The Death Pits, in this view, would be collective, and not multiple graves, where bodies could decompose in empty spaces (terms after Duday 2009). If that were the case, PG 1237 would have been a large subterranean hall, but Charvát and Sürenhagen would need to explain how the roof of such a large buried space could stand for long periods without columns or other architectural supports, the evidence for which has never been found. This is impossible also because, in PG 1237 and in other graves, many skeletons of attendants are undisturbed primary depositions. Woolley may have indulged in narrative and romance, but his reconstructions of the graves' filling processes are detailed, sound and reasonable and cannot be questioned by similar abstract considerations. Furthermore, the accompanying burials often represented complementary technical or social roles,

2. According to Marchesi (2004, 160) a passage from the Sumerian literary text 'Death of Gilgamesh', often quoted to explain the burial practices of the Royal Cemetery (e.g. Kramer 1944; 1960; 1963, 129–30) does '… not seem to refer to a rite of collective burial, nor to show any relationship to the burial customs attested by the Royal Tombs of Ur'. More relevant to the Ur burials might be the (later) text conventionally known as 'Death of Urnamma' (Flückiger-Hawker 1999, 93–182; Cohen 2005, 94–5; Tinney 1998; a synthetic general review of Mesopotamian funerary practices is given in Potts 1997, 220–35).
3. Ascalone (2005, 26), among others, while accepting the theory of the funerary ritual mass killing, still tries to minimize the evidence ('… The burial rituals included human sacrifices, but not many'). The attached burials in the Royal Cemetery, as can easily be calculated from the excavation report, amount in total to almost 350 individuals.

such as soldiers, musicians or wagon attendants,[4] and their burial was necessarily simultaneous (as cogently argued in Marchesi 2004, 155).

More recently, Cohen (2005, 150) discussed the Royal Cemetery as the site and the ritual show of an elite banquet, materializing a strong 'palace ideology'. Pollock (1991a; 2007a,b) while agreeing that feasting and distribution of food and drinks was an important activity, saw the main burials as belonging to pre-eminent leaders of elite households. Fully reflected in the elite burials of the Royal Cemetery, public feasting would have enhanced a psychological and behavioural connection between the mundane and the ritual, thus enforcing the relationships of power and submission that might explain the acceptance of a premature death by a mass of participants.

Both Winter (2010, 231) and Gansell (2007) focused rather on the evidence of ritualism. According to Gansell, the deposition of jewellery with the dead within tombs and across the Royal Cemetery demonstrates that stock articles were worn in standard configurations. Besides signalling collective affiliation and possibly initiation, such recurrent assemblages would indicate distinct sub-groupings of individuals (2007, 31). Her figures 2–4 clearly show that rows of individuals with various formal identities and probably different ranks occupy segregated positions in some shafts. This fits with the suggestion of Winter (2010, 227–9) that deposition followed a precise ritual, and that such symbolically and culturally meaningful behaviour (in her terms 'appropriate grave-side protocols') can be reconstructed upon the basis of such spatial patterns. She noticed, for example, how groups of ritual containers used for libations were often discarded in northern and northwestern points of the funerary shafts. Stating (on the basis of ancient texts) that in Mesopotamian cosmic geography '… "north" and "northwest" constituted a conceptual unity' (Winter 2010, 252). Winter tentatively refers such ritual behaviour to offerings made to netherworld deities and demons associated with specific winds coming from such cardinal directions.

All this might sound quite speculative, but the perspective is intriguing. Funerary beliefs, ideology and ritual actions might have had little to do with what we presently understand as religion (Fogelin 2007, 59; historical examples in Ariès 1977). However, in spite of their ambiguity, the archaeological patterns detected by Gansell and Winter, like those identified in the rest of this article, can only be explained by reference to formal rituals, and these latter, obeying more general ideological frameworks, must have been important components of Sumerian religion.

How far we can reconstruct on similar evidence alone the detailed dynamics of ritual actions, their possible meanings, and move towards understanding the underlying religious background, is a long-debated question (e.g. Insoll 1999; Biehl & Bertemes 2001; Kyriakidis 2007) that exceeds the scope of this article. In Mesopotamian archaeology, given its historical reliance on very partial written sources, and the total absence of any relevant ethnographic and ethnohistorical information, this task appears even more demanding than in other contexts.

Rams and lyres: musicians for the dead

The skeletons found in this and other contexts of the Royal Cemetery were very poorly preserved. Only a few were recovered, saved and brought to London or Philadelphia for further study (Woolley 1934, 121). These include waxed earthen blocks containing post-cranial skeletal parts and some crushed skulls with jewellery or encased in flattened copper helmets.[5]

4. A peculiar 'ethnic' perspective was added by During Caspers, when she noticed (1994) the similarity between the elaborate, flower-laden headdresses of Harappan ceramic figurines and the precious gold and silver diadems worn by the retinues of the Royal Cemetery. Later, Tengberg *et al.* (2008) identified the form of some of the Ur gold leaves as representing those of *Dalbergia sissoo* or pipal, a species native to the Indo-Pakistani Subcontinent. At Kunal (Haryana, India) a jewellery hoard with large and showy silver flowers, was found dating to *c.* 2600 BC (Khatri & Acharya 2005). Are we dealing with specific cultural contacts between Ur and the Indus valley, or, as suggested by Kenoyer (1997, 274–5; 2003) were the victims slaves imported from this latter region?

5. Woolley (1934, 121) states that 'Four of the better-preserved skulls well provided with ornaments were waxed together with all the beads, hair-ribbons, &c. and removed for exhibition; they illustrate clearly the arrangement of the head-dress'. In 1992, Irving & Ambers (2002, 210–11) X-rayed two other blocks from PG 1237 discovering that they contained crushed jewellery and not human remains. Molleson & Hodgson (2003, 93, fig. 16) mention a single waxed package from PG 1237 at the British Museum's Department of the Ancient Near East, Gallery 56: the crushed skull of a 'female attendant' with rich jewellery that partially covers the tibiae of individual 67. This find can easily be located in the published plan (second inner row from the southwestern side, centre). Describing the skull and its radiograph, the authors ascribe it to an adolescent/young female (Table 2), while on p. 111 they suggest an age of 20–30 years. However, the sex attribution of the other skeletons is based only on the ornaments. Another waxed block encasing the crushed skull of a jewelled 'woman' from PG 1237 is conserved at the Penn Museum.

Figure 3. *The skull of a woman from PG 1237 with a rich array of ornaments (gold hair-ribbon, gold lunate earrings, lapis lazuli hair-string with pendant leaves, silver stem with raised rosettes, 'dog-collar' of lapis lazuli and gold, necklace of lapis lazuli and gold fluted beads). It is one of two skulls recently analysed by CT scan in Philadelphia (Courtesy of the Penn Museum, image #193965).*

Woolley's aim was to document the conditions of the remains at the time of the discovery and show the visitors what he had found and what the conservators so successfully reconstructed.

The sex of the individuals buried in PG 1237 was inferred from the ornaments and other accompanying objects,[6] rather than from the bones. Woolley determined there were 68 female and 6 male burials. Their age was generally ignored, with the exception of burial 9, isolated to the west of the piled lyres, which was described as a very young woman (Woolley 1934, 117). In fact, the main concern of Sir Arthur Keith (1934), Woolley's physical anthropologist, was rather the racial ascription of 'queen Shub-ad' (Pu'abum) and Meskalamdug (Molleson & Hodgson 2003; Soltysiak 2006).

The discovery of lyres and harps in PG 1237, and in other grave shafts of the Royal Cemetery, infers that some retainers were musicians and people who practised singing and/or dancing.

The attire of the dead is fully compatible with similar roles. In fact, Cheng observes that the elaborate headdresses of most individuals, in PG 1237 and other royal graves, suggest long hair, in Early Dynastic art associated not only with women, but also with singers, and, in ritual contexts, with castration and eunuchs. Moreover, contemporary cuneiform texts indicate that in the Early Dynastic world, the *gala* (professional singers) may have been eunuchs, transvestites or homosexuals (Cheng 2009, 165–6, 171). As Pollock (1991a) pointed out, sex in this cemetery should not be confused with gender. Woolley's identification of the skeletons as female solely on the basis of their costume and accessories, and not on physiological measurements, is open to serious questioning (McCaffrey 2008, 177–83; Cheng 2009, 168). Thus, at present, it is impossible to state that the apparent feminine characterization of most burials in the Great Death Pit matched with biological sex.

In this article, without proper osteological information, I will use the conventional expression 'women' and 'male-servants' (with quotation marks) to refer to the individuals thus identified by the excavator.[7] The

It is one of the two specimens X-rayed in Philadelphia (Fig. 3). Another illustration of a waxed block from the Great Death Pit is published by Woolley (1934, pl. 148b, caption refers to p. 116 of the report).

6. Woolley (1934, 30) lists the types of ornaments preferentially associated with men (rings of gold and silver chain, large beads on the headdress) and women (gold hair-ribbons, wreath of gold and lapis beads with pendants, large gold lunate ear-rings, hair-rings of coiled gold wire, gold and silver combs, floral tips). Both Gansell (2007) and Pollock (1991a,b) developed Woolley's suggestions, ultimately concluding that '… people wearing vegetal wreaths are gendered as female, and those wearing "brims" [i.e. *showy headbands with beads*] are identified as male' (Gansell 2007, 37–8). Almost all the burials in PG 1237 would therefore qualify as females (see her fig. 4), thus confirming the excavator's original view.

7. A careful reading of the excavation report reveals a minor contradiction. At least one individual in the list of Woolley's 68 'women', might have been a male. Individual 21, in fact, wore a limited set of ornaments a single silver hair-ring, a necklace of silver and lapis beads, a copper pin, while a copper axe might have belonged to this burial or to the nearby individual 22. Although the lists of the previous footnote are clearly an over-simplification, they would qualify individual 21 as male rather than female. In the excavation report, the list of objects associated with this burial also mentions a copper axe. It is the only weapon found among the 'women' of the mass burial; however, Pollock, who carried out a careful check of Woolley's notes, informs me that this axe is not present in the original document, but a copper axe is recorded on the hip of skeleton 22. This latter only has two necklaces and a copper pin; it is possible that Woolley confused the two burials, and it is also possible that both (21 & 22) were originally 'engendered' in the mass burial as males.

