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SHELL OBJECTS FROM TELL RAD SHAQRAH (SYRIA)

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Abstract: Polish excavations at Tell Rad Shaqrah in northeastern Syria revealed remains of a settlement dated primarily to the second half of the 3rd millennium BC. The paper presents a collection of beads and pendants made of shell and nacre from Rad Shaqrah, mostly from funerary contexts. These beads and pendants find parallels among finds from sites in northern Syria and Mesopotamia (Tell al-Raqa'i, Tell Beydar, Tell Brak, Tell Bi'a, Tawi, Qara Quzaq, Mari etc.) and also from southern Mesopotamia (Ur, Uruk, Abu Salabikh). Among the shell artifacts there are also items made of exotic shells, which raises the question of trade and exchange of shells in northern Mesopotamia in the 3rd millennium BC.

Keywords: Tell Rad Shaqrah, shell/nacre artifacts, personal adornment, beads, zoomorphic pendants, quadrupeds

THE SITE

From the late 1980s through the mid-1990s Polish archaeologists participated in an international archaeological salvage program initiated in connection with the building of the Hassake Dam on the Khabur river in northeastern Syria (International Salvage Program of the Hassake Dam Area). The Hassake Southern Dam Project covered one of the areas under investigation and Tell Rad Shaqrah was the northernmost site in this area. It was excavated in 1991–1995 by a team from the Polish Centre of Mediterranean Archaeology of the University of Warsaw headed by Prof. Piotr Bieliński.[1]

Tell Rad Shaqrah was a small tell, approximately 140 m by 120 m, rising 8 m above ground level (305 m a.s.l.), located on the eastern bank of the river about 15 km southeast of Hassake [***Fig. 1***]. Excavations uncovered the remains of a small settlement from the second half of the 3rd millennium BC (Early Dynastic III). Possible earlier occupation of the site was suggested by a smattering of potsherds attributed to Late Ninevite 5 culture

[1] For preliminary field reports, see Bieliński 1992; 1993; 1994; 1995; 1996. On excavations at Tell Rad Shaqrah, see also Koliński 1996.

and a single pot-stand of Bichrome Ware (Koliński 1996). The site was settled also in the Akkadian period and after a long interval again in the Iron Age, in the Neo-Assyrian period (Koliński 1996: 67; Reiche 1999).

SHELL FINDS FROM TELL RAD SHAQRAH

Excavations produced both unworked shells and artifacts made of shell,[2] but neither were ever studied by specialists. The shells were not properly identified

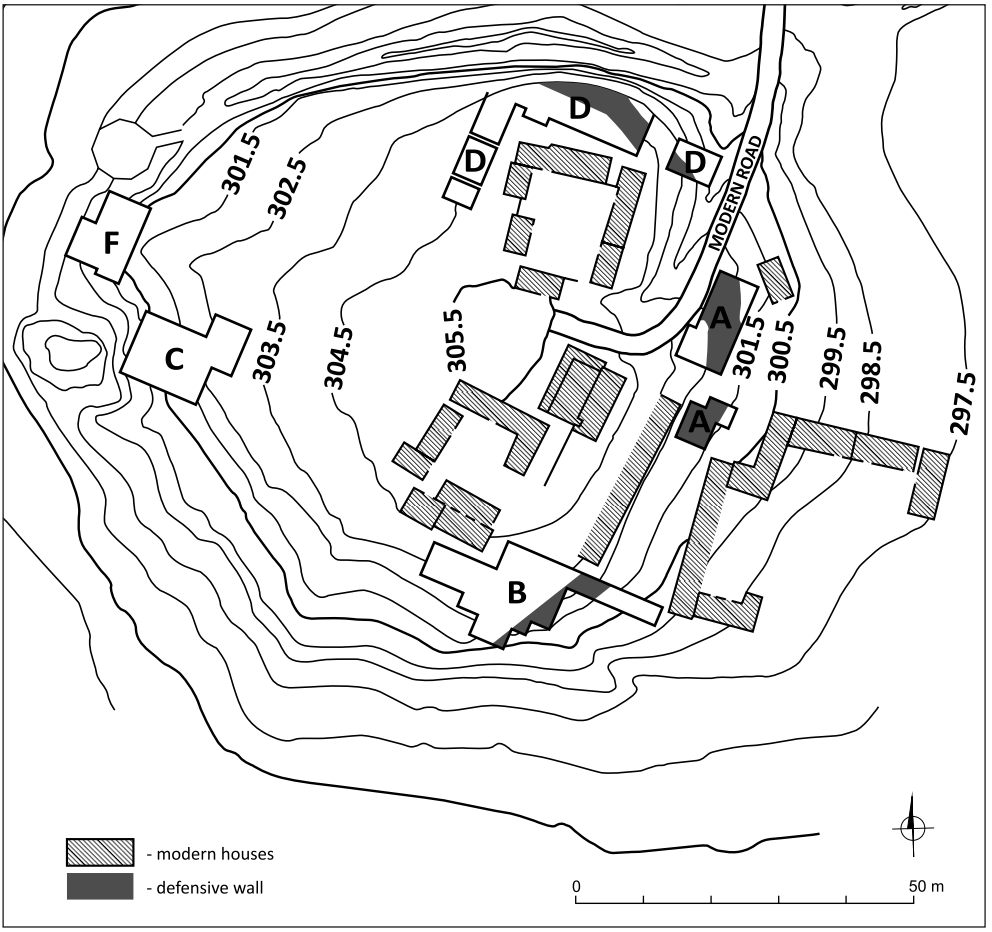

Fig. 1. Contour plan of Tell Rad Shaqrah showing the location of excavated areas (object inventory numbers in the catalogue herein are coded by the letters designating individual trenches) (Drawing A. Schneider; digitizing M. Wagner)

[2] The excavation register from Tell Rad Shaqrah listed altogether 71 shells or fragments of shells: 22 were described as bivalves, the rest as shells. The latter group could have included more bivalves, but also, for example, land snails, the presence of which in archaeological layers could have been natural after all and not necessarily from the 3rd millennium BC.

to species, which would have been of particular importance had any exotic shells been found. The author has attempted to identify shell species based on drawings and photos, but the results cannot be considered as binding. Species identification is a broader issue which has been brought up also with regard to the origin of shell raw material used in Mesopotamia as well as ready shell products from this region (e.g., Gensheimer 1984: 65–67, 69–72; Moorey 1999: 129–130). Identification is especially difficult with regard to highly worked forms (Gensheimer 1984: 65).

SHELLS IN MESOPOTAMIA

Mollusks[3] were used in Mesopotamia and the entire Near East from the earliest periods, from the Paleolithic as food (von den Driesch 1995: 350, listing terrestrial, freshwater and marine species from the Near East) and from the Neolithic and early Chalcolithic as ornaments, mainly because of the durability of the material (Gensheimer 1984: 67, Musche 1992: 9, 12, 31, see also Pl. VII: 1, 4, 5.2–5.6, examples from Ubaid culture). Intensive use of shells in Mesopotamia, both natural and as worked products, is observed from the turn of the 4th millennium BC (Gensheimer 1984: 67).

From the Epipaleolithic shells were the object of exchange, trade in these products intensifying in the 3rd and 2nd millennia BC often between very distant regions (von den Driesch 1995: 351). Shell artifacts found in Mesopotamia frequently originated from the Gulf of Oman; starting from the mid-3rd millennium BC or slightly later they also came from coastal India either directly or through intermediaries like the merchants of Oman (Gensheimer 1984: 65–67, 72). It has been pointed out (Moorey 1999: 129) that while the use of perforated shells as ornaments began from prehistoric times, it was in the 3rd millennium BC, especially in the ED II and ED III, that production of shell artifacts boomed. It does not come as a surprise because it was also a period of extensive trade contacts with regions where shells of marine snails used in craftwork, were commonly available.

The role of shells in cult practices (von den Driesch 1995: 351–354) or more broadly socio-ritual functions (Gensheimer 1984: 65, 67) has been recognized based on texts of a magical nature and the context of some of the shell finds (temples, foundation deposits). It has been confirmed by the presence of shells and shell artifacts in deposits from Ashur (e.g., Ishtar temple, Ashur-Enlil ziggurat, see Andrae 1935: 24–25, 54–57, Pls 26:a, 27:a-b, Middle- and Neo-Assyrian), Mari (e.g., Ninhursag temple, see Beyer, Jean-Marie 2007, ED III), Nineveh (so-called "Perlenstratum" probably connected with the Ishtar temple, see Gut *et alii* 2001, ED III–Akkadian), Tell Bi'a (Temple C, see

Bivalves could have been part of the diet of the inhabitants of Tell Rad Shaqrah, which lies on the Khabur. Bivalves were consumed in the Near East from the Paleolithic and the most common species found on the banks of the Tigris and Euphrates rivers was *Unio tigridis* (von den Driesch 1995: 350). The bivalves shells from Tell Rad Shaqrah may have represented the most common species of *Unio tigridis,* Unionacea order of river bivalves (von den Driesch 1995: 350).

[3] Mollusks are extremely numerous, divided into several classes. Of interest for the purposes of this study are the ones that form shells: snails (Gastropoda), tusk shells (Scaphopoda) and bivalves (Bivalvia).

Miglus, Strommenger 2002: Pls 129–131) and other sites. In Nineveh shell beads constituted the second largest group of bead and pendant artifacts from the "Perlenstratum", counted after frit (Gut *et alii* 2001: 80). The case of finds of marine shell from graves is very similar; they were interpreted as status markers or as amulets (Gensheimer 1984: 67).

Finds from Mesopotamian sites demonstrate that shells and nacre were used to make different artifacts: jewelry, adornments, but also inlays, ladles, vessels,[4] scrapers and seals. They also served as containers for pigments or cosmetics[5] (see von den Driesch 1995: 351; Gensheimer 1984: 69; Potts 1997: 263–265, Moorey 1999: 129, 132–140). Despite numerous shell finds coming from archaeological excavations, only few of the larger bivalves and snail shells were suitable for craftwork, including complicated ornaments (Moorey 1999: 129). On the other hand, natural shells were commonly used as containers for cosmetics and almost unworked shells (except for perforations for suspension) as ornaments/beads. Ornaments of this kind had diverse purposes. According to W. Orthmann, pendants could have decorated clothing and accessories; according to the excavator, numerous beads, mainly of frit, from Steinbau I in Tell Chuera could have been dress ornaments along with two shell pendants shaped as birds with spread wings and two shell rings (Orthmann *et alii* 1995: 40, 43, see Fig. 22:61a, e–f).[6] Finds from graves suggest that pendants could have been part of necklaces or bracelets.

