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Keywords: Tell Arbid, clay zoomorphic figurines, Early/Middle Bronze Age, Syria, north Mesopotamia

تماثيل طينية برموز حيوانية من تل عريبد . التقرير الأولي .

Maciej Makowski

الملخص: مجموعة تماثيل طينية برموز حيوانية من تل عريبد في موقع حوض نهر الخابور شمال وادي الرافدين يضم ما يقرب من 600 من العينات مؤرخة في الغالب إلى النصف الثالث والأول من الألفية الثانية قبل الميلاد تتألف من تماثيل ذات شكل ثابت وعدد قليل من التماثيل ذات العجلات والتماثيل المجوفة وأنية برموز حيوانية بالإضافة إلى خشخيشة أطفال (لعبة مشهورة عند العوائل تستخدمها لتهديئة الأطفال) برموز حيوانية. الحيوانات الموضحة تشمل بشكل أساسي أنواع من فصيلة الخيول, أغنام وماعز ومواشي وكلاب وطيور. الإكتشافات الفردية عادةً لا تسمح بأي شيء ماعدا سجل تأريخ واضح لكن تحليل لتفاصيل التنفيذ يجعل من الممكن إنشاء تسلسل زمني لأهداف محددة. التجمعات الزمنية المحددة وضحت شخصيات التماثيل ذات الرموز الحيوانية تمثل مراحل محددة. إن التحليل المقارن يكشف بين أمور أخرى تطورات زمنية ومتغيرات في شعبية تمثيل لأنواع محددة من الحيوانات. وتعتبر هذه المتغيرات مقارنة مع نتائج فحص تشريح العظام للحيوانات لمحاولة معرفة ما يمكن أن تنعكس على العمليات التي جرت في نظام الإقتصاد الحيواني في تل عريبد.

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RESEARCH



ABBREVIATIONS

<i>AA</i>	<i>Archäologischer Anzeiger; Jahrbuch des Deutschen Archäologischen Instituts</i> (Berlin)
<i>ANM</i>	<i>Archéologie du Nil Moyen</i> (Lille)
<i>ASAE</i>	<i>Annales du Service des Antiquités de l'Égypte</i> (Cairo)
<i>AV</i>	<i>Archäologische Veröffentlichungen, Deutsches Archäologisches Institut, Abteilung Kairo</i> (Berlin–Mainz am Rhein)
<i>BAAL</i>	<i>Bulletin d'archéologie et d'architecture libanaises</i> (Beirut)
<i>BAH</i>	<i>Bibliothèque archéologique et historique</i> (Paris)
<i>BAR IS</i>	<i>British Archaeology Reports International Series</i> (Oxford)
<i>BASOR</i>	<i>Bulletin of the American Schools of Oriental Research</i> (Ann Arbor, MI)
<i>BCH</i>	<i>Bulletin de correspondance hellénique</i> (Paris)
<i>BdE</i>	<i>Bibliothèque d'étude</i> (Cairo)
<i>BIFAO</i>	<i>Bulletin de l'Institut français d'archéologie orientale</i> (Cairo)
<i>BSAA</i>	<i>Bulletin de la Société d'archéologie d'Alexandrie</i> (Cairo)
<i>BSFE</i>	<i>Bulletin de la Société française d'égyptologie</i> (Paris)
<i>CCE</i>	<i>Cahiers de la céramique égyptienne</i> (Cairo)
<i>EtTrav</i>	<i>Études et travaux. Travaux du Centre d'archéologie méditerranéenne de l'Académie des sciences polonaise</i> (Warsaw)
<i>FIFAO</i>	<i>Fouilles de l'Institut français d'archéologie orientale</i> (Cairo)
<i>GAMAR</i>	<i>Gdańsk Archaeological Museum African Reports</i> (Gdańsk)
<i>GM</i>	<i>Göttinger Miszellen</i> (Göttingen)
<i>IAMS</i>	<i>Institute of Archaeo-Metallurgical Studies</i> (London)
<i>JARCE</i>	<i>Journal of the American Research Center in Egypt</i> (Boston–Princeton–New York–Cairo)
<i>JEJ</i>	<i>Journal of Egyptian Archaeology</i> (London)
<i>JGS</i>	<i>Journal of Glass Studies</i> (Corning, NY)
<i>JJP</i>	<i>Journal of Juristic Papyrology</i> (Warsaw)
<i>JRS</i>	<i>Journal of Roman Studies</i> (London)
<i>MDAIK</i>	<i>Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo</i> (Wiesbaden)
<i>OIP</i>	<i>Oriental Institute Publications</i> (Chicago)
<i>OLA</i>	<i>Orientalia lovaniensia analecta</i> (Louvain)
<i>PAM</i>	<i>Polish Archaeology in the Mediterranean</i> (Warsaw)
<i>PSAS</i>	<i>Proceedings of the Seminar for Arabian Studies</i> (London)
<i>SAAC</i>	<i>Studies in Ancient Art and Civilisation</i> (Kraków)
<i>SAK</i>	<i>Studien zur altägyptischen Kultur</i> (Hamburg)
<i>SAOC</i>	<i>Studies in Ancient Oriental Civilization</i> (Chicago)
<i>WVDOG</i>	<i>Wissenschaftliche Veröffentlichungen der deutschen Orient-Gesellschaft</i> (Berlin–Leipzig)