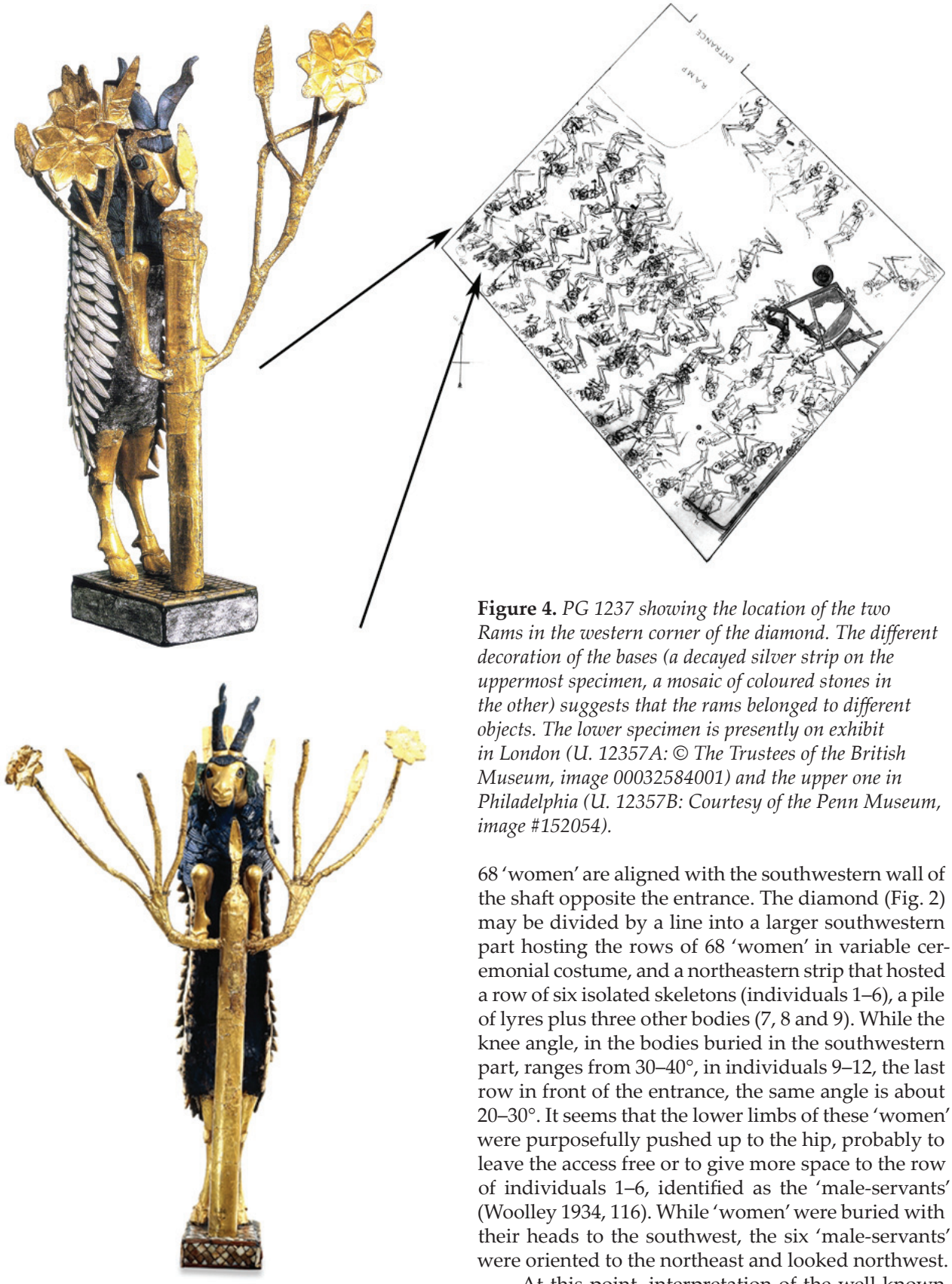

Figure 4. *PG 1237 showing the location of the two Rams in the western corner of the diamond. The different decoration of the bases (a decayed silver strip on the uppermost specimen, a mosaic of coloured stones in the other) suggests that the rams belonged to different objects. The lower specimen is presently on exhibit in London (U. 12357A: © The Trustees of the British Museum, image 00032584001) and the upper one in Philadelphia (U. 12357B: Courtesy of the Penn Museum, image #152054).*

68 'women' are aligned with the southwestern wall of the shaft opposite the entrance. The diamond (Fig. 2) may be divided by a line into a larger southwestern part hosting the rows of 68 'women' in variable ceremonial costume, and a northeastern strip that hosted a row of six isolated skeletons (individuals 1–6), a pile of lyres plus three other bodies (7, 8 and 9). While the knee angle, in the bodies buried in the southwestern part, ranges from 30–40°, in individuals 9–12, the last row in front of the entrance, the same angle is about 20–30°. It seems that the lower limbs of these 'women' were purposefully pushed up to the hip, probably to leave the access free or to give more space to the row of individuals 1–6, identified as the 'male-servants' (Woolley 1934, 116). While 'women' were buried with their heads to the southwest, the six 'male-servants' were oriented to the northeast and looked northwest.

At this point, interpretation of the well-known 'Rams Caught in a Thicket' in the western corner of the

Figure 5. *Shell engraving (U. 10917A: Woolley 1934, 91 and pl. 100; © The Trustees of the British Museum, image 00032405001). The motif closely reflects the posture and setting of the two Rams, but the rosette and 'leaves' of the plant occupy opposite positions.*

shaft becomes crucial. The 'Rams' are two composite images made of wood, lapis lazuli, red limestone, shell, copper, gold and silver (Woolley 1934, U. 12357A and 12357B, pls. 77, 88, 89; pl. 90a, b; Hansen 1998, 61–3, cat. 8; 2003). Found in the same corner of the shaft (Fig. 4), they represented two goats with a thick mane and lapis lazuli cork-screw horns, climbing on a low tree or bush.[8] Animals or mythological creatures in heraldic positions beside 'mountains' and 'plants' are common from Uruk period (e.g. Frankfort 1939, pl. IV.j) to Early Dynastic (see Frankfort 1939, pl. XIII.h; Moortgat 1969, pl. D.1) and later Mesopotamian art (e.g. Frankfort 1939, pl. XVII.h; Muscarella 1981, 83, fig. 38; 119, fig. 77; 143, fig. 104). In many artefacts of the Royal Cemetery, bulls, ibexes, stags and antelopes(?) climb bushes or plants on small elevations, to form 'trees of life', in which flowers and leaves are exactly opposed: a single rosette-like flower in the centre, the 'leaves' symmetrically displayed at the sides of the animals. An example is the shell engraving of Figure 5 (Woolley 1934, vol. II, 91, pl. 100, U. 10917A). The same motif appears on the inlaid gaming boards of PG 789 (U. 10557, pl. 96) and PG 779, Chamber D (U. 11162, pl. 97). Variations also appear on the inlays of lyre sound-boxes (U. 1057, pl. 104; U. 10478, pl. 98, b).[9]

The plant of the Rams is conventionally represented as a shrub of some strength (otherwise it could not withstand the animal's weight). Its flowers have large eight-petal corollas (quite rare in nature) in the form of symmetrical radiating lozenges.[10] Rosettes — very common in the Early Dynastic repertoire — appear as abstract signs on many other artefacts of the Cemetery (e.g. the inlays of the famous game-boards, pl. 95, U. 10478 and U. 9000, where red and blue petals regularly alternate giving the probable numeric value of 'eight', to the bottom of the gold fluted beaker found in grave PG 1054, pl. 157 c, U. 11902: in short, both caprids and rosettes are often repeated in the substantial figurative repertoire of the Royal Cemetery). In the Ur rams, flowers appear on the end of naked branches, perhaps suggesting a late winter–early spring blossoming. The elongated and concave vegetal elements on the end of other branches might be leaves, but also fruits or buds, another symbol (in a funerary context) of fertility and resurrection.[11]

Because of the cork-screw horns and the thick

8. While the position of the Rams would immediately suggest a grazing posture, Woolley saw them as trapped within a bush, like the animal that Abraham killed as a substitute for his son Isaac (Genesis 22, 3–10). He observed that 'When found each animal had a silver bond, apparently a chain, round his front fetlocks attaching him to the branches of the tree (these were reduced to soft chloride and fell away), so that he was perhaps conceived as hobbled to the tree rather than resting against it …' (1934, 265). As a rule, in fact, in the Royal Cemetery '… silver was in nearly every case reduced to a purplish powder…' (1934, 121). The biblical reference perfectly fits the ideological climate of the time, but at present may be considered with scepticism. The silver chains or bonds mentioned by the excavator and recently resurrected by Hansen (1998, 49) were not preserved or otherwise documented by Woolley, and remain an open question.

9. The symmetry of these shell engravings recalls a split representation: ideally, one of the Ram statues, vertically cut along its main axis and projected onto a two-dimensional plane, would produce exactly the same image.

10. Costantini, a leading ethno-botanist of South Asian archaeology (pers. comm.), agrees that it is hard to establish if such images are realistic, and actually referred to a precise species, or were simply conventional (in both cases symbolism might have played a major role). The same opinion is shared by Miller (2000). The rosette is generally assumed to be one of the main symbols of the goddess Inanna. Some scholars see the statuettes as symbols of the sacred marriage between the ruler and Inanna (e.g. Cohen 2005, 151).

11. 'The leaf shape may represent a flower on the end of a branch or twig, or perhaps a stylized bud that will become the rosette, or a simple fruit, the consequence of a fertilized floral spadix.' (Pittman 2003, 122; see also Hansen 1998, 49, 62).