SHELL ARTIFACTS FROM TELL RAD SHAQRAH

Shell artifacts found during archaeological excavations at Tell Rad Shaqrah demonstrated different degrees of reworking, from the simplest beads to pendants with stone inlays. Most of the finds of shell artifacts came from grave contexts (see catalogue in ***Table 1***), some from different occupation contexts. To date, only the zoomorphic pendants from burials have been studied (Szeląg 2002 and forthcoming).

All of the shell artifacts from Tell Rad Shaqrah represent only ornaments made of different species of shells: beads, rings and pendants/amulets. It is a small assemblage compared with Tell Brak where the variety of objects made of shell was considerably greater: rings, beads or presumed beads, like 26 small shells found in a ritual deposit (SS-549 in paved courtyard 8, area SS), pendants, including cowry shells,[7] seals and inlays. At Brak local river bivalves were also used as a container for pigments and presumably cosmetics, or else small pieces of different shape were cut out to be used as inlays (Oates 2001: 296–297).

[4] Previously interpreted as lamps, see Gensheimer 1984: 69; Moorey 1999: 133.

[5] On such finds from a grave in Ashur, see Hockmann 2010: 86, with references. Cosmetic containers made of shells with their content were also found in Selenkahiye, see van Loon [ed.] 2001: 140 (grave C, dated to the Akkadian period), see also Fig. 4A.4A:20, 145 (grave E, dated to ED III), 155 (grave H, dated to ED III, see also Fig. 4A.8A:28).

[6] Orthmann also recorded shell artifacts from the same location (Steinbau I), including one reworked into a vessel; no species were identified, see Orthmann *et alii* 1995: 40, 43, see Pl. 22: 62–64.

[7] Beads made of cowry shells from Tell Brak were mentioned also by R. Matthews (Matthews [ed.] 2003: 63, Fig. 4.12, see also Fig. 4.26:18).

A. BEADS

Beads are the simplest category of shell ornaments, used on either necklaces or bracelets. Shells can be considered as natural, assuming the pierced hole for suspension is ignored [***Fig. 2***, top row]. The beads were usually of small size, ranging from the smallest, about 1.2–1.6 cm in height, to middle-sized examples (about 2.7 cm in length, 0.8 cm in width).

A few singular finds came from the settlement on Tell Rad Shaqrah [***Fig. 2: Cat. 2***], whereas larger assemblages were discovered in child graves. The biggest numbers of beads were found in the most elaborate and richest stone cist graves, where perforated shell beads were only one category of ornaments made of a variety of materials: grave 19 yielded remains of a necklace with the beads made of frit, bone and in nine cases of shell [***Fig. 2: Cat. 11 (1–3)***]. Another 12 shell beads from this grave were identified as dress ornaments [***Fig. 2: Cat. 10 (1–2)***]. Shell beads were also found in two other graves of the same kind. Beads from grave 20 included 20 examples made of perforated shell [***Fig. 2: Cat. 12***], and in grave 21 there were 27 such beads among the ornaments recorded there [***Fig. 2: Cat. 13***]. Shell beads were found also in mud-brick box graves. In one of these (grave 13) there were 12 shell beads, from one to five beads came from burial contexts in graves 15, 16 [***Fig. 2: Cat. 8***], 17, 35, 37. In the case of grave 15, dated to the Akkadian period, the beads demonstrated a degree of processing: the shells seem to have been cut lengthwise revealing their inner structure [***Fig. 2: Cat. 7***]. Similar beads came from graves in Tell Bi'a (Strommenger, Kohlmeyer 1998: Pls 19:11,15, 26:12) and Tell Abu Hğaira (Suleiman, Quenet 2012: 14, No. 60, Fig. 45, left).

The simplest form of shell beads was very common on 3rd millennium BC sites in northern Mesopotamia, where they were found mainly in graves:
Khabur area — Tell al-Raqa'i (Curvers, Schwartz 1990: 14, Fig. 16.5, grave, excavation unit 42/90; Dunham 1993: 253–254, grave 42/96-35, 256, grave 29/132-12, 257 grave 29/132-21); Tell Abu Hafur (Koliński, Ławecka 1992: 202, 211, grave 2, layer 1); Tell Knedij (Martin *et alii* 2005: 52, grave 73, see also Martin, Wartke 2005: 260, Pl. 184:613);[8] Tell Beydar (Nonne 2008: 16–20);[9] Tell Abu Hğaira (Suleiman, Quenet 2012: 13–14, Nos 52–59);
Euphrates area — among others, Qara Quzaq, graves (Valdés Pereiro 1996: 313, 317, Fig. 23:29–32, one example [Fig. 23:19] cut to reveal the inside of the shell); Tawi (Kampschulte, Orthmann 1984: 39, grave T 21; 43, grave T 22; 71, grave T 26; 74, grave T 27);[10] Tell Bi'a (many examples, e.g., Strommenger, Kohlmeyer 1998: Pls 19:17; 23:18,27,33; 27:17; 28:24; 30:8; 35:5); Selenkahiye (van Loon 2001: 155, grave H; 177, grave R; 480, two graves from square Q 26).[11] Selenkahiye has also yielded imitations of shell beads

[8] Tell Knedij yielded also two bivalves shells with perforations at one end for suspension (Martin, Wartke 2005: 250, Pl. 172:502–503).

[9] In her publication of ornaments from the excavations at Tell Beydar L. Nonne adopted a division into groups which placed perforated shells in the category of pendants (pendentifs), further subdivided by shape, see Nonne 2008: 3–6, especially 4.

[10] Tawi and Selenkahiye should be noted as singular finds.

[11] Other mentions of shell finds from graves in Selenkahiye are not clear, but may concern pierced shells used as beads: grave T, Akkadian period: three shells (van Loon 2001: 181), grave Tb 1, group of burials dated to 2400–2000 BC: one shell (van Loon 2001: 197).

made of faience/frit (van Loon 2001: 155, grave H, see also Fig. 4A.8A:24) and lapis lazuli (van Loon 2001: 177, grave R).

Shell beads could also be processed to a greater degree. Examples of this kind from Tell Rad Shaqrah are limited to two small (1 x 1 cm) mother-of-pearl beads of rhomboid shape (grave 16) [***Fig. 2: Cat. 18 (1–2)***]. A good parallel comes from T 22 at Tawi (Kampschulte, Orthmann 1984: 42, the beads are bigger, 2.5 x 2.55 cm).

Beads of tusk shells (Scaphopoda) can be distinguished as a separate group of the simplest kind of beads. Shell structure in the case of this species — open at both ends, slightly curved conical tubes — let them be strung as ornaments without perforation. Three beads of this kind may be identified in the assemblages from Tell Rad Shaqrah. One comes from the inventory of 14 stone and shell ornaments from grave 31 (identified from photos alone) [***Fig. 2: Cat. 6,*** elongated bead], two others were found outside of grave contexts: A-34/1/'91 [***Fig. 2: Cat. 16***] and C-20/'91 [***Fig. 2: Cat. 17***]. If the identification based on a characteristic lengthwise-ribbed surface is correct, they were marine mollusks living in the Mediterranean Sea as well as the Indian Ocean and hence, would represent imports at the site. Tusk shell beads have been found, among others, in the burial of a young woman from Qara Quzaq, layer V (Valdés Pereiro 1996: 313, 317, Fig. 23:33–34), where they were identified as *Dentalium*,[12] Bi'a (Strommenger, Kohlmeyer 1998: Pl. 19:17.4, 17.15) and Selenkahiye (van Loon 2001: 480, see also Pl. 10.1:b – 28; *Dentalium* shells making up part of a necklace found in a grave in square Q26).

Table 1 Catalogue of shell artifacts from Tell Rad Shaqrah

Figure	Cat. No.	Object	Dimensions	Findspot	Inv. No.
A. BEADS					
	1	1 bead, perforated shell	1.0 cm x 0.6 cm	loc. 2	TRS A-21/1/'91
Fig. 2	2	1 bead, perforated shell	2.1 cm x 1.8 cm	loc. 1	TRS A-28/1/'91
	3	1 bead, perforated shell	–	loc. 25	TRS C-50/'91
	4	1 bead, perforated shell	–	subsurface	TRS D-2/'92
	5	12 beads, perforated shell	L. 1.2–1.4 cm	grave 13	TRS B2-94/3e/'92
Fig. 2	6	5 beads, perforated shell [three illustrated: 6(1), 6(2) and 6(3)]	–	grave 31	TRS B3-82/3c/'94
Fig. 2	7	5 beads, perforated shell	L. 1.0 cm	grave 15	TRS C-179/3/'95
Fig. 2	8	3 beads, perforated shell	L. 1.0 cm	grave 16	TRS C-194/8i/'95
	9	3 beads, perforated shell	L. 1.3 cm	grave 17	TRS C-196/8c/'95
Fig. 2	10	12 beads, perforated shell: seven bigger and five smaller [10(1) and 10(2) respectively in the plate]	L. ~1.6 cm, ~1.2 cm	grave 19	TRS C-56/8b/'91

[12] On difficulties in identifying tusk shells as the *Dentalium* species, see Moorey 1999: 131.