ZOOMORPHIC CLAY FIGURINES FROM TELL ARBID. PRELIMINARY REPORT

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Abstract: The collection of clay zoomorphic figurines from Tell Arbid, a site in the Khabur river basin in northern Mesopotamia, comprises nearly 600 specimens, dated mainly to the 3rd and first half of the 2nd millennium BC. It consists of solid figurines and the much less numerous wheeled figurines and hollow figurines/zoomorphic vessels, as well as a single rattle in the form of a zoomorphic figurine. The animals represented include chiefly equids, sheep, goats, cattle, dogs and birds. The find context usually does not permit anything but a very broad dating, but an analysis of details of execution makes it possible to establish the chronology of particular objects. Identified chronological assemblages illustrate the character of zoomorphic representations in particular periods. A comparative analysis reveals, among others, diachronic changes in the popularity of representations of particular kinds of animals. These changes are considered in comparison with the results of an examination of the osteological material in an effort to observe whether they could reflect processes taking place in the animal economy of Tell Arbid.

Keywords: Tell Arbid, clay zoomorphic figurines, Early/Middle Bronze Age, Syria, north Mesopotamia

Clay figurines are the second most numerous class of finds after pottery at the site of Tell Arbid, which lies in the northern part of the Khabur river basin in northeastern Syria, a region once part of historical Mesopotamia. The assemblage counted 645 artifacts, discovered by a Polish–Syrian mission from the PCMA UW which excavated the site in 1996–2010. Dominating the set were zoomorphic representations (577 specimens). Most of these were solid figurines; other categories of clay images were much less numerous and encompassed wheeled figurines, hollow figurines/zoomorphic

vessels and one zoomorphic rattle. The figurines could be dated for the most part to the 3rd and first half of the 2nd millennium BC, from the Ninevite 5 period (Early Jazirah I–II, hereinafter EJ), through Early Dynastic III (hereinafter ED III, EJ III), Akkadian (EJ IV), post-Akkadian (EJ V) to Khabur-Ware period (Old Jazirah I–III). A small number of specimens came from layers dated to the second half of the 2nd and 1st millennium BC, but most of them should be dated to the Bronze Age. These were figurines of unbaked or baked clay, the smallest being approximately 1.5 cm high and the

biggest attaining even 20 cm or thereabouts in height. They were found most commonly in secondary context: room fill, pits, street deposits, mixed accumulations, leveling and subsurface layers, rubbish dumps. Seldom could the

location of a figurine be considered as a place where it had functioned originally. In most cases these were dwellings. In one, the object, a rattle, was found in a grave (Bieliński 2004: 339, Figs 4–5).