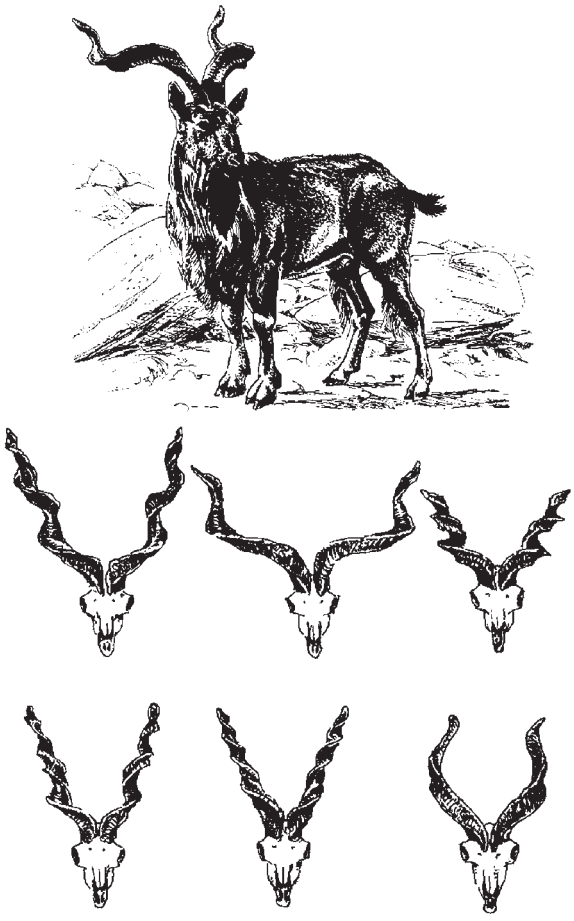

Figure 6. *A markhor (*Capra falconeri*) and the horn variations of the species (Roberts 1997). In each case the horns twist anti-clockwise.*

Figure 7. *A stuffed goat with long hair and corkscrew horns on sale in Mazandaran, Iran, along the south-eastern Caspian shore. The position is the same as that of the two Rams found in PG 1237, showing the enduring popularity of this heraldic motif. The horns, as in all domesticated goats, twist clockwise.*

mane, I wondered if the portrayed animal could be a markhor (*Capra falconeri*),[12] the powerful goat-antelope of the Hindukush region (Fig. 6).[13] In fact, markhors are rare but well-recognizable subjects in Sumerian Early Dynastic Art (e.g. Aruz & Wallenfels 2003, nr. 41, 82). According to Meadow (pers. comm.), a reputed archaeozoologist of South Asia, the mane, limited to the shoulders, is more likely a heavy fleece, and the floppy ears suggest a domesticated animal. As the horns of the Ur figures twist in a clockwise direction, while those of markhors always twist anti-clockwise (Fig. 6), the figures are domesticated sheep or goats, like the stuffed specimens currently sold in Mazandaran, Iran (Fig. 7).

Woolley explained in detail how the two statuettes were carefully recovered and reconstructed with modern supports. Presently, one is in Philadelphia (U. 12357B), and the other in London (U. 12357A) (Fig. 4). One has a base surrounded by a silver sheet, while the sides of the other bear a geometric mosaic similar to that of its upper surface. They look very similar, but a recent critical restoration of the Philadelphia

12. This suggestion had been already advanced by Hall, in a letter to Jayne on January 31, 1930, as reported in Tinney 1998, 31.
13. Although the ancient habitat of the markhor is unknown, assuming that the present sparse distribution includes patches of an original continuous area, we may hypothesize that in the past it moved in a wide crescent from the Dushambe valleys to Pamir, Karakorum and its lower valleys, including Chitral, Swat and the whole Sulaiman range to end in Quetta (Roberts 1997). Badakshan and the Kokcha river valley (the source of lapis lazuli exploited in the Bronze Age) cut a west–east axis approximately through the centre of this crescent. This would mean — if the present distribution of the animal infers that of 5000 years ago — that whoever was mining and trading lapis lazuli probably had many opportunities to hunt and capture markhors.

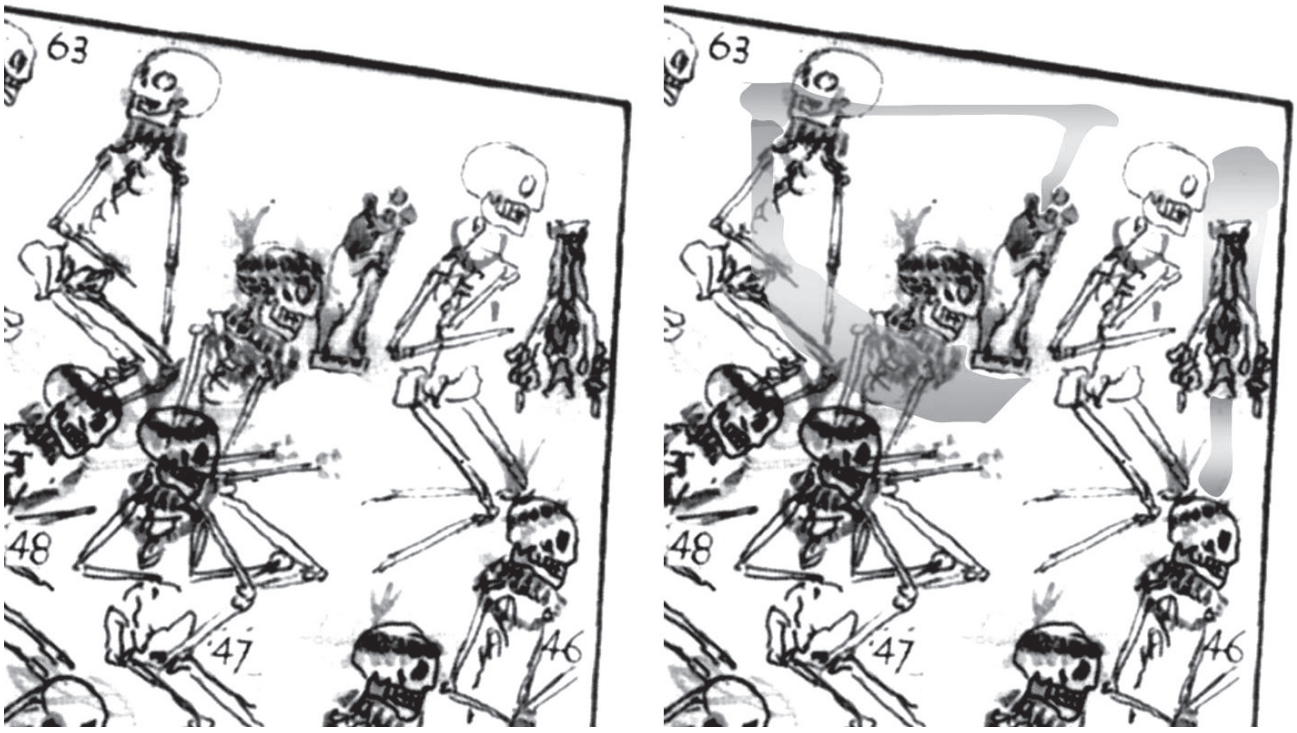

Figure 8. *PG 1237, eastern corner of the shaft. The gap between individual 60 (right), 61 (centre), 62 (left) and the wall may be filled by a reconstructed lyre bearing one of the ram figures on its front. We can also conceptualize a vertical lyre between 60 and the wall of the pit; in this case, too, the ram statue would fall in the proper setting.*

Ram (Rakic 1998; Penn Museum 2007; Hansen 1998) singled out a set of minor differences, confirming that they belonged to two different objects.

The function of these statuettes was never well understood. Woolley spoke of 'applied art, the decoration of a piece of furniture' (1934, 265). This idea is still repeated in most publications. For example, Pittman (2003)[14] interprets the gold-sheet tubes protruding from the neck of both statuettes as coatings for the wooden uprights or legs of a lamp, a burner or a small tray, while Hansen (1998, 63) speaks of the 'lower part of a stand', as if the two statuettes belonged to a single object.

It is easy to see that in the Royal Cemetery wooden furniture (even the enigmatic 'canopy' laid near the southern corner of PG 1237, see Fig. 1) was buried and decayed *in situ*, and there is no evidence that objects were intentionally broken apart; nor can a tray be supported by only two legs. Not only do their differences indicate different objects, but so does their separateness in the corner of the shaft. In the well-known watercolour by Louise Baker (U. 12357A, see the title-page of Woolley 1934, vol. I, text, and pl. 87) the upper extremity of the upper gold tube is capped with an imaginary gold disk, but this reconstruction is dictated only by aesthetic reasons and by the need to minimize the apparent anomaly. Underneath the tail of the Philadelphia Ram it is possible to see a gap in the gold foil showing the location of a regular hole: a wooden shaft crossed the figure along its whole length, neck to back.

Gansell (2007, 41) has suggested that the shafts across both rams might have been the oblique uprights of two small lyres. If we compare the setting of the Philadelphia specimen with the large silver lyre found near the entrance of PG 1237 (Woolley 1934, U. 12355, pl. 112; de Schauensee 1998; 2002) the structural and iconographic similarity is striking. In front of the fully preserved oblique upright, another animal (a stag) climbs a similar shrub bearing the same pointed leaves or buds. Woolley himself thought that the two damaged copper stags below the silver and gold lyres might originally have been placed in front of wooden lyres in the same position (1934, 123, pl. 113).[15]

14. Pittman discusses the possible representation 'piece of furniture' in a contemporary marble cylinder seal at Berlin (see Aruz & Wallenfels 2003, fig. 37; Hansen 2003, 43) where a bull in the same position supports a horizontal element. I would agree rather with other sources (quoted by Pittman in the same context) that the object in this seal is actually a lyre.

15. The analogy and reconstruction are not free of problems. In the silver lyre the stag places the hind legs on the

Is it possible that the trace left by the decayed wood of these hypothetical lyres was not recognized? I think so, because in similar cases the excavator confesses to a serious uncertainty.[16] The records (Woolley 1934, pl. 77) show that one of the Rams (U. 12357B), near individual 61, lay on its side near the floor. The other, near individual 60 (U. 12357A), rested on its back near the corner of the pit. The row of bodies 60–68 along the wall is interrupted only near individual 61, where the contour of a lyre put on the ground (Fig. 8, right) would fit perfectly. The void between individual 60 and the corner of the shaft (as carefully mapped by Woolley), may also correspond well to the decayed wooden frame of a second lyre, if vertically placed against the earthen wall (Fig. 8, left). Here, it would have been harder to trace the cut line of decayed wood when excavating, in spite of Woolley's field experience and the standardized practice of filling the voids that appeared under the spades with plaster and waxing the most delicate elements with paraffin (described in detail in Woolley 1934, 70, 75, 123; see also Tinney 1998, 31).