Figure	Cat. No.	Object	Dimensions	Findspot	Inv. No.
Fig. 2	11	9 beads, perforated shell [11(1), 11(2) and 11(3) examples in the plate]	L. 1.2–1.9 cm	grave 19	TRS C-56/9l/'91
Fig. 2	12	20 beads, perforated shell	H. 1.2–1.6 cm x max. 1.1 cm	grave 20	TRS C-106/9l/'94
Fig. 2	13	27 beads, perforated shell	2.7 cm x 0.8 cm	grave 21	TRS C-206/10m/'95
	14	2 beads, shell?/bone?	–	grave 35	TRS B1-147/'94
	15	1 bead, perforated shell	–	grave 37	TRS C-10/67/'94
Fig. 2	16	1 bead, elongated, tusk shell	1.4 cm x max. 0.5 cm, D. ~0.1 cm	small test pit	TRS A-34/1/'91
Fig. 2	17	1 bead, elongated, tusk shell	1.3 cm x 0.5 cm, D. ~0.1 cm	loc. 5	TRS C-20/'91
Fig. 2	18	2 rhomboid beads, perforated, nacre	max. 1.0 cm x 1.0 cm, D. 0.2 cm	grave 16	TRS C-194/8a/'95
B. RINGS					
Fig. 3	19	15 flat rings, shell	Dia. outer 2.4 cm, inner 0.8–0.9 cm	grave 19	TRS C-56/8a/'91
Fig. 3	20	1 ring, shell	Dia. outer 2.3–4 cm, inner 1.5 cm; D. 0.5 cm	grave 14	TRS B1/B5-131/10/'94
	21	1 ring, shell, fragmentary	Dia. outer 1.8 cm; D. 0.3 cm	–	TRS D-203/'95
Fig. 3	22	1 ring, shell, fragmentary	Dia. outer 2.3 cm, inner 1.4 cm; D. 0.5 cm	–	TRS F-11/'95
Fig. 3	23	2 rings, nacre [23(1) and 23(2) respectively in the plate]	Dia. outer 2.4 cm, inner 1 cm [23:1]; outer 2.5 cm, inner 1.2 cm [23:2]; D. ~0.3 cm	grave 20	TRS C-106/8/'94
Fig. 3	24	1 ring, shell?/bone?	Dia. outer 2.2 cm, inner 1.4 cm	grave 24	TRS C-145/2/'95
C. PENDANTS: C.1. Zoomorphic pendants **C.1.1. Quadrupeds**					
Fig. 4	25	Pendant, nacre, quadruped; horizontally pierced; eyes as concentric circles with dots in the middle, circle-and-dot engraving on the body	3.8 cm x 1.7 cm, D. ~0.2 cmx	grave 9	TRS A-4/56/5/'93
Fig. 4	26	Pendant, nacre, quadruped; horizontally pierced, eye as concentric incision, circle and dot engravings on the body	max. 1.5 cm x 2.2 cm, D. 0.2 cm	grave 16	TRS C-194/6/'95.
Fig. 4	27	Pendant, nacre, quadruped, horizontally pierced, eye as concentric incision, concentric engravings on the body	max. 3.5 cm x 2.0 cm, D. 0.2 cm	grave 17	TRS C-197/7/'95

Figure	Cat. No.	Object	Dimensions	Findspot	Inv. No.
Fig. 4	28	Pendant, nacre, quadruped, description as above	3.0 cm x 2.2 cm, D. 0.2 cm	grave 20	TRS C-106/5a/'94
Fig. 4	29	Pendant, nacre, quadruped, description as above	2.3 cm x 1.6 cm, D. 0.2 cm	grave 20	TRS C-106/5b/'94
Fig. 4	30	Pendant, nacre, quadruped, horizontally pierced, eye as concentric circle with dot in the middle, circle and dot engraving on the body	max. 3.0 cm x 2.4 cm, D. 0.2–0.3 cm	grave 21	TRS C-206/8/'95
Fig. 4	31	Pendant, nacre, quadruped, horizontally pierced	max. 1.9 cm x 1.2 cm, max. D. 0.4 cm		TRS C-3/5/'91
		C.1.2. Birds			
Fig. 5	32	Pendant, nacre, fragmentary, bird with spread wings, horizontally pierced, feathers indicated as incised lines	max. 1.1 cm x 1.8 cm, D. ~0.2 cm	grave 16	TRS C-194/7/'95
Fig. 5	33	Pendant, nacre, bird as above, head missing or not indicated	2.0 cm x 2.4 cm, D. 0.3 cm	grave 20	TRS C-106/4a/'94
Fig. 5	34	Pendant, nacre, bird as above, head missing or not indicated	1.4 cm x 1.7 cm, D. 0.1 cm	grave 20	TRS C-106/4b/'94
		C.1.3. Fish			
Fig. 5	35	Pendant, nacre, fish, horizontally pierced (hole represents an eye)	max. 3.0 cm x 1.2 cm, D. 0.2 cm	grave 16	TRS C-194/5/'95
	C.2 Other	**C.2.1. Pendant (conical)**			
Fig. 6	36	Pendant, perforated shell (*Conus*?), conical	height 2.5 cm, max. diameter of base 2.3 cm	grave 14	TRS B1/B5-131/9/'94
		C.2.2. Pendant (anthropomorphic)			
Fig. 6	37	Pendant, nacre, anthropomorphic shape(?)	max. 2.0 cm x 1.5 cm	grave 15	TRS C-179/2/'95
		C.2.3. Pendant (boat)			
Fig. 6	38	Pendant, shell, boat(?)	2.0 cm x max. 0.6 cm, D. 0.2 cm	grave 33	TRS D-205/7/'95
		C.2.4. Pendant ("face")			
Fig. 6	39	Pendant, shell, "face"	max. 2.8 cm x 2.7 cm, D. max. 0.6 cm	grave 19	TRS C-56/9a/'91

In the Khabur area examples of tusk beads were discovered at Tell Brak (Oates 2001: 297, *Dentalium* beads). Layers from the Uruk period at Tell Brak have also yielded long cylindrical shell beads, although it is not certain that these were tusk shell beads (see Matthews [ed.] 2003: Fig. 4.26:11). Graves at Tell Bi'a contained examples of beads made of the shells of marine snails called Röhrenschnecke in German (Vermetidae family, see Strommenger, Kohlmeyer 1998: Pls 121:6e, 125:12h), indicating that tubular shell beads need not always represent Scaphopoda.

Exotic shells may have been used for a number of other beads at Tell Rad Shaqrah. Grave 31 contained two beads of perforated shells that, judging by shape, should be identified as a *Conus* shell at least in one case [***Fig. 2: Cat. 6***]; if so, it would have come from the Persian Gulf or the Indian Ocean (see Moorey 1999: 131). Three shell beads from grave 16 [***Fig. 2: Cat. 8***], similarly as at least three of 20 shell beads from grave 20 [***Fig. 2: Cat. 12***] appear to originate from regions distant from the Khabur river basin. They could be shells of *Engina mendicaria* from the Buccinidae family, which is found in the Gulf of Oman (Gensheimer 1984: 65, 67, 69). Nonetheless, shells of local snails were the primary material used for making beads at Tell Rad Shaqrah.

Shells from the Mediterranean or Persian Gulf have been attested on other sites in the Khabur region as well. The inventory of child graves from layer 2 at Tell al-Raqa'i contained *Engina mendicaria* shells from the Gulf in considerable numbers: five from a grave in square 42/90 (Curvers, Schwartz 1990: 14, Fig. 16.5),[13] altogether nine in grave 42/96-35, 12 in grave 29/132-12 (Dunham 1993: 240, 253–256, see also Figs 2–3, 11); a few shells of this kind (and probably also two other exotic species) were found in grave 29/132-68 (Schwartz, Curvers 1992: 400, Fig. 4, photos only, no description in the text). Among the finds from the second half of the 3rd millennium BC from Tell Brak (ritual deposit SS-549) were shells, most probably from the Indian Ocean (Oates 2001: 296–297). Shell beads are known also from Tell Chazna, although there they were dated to an earlier period. Grave 22 from Chazna yielded numerous beads of diverse materials, shell included; judging by the published illustrations, one of the beads was a perforated *Conus* shell and at least some of a few dozen smaller shells in the reconstructed necklace can be identified as most probably *Engina mendicaria* (Munčaev *et alii* 2004: Pls 15:1 reconstructed necklace, 18:7 drawing of shell from grave 22).[14] Exotic shells (*Engina mendicaria*, *Glycymeris*, *Murex*, *Conus*) are recorded from small site of Tell Abu Hğaira (Suleiman, Quenet 2012: 13–14, Nos 52, 54–55, 57, 59, 62). A great variety of shell species can be observed among the beads and pendants from Tell Beydar (Nonne 2008: 23–50, catalogue, see also selected photos on page 57). Apart from the unspecified snail (23, Nos 3, 4; 36, Nos 66, 91; 37, Nos 148, 157–158, 226; 38, Nos 48, 144, 146) and bivalve shells (36, No. 129; 37, No. 194; 38, No. 248;[15] 41, No. 47), L. Nonne listed

[13] These shells were described as terrestrial snails; a revised description appeared in Schwartz, Curvers 1992: 401, note 7, along with revised dating of the grave (previously attributed to a late layer 3/early layer 2).

[14] Also graves 3 and 21 (Munčaev *et alii* 2004: Pl. 3) contained beads, including possibly ones made of shell (Munčaev *et alii* 2004: Pls 14 and 15:3).

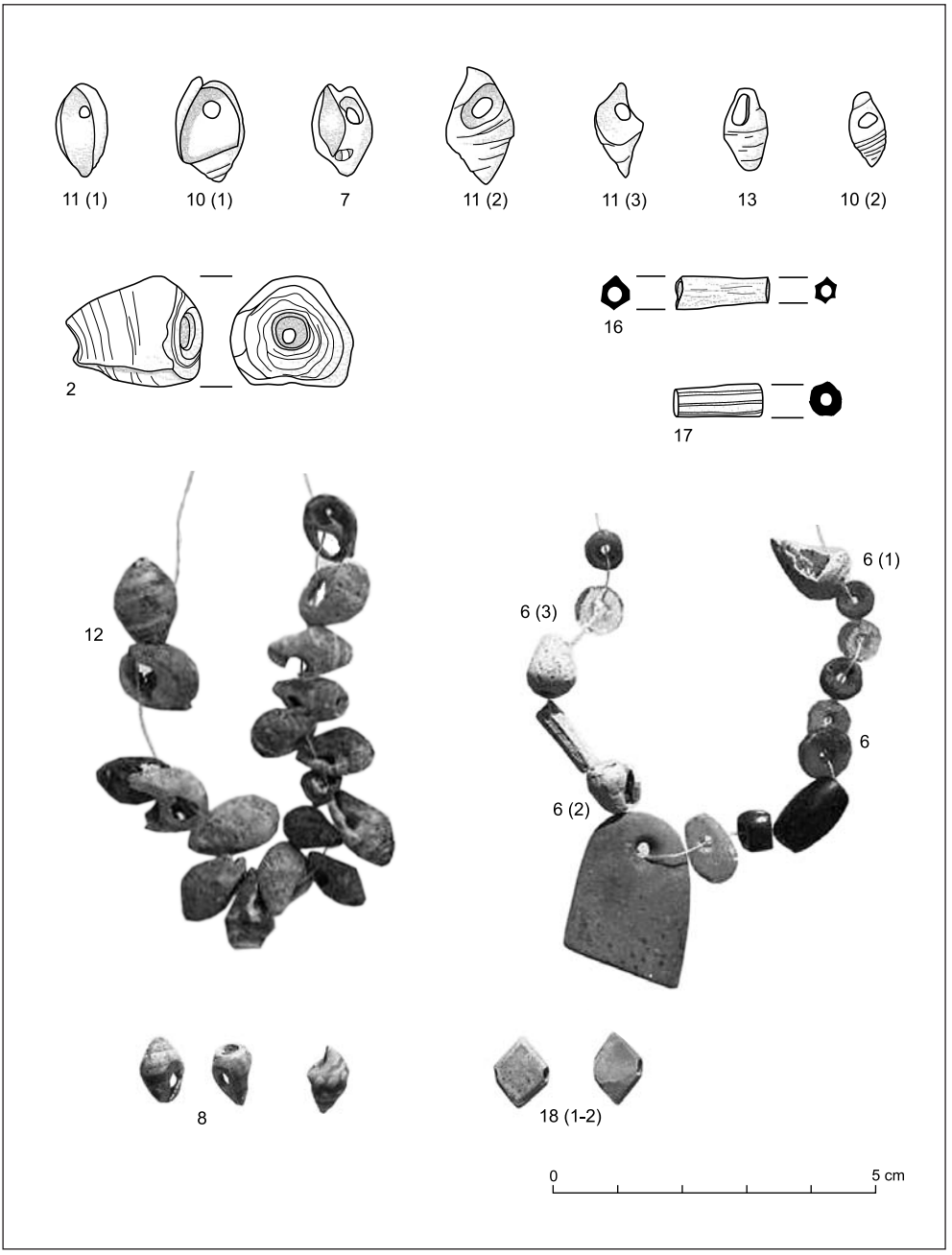

Fig. 2. Simple shell beads (numbers refer to the catalogue in Table 1) (All drawing M. Wagner; all photos A. Reiche)