REPERTOIRE OF DEPICTED ANIMALS

The zoomorphic figurines from Tell Arbid represented chiefly breeding animals: bovids (including sheep, goats and cattle) and equids, although in both cases a share of wild animals in the overall number is not to be excluded. The remaining figurines depicted dogs, birds, singular cases of pig, hedgehog, a felid, possibly a lion, and most probably a turtle. The figurines are for the most part quite schematic, often conventional and excessively stylized in form. The identification, especially in the case of fragmentary examples, is possible on the grounds of certain distinctive details that are present only on representations of a given species or kind of animals. The discussion below will concentrate on these distinctive details permitting identification, which have been defined primarily based on an analysis of the Tell Arbid assemblage, although many have also been found as characteristic of clay representations of given kinds of animals from other sites in the region (McDonald 2001; Wissing 2009: 37–48).

EQUIDS

Clay images of equids were the most numerous in the Tell Arbid assemblage of zoomorphic representations (~43.85% of all figurines; ~59.25% of representations

identified to species; 253 specimens) [*Fig. 1*].

Equids were depicted as solid figurines. A relatively large number of details distinguished them from other animals (for a thorough discussion of details distinctive of equid figurines, see Makowski 2014: 260–272). These are foremost details characteristic of this animal family, such as the mane. The mane and/or tail could be imitated by tassels fastened in perforations pierced through the neck and/or rump of equid figurines. Dorsal and shoulder stripes typical of some equid species/subspecies were also noted on the figurines (Makowski 2014: 270–271, 277–278). Evidence of diverse breeding practices, such as strapping of male genitals for example, was also found to be an animal-distinctive feature. Elements of equipment¹ reflecting manner of exploitation (Makowski 2014: 262–265, 268–269, 276) were also observed on the equid figurines: headstall, neck straps with fringe, decorative nape straps on necks, yoke/neck straps holding on a yoke, trapper and presumably saddlebags. Other characteristics, found not only on equid figurines however, included: horizontal head perforations for threading string imitating rope for controlling draught equids and connecting the figurine with

¹ For definition of terms used in the present article, see Littauer and Crouwel 1979: 3–7; 2002: xv–xx.

a wheeled vehicle model (Makowski 2014: 264–265 and note 28; 2015: 125–126, Fig. 5a; Oates 2001: 288; Littauer and Crouwel 2001: 332; Pruss 2011: 243); rounded cavities in the rumps, which must have served, at least occasionally, the same purpose as rump perforations; ‘x’ mark or circle with ‘x’ mark reflecting identifying marks placed on real animals (Makowski 2014: 273–274). Figurines with expressed sexual parts are mostly stallions. Only two cases of figurines with marked female genitalia were recorded.

SHEEP

Sheep are the next most common animal after equids in the Tell Arbid assemblage of zoomorphic representations (~17.50% of all figurines; ~23.65% of representations identified to species; 101 specimens) [see Fig. 1].

Most of these figurines are solid (~81%). Wheeled figurines are rarer (~17%), identified either by perforated

legs, shoulders or hips or by attached two clay “axle tubes” on the underside of the body. Most figurines featured also neck or head perforations for threading the string used to pull them. Three representations (~2%) belonged to the category of hollow figurines/zoomorphic vessels. At least two were made to be mounted on wheels and had perforations to fix the string used to pull them.