Both theories — supports for furniture *vs* parts of lyres — lack any factual grounding. However, the lyre hypothesis is supported by analogy with the same finds nearby and, more importantly, is a good explanation for the two anomalies in the spatial setting of the burials, by invoking the simple taphonomic process of the decay of the wood of which they were made. On the whole, it is more likely. It would also fit with Woolley's original suggestion (1934, 252) that in the funeral procession people had played sets of lyres with different tones, symbolically attached to different animals.[17] Perhaps the largest and low-pitched lyres were assimilated to bovines in a normal horizontal position; medium-sized instruments had stags climbing shrubs in oblique positions, and the 'Rams caught in a thicket' stood almost vertical in front of the highest-pitched and possibly smallest instruments. The setting or angle of the animals' bodies to the plane of the lower supporting boxes (and their decreasing body size) might have been related to the pitch of the instruments.[18]

As the bearers of the hypothesized Ram lyres were buried along the opposite wall of the shaft,[19] and the pile of 4–5 lyres was found near the entrance, the entire group might have been preceded and followed by lyre-players. Moreover, as already suggested by Moorey (1977, 35) the large copper container laid near the instruments, instead of a cauldron containing the poisonous drug, could well have been a large drum abandoned nearby together with the great lyres.[20]

In this view, all the 'women' in the southwestern part of the Pit, and not only the people deposited near the lyres, could have been musicians capable of playing lyres and drums, dancing and/or singing.[21]

plane of the sound-box, while the bush and anterior part of the body stand above a low but evident step, which also hosts the base of the upright. In contrast, the almost vertical Rams would be entirely contained within the limits of two rectangular bases, and we have to assume that the upright's shaft was inserted outside the base, directly into the plane of the sound-box. The angle of the gold foil tube to the base of the goat matches with this reconstruction. There might be a formal analogy between the raised step of the silver instrument and the small platform or base of the Rams. Another difficulty for the lyres hypothesis is that the inhomogeneous core of the Rams and their applied parts might have created vibrations and deteriorated the sound (Dumbrill pers. comm.). The argument is a serious one, but also the silver 'Boat-Shaped' lyre from the same Death Pit has a composite frontal silver stag made of wood, copper and silver, climbing a bush (de Schauensee 1998; 2002). Here, too, unpleasant vibrations might have been difficult to avoid. Furthermore, it is hard to say if and how far the ritual would have enhanced the ceremonial display to the detriment of the quality of the sound.

16. In the Royal Cemetery, other lyres were set vertically against the shafts and near corners of the funerary pits (like in PG 789 and 800, see in particular Woolley 1934, 69, n. 1 & pl. 29; and also in PG 1332, 125). The excavator states that in PG 789 two wooden musical instruments with metallic animal masks were not recognized as such but misinterpreted as statues. Barnett (1969) found that Woolley had mistaken two superimposed instruments for a single one. Together with the couple of badly corroded copper stags found aside the ramp of access (Woolley 1934, pl. 75a), which may have been one or two front pieces for other lyres, the Rams suggest that not all the instruments originally buried in the Death Pit were actually well interpreted by the excavators.

17. The semantic and symbolic associations between music and animals in the ED III period are thoroughly explored in Cheng 2009.

18. The weight of similar large instruments is demonstrated by the player's image in the 'peace' side of the 'Ur Standard' (Woolley 1934, pl. 91). Beside a long-haired singer, a man carries a lyre with the help of a leather belt that hangs from his shoulder. The belt supports the box of the lyre from below and turns around the neck of the cow or bull front figure like a leash, strengthening the visual reference to a powerful domesticated bovine. In the lapis lazuli seal of individual 7, PG 1237 (U. 12374, in Woolley 1934, 338, 22; pl. 194, 22) the lyre is carried by two dwarf-like figures or boys moving below the soundbox. See also Table 2.

19. Stratigraphic analysis confirms that individuals 60 and 61 were among the first to be buried in PG 1237.

20. Some copper drums are on exhibit in the ethnographic showcases of the Haradi Museum, Kerman, Iran.

21. The ornaments (and objects in general) accompanying each 'woman' of PG 1237, seem to differ noticeably in wealth. A rough classification of the burials in terms of

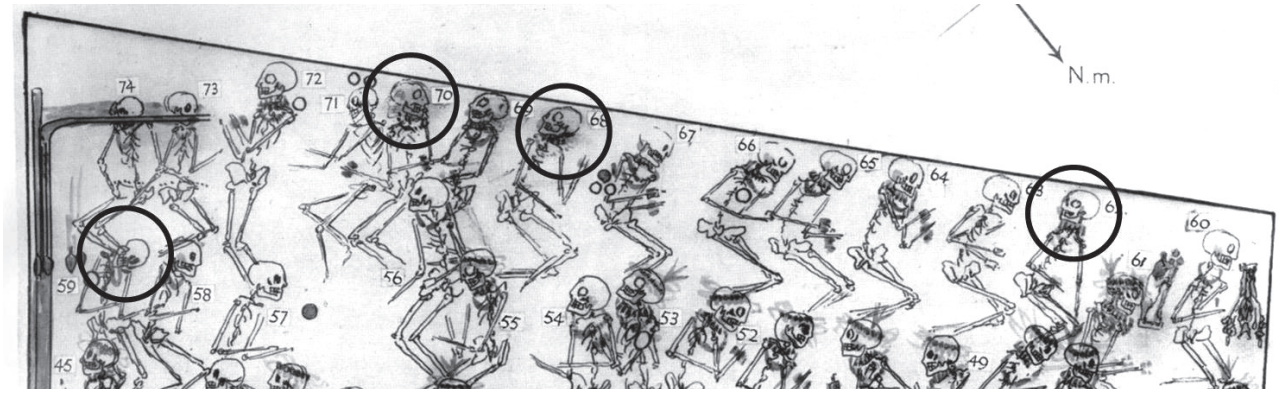

Figure 9. *A detail of the skeletons along the southwestern side of the shaft. The circles single out possible anomalous positions among the skull, cervical vertebrae and post-cranial skeleton. For discussion see text.*

Were the victims executed?

The second question is how the 'musicians', or their bodies, entered the shaft.[22] Since the effects of heavy drugs and deadly poisons on a large group of panicking people expecting to be buried alive are hardly compatible with the apparent strict formality expected in such a formal ceremony, we may consider the possibility that the retinues in PG 1237 were killed violently before interment. Perhaps the victims were strangled (one of the most expedient and common techniques of execution in the ancient world)[23] or their throats were cut. The first doubts derive from the published plan of PG 1237 (Figs. 1 & 2). The rotation angle of the cervical vertebrae of a few bodies (like 62, 68 and 70) seems to exceed the biomechanical range of a living individual (Fig. 9; Duday 2009, 42). The perfect preservation of the weakest joints, completely undisturbed, indicates a very rapid burial; therefore the unnatural rotation of skulls, as in individuals 66 and 68, cannot be ascribed to slow, gravitational (taphonomic) displacement after decomposition. In skeleton 53, moreover, the distance between the skull and the post-cranial skeleton seems anomalous. Burials 10, 18 and 28 also might show anomalous angles between the last cervical vertebrae and the base of the cranium. According to the excavator, while kings or queens rested in sealed empty chambers, the retainers of the Death Pits had been rapidly buried and their bodies decayed in earth-filled environments. The evidence which Woolley provided in the report is generally consistent with such an hypothesis.[24]

jewels and ornaments, implicit in Woolley's inventories, suggests that the 'women' in PG 1237 might have been buried in two-rank couples ('lady' — 'lady servant'?) followed by a minor group of attendants. The testing of this impression would require the examination of Woolley's original field notes, photographs and actual materials, and this is impossible at present, and out of the scope of this article. Susan Pollock, who analysed the context in detail, came to largely comparable conclusions (pers. comm.). Gansell (2007) carried out a systematic study of the association of the personal ornaments buried in PG 1237 and other graves of the Royal Cemetery. She stated that: '… selection and configuration of jewellery on bodies across the cemetery [represented] visual communication within an encoded repertoire expressing information about the identities of the deceased' (2007, 37). She recognizes as the richest assemblages (often worn by the main, royal occupants of some graves) those including the 'gold wreath sets' (2007, 32). Along the southwestern wall of the shaft (Gansell 2007, fig. 4) a row of burials with this gorgeous attire is segregated from a parallel unbroken row of 'women' with less-showy 'choker-based ornaments'. Upper-ranking attendants, in this view, are spatially distinguished from lower-ranking ones. The pile of lyres finally abandoned near the eastern corner of PG 1237 — if the copper stags, as I believe, were actually parts of such instruments — might be inspired by a precise threefold 'metal hierarchy' of gold, silver and copper. The same obvious hierarchy is evident in the series of spears (gold, silver and copper) deposited in the Death Pit of Grave 789 ('The King's Grave': Woolley 1934, 69). This symbolism might also be identified in other series of objects in other contexts. One wonders if such metallic hierarchy was related to the rank scale suggested by the attached burials.

22. M. Vidale 'Royal Graves of Ur: Patterns in Death'(lecture given on 27 March 2009, Penn Museum, Philadelphia). The nice title is due to Holly Pittman, who bravely invited me to speak about the Royal Cemetery in front of people who knew the most celebrated treasures of the Museum much better than I could ever dream of.
23. Strangling is normally detected from a fracture of the hyoid bone. Given the state of heavy fragmentation of the skeletal remains found in PG 1237, even this possible indicator would probably have been useless.
24. Not always though. While describing the Death Pit of grave PG 789 Woolley (1934, 68) stated that the bodies in

Nonetheless, bone displacement could be more simply a result of the peculiar burial processes reconstructed by the excavator (Woolley 1934, 36). Some shafts were temporarily paved at increasing heights, and funerary feasts with offerings and libations were celebrated there. At the beginning of this process, corpses may have been indirectly trampled and heavily compressed, breaking and partially displacing the joints between some skulls and the supporting vertebrae. The sole evidence of the plan, the level of accuracy of which, at present, cannot be evaluated,[25] is hardly conclusive.

A study carried out for the new exhibit 'Iraq's Ancient Past: Rediscovering Ur's Royal Cemetery' (Philadelphia, 25 October 2009) later reported new relevant evidence (e.g. Penn Museum 2009; Hurdle 2009; McCarthy 2010; Baadsgard *et al*. 2011).[26] Baasgard, Zettler (curator of the Near East Section) and Monge (a physical anthropologist at Penn Museum) brought the two crushed skulls kept in Philadelphia (a skull with jewellery from PG 1237 (Fig. 3) and a guard with helmet from grave PG 789) to the University of Pennsylvania Hospital and scrutinized them using CT scans. On the jewelled skull they found a blunt-force trauma. In the other block, below a helmet that looks intact, the skull showed two holes surrounded by radiating fractures, interpreted as peri-mortem blows from an axe.[27] If this skull turned out to be damaged *below* an intact copper helmet (as there is no evidence of a corresponding hole in the metal), this individual at least had been re-dressed after execution. The X-ray image furthermore reveals that the Penn Museum helmet was replaced backwards, the front to the rear of the skull.[28] Preliminary evidence thus strongly supports the view that the victims were executed, cleaned, recomposed and carried into their mass grave before rigor mortis took place.[29]

In this view, Dickson's (2006) definition of these funerals as 'state-sponsored theatres of cruelty' would seem particularly appropriate. The suicide theory might have clouded another case of political violence in the rise of archaic states. In fact, if all the victims had been executed, royal funerals at Ur, as in other early states, chiefdoms and hierarchical tribal societies of the Bronze and Iron Ages of Eurasia and Egypt (Tinney 1998, 29–30), would appear to be

the open shaft had been buried seated against the wall, so that they '… had fallen forward and the skulls lay at all angles among the leg-bones'. This accurate observation would imply (at least in this case) a burial within an empty covered space, slow processes of decomposition and gradual collapse of the skeletal parts.