freshwater bivalves Unionidae (36, No. 77), as well as bivalves from the families: Cardiidae (36, No. 65; 37, No. 133), Veniidae (37, Nos 235, 208), Cypraeidae (38, No. 145; 40, Nos 218, 284) and very numerous examples from the Nassaridae family called *Columbella*, from the Mediterranean Sea (37, No. 223; 38, Nos 142, 160; 39, Nos 161–163, 165, 173, 175–176; 40, Nos 237, 240, 276, 278). Among the snail shells identified at Tell Beydar there were marine snails from the families Nitorinidae (36, Nos 76, 166, see illustration on page 56), Muricidae (40, No. 186), Olividae from the Indian Ocean (36, Nos 37, 225, see illustration on page 56), as well as snail shells from the Buccinidae family from the Mediterranean Sea (36, No. 100; 38, Nos 23, 64). Altogether 39 kinds of shells, included imported ones, were identified at the site of Tell Chuera (von den Driesch 1995: 351, see also Orthmann *et alii* 1995: Pl. 22:63–64).

The richness of identified shell species on the sites mentioned above suggests that a specialist study of shell artifacts from Tell Rad Shaqrah could have brought similar results.

B. RINGS

The next category of ornaments comprises rings. Grave 19 contained 15 flat rings, which could have once decorated a belt [***Fig. 3: Cat. 19***]. They are quite wide compared to the size of the opening (outer diameter is 2.4 cm, the inside 0.8–0.9 cm). Two rings of this kind came also from grave 20 [***Fig. 3: Cat. 23***]; both were fairly flat, about 2.4 cm and 2.5 cm in outside diameter and respectively 1 cm and 1.2 cm on the inside. Another find from a burial context (grave 14) had a much larger inner diameter (about 1.5 cm) [***Fig. 3: Cat. 20***] compared to the 2.3–2.4 cm outside diameter; it may have been used as a finger band rather than a bead (see below). The flat rings with smaller inner openings could have indeed been ornaments sewn onto clothing or accessories like belts. Two singular finds of bands from other contexts (D-203/95, F- 11/95 [***Fig. 3: Cat. 22***])[16] fall into the finger-ring category.

Parallels from the Khabur basin come from, among others, Tell Abu Hafur (Koliński, Ławecka 1992: Fig. 24:14), Tell al-Raqa'i (Dunham 1993: 256, grave 29/132-12), Tell Abu Hğaira (Suleiman, Quenet 2012: 14, 62/AH 460a-b, Fig. 12), Tell Brak (Oates 2001: 296, 10 beads) and Tell Beydar. Indeed, the 146 artifacts of this kind from Beydar indicate that this category of ornaments was quite common. Only 16 of these rings were made of shell, 20 of nacre and one of either shell or bone, whereas the rest were of different kinds of stone, as well as frit and clay (Nonne 2008: 10, Fig. 11).[17] Parallels from northern Mesopotamia include rings from Tell Chuera (Orthmann *et alii* 1995: 43, Pl. 22:61e,f, Steinbau 1, Verfall der Schicht 2), Tawi (Kampschulte, Orthmann 1984: 39, grave T 21, Pl. 16B:19; 42, grave T 22, Pl. 17:19; 71, grave T 26, Pl. 29B:13; 105, grave T 3, Pl. 2a:10–11), Qara Quzaq

[15] Apart from this fossil mollusk shell, a monovalve shell was also identified, see Nonne 2008: No. 22, illustration on p. 56.

[16] Two other artifacts could be attributed to this category (C-145/'95 [***Fig. 2: Cat. 24***] and C-120/'94), but the existing documentation registered the material as either bone or shell.

[17] L. Nonne distinguished three types of rings: spherical, flat and worked ("en préparation"). Shell and nacre artifacts represented only the first two types (Nonne 2008: 4–5, 12, Pl. 13); see also Nonne 2008: illustration on page 56 for a group of flat discoid rings (type IA2), Nos 99, 154, 210, 250.

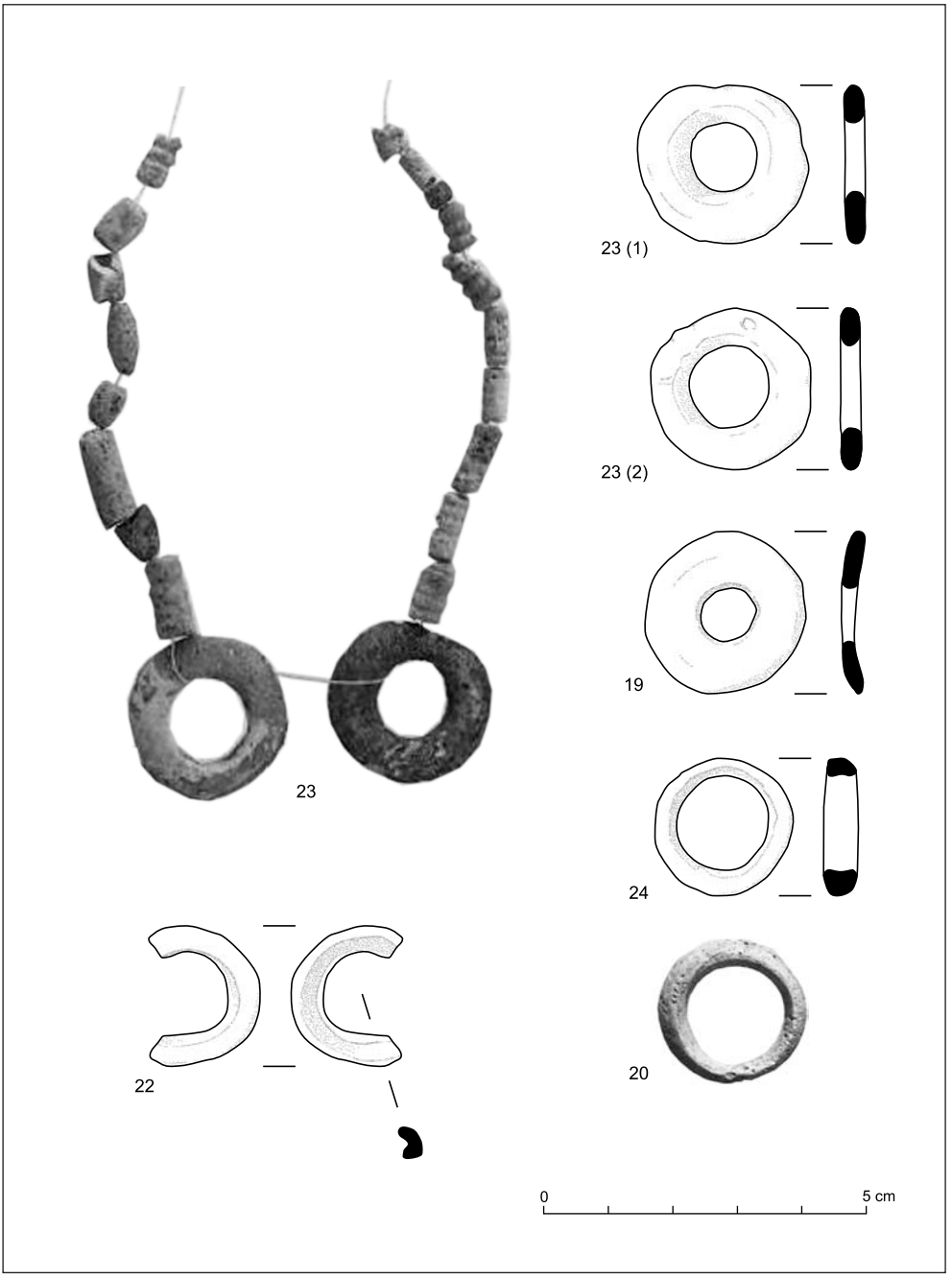

Fig. 3. Shell rings (numbers refer to the catalogue in Table 1)

(Valdés Pereiro 1996: 313, 317, Fig. 23:27–28, female grave from layer V), Tell Shiyukh Tahtani (Sconzo 2006: 345, mid-3rd millennium BC), Tell Bi'a (Strommenger, Kohlmeyer 1998: Pls 69:5, 77:14, 91:1–4, 146:4, 168:11), Selenkahiye (van Loon 2001: 155, grave H, ED III, flat disk with engraved circle-and-dot ornament, 156, grave J, Akkadian period, 480, level 4, see Pl. 10.1:a) and Tell Ashara Terqa (Thureau-Dangin, Dhorme 1924: 289, 11 fragments, Pl. LX:6).

The rings could have had diverse functions. P.R.S. Moorey pointed out that some of the items described as rings were too small to be worn on a finger and must have therefore been used as beads (Moorey 1999: 133; Lindemeyer, Martin 1993: 291[18]). Finds from graves in Tell Rad Shaqrah have suggested dress ornaments as a possible function (see also example from Tell Chuera, Orthmann *et alii* 1995: 40). Flat rings could have also been used as inlays or settings for small round stones (Lindemeyer, Martin 1993: 292, No. 1946). They are most likely to have been produced from the shells of large marine snails, *Strombus* and *Conus* (von den Driesch 1995: 353, Pls 19, 21:e–f; Spycket 1996: 143). Most of the rings from female graves in Ur and Khafajeh were made of *Conus* shell tops (Kenoyer 1984: 58–59). Nevertheless ornaments of this kind were also made of bivalves shells (for stages of production, see Musche 1992: Pl. 8). At Kurban Höyük there were rings made of *Conus* shells as well as of fresh water bivalves shells (Reese 1990: Pl. 164: J–N).