The primary identifying feature are the horns curved round the side of the head. If the shape of the horns is not enough to distinguish between sheep and goats, then an examination of the rump can be helpful. Sheep have massive, oval rumps with a tail that hangs down. A frequent distinguishing feature is incised decoration rendering the fleece, although this was sometimes encountered on goats, too. Some solid figurines had clearly expressed sexual parts: the male scrotum between the legs and the end of the penis about mid-length of the body, and the less frequent

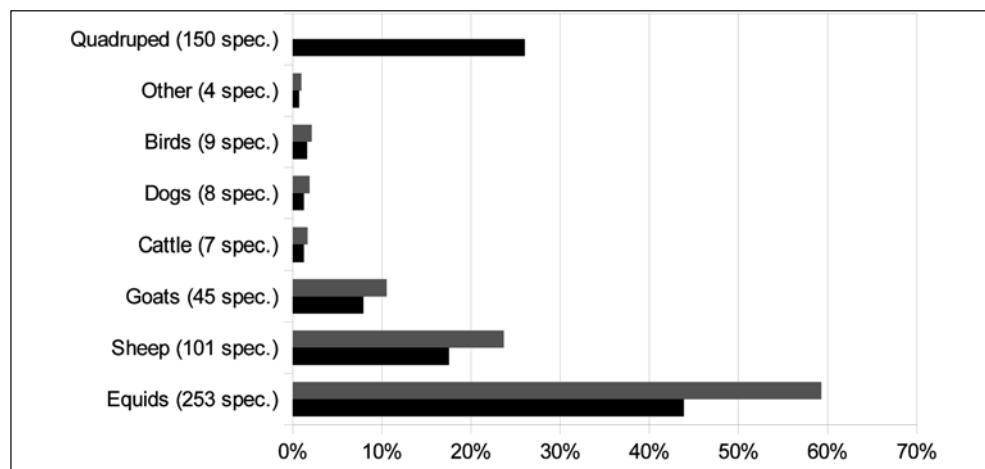


Fig. 1. Share of representations of particular kinds of animals in the assemblage of clay figurines from Tell Arbid: black – percentage of all zoomorphic representations, gray – percentage of representations identified to species (excluding unidentified quadrupeds)

female udder. Decoration in the form of an 'x' mark on some of the figurines reflects animal identifying practices (see Makowski 2014: 273–274).

GOATS

Images of goats, including perhaps a few wild members of the Bovidae family resembling goats in appearance, constituted the third most common group in the Tell Arbid assemblage (~7.90% of all figurines; ~10.54% of representations identified to species; 45 specimens) [see *Fig. 1*].

The figurines were all solid. Goat representations are identified by the presence of horns and their shape, although in some cases the resemblance to sheep is very close. The shape of the rump is also diagnostic, being most often triangular in section from behind, the buttocks drawn backward into two flaps that approach one another, as if to enclose the hindquarters. The tail curves up and is carried high. The beard is another characteristic feature of goat representations. Other details sporadically marked on figurines representing this kind of animal include incised decoration rendering the pelt, 'x' marks, male genitals and udder.

CATTLE

Figurines of cattle are the least frequent member of the Bovidae family represented in the Tell Arbid assemblage (~1.22% of all figurines; ~1.64% of representations identified to species; seven specimens) [see *Fig. 1*].

All seem to have been solid figurines. Unbranching horns crossing the crown of the head and curving gently outward, perpendicular to the sides of the head, constitute a distinctive feature in the case of these figurines. Some had perforations

at mid-height of the head or on the nose, most probably for the same purpose as in figurines of equids, that is, to thread a string that would imitate the rope passed through a nose ring for controlling draught animals (Makowski 2014: 263–265 and note 28; Littauer and Crouwel 1979: 14, 30, *Fig. 15*).

DOGS

The last kind of quadruped to appear in number in the Tell Arbid assemblage is a dog (~1.23% of all figurines; ~1.87% of representations identified to species; eight specimens) [see *Fig. 1*].

Images of dogs were always solid in form. Distinctive details of this kind of animal are difficult to point out and for the most part dog representation can be distinguished from other kinds of quadrupeds only if well preserved. Extended outward pointed ears or flopping slightly at the ends are perhaps the most characteristic element. Another frequent feature is an upturned tail, same as on goats, from which these representations can be distinguished by a different shape of the rump. In some cases of dog images, however, the tail hangs down. On most figures of this kind one observes marked male sexual parts. One atypical figurine could represent a bitch.