25. While the plan — the best ever made in the Royal Cemetery — shows the skeletons in almost complete forms, Woolley states that in some cases the bones were so badly preserved that the original position of the bodies was inferred from the position of the skull. Note also how the skulls, in many cases, are drafted as having a volume and three-dimensional orientation, while the sampled specimens are so flattened that such reconstructions today appear arbitrary.
26. Lemonick (2009) stresses how the new discovery — by two women scientists — dismissed the old theory of the mass painless suicide, ascribed to Leonard Woolley. However, the idea had been advanced by Katharine, and accepted only later by her husband, as openly acknowledged by Woolley (1934, 35). Actually, in *The Sumerians* (1965, first published in New York on 31 December 1929), Woolley stated without ambiguity that the retainers had been ritually slaughtered. At the time, after the first two campaigns in the Cemetery, the team had excavated PG 580, 777, 779, 789, 800 (Pu'abum), and Meskalamdug. PG 1050, 1054, 1236 and 1237 were excavated in the 1928–9 season. It is thus clear that the suicide theory was inspired by Katharine to Leonard during the long excavation of PG 1237, while *The Sumerians* was already in print. Katharine's suggestion was that the dead looked too peaceful, ordered and perfectly dressed to have been violently killed on the spot. It was the peak of the Neo-Romantic movement, when the ideal of a peaceful, painless suicide by self-poisoning was still popular among leading artists and poets (see Minois 1999). It was also an obvious reaction to the naturalist canon that dominated literature in the second half of the nineteenth century, exemplified by the 'embarrassingly graceless death' (Ariès 1977) of Emma Bovary's suicide with arsenic in the masterpiece by Gustave Flaubert (1856).
27. Baadsgard *et al.* 2011, 36–8, figs. 6 & 7; Penn Museum 2009. Looking at the X-ray plate of the skull of individual 46 from PG 789, in London (Molleson & Hodgson 2003, fig. 13), one sees two or possibly three holes with an oval contour, two of which surrounded by concentric and radiating fractures (see for comparisons Burns 1999, 162–5). Their appearance matches the preliminary description of the new Philadelphia radiographs. Are these holes, too, the mark of a similar weapon? Molleson and Hodgson do not remark on the evidence. At any rate, the skulls are so badly shattered that doubtless caution is mandatory.
28. Is this casual? A previous X-ray image (Molleson & Hodgson 2003, fig. 13, from PG 789, n. 46, a soldier's head with copper helmet, see their footnote 2) shows the helmet in its proper setting (see also Woolley 1934, pl. 218, PG 789 b). As we have, at present, only these cases, it is hard to say, but the helmet at Philadelphia, in its reversed position, was certainly replaced on the body of the victim.
29. The study also revealed traces of cinnabar in the jewelled crushed skull from PG 1237 (as reported in Penn Museum 2009). The substance might suggest an attempt at preserving the body and/or a residue of a cosmetic treatment.

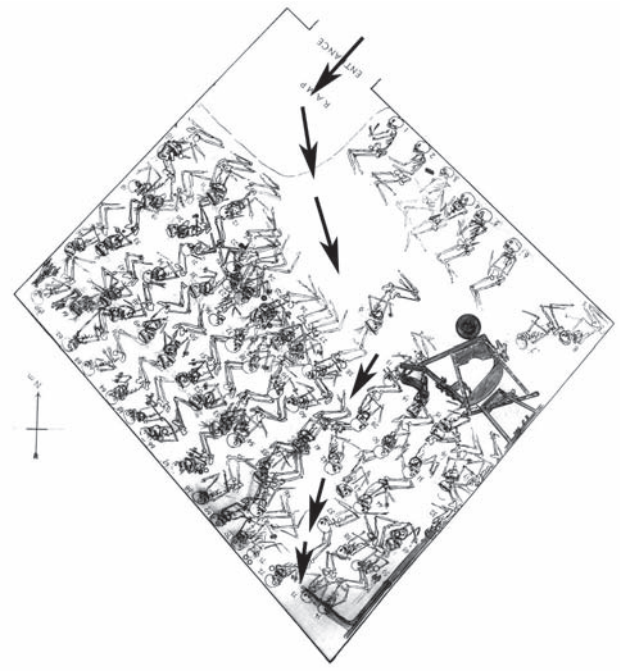

Figure 10. *The diamond of PG 1237, and the north–south pathway probably used while shifting the bodies into the Pit (modified after Woolley 1934, vol. II, pl. 71).*

immersed in a recurrent political and/or religious fanaticism.

However, stating that the victims had been executed does not necessarily imply that they were violently forced to die. Both Pollock (2007b) and Cohen (2005), in fact, argued that ideology could have been a powerful 'inclusive' tool, bonding subordinates and victims to the elites by the means of impressive formal rituals pivoted on public feasting, drinking and pervasive soundscapes. And such feasts might have been effective in creating consent to the gruesome practice of ritual mass killing, even to the point of promoting and justifying self-immolation. This is entirely possible, but in strictly archaeological terms, given the very limited osteological evidence, we are presently unable to ascertain whether or not the victims accepted their fate without struggling.

On the other hand, while ideology doubtlessly had a cardinal role to play, it might have been more 'exclusive' than 'inclusive'. Even a superficial reading of the Shang oracular bones from Bronze Age China (Keightley 1978; Chang 1980) reveals how early state communities sometimes developed a strong sense of limited and constrained identity that made outsiders, and with them servants, prisoners and slaves, little more than animals that could be killed by the hundreds in a single day.[30] The practice might also have signalled a growing political power. In fact, when enemies or foreigners were killed in public, chiefs and rulers openly claimed and displayed, at the same time, immunity from the ensuing feuds, and this immunity was probably perceived as a measure of the radius of territorial control and degree of military security of the ruling house.

Were the retinues of the multiple graves foreign slaves or servants? And if so, how long had they served at Ur as musicians, dancers and singers before their execution? If, instead, they were prisoners, this status (at least for similar large groups) would hardly be compatible with a narrow professional specialization, and the question would get even more intricate.

The process of deposition

If 'musicians' and their companions were killed outside and entered the shaft as dressed corpses, in which order were they laid? Common sense would dictate that deposition started from the side of the diamond opposite the entrance and continued towards the northeast, i.e. towards the access ramp. As we shall see later, the evidence of physical superimposition among the human remains fully supports this view. The first bodies may reasonably be expected to be those along the walls and in the southern corner opposite the sloping entrance. The bodies were transported along a north–south axial pathway joining two opposing corners of the diamond (the entrance at the northern corner and the southern end).

This pathway is still recognizable as a partially free, 'S'-shaped strip, about one and half metres wide (Fig. 10) obstructed only by four isolated corpses with the same orientation (from the north, individuals 9, 41, 55 and 56). These 'women' (together with the hypothetical musicians near the piled lyres and the copper vessel) might have been among the last victims to be deposited into the mass grave. They may have obstructed the pathway only after all the bodies were finally in.

In order to reconstruct the sequence of deposition, I defined as a 'burial group' a series of bodies set in limited or discontinuous rows, having the same orientation, or, in a few cases, symmetrically opposed in an evident pattern. Isolated bodies were

30. See for example the following statement: 'The people of Ch'iang Fang, a country probably to the west of Shang, were the frequent source of war captives by the Shang … and these captives were frequent victims in Shang ancestral rites, used as offerings in the same order as cattle, sheep, and kids, as the oracles related' (Chang 1980, 228–9).

Figure 11. *PG 1237, bipartition of the pit and the proposed subdivision of the bodies by burial groups. Lines were drawn differently only to enhance the visibility of the rectangles.*

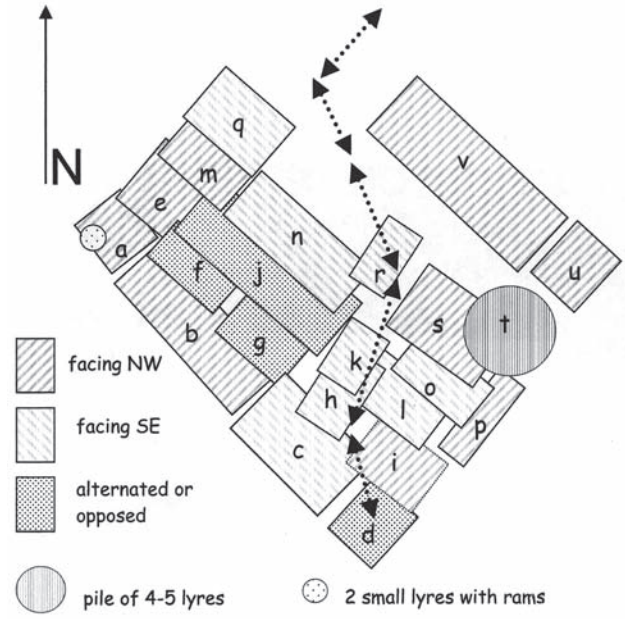

Figure 12. *PG 1237, subdivision by burial groups, numbered from a to v. In the majority of the groups deposited along the walls the bodies look northwest, while those deposited in the centre (along the pathway) look southeast (modified after Woolley 1934, vol. II, pl. 71).*

also considered burial groups. Almost all corpses were placed lying on their sides, and the orientation of each case was defined by the post-cranial skeleton, rather than after the orientation of the skull. The resulting hypothetical burial groups were then considered as 'steps' of the deposition sequence.

This subdivision is partly subjective.[31] The only reliable way of establishing a sequence is the relative stratigraphy among the excavated burials. While the relationships of superimposition seem to have been systematically recorded in the published plan,[32] not all the skeletons have direct physical contact. The western part of the diamond retains consistent relationships of superimposition, while the interpretation of the eastern part is more conjectural.