A. Spycket (1996: 141–147) listed shell rings from the second half of the 3rd millennium BC and first half of the 2nd millennium BC, from Mesopotamia and Elam, including, among others, Isin, Khafajeh,[19] Susa and Der. They were found frequently in the graves of women and young girls, usually in larger numbers, sometimes at waist level. Spycket suggested that these could be burials of women who died in pregnancy or childbirth and the shell ornaments on belts may have been fertility symbols (Spycket 1996: 147).

Even if this hypothesis is correct, single finds from graves in Tell Rad Shaqrah and other sites in the region indicate that rings did not always occur in sets used as recurrent decoration motifs on belts or clothing. They could have been used as one of several different motifs sewn onto dress or accessories, next to zoomorphic pendants, for example (Orthmann *et alii* 1995: 40).

C. PENDANTS

C.1. Zoomorphic pendants

Zoomorphic pendants constituted the most numerous group of shell pendants found during the excavations at Tell Rad Shaqrah (Szeląg 2002 and forthcoming). Animals represented included quadrupeds, birds and fish. Shell and nacre were not the only materials used to make animal pendants. Other materials included stone (for quadrupeds) and frit (for birds, presumably a duck) and an unidentified material (for amphibians, presumably frogs) (see Szeląg 2002: 212–213, Cat. 1, 7–8, 11–12, 16).

C.1.1. Quadrupeds

[18] Only three of the 56 rings of this kind from Uruk could be dated to a period encompassing Jemdet Nasr–ED, see Lindemeyer, Martin 1993: 292, Nos 1944–1946.

[19] On rings from Khafajeh, see also Sürenhagen 2011: Fig. 14. He also describes similar finds from a cemetery on the site of Tell Ahmad al-Hattu, dated to ED I (see Sürenhagen 2011: 16, Fig. 18:1a-l).

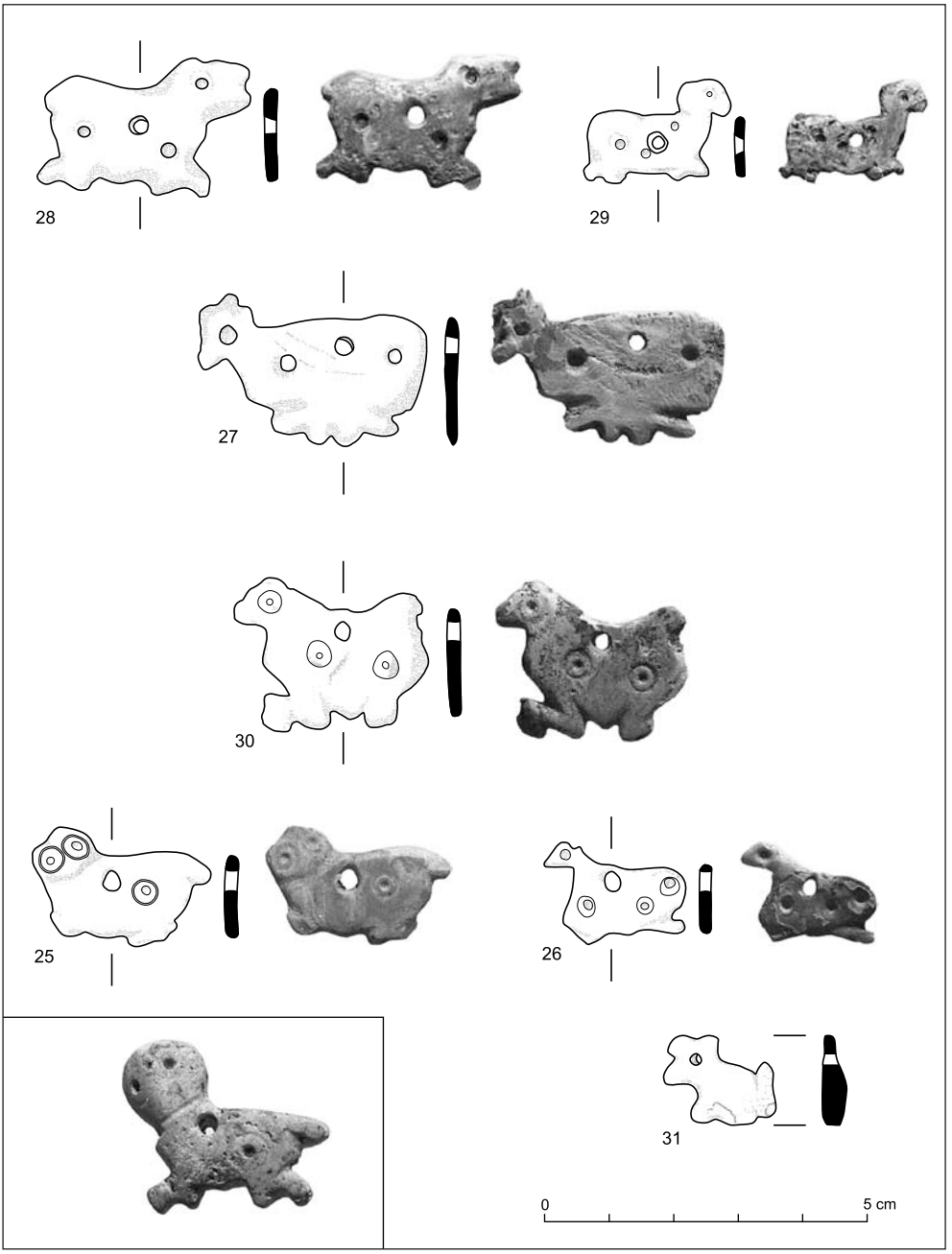

Fig. 4. Zoomorphic shell pendants in the form of quadrupeds; box, pendant of stone analogous to the shell pendant 25 (numbers refer to the catalogue in Table 1)

Seven pendants from Tell Rad Shaqrah took on the shape of quadrupeds. Six came from burial contexts [***Fig. 4: Cat. 25–30***], one from sector C, locus 2 (C-3/5/91) [***Fig. 4: Cat. 31***]. Simplified representations combined with damage to the objects make identification of the animals difficult, but in those cases where some semblance of an identification is possible, we may be dealing with a ram [***Fig. 4: Cat. 26, 29***], cow [***Fig. 4: Cat. 27***] and bull [***Fig. 4: Cat. 30***].

Animals are shown moving, walking [***Fig. 4: Cat. 25?, 28–30***] or lying down, resting [***Fig. 4: Cat. 26–27***]. The silhouettes, most often shown in profile, are shown moving either to the right or to the left, and there does not seem to be any regularity in this. Should we imagine, however, the pendants as part of a necklace, then a regularity could be suggested with the animals being turned to right and to left on either side of a central element. The same could be said of pendants sewn onto clothing — they could have been arranged symmetrically in antithetical position.

The ram-shaped pendant from grave 16 [***Fig. 4: Cat. 26***] finds parallels among artifacts from Tell Chuera (Moortgat, Moortgat-Correns 1976: 61, Fig. 24b, 62 note 58 [Einlage-Plättchen]) and Mari (Parrot 1935: 127, Fig. 10). The quadruped from grave 9 [***Fig. 4: Cat. 25***] differs from other pendants of this kind in that it has two eyes instead of one, as if seen from above or frontally. A similar example came from Tell Rad Shaqrah (stone pendant, see Szeląg 2002: 212, Fig. 1:1) [***Fig. 4***, box]; other 3rd millennium BC sites included Tell Knedij (Martin, Wartke 2005: 250, Pl. 172:504, bull?, shell), Tell Hğaira (Martin, Wartke 1993–1994: Fig. 14: top row, first from left, stone), Tell Brak (Oates 2001: 296, Fig. 317, human-headed bull, phase L, ED IIIb,[20] nacre), Selenkahiye (van Loon 2001: 155, see also Fig. 4A.8A:21, Wreyde tomb H, horizontal perforation, lion, shell), Bi'a (Strommenger, Kohlmeyer 2000: Fig. 53:2, 65:8, Akkadian period, lion, vertical perforation, shell), Tell Atij (Fortin 1990: 240, Fig. 21, bull, shell), Tepe Gawra (Speiser 1935: Pl. LIIIb:2, first half of 3rd millennium BC, marble) and Qara Quzaq (Akkermans, Schwartz 2003: 274, Fig. 8.24, bull, shell). The Tell Brak pendant was interpreted as a human-headed bull, presumably (although this was not said explicitly) because of the head with two eyes. Small-scale stone figurines of human-headed bulls were usually shown with the animal lying on its side, in profile, but with the head facing the viewer (two eyes visible). One wonders whether the different depiction of the head was intended as a means of anthropomorphizing the figure. If so, the pendants could be, like the figures of birds with spread wings (see below), images of mythical beings rather than real animals. On the other hand, there are many representations of (real) animals shown with the head turned toward the viewer, so it is not a feature that was necessarily meant to represent a human head.

A common feature of zoomorphic pendants of shell or stone (primarily of quadrupeds, although there are also examples of birds) are concentric circles cut in place of the eyes [***Fig. 4: Cat. 25, 30***, circle-and-dot incisions; ***Fig. 4: Cat. 26–29***, deeper incisions] and on the body. Actually, there are two kinds of incisions: circle-

[20] On the dating of layers at Tell Brak, see Matthews (ed.) 2003: 5, Table 1.1.

and-dot incisions and deeper concentric cuts. The bodies of pendants from Tell Rad Shaqrah are decorated with circles-and-dots [***Fig. 4: Cat. 25, 26, 30***], as well as deep concentric incisions [***Fig. 4: Cat. 27–29***]. The first kind was surely filled with pigment; traces of pigment have been found occasionally, as evidenced by a pendant from Tell Brak (Mallowan 1947: Pl. XV:10). The deeper incisions could have been filled with pigment or inlaid, for example, with lapis lazuli (Mari, bird with spread wings, Parrot 1956: 158, Pl. 58, see also Bonatz *et alii* 1998: 65 No. 55). No inlays were observed on the zoomorphic pendants with deeper incisions coming from sealed deposits (graves) from Tell Rad Shaqrah; most probably deeper incisions in these cases were filled with paint.