BIRDS

A small group of figurines represented birds (~1.60% of all representations; ~2.11% of representations identified to species; nine specimens) [see *Fig. 1*].

The group is well defined as a whole and internally differentiated. The figurines are most often solid; single objects represent the hollow figurines/zoomorphic vessels and rattle categories. One figurine could

have been wheeled. A characteristic head and an oval body, frequently flattened on top and narrowing toward the tail, are typical of these animals. The figurines are placed on a cylindrical or conical pedestal base as a rule. Incised decoration on some specimens is interpreted as rendering of feathers.

OTHERS

Other kinds of animals identified in the Tell Arbid assemblage are represented by single figurines (~0.7% of all zoomorphic representations; ~0.94% of represen-

tations identified to species; four specimens) [see *Fig. 1*].

These are all solid figurines, nearly complete in the case of images of a pig and hedgehog, preserved only as the head in the case of two others, a felid and a turtle.

UNIDENTIFIED QUADRUPEDS

For a considerable number of quadruped figurines (~26% of all zoomorphic representations, 150 specimens) [see *Fig. 1*], their state of preservation or schematic rendering preclude identification of the animal intended.

CHRONOLOGICAL ASSEMBLAGES

Owing to the considerable differentiation of zoomorphic representations, an all-encompassing typology for this class of small finds, that would at the same time provide a useful tool for chronological attribution, is difficult to establish (see, however, Pruss 2011: 242–244; Hauser 2006). Image groups can be distinguished based on a similarity of the kind of animal represented, general shape, repertoire of details and manner of their marking, dimensions and even technological/production features (kind of clay, degree of firing). The discussion below will define the image groups that are the most numerous or particularly distinctive, identifying them by the kind of animal represented (Equid, Sheep, Goat, Cattle, Dog, Bird, Other, [unidentified] Quadruped), the image category (F – solid figurines; WF – wheeled figurines; V – hollow figurines/zoomorphic vessels; R – rattle) and a serial number of the group or subgroup, if one was assigned (e.g., Sheep/F/1a).

The secondary context of most of the zoomorphic terracottas found at Tell Arbid

seldom gives grounds for a secure dating of the finds. To establish a chronology of specific image groups as well as individual finds, it was necessary to take into consideration, to an equal extent as the find context, details of execution that were of apparent chronological significance. Even so, in many cases the chronology is approximate, limited to two successive periods. Therefore, presenting assemblages from a given period (e.g., Ninevite 5), the author includes figurines dated either to this or immediately following period (e.g., Ninevite 5/ED III). Figurines of uncertain date (~13%), of which a small number could come from the second half of the 2nd millennium or even the 1st millennium BC, were not taken into consideration in the chronological presentation below.

Size has already been mentioned as a significant criterion for distinguishing image groups and in order to facilitate the presentation, the material was classed by dimensions, the different categories reflecting original or frequently

reconstructed figurine size. The dimension categories are as follows: miniature (~2.25% of all zoomorphic figurines), up to 3 cm in height originally; small (~19.95%), 3–4 cm high; middle-sized (~57.5%), 4–8 cm high; large (~13.90%), 8–11 cm high; very large (~6.40%), more than 11 cm high.

NINEVITE 5 AND

NINEVITE 5/ED III ASSEMBLAGE

Eleven figurines were dated to the Ninevite 5 period and another four could be from this or the immediately following period (ED III), presumably the early phase.

They were all solid figurines, mostly of miniature or small size, about 1.5 cm to 4–5 cm high [Figs 2, 17:5]. Few details were marked on these representations. Larger figurines were rare and usually preserved in fragments. They were made of dark-gray clay, which was poorly fired (probably accidentally, simply by lying in the ashes). Equids and goats were identified among them (Equid/F/1 and Goat/F/1 groups, five and three specimens respectively