Sometimes, on the basis of geometrical order alone, the sequence of deposition recognized for some skeletons was arbitrarily extended to a whole row or burial group. Although a search for spatial patterns on these grounds may be easily questioned as uncertain, preliminary results are encouraging. In Figures 11 and 12 the groups are labelled with letters (a–v) (Fig. 12). Table 1 outlines the attributes of each group (composition, location and face orientation) and, where possible, it details when one group covers another. The stars in the last column distinguish the 29 bodies with gold hair-ribbons as indicating the richest attire (as opposed to silver ribbons and other ornaments). Stratigraphic relationships are summarized in the Harris diagram of Figure 13.

All the burials face northwest or southeast; and as previously noted, all bodies are oriented with their heads towards the southwest, except for the six 'males' (1–6), whose heads are oriented to the northeast (these patterns alone are inconsistent with the traditional theory of a funerary cortège collapsing to the ground in agony and, in contrast, strongly suggest a ritual arrangement of the bodies).

Figure 12 shows that almost all the groups along the walls contain bodies which face northwest, while in the core of the diamond they face southeast, or

31. For example, Woolley (1934, vol. I, 116) in the southern corner of the diamond associates six 'women' to the 'canopy'. He probably meant individuals 72–4 and 57–59. This wooden object might have been associated with 73, 74, 32 and 17. Also, the inclusion of individual 34 in burial group j is somehow subjective. As in other steps of the present analysis, uncertainty can hardly be ruled out.

32. Woolley made clear that in PG 1237 the bodies were arranged in rows, and that such rows were often superimposed one onto the other. Note the following statement (1952, 46): 'They were disposed in regular rows across the floor, every one lying on her side with legs slightly bent and hands brought up close near the face, so close together that the heads of those in one row rested on the legs of those in the row above.'

Table 1. *PG 1237 by burial groups and their main features.*

Burial group	Individuals	Location	Orientation	Stratigraphy	Remarks
a	60, 61	W corner	Both NW	covered by f (?)	lapis seals, 2 rams, 61*
b	62–8	NE side	NW	covered by f, g	
c	69–72	NE side	SE	covered by i	69, lapis seal
d	73, 74	S corner	73 NW, 74 SE	covered by i	canopy, 2 non-functional spears?
e	33, 46	NE side	NW	covered by f	33*, 46*
f	47–50	centre, W	47, 48 NW, 49, 50 SE	covered by j	47*, 48*, 49*, 50*
g	51–4	centre, W	51, 52 NW, 53, 54 SE	covered by j	51*, 52*, 53*
h	55–6	pathway, S	SE	covered by k	55*
i	57–9	SE side	NW	covered by l	near canopy?
j	34–40	centre, W	34, 35, 40 NW; 36–39 SE	covered by m, n	34*, 35*, 36*
k	41	pathway, centre	SE	–	41*
l	42–5	centre, E	SE	covered by h, o	43*, 45*
m	18–21	NE side	NW	covered by q	21, a man (?) with a copper axe; 19*, 20*
n	22–8	centre, W	SE	covered by r	24*, 25*, 26*, 27*
o	16, 29–31	centre, E	SE	covered by s	16*
p	17, 32	SE side	NW	covered by o	17, calcite seal
q	10–12	NW side	SE	–	10*, 11*
r	9	pathway, centre	SE	–	9*
s	13–15	centre, E	NW	covered by t	14*, 15*
t	(4–5 lyres)	SE side	NE, SW, E	–	
u	7, 8	E corner	NW	–	7, lapis seal
v	1–6	NE side	NW	–	3 men with weapons; 4, shell seal

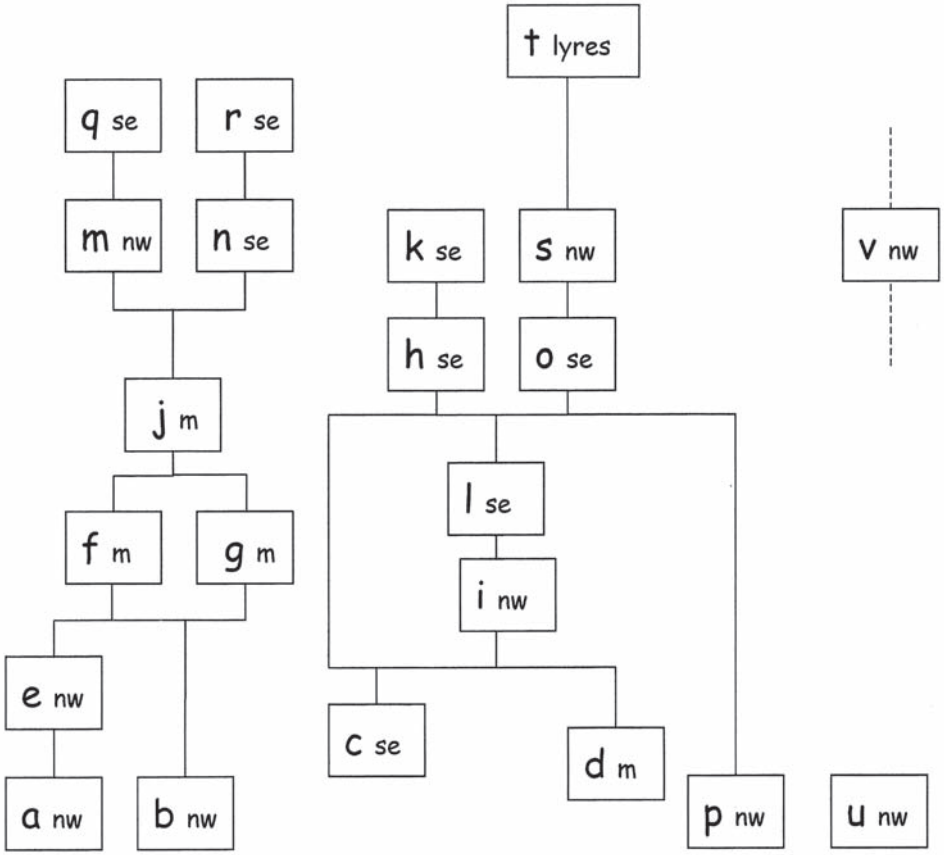

Figure 13. *PG 1237. Stratigraphic sequence of the burial groups expressed as a Harris diagram.*

contain bodies with both orientations. The first to enter were groups a, b, e (to the west) and perhaps, p and u (with no physical contacts to the other series) to the east. The two corners, west and east, might have been filled with corpses before the other spaces of the shaft. Here, the bodies face exclusively northwest. Burial group d, in the southern corner of the diamond, is mixed: one body faces northwest and the other, symmetrically opposed, faces southeast. Figure 12 and the Harris diagram (Fig. 13) indicate that the bodies were laid in the southern corner, starting from group d, with steps being retraced along the path until this was finally obstructed, as stated above, by the isolated bodies labelled as groups h, k and r (individuals 9, 41, 55 and 56).

In this second step of deposition, all bodies were deposited facing southeast (with the possible exception of f, g and j, in the centre-west of the diamond, that are mixed). In summary, spatial analysis suggests that the first bodies were set into the corners and quite probably along the walls, and faced to the northwest; then the rest of the bodies gradually filled the centre, their face turned in the opposite direction, to the southeast. This sequence was possibly closed when the six 'male-servants' were set along the northeastern wall, their faces looking to the northwest like the other bodies put along the sides of the diamond.

This looked like an interesting but isolated conjecture, until I considered the evidence of nearby PG 1332 (the other large Death Pit excavated in the Royal Cemetery). Here, Woolley found

> … two layers of bones, separated by an earth stratum 1.10 m. thick, representing in the upper layer 23 and in the lower 20 human bodies. In the top layer the bodies were arranged fairly regularly in rows of five across the pit's axis, the rows, measured by the heads, being about 1.00 m. apart; in the lower layer the arrangement was less orderly and at the north-east end there was only one body which, judging from its position in relation to the lyre, may have been that of the musician of the party; in the upper layer all the bodies lay with their heads to the north-east, in the lower all lay with their heads south or south-west except the 'musician', whose head was in the north corner of the pit. (1934, 124).

The sequence of events is here revealed without ambiguity by a substantial stratigraphic gap. The first (lower) burials in the pit faced south to southwest while the last (or upper) ones faced northeast. In summary, in both cases (PG 1327 and PG 1332), people were buried with a long two-step process, the first burial groups looking westwards, the last ones facing eastwards. The coherence of the rituals is striking, also in the light of the discovery in the same funerary Pit (Woolley 1934, 127–8) of a wooden lyre with a copper bull head, set vertically against the wall of the shaft, together with two copper wands plausibly interpreted as musical instruments and described as '… castanets, long clappers of metal mounted on wood'. PG 1332 contained the remains of another cortège of people involved with music, and buried with a similar ritual.

Searching for other patterns: burials in pairs in the corners?

If the subdivision in sequential burial groups is an approximation of reality, we recognize many pairs of victims at the three corners of the diamond (the northern one is occupied by the sloping corridor and the ramp). Isolated in the eastern corner are individuals 7 and 8: they were buried with abundant gold (ear-rings, hair-rings, finger-rings, gold and silver pins, rich gold and lapis lazuli collars and necklaces of various fashions) and a lapis cylinder seal (nr. 7: Woolley 1934, pl. 194, 22, U. 12374). In the opposite corner (west) we find the couple with the Rams, individuals 60 and 61. Burial 60 has gold ear-rings, a necklace and a silver pin, and a lapis seal (pl. 194, U. 12387). Individual 61 belongs to the series of 28 'women' having a precious headdress of gold ribbon. The list of ornaments (wreaths of leaves and rings, gold rosettes on silver stems, gold hair-rings and finger-rings, gorgeous necklaces and collars of gold, carnelian and lapis, bracelets of gold, carnelian and lapis, silver pins and a comb in the same metal) is among the longest in the PG 1237 inventory. Individual 61 had another lapis cylinder seal (pl. 195, 39, U. 12380).

In the southern corner, two bodies (73 and 74) were arranged symmetrically, one facing to the northwest, the other to the southeast. Burials 73 and 74 had similar ornaments (silver ribbon, hair-rings and frontlet) and the same belt of shell rings. Both skulls are covered by a shaft of the mysterious 'canopy'. Broad leaf-shaped points (considered by Woolley as ornaments, and not true weapons) are visible near the knee of individual 74. The wooden frame of the 'canopy' extends along the southeastern side to cover the face of a third individual (32) buried with the back to the shaft, and further onward there is another body (17) precisely in the same position. In Table 1 and in the plans (Figs. 11, 12) burials 17 and 32, with the same setting, are considered a single group. Individual 32 is linked to the couple 73–4 by the contact with the 'canopy'. Burial 17, like 73 and 74, had (among other objects) silver ornaments, simple copper ornaments and utensils, and a smaller calcite cylinder seal (Woolley 1934, vol. II, pl. 195, 40, U. 12371). Burial 32 had similar silver ornaments, the same copper items (a pin and a bowl) and a gold and lapis lazuli necklace. Wool-

ley thought that such a 'canopy' could have been part of four-poster frame over the biers (in other graves he had found post-holes around the coffins). Was it a kind of stretcher used to carry the bodies of the victims into the shaft? If this was the case, we should probably keep in the same group corpses 73, 74, 32 and 17.