The circle-and-dot motif was common in this period and used to decorate a variety of objects. Peter Akkermans and Glenn Schwartz observed the spread of the motif from western Syria to the Khabur, attested on different artifacts, among others, votive alabaster plaques with the circle-and-dot motif deposited in a jar found inside a temple *in antis* in Qara Quzaq (Akkermans, Schwartz 2003: 274). Similar plaques/beads came from Bi'a, from a foundation deposit in temple C (Miglus, Strommenger 2002: Pls 129:10; 130:4, 6) and Tawi (Kampschulte, Orthmann 1984: 43, grave T.22:18, see also 33:8c–d), and from Knedij, where a rectangular plaque of bone was also decorated with rows of circles-and-dots (Martin, Wartke 2005: 250, Pl. 172:505). Small cubic inlays from a grave at Tell Rad Shaqrah were decorated with incised circles-and-dots (grave 21). A spindle whorl of gypsum decorated with four "dotted circles" was found in one of the graves at Selenkahiye (van Loon 2001: 458, Pl. 9.9:b), as were also a pendant of shell decorated with the same motif (van Loon 2001: 480, Pl. 10.3:d)[21] and a ring with three circles (van Loon 2001: Pl. 4A.8A:27, Wreyde tomb H). Also one of the flat rings of nacre found at Tell Beydar had four such circles arranged around the circumference (Nonne 2008: No. 316); another one comes from the so-called "Perlenstratum" from Nineveh (Gut *et alii* 2001: 80 with further examples from other sites, Fig. 7:76). The same motif was incised on alabaster cups known from, among others, Selenkahiye (van Loon 2001: 456–457 with further examples from other sites, Pls 9.6:c,d; 9.7), 3rd millennium BC graves from Ashur (Hockmann 2010: Pls 20:Ass 2305, 24:Ass 2490, 25:Ass 2499) and from Mari, where they were found in foundation deposits of the temple of Ninhursag (Beyer, Jean-Marie 2007: Fig. 8:13, 23, motifs which can be described as double circle-and-dot motifs, Figs 13:45–46, 24:18). A cosmetic container made of limestone, decorated with rows of incised circles-and-dots inlaid with white paste was found in tomb P at Selenkahiye (van Loon 2001: Pl. 4A.12.A:30).

The custom of decorating animal pendants with circle-and-dot motifs could have been akin to the practice of decorating animal figures with the rosette motif. A good example comes from palace G at Ebla, where a bull and lion, which constituted part of the decoration of a wooden panel (from a piece of furniture?), had rosette-shaped inlays made of shell in the back parts of their bodies (Aruz

[21] But see van Loon 2001: 480, where the artifact is described as a piece of inlay and 482 where it is referred to as a knife(?). The perforation in the upper part of the artifact and the size (2.3 x 2.3 cm) suggest that it was a pendant.

[ed.] 2003: 174, No. 114).

Assuming the symbolic meaning of this motif, which appears to be confirmed by the fact that it could be found on objects found in graves and temple foundation deposits, then its presence on zoomorphic pendants, commonly believed to be amulets, becomes completely understandable.

C.1.2. Birds

Three examples of pendants in the shape of birds with spread wings, pierced at the top for suspension originated from burial contexts: two [***Fig. 5: Cat. 33, 34***] very similar ones except for the size from grave 20 and a third, fragmentarily preserved in two parts, from grave 16 (reconstructed in the drawing) [***Fig. 5: Cat. 32***]. The difference between the first two and the last pendant concern the marking of feathers on the wings. All three were inscribed into a triangle, hence the absence of a clearly distinguished head. The birds were shown frontally, as if in flight, seen from the ground, or else sitting with spread wings (or possibly beating their wings?).

A bird with spread wings is one of the most popular forms of zoomorphic pendants. Among the many parallels for the Tell Rad Shaqrah finds one can mention pendants from Tell al-Raqa'i (Dunham 1993: 255, grave 29/132-12, see also Fig. 6; 256, grave 29/132-21, see also Fig. 12),[22] Tell Abu Hğaira (Suleiman, Quenet 2012: 16, No. 78), Tell Abu Hafur (Koliński, Ławecka 1992: Fig. 24:12a),[23] Tell Arbid (Bieliński 2010: 542–543, Fig. 6) and Tell Chuera (Orthmann *et alii* 1995: 40, 43, Fig. 22:61a, Steinbau 1). Another very schematic pendant from Tell Beydar may have been meant to represent a bird with spread wings.[24] Similar pendants were found in the Euphrates region at Tell Bi'a (Strommenger, Kohlmeyer 1998: Pl. 125:12), Habuba Kabira (Strommenger 1979: 74–75, Fig. 22), Tell Tawi (Kampschulte, Orthmann 1984: 74, grave T 27, see also Pl. 30a:12) and finally Mari (Parrot 1956: 158–159, Pl. LVIII;[25] 1967: 278–279, Figs 297–298, M. 2747). One of the pendants from Selenkahiye, described as a "notched piece of red shell", was most probably a fairly schematic representation of a bird with spread wings (van Loon 2001: 155, grave H, see also Fig. 4A.8A:25). Similar artifacts, although made of other materials, come from southern Mesopotamian sites: Abu Salabikh (Postgate, Moorey 1976: Pl. 26:b, c, four examples of lapis lazuli) and Ur (Woolley 1955: 187, U. 17860, amulet of glazed frit, see also Pl. 28).

Examples of this category can differ considerably. One pendant from Mari (Bonatz *et alii* 1998: 65, No. 55) is of highly angular shape. The head is practically not distinguished from the body, the tail is rectangular and there is no evidence of engraving on the wings. From Mari as

[22] See also Dunham 1993: 247, note 49, citing many examples of pendants shaped as birds with spread wings from different sites in Mesopotamia, Anatolia and Elam: Tell Atij, Kish, Kurban Höyük (shell pendants), Fara, Susa (stone pendants).

[23] Two other pendants are too damaged to identify the figure with any certainty, but at least one of them may have represented a bird with spread wings (see Koliński, Ławecka 1992: Fig. 24:12b-c).

[24] L. Nonne believed the pendant represented a fish (2008: 42, no. 243; illustration on page 58). Incisions "on the fin" may be remains of wing markings known from bird representations.

[25] A. Parrot lists nine examples, including seven made of shell. One of the artifacts (M. 213) was presented in Bonatz *et alii* 1998: 65, No. 55. There were three small perforations in the upper part of the pendant and below them two circular hollows preserving remains of a round ring of shell and, in the left one, also inlay of lapis lazuli. A. Parrot (1956: 158) considered these to be inlaid eyes.

well as from other sites come pendants with feathers marked on the wings and tail (Parrot 1956: Pl. LVIII; 1967: Figs 297–298).

Shell artifacts presenting birds in a different view than with spread wings come from northern Mesopotamia and Syria, e.g., a pendant from the Early Bronze Age from Emar (Finkbeiner, Sakal 2003: Pl. 17:b) and two others from Mari (Parrot 1956: Pl. LX:671, goose; 1967: 278–279, Figs 297–298, domestic bird, M. 2760).

The birds represented on the pendants are interpreted most often as eagles. However, it should be assumed that different species were actually represented, just as there are many species suggested in the interpretation of representations of quadrupeds (bull, ram, cow, lion, dog, fox, bear). The identification with an eagle is rooted in the association of bird representations with Anzu/Imdugud (eagle with lion head) or perhaps even in the similarity of the frontal image with spread wings to later armorial birds (eagles) known from Europe. Parrot was the first to observe that the extreme simplification of the representations from Mari make it impossible to determine whether the birds had lion heads (Parrot 1956: 158). Indeed, the highly simplified heads of most bird-shaped pendants do not justify interpreting all of them automatically as representations of Anzu/Imdugud.

There are, however, a few unquestionable representations of Anzu/Imdugud from northern Mesopotamia. A hoard of Akkadian date from Tell Brak included a pendant of lapis lazuli and gold representing a lion-headed bird (see Matthews [ed.] 2003: 204–205, Figs 6.16, 6.63:1). Matthews cited also other examples from other sites in northern (Mari, see Matthews [ed.] 2003: 206) and southern Mesopotamia (Tell Asmar, Lagash, Al-Ubaid, Ur, see Matthews [ed.] 2003: 206–207). A lion-headed eagle can be seen

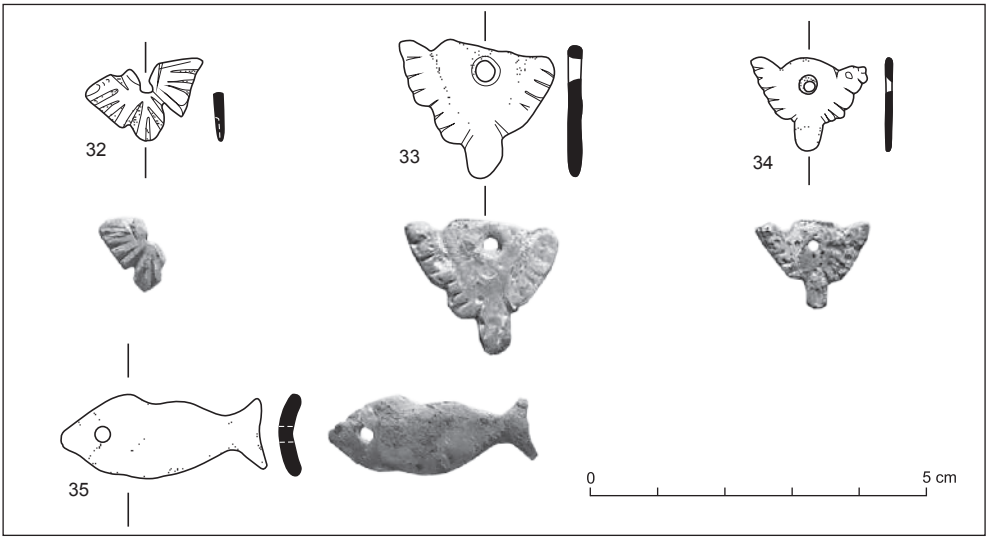

Fig. 5. Zoomorphic shell pendants in the form of birds and fish (numbers refer to the catalogue in Table 1)

also on a fragment of an inlay from Ebla (Aruz [ed.] 2003: 175, No. 115a). Seals from northern and southern Mesopotamia also point to the popularity of the motif in the 3rd millennium BC (Matthews [ed.] 2003: 207). The simplified representations of birds could have been, but not necessarily, a counterpart of images of Anzu on the objects cited above.

S. Dunham linked the image of a bird with spread wings with Enlil (Dunham 1993: 249–251). In turn R. Matthews pointed to a connection between representations of Imdugud/Anzu from Lagash and the god Ningirsu or Ninurta. The motif was undoubtedly strongly rooted in southern Mesopotamian religious images. Should it be assumed that pendants in the form of birds/eagles found at many sites in northern Mesopotamia and Anatolia were indeed representations of Anzu, it would mean that this figure and/or deities associated with it were well known and worshiped in Mesopotamia in the second half of the 3rd millennium BC. This idea seems risky at best. Moreover, it is difficult to explain why only one creature, the eagle, should be connected with the mythological counterpart, while the other known zoomorphic pendants occurring simultaneously with it would be only representations of real animals (with the one exception of a human-headed bull, see above). All in all, it should be assumed that they were representations of some divine beings or animals symbolizing divinities.