In summary, a couple with two lyres and two lapis lazuli cylinder seals was laid in the western corner; another couple with silver ornaments and a similar cylinder seal lay in the eastern corner; a couple with silver ornaments and belts made of shell ringlets below the canopy in the southern corner, perhaps related to a fourth couple with simpler ornaments, and the four latter individuals might have carried this large object, which is still unidentified.

The bearers of cylinder seals as 'gate-keepers'

The spatial arrangement of the six individuals bearing cylinder seals, far from being random, seems to have followed another precise ritual arrangement (Fig. 14, Table 2).[33]

Gansell (2007, 31) remarks that '… Various studies have established that lapis lazuli seals bearing banquet imagery were characteristically female possessions'. According to Pittman (1998, 76) '… Double register banquet scenes seem more often associated with women involved in the internal workings of the court'. A different interpretation of the burials with cylinder seals in PG 1237 and other graves of the Royal Cemetery, stressing the authority these tools would imply, rather than a subordinate administrative responsibility, is discussed by Gansell (2007). The author remarks that in the Royal Cemetery:

> … [s]eals were found with attendants wearing all types of jewellery sets but were far less common among the secondary interments than among primary occupants and those buried singly. This disparity may reflect an emphasis on group affiliation over personal distinction among attendants; and it may mean that attendants were derived from a less prominent social rank (2007, 40).

In PG 1237, all bearers of cylinder seals were laid along the sides and in the corners of the shaft: in fact, no other seal was found with the inner groups. In such a formal context, this pattern cannot be casual. The most important seals (in lapis lazuli, with complex banquet and symposium scenes in two registers) were symmetrically placed with their owners in the western (U. 12387, U. 12380) and eastern corner (U. 12374). The seal in lapis lazuli (U. 12427), and the calcite one (U. 12371) have simplified symposium scenes on a single register. They are located respectively near the centre of the southwestern and southeastern sides. The last cylinder seal (U. 12390) was made of shell. Badly preserved, it was found near the centre of the northeastern side.

During the Bronze Age, from Egypt to the Indus Valley, seals were used (among other functions) to close and unlock jars, baskets, furniture and doors (Ferioli *et al.* 1979; Fiandra & Pepe 2000; Perna 2005).[34] Seals with inscriptions that qualify associated burials of the Royal Cemetery as scribes, priests, porters and cooks (Gansell 2007, 40) were probably used by attendants in the daily administration of the palace's facilities and goods. While placing non-inscribed cylinder seals (and the possibly female administrators or attendants in charge) along the walls and in the corners of the shaft of PG 1237, people who performed the burial might have been signalling the location of imaginary axial gates. If the main funerary constructions of the Royal Cemetery were indeed imagined — as Woolley proposed (1934, 141–2) — as sacred underworld buildings, the invisible accesses of PG 1237 in key points of the diamond might have been controlled by the bodies of six 'gate-keepers'. The location of such imaginary gates in the corners would match with the actual entrance to the diamond itself (set in the northern corner). The imaginary accesses could be related symbolically to different supernatural loci or axial directions, or reserved to different spiritual or psychological components of the dead (see Bottéro 2001, 105–10; Mander 2009, 62–5; Katz 2007).

The 'male-servants' as possible executioners

As stated above, the row of individuals 1–6 were identified by Woolley as 'male-servants' (1934, 116) not only because they lacked the most visible 'female' ornaments such as large ear-rings, combs or floral tips, but also because three of them were buried with copper weapons (burial 1, a dagger and its whetstone; burial 5, a dagger; burial 6, a copper blade). Although

33. When Gansell (2007, fig. 4) maps the distribution of seals, she places the lapis cylinder seal found by Woolley with individual 69 on individual 70, probably because it was found near the hand or arm of the former (look carefully at the plan in Fig. 1 and consider Woolley 1934, 120). This partially obscures the geometrical pattern of the seal's distribution, shifting the location of the seal towards the corner. Compare my Figure 14 with Gansell's figure 4.

34. Potts more specifically states that in the mid-third-millennium BC, the sealing of doors and movable containers was very common, while the use of seals on administrative and legal documents appears to have been extremely rare, to become frequent again in the Ur III period (1997, 243).

Table 2. *Description, context and spatial distribution of the six cylinder seals found in PG 1237. See also Figures 12 and 14 and Pittman 1998.*

Ind.	Identification	Material	Registers	Woolley's description of the subject	Location
60	U. 12387 pl. 194, 23	lapis	2	'Man and woman seated at a banquet of wine, attended by one servant. The man raises a cup. The woman drinks through a tube from a jar set on a stand containing two extra pipes. Their seats are different. The sideboard below is richly loaded with legs of lamb, loaves, or jars. Two servants bring in a heavy jar swinging from a pole across their shoulders. A solid rope or net is tied around the jar. The crossed sticks above may be a stand.'	western corner
61	U. 12380 pl. 195, 39	lapis	2	'Banquet of wine and contest of animals. Three women are seated cup in hand. A maid stands by a board loaded with more cups. Two crossed lions attack a herd of antelopes (goats ?)…'	western corner
7	U. 12374, pl. 194, 22	lapis	2	'Symposium with music…The high-priestess (?) attended by one maid sits apart, cup in hand. Two men drink through pipes from a jar set on a stand and containing three extra pipes or air tubes. Bird heads and scalloped skirts as usual. The more elegant seat may mark the better rank. The female choir below, led by one man, staff in hand, consists of one harp-player, two cymbalists, and three singers clapping their hands…The five-string harp, has a sounding-box shaped like a standing bull and is carried by two boys, each with an arm round its legs.'	eastern corner
69	U. 12427, pl. 193, 14	calcite	1	'Symposium reduced to two seated archaic figures, two pipes, one jar on a stand. Extra pipe in the middle. One scorpion in the field.'	southwestern side
17	U. 12371, pl. 195, 40	lapis	1	'Ritual symposium. Man and woman with servants. They sit and drink through long pipes. A palm-tree suggests dates and palm wine.'	southeastern side
4	U. 12390	shell	nd	Nd	northeastern side

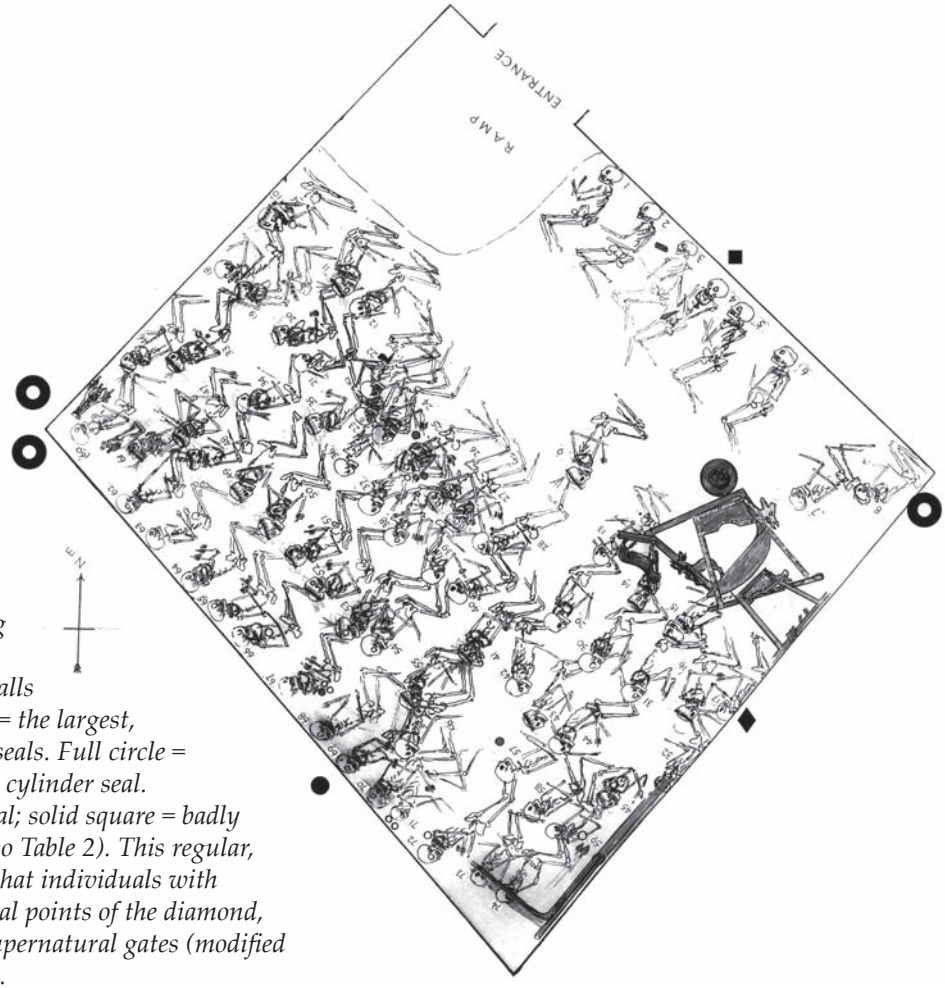

Figure 14. *PG 1237. Seal-bearing bodies were deposited in the east and west corners and along the walls of the diamond. Void large circles = the largest, two-register lapis lazuli cylinder seals. Full circle = a simpler, one-register lapis lazuli cylinder seal. Solid lozenge = calcite cylinder seal; solid square = badly decayed shell cylinder seal (see also Table 2). This regular, symmetric distribution suggests that individuals with seals were placed at key geometrical points of the diamond, perhaps as 'keepers' of invisible supernatural gates (modified after Woolley 1934, vol. II, pl. 71).*

impossible to demonstrate, Woolley's hypothesis, on the whole, seems reasonable. Woolley recorded similar homogeneous groups of 'male' victims buried with their weapons in segregated spaces in other graves, like PG 789 (individuals 19–22, four daggers and a whetstone; heads oriented towards east and looking to northeast) and 800 (five burials into a narrow rectangular pit in the sloping entrance, with daggers and a razor; heads to the southeast). All these attached burials provided with copper blades are strictly spatially segregated; in two cases, they are also oriented in directions contrasting with those of the other associated burials. They are all found near the entrance, presumably being the last, or among the last, to be deposited in the shafts.[35] These correlations suggest the possibility that such groups of armed 'male-servants' in the funerary scenes of the Royal Cemetery were the actual executioners of the others.