It cannot be excluded, however, that the image of a bird with spread wings was part of some unknown mythological beliefs of the inhabitants of northern Mesopotamia and hence their popularity over such an extensive part of the Near East in the second half of the 3rd millennium BC.

C.1.3. Fish

A fish-shaped pendant with perforated eye came from grave 16 [***Fig. 5: Cat. 35***]. A very similar pendant was found in Ur (Woolley 1955: 191, Pl. 28, U. 18499, shell). Fish-shaped pendants made of shell and other materials were also discovered in Tell al-Raqa'i (Curvers, Schwartz 1990: 13, Fig. 14, "fish" pendant, limestone, burial, excavation unit 48/90; Schwartz, Curvers 1992: Fig. 6, bone fish, grave 29/132-12, level 2), Tell Chuera (Moortgat, Moortgat-Correns 1976: 61–62, Fig. 24A, shell), Mari (Parrot 1956: Pl. LX:201, 271, 370, shell) and Tell Abu Hğaira (Martin, Wartke 1993–1994: 210, Fig. 14). Small fish-shaped amulets, two of gold and one of lapis lazuli, came from the royal cemetery in Ur (tomb of Pu-abi, Woolley 1934: 88, 300, 565, Pl. 142, U.10944–10945). The fish from Mari, Raqa'i and the cemetery in Ur were represented with much greater accuracy than the pendant from Rad Shaqrah, showing the eyes, fins and engraved ornament representing scales on the body.

Objects of this type were made in earlier periods, as indicated by a fish-shaped pendant of stone from Tell Brak, from the "Eye Temple", dated to 3300–3100 BC (Mallowan 1947: 194, Pl. XLVII:4, see also Pl. XIV:25 and page 110 on other fish-shaped pendants from Brak and other sites in Mesopotamia).[26]

Raqa'i produced another shell pendant

[26] For another fish pendant, see Reade 1996: 25, Ill. 26 stone and shell amulets and stamp seals from Uruk, Tell Brak and unnamed sites (three bottom ones most probably of shell, the first one on the left a fish representation) from the late Uruk period (about 3300–3000 BC).

representing two fish "hanging by their mouths" (Dunham 1993: 253, Fig. 1, grave 42/96-35, shell). While not exactly rare (two examples from Uruk from the Jemdet Nasr period, see Limper 1988: 31, 187, Form 324, Pl. 11: 94b, see also Fig. 25 with other examples from Khafajeh, Tello and Ur), this manner of representing fish is different from the convention adopted for other animals. Those were images of animals in the wild, these fish appeared as if caught and strung up to be carried. A scene from the so-called Standard of Ur stands in clear confirmation — it shows a servant with tied fish held in both hands in the middle register of a banquet scene (see Woolley 1934/II: Pl. 91). A similar motif can be seen most probably on the shoulders of a Jemdet Nasr-period jar from Jemdet Nasr; the decoration in the metopes included, among others, scorpions,[27] eyes, fish tied with string, a building facade(?), birds and quadrupeds (Matthews 2002: Fig. 18:7).

The question that first comes to mind is whether the difference in rendering denotes a difference in meaning: live fish on the pendants from Ur and Tell Rad Shaqrah, caught fish, either for consumption or as offerings(?), on the ornament from Raqa'i and the decoration of the jar from Jemdet Nasr. Amuletic function is the second issue that comes to mind. What could be the meaning of fish that have been caught, vanquished outside their element which is water? In her description of the finds from Uruk, K. Limper cited E. Heinrich, who considered the double fish as a symbol of fertility (Limper 1988: 31), even if with a question mark at the end.

A satisfactory answer is difficult to find, but the Jemdet Nasr jar merits note in this context as all the images found in the metope decoration represent motifs used as pendants/amulets (scorpions, eyes, fish, birds, quadrupeds). Therefore, the decoration of the jar consists of a series of images with protective function and if so, then the unusual fish representation could have been of the same nature as well.

C.2. Other

Among the pendants there are also some singular examples with more highly geometrized shapes, although in a few cases figural representations cannot be excluded.

C.2.1. Pendant

A single pendant made from a conical *Conus* or *Strombus* shell came from grave 14 [***Fig. 6: Cat. 36***]. The broader end was cut off (and used most likely as a ring),[28] creating a conical pendant with spiral-shaped bottom.

Tell al-Raqa'i yielded singular examples of ornaments of this kind constituting part of two sets of jewelry found in grave 42/96-35, one near one of the arms, the other close to the abdomen of the skeleton (Dunham 1993: 253–254, Figs 2–3). Similar finds from Akkadian layers at Tell Brak were interpreted as stamp seals or stamps because of the spiral pattern on the bottom (see Oates 2001: 296, "two pierced objects cut from gastropods may have possibly been intended as stamps, one from CH Level 4, which had been pierced for suspension, and the second from upper

[27] Scorpion-shaped pendant made of nacre from Tell Beydar, see Nonne 2008: 41, No. 156 and illustration on page 58.

[28] A ring, most probably made of shell, was found in the same grave. The ring may have been made from the same shell as the pendant, but there is no way to verify this assumption.

fill in SS Room 18", see also 602–603, Fig. 493: 24–25). Two such shell ornaments, described as pendants and without identifying the shell species, were also found at Tell Beydar (Nonne 2008: 37, Nos 157–158). Outside the Khabur basin finds of this kind were recorded from graves at Tell Bi'a (Strommenger, Kohlmeyer 1998: Pls 44:16, 73:17.2, 76:13.1-2, 146:5).[29] A. von den Driesch (1995: 351) mentions conical pendants made from "waste" left from making rings/bands of shell; finds from Habuba Kabira illustrate different stages of the production of ornaments of this kind (von den Driesch 1995: 353, Fig. 21 a–g, especially g). The material for these ornaments at Habuba Kabira were shells of *Strombus decorus* ssp. *persicus*, occurring in the Red Sea and the Persian Gulf (von den Driesch 1995: 351, see also Moorey 1999: 129 on the use of *Strombus* shells).

The data from Habuba Kabira indicates that shells, which had the bottom cut off for a ring were easily made into pendants simply by perforating their apex. Other uses for the apexes would have been secondary. The interpretation as stamps is possible, but their presence in graves, and especially in child graves, among the ornaments would suggest that they were considered foremost as jewelry. Moreover, assuming that the pendants made from *Conus* and *Strombus* shells were leftovers from ring production, then they should be

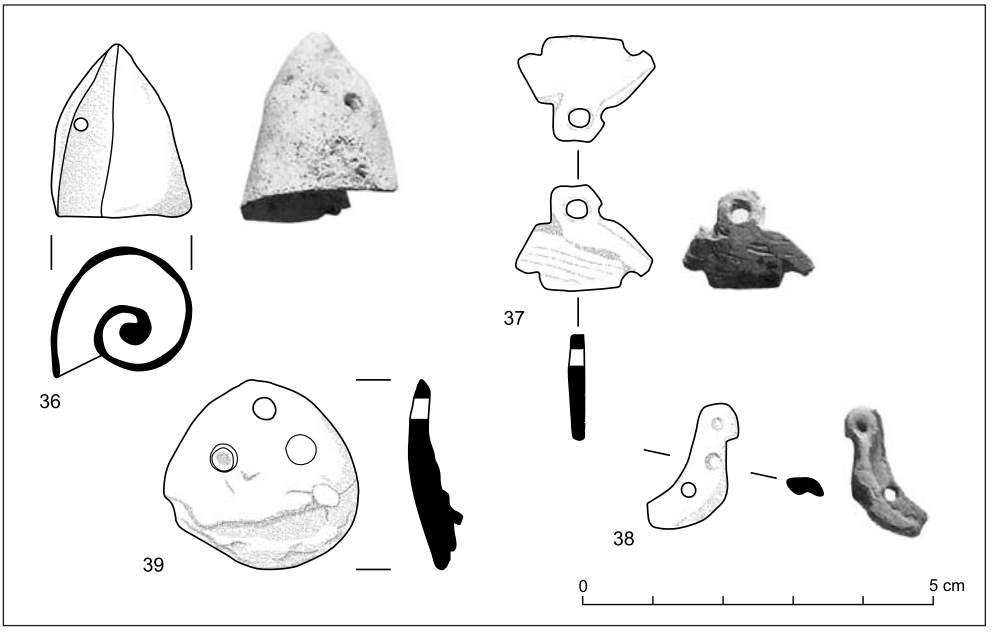

Fig. 6. Other forms of shell pendants: cone (36), anthropomorphic shape (37), boat (38) and "face" (39) (numbers refer to the catalogue in Table 1)

[29] One of the examples from Bi'a (Strommenger, Kohlmeyer 1998: Pl. 146:5), similarly as one of the pendants from Beydar, are distinguished by a less twisted spiral than in the case of finds from other sites (Nonne 2008: 57).

at least as frequent as rings in the archaeological record, but they are actually quite rare. One possible explanation is that the *Conus* and *Strombus* shells could have been used for a series of ever smaller rings or else cut up into smaller pieces to be used as inlays. Another explanation is that making the rings damaged the rest of the shell, so that it could no longer be used for a bigger ornament like a pendant with a spiral-shaped design on the bottom. Such broken pieces of the body whorl may have been intended for making small pieces of ornaments, like inlays.

C.2.2. Anthropomorphic pendant
A fragmentary nacre pendant from an Akkadian burial in grave 15 (maximum L. 2.0 cm and W. 1.5 cm), has a rectangular body with two projections resembling shoulders [***Fig. 6: Cat. 37***]. The round perforated loop for suspension brings to mind a schematic human head, suggesting an anthropomorphic shape.

Similar pendants came from a child grave 29/132-68 at Tell Raqa'i (Schwartz, Curvers 1992: 400, Fig. 4),[30] Tell Brak (Oates 2001: Fig. 493: 26, shell, old spoil-heap) and from Kurban Höyük in Anatolia ("winged figure pendant", see Reese 1990: Pl. 164: I, U).

C.2.3. Boat pendant
A pendant from grave 33 is sickle-shaped with both ends thickened [***Fig. 6: Cat. 38***].

Similar pendants from Tell Raqa'i were identified by S. Dunham as representations of boats with animal-headed protomes at the bow and stern. Dunham proposed to interpret the ornament in the context of the iconography of the female demon Lamashtu as an image of her boat (Dunham 1993: 242, see also Fig. 1:d–e).