Another reconstruction

So far, the fascinating theory that the victims were softly 'translated to a higher sphere of service' (Woolley 1934, 42) supported, in an implicit but authoritative way, the idea that retinues died willingly in their mass graves, under the coercion of a totalitarian ideology. The theory of a voluntary self-immolation of crowds of retinues by the means of a 'sweet poison' is probably a neo-romantic myth, deeply rooted in the culture of the late nineteenth century. It also implied that the order of the bodies in the Death Pits would have reflected that of an official funeral procession, instantly 'frozen' at the time of death without major traumas, to wait undisturbed for the shovels of the excavators. The Woolleys were early and illustrious victims of what Binford and others called 'The Pompeii premise', i.e. the illusion that the archaeological record in optimal conditions should reflect '… the remains of a once living community stopped, as it were, at a point in time' (Binford 1981, 196; consider, in Woolley 1934, the plan of PG 789 in pl. 29, and the famous graphic reconstruction of pl. 30, the caption of which reads 'The persons and objects are drawn in the position in which their remains were found').

If, in contrast, deposition was the result of a prolonged ritual, the Royal Cemetery should be imagined as a quite different scenario. Fogelin (2007, 58) defines the basic elements of ritualism as formalism, traditionalism, invariance, rule-governance, sacral symbolism and public performance. Not all of these characteristics are immediately evident in the archaeological record of the Cemetery. Traditionalism, for example, is hard to evaluate because of the lack of other and more ancient royal cemeteries (the prevailing view, on the contrary, is that these graves are an historical anomaly); invariance, in such a highly decayed record, is at least doubtful; rule-governance and public performance are quite likely, but not demonstrable. In the cognitive theory developed by McCauley and Lawson (2007), religious rituals are transitive (including agents doing something to patients such as objects, plants, animals or persons): participants need to have selected qualities, acquired by the means of previous engagements, belonging to a wider network of past and future ritual events. Rituals also presuppose contact with divinities through leading and strictly qualified intermediaries. These preconditions might fit generically with the evidence of the Royal Cemetery, where — as assumed by Winter and others — pits and spaces, bodies and objects were structured according to precise links and obligations with gods and goddesses of the netherworld.

In this view, the evidence of a powerful sequence of highly formal mortuary performances is revealing. The digging and fast refilling of the Death Pit required the movement of not less than 500–600 cubic metres of soil (assuming an original depth of the Pit of about 8 m, and without accounting for the lost grave and the accessory pits that might greatly increase this estimate). The preparation of the shafts thus required substantial collective efforts. Various types of service and craft specialists were involved and the ritual must have followed a carefully planned program, perhaps directed by managers and leading officers.

The occupants of PG 1237 appear in the funerary scene like a chorus accompanied by professional players and dancers, including 'cross-dressed lamentation specialists' (as suggested by Cohen 2005, 148) or part of a royal harem. We will never know if these people had to perform during the funeral. It is possible that, before death, the victims were forced or persuaded to enact powerful soundscapes, with a deep emotional impact on the hundreds of participants that surrounded the Pit. Through a socially encoded 'choreographed event' charged with an overwhelming 'transformative power' (terms after Winter 2010), music, performance and feasting (all archaeologically invisible ritual components) may have accompanied and celebrated in public the transition of the Sum-

35. In PG 789, this group is buried along a wall, near soldiers, a wagon and wagon attendants, not far from the entrance (this latter seems to have been guarded by rows of armed soldiers). In PG 800, the group is buried in a rectangular pit, sunk at the foot of the sloping access ramp, and doubtless the last to be buried the whole funerary Pit (Woolley 1934, 62–91, pls. 29–43). The burials with blades and weapons are also commented upon by Gansell (2007, 41).

erian lords to their afterlife, creating around them a halo of transcendence, and fostering consensus to the claimed relationships of power. If this was the case, such high levels of 'sensory pageantry' might be correlated with the expected low frequency of performance (McCauley & Lawson 2007), as a royal death was a major, uncommon event. On the other hand, the mortuary representation of music might have been entirely symbolic. The retinues might have been dressed like musicians, without being skilled specialists and, in this case, to assume that music and dance were necessarily performed during the funerals might be arbitrary. Given this uncertainty, and the lack of information on the standards for royal funerals in Mesopotamia in previous and later periods, any cognitive approach, in spite of its potential, will remain quite a tricky effort.

Strong emotions were certainly stirred by the killings, possibly performed in two consecutive steps (first the mass of the victims, then their executioners). If people were serially killed, washed, re-dressed and deposited in burial groups (as the new CT scans make likely, although we might never be able to come to a final solution) we should search in the mass burial for spatial patterns created by a long series of actions. The funerary scene is not simply the output of the collapse of a procession, when everybody fell where he or she was at the moment of death, but the result of a long ritual with repetitive depositions.

Music belonged to palaces and temples. Following Woolley, we may hypothesize that the diamond-like shaft was conceived as an underworld building. In the east and west corners, and on three sides of the diamond, six individuals bearing cylinder seals were possibly buried as the 'keepers' of the gates of this imaginary construction. Their role might have been to keep the dead 'musicians' inside their last residence, and/or to allow them (or part of their supernatural personae) to reach their proper supernatural destinations. Three pairs of individuals with different artefacts and attires may have been placed, in the first steps of the mass deposition, in the three corners opposing the entrance.

The mass of Woolley's 'women' was deposited in the southwestern part of the shaft. Deposition of corpses started from the corners and the sides, continuing in the centre. In the first phases the dead looked to the northwest, while in the second stage they were set looking to the southeast. The ritual (or religious) reasons for this mysterious funerary model, clearly replicated, as discussed above, in the nearby mass burial PG 1332, are open to speculation. A row of 'male-servants' was placed to the northeast, near the entrance, in a contrasting setting. Some of them had copper blades, presumably those used for executing their companions. They might have been killed, in turn, in the last moments of the ceremony, and placed into the shaft near the entrance, with the role of supernatural guards.

Socio-economical implications

Rituals and their repetitive, predictable actions, as expressions of human 'material engagement' (Renfrew *et al.* 2008, 1937), are social signs *par excellence* and possibly the most archaeologically visible form of intensive social interaction. Their performance requires and creates at the same time highly structured environments, both in terms of artefacts and stratigraphic units. Among various approaches (Fogelin 2007), rituals and their symbols may be considered from a political viewpoint. Ritual artefacts may be viewed as materialized ideology. In fact, the '… construction of a sacred building by a king is an avenue toward sacred power; limiting access to the same building affirms that sacred power is restricted to a select few'. In particular, archaeologists may observe '… how symbols are appropriated and manipulated to achieve specific ends … [assuming] ... that the role of ritual is enacting long-lasting cosmological orders that legitimize the ruling elite' (Fogelin 2007, 65). These statements fit very well with the evidence of PG 1237, the lay-out and furnishings of which (as observed for the selective location of the cylinder seals) were dictated by cosmological principles, even if it was a mortuary 'music hall' rather than a royal dwelling.

Whether performed at the funeral or not, when music and dance were 'killed' at the mouth of the shafts, these activities probably became physical furnishings for the dead. After the funerals and the executions, bodies, ornaments, carts, animals, weapons, ritual containers and musical instruments were abandoned in the 'Death Pits' — perhaps, as we have seen, for following the kings or queens to their underworld palaces, as provisions or even as gifts to the local divinities, or just because they were ritually contaminated by the slaughter — the price paid by many for a more prestigious afterlife of a few.

These rituals, reflected discontinuously in the archaeological record, in addition to their immediate ideological functions, were also a systematic, ritualized destruction of wealth. In 1978, Redman (quoted in Tinney 1998) stated that at Ur the weakness of the institution of regality had required lavish and costly funerals to maintain the authority of shaky ruling houses. On the same lines, Pollock (1991a; 2007a) offered a holistic explanation of the Royal Cemetery, proposing that the richest graves symbolically marked

the end of entire prominent households after the death of their charismatic leaders. The custom of burying valuable goods in these graves would have stopped after the institutional consolidation of kingship, when wealth could be officially inherited, together with the role of queen or king, along kinship lines. Actually, in economic terms, the burial of a mass of precious objects, to a large extent made with rare exotic materials imported from the eastern Iranian Plateau and the Indus trade network, appears as a manifest absurdity.[36]

Douglas (1986) showed that the triumph of an institution is its successful nesting into collective consciousness, being actually invisible; a deeply rooted institutional inequality avoids or limits such extreme forms of social display. In contrast, similar rituals denote an archaic attachment to a 'symbolic capital' relevant as far as it could be displayed in public: when kingship and the attached material and ideological resources could not be passed without conflicts to the next generation, nor could it be legitimately transformed into new values and effective political strategies.

The serial executions, waste of highly skilled labour, highly repetitive iconography, and strong ritualism encoded in the deposition processes, as revealed by the detected spatial patterns, share a pervasive dimension of redundancy. As proposed almost thirty years ago in an influential article by Pollock (1983), redundancy in behaviour (and, in terms of material culture, in style) may be the most obvious solution to uncertainty in ancient and contemporary information systems. The evidence thus supports Redman's and Pollock's view that the rationale behind these incredibly elaborate, dramatic funerals was the display of wealth and socio-ritual status by households who actually felt politically weak, and not entirely legitimized to royalty by their own urban community. The claim of a supernatural status by the means of these celebrations might have been perceived as a short-cut to deification of kingship (Woolley 1934, 33–42; Marchesi 2004, 165–9).

History says that shortly after these funerals, the lords of Uruk and later the house of Sargon, while struggling for the political unification of the country, had found more intelligent and pragmatic ways of investing their growing wealth, and soon were able to defeat and conquer Ur. The dead musicians and performers who accompanied their rulers in the Ur's Cemetery, willing or not, were victims, but their killers will be remembered by history as those who lost the most important and final fight — the one for political supremacy in a new, super-urban state.

36. Two or three of such funerals in a row (in the case of a similar contingency) would have bankrupted any royal house in Memphis, Ur or Yin-Anyang. Perhaps in such graveyards the buried treasures were unofficially recovered and recycled by the households or courts who owned the graves, rather than looted by clandestine robbers (see for a provocative discussion Pollock 1991a, 181–2).

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