C.2.4. "Face" pendant
A "face" pendant from grave 19 took on the shape of a more or less round disc cut from shell and perforated for suspension [***Fig. 6: Cat. 39***]. Below this hole there are two hollows that look as eyes. One hollow preserved traces of inlay: the whites of the eye cut out of shell, the iris of blue stone (lapis?) set in a "powdery, soft, black" substance according to the excavation register, most probably bitumen. It would be the only example of using shell as inlay from Tell Rad Shaqrah.

Twenty similar pendants from Mari (rooms 13 and 14 of the so-called priests' house next to the temple of Ishtar) were interpreted by the excavator initially as owl images (*chouettes*); they are perforated for suspension and often inlaid with round shells and pieces of lapis lazuli imitating eyes (Parrot 1935: 127–128, Fig. 10; 1956: 161–163, marine shells, similar form, different sizes). Very similar pendants, described as anthropomorphic idols, come from Tell Ashara/Terqa, located upstream from Mari (Thureau-Dangin, Dhorme 1924: 289–290, Pl. LX:3, six examples). They were made presumably of ostrich eggshell. Apart from the perforation for suspension they had two other openings in the upper part (in one case only a drilled hollow), but an inlay (of mother-of-pearl with a hollow in the center filled with a dark pigment imitating the iris) was preserved in only one instance.

[30] The text speaks collectively of beads and pendants made of bone, stone and shell from graves on the site, hence the photo in the figure is the only information about the object; it is difficult on this ground to identify the material as shell with any measure of certainty.

CONCLUSIONS

The percentage of shells species native to the region versus exotic snails and mollusks among the shell artifacts from Tell Rad Shaqrah cannot be commented on for lack of specific species identification. A provisional identification made on the grounds of photos and drawings suggests that the beads could have originated from outside Mesopotamia, that is, from the Persian Gulf and Indian Ocean (*Engina mendicaria*, *Conus/Strombus*, Scaphopoda shells). Finds from other sites in the region indicate that shells from the Persian Gulf, Gulf of Oman and the Mediterranean Sea made their way in the second half of the 3rd millennium BC to sites in the Khabur region, even the small ones. Tell Rad Shaqrah was probably no exception, especially if one takes into account the richness and variety of the burial equipment (different kinds of stone, frit, bronze, lead) in some of the child graves.

The number of shell ornaments was small as a rule, compared to the overall number of ornaments/jewelry made of other materials, like stone and frit, in a given burial. In graves 9 and 14, respectively only one of 17 and one of 89 beads and pendants was made of shell. Slightly more shell ornaments were found in graves 31 (six out of 53), 17 (four out of 60), 13 (12 out of 20) and 15 (six out of 26). In graves with richer burial goods, the disproportion could have been even bigger: in grave 33 only one pendant was of shell among 232 ornaments, in grave 16 eight out of 152. In the richest stone cist graves the proportions were as follows: grave 19 (37/451), grave 20 (60/147), grave 21 (28/237).[31] An analysis of the list of grave goods from three child graves from layer 2 at Tell Raqa'i leads to fairly similar conclusions (Dunham 1993: 237–257).[32] In grave 42/96-35, 14 out of 370[33] beads and pendants were of shell, in grave 29/132-12 shell artifacts numbered 38 out of 513[34] and in grave 29/132-21 18 out of 220.[35]

The data from Tell Beydar on shell ornaments from the 3rd millennium BC is interesting as it represents not only burial contexts.[36] Nonne listed a total of 433 ornaments, of which 72 were of shell and 24 of nacre, hence altogether 96 orna-

[31] Graves 35 and 37 from Shaqrah have not been included in this summing despite yielding shell ornaments, because it was not possible in either case to establish the total number of ornaments from these burials.

[32] Shells were also recorded in the remaining child graves from layer 2 at Raqa'i (grave 29/132-48, 13 shells, grave 42/90-11, 57 whelk shells, see Schwartz, Curvers 1993–1994: 254); data were available for 13 graves out of 16. In the case of burials from the earlier layer 3, shell was noted in only one case (grave 29/120-524, Schwartz, Curvers 1993–1994: 253) out of 11 (but six burials contained no grave goods at all).

[33] One should add to this number three artifacts of bronze/copper, see Dunham 1993: 253.

[34] The number 513 was assumed here, despite the fact that a summary listing in Dunham's text gives a larger figure. The grave set B-51 was supposed to include 37 ornaments, whereas the detailed description mentioned only 25 items. Were one to assume 37 beads and pendants, then the overall number of ornaments from the burial would grow to 525, which would correspond in turn to the number in G.M. Schwartz's and H.H. Curvers's report (see below, note 35).

[35] The listings by S. Dunham in her article do not correspond exactly with those in the preliminary report from excavations at Tell Raqa'i (Schwartz, Curvers 1993–1994: 254, Table 2: 219 (29/132-21), 379 (42/96-35), 524 (29/132-12, without the bronze ornaments).

[36] L. Nonne did not consider metal ornaments, hence the listing of grave goods from Shaqrah does not cover the admittedly few artifacts made of bronze and lead (one example).

ments (Nonne 2008: 10, Table 11). Shell was the second most common material (after gypsum, 117 ornaments). Shell and nacre were used most frequently for pendants (44 artifacts), beads (11), disks (5) and rings (36) (Nonne 2008: 11). Burial contexts yielded a total of 147 ornaments made of different materials (Nonne 2008: 16, Table 22), so the share in the set as a whole is definitely smaller than in the case of Tell Rad Shaqrah. The frequency of shell beads and pendants from burial contexts at Tell Rad Shaqrah is certainly not a reflection of their special role in burial customs. Finds from Beydar and Mari leave no doubt that artifacts of this kind were found also in other contexts. The distribution of finds from Tell Rad Shaqrah may be explained by the greater chances of such artifacts being preserved in sealed burial assemblages.

It is more difficult to establish the proportions between local and imported shells for two reasons: not always were species identified and not always is it possible to identify the species in the case of highly worked shell. The material is thus frequently identified with a general term: shell, mother-of-pearl (nacre), snail shell etc. The following numbers should be treated therefore as minima. The proportions for the graves at Raqa'i are 11 imported shell beads and pendants out of a total of 14 ornaments (grave 42/96-35), 13 out of 38 (grave 29/132-12); only native local species (?) (grave 29/132-21). With regard to the finds from Beydar, at least 32 of the 72 shell artifacts (the remaining 24 were described as being made of mother-of-pearl) were produced from exotic shells.

Shell thus appears to be just one more material to be used in the production of ornaments without any clear preference in terms of commonness. Could it be that the more easily available shells of snails, which needed only to be perforated to be used as pendants, were a cheaper version of the more expensive beads made of stone or metal? They appear in sets with beads made of other materials, also in the richest burials, thus there does not seem to be any connection between raw materials used to make beads and pendants and the richness of the grave goods. Rejecting this idea, we find that the occurrence of shell beads in necklaces next to stone and frit beads is an expression of equal treatment of this material, which may have been associated with certain, possibly magical properties of shells.

One wonders how artifacts made of exotic shells found their way to small villages like Raqa'i or Shaqrah. They could have come either directly from traders or indirectly, through bigger centers like Tell Brak. It cannot be said whether they came as unworked shells or ready products. If the latter, then the question with regard to artifacts found in graves in northern Mesopotamia in the 3rd millennium BC is where were they made. The workshop discovered at Habuba Kabira, in layers from the 3rd millennium BC, suggests local production for the needs of a rather small consumer market (Strommenger 1980: 69–71, 76). The raw material, semi-products and ready products found in the workshop demonstrate that the craftsmen of Habuba worked stone and different kinds of shells to make beads and amulets (Strommenger 1979: 74), hence there was obviously no specialization in shell processing. The variety of finds from Habuba is reflected in the diversity of materials used to make the ornaments found in the graves of Tell Rad Shaqrah among others. In the

case of the simplest ornaments (pierced shells, rings, etc.) the possibility of local, even home production is the most probable. On the other hand, the distribution of zoomorphic pendants with similar characteristics (similar shaping of the animal figure, similar eye markings and incisions) over a fairly extensive area suggests either one or more centers of production. Pendants with concentric incisions occur from the Euphrates to the Khabur: apart from the sites already mentioned, they were also found, for example, at Tell Leilan (see Bonatz *et alii* 1998: 53, No. 40, grave, Early Syrian II period, 2800–2400 BC). One cannot exclude the possibility of itinerant traders offering exotic shells and/or ready products from exotic shells also in the smaller settlements. Such a trading model was suggested in the case of cast lead ornaments, which were supposed to have been sold by craftsmen traveling with the merchant caravans (Canby 1965: 52–53).

Parallels for different categories of shell pendants from Rad Shaqrah coming from the big centers, like Mari, indicate that the same or similar products were available regardless of settlement size. The only difference is that the bigger centers apparently had a greater variety of shell products (apart from pendants also inlays, toiletry containers, ladles, etc.).

Research into shell production and trade, especially with regard to exotic shells, needs to be developed, but even at the current stage it is possible to suggest that the simplest forms of beads and pendants could have been produced locally, whereas the more elaborate forms of zoomorphic pendants could have been made in the bigger centers. Perhaps even the production of such ornaments could be linked to the existence of workshops producing the popular inlays used in furniture and the so-called standards known from the large urban centers of Mesopotamia and Syria (Ur, Kish, Mari, Ebla). The commonness of the material and the evident processing skills demonstrated by these ornaments, undoubtedly intended for the elite, could have influenced local craft production expressed in such artifacts as zoomorphic shell pendants. Neither should one exclude the possibility of imitations being made of pendants brought from the large cities to satisfy a local demand.

Shell ornaments were part of the jewelry set used by the inhabitants of Tell Rad Shaqrah and other north Mesopotamian sites in general. The presence of products of shells from outside the region, confirmed on sites in this area and postulated for Rad Shaqrah, attests to the common availability of this material in the 3rd millennium BC, even in the small villages. It reflects intensive trade exchange with regions from where exotic shells coming from distant seas could have come, a fact all the more significant considering that sites like Raqa'i and Shaqrah have produced either none or very few ornaments made of lapis lazuli or carnelian (with regard to Raqa'i, see remarks in Dunham 1993: 239–240), which are found on sites in southern (Abu Salabikh) and northern Mesopotamia (Brak, Mari, Ebla). The presence of lapis lazuli was perhaps limited mostly to centers lying in the vicinity of sources of the material and large urban centers. It will be safe to assume, therefore, that shells and pendants made of exotic shells were an expression of the desire on the part of the affluent members of small communities to own goods that were considered a luxury because of their distant origin.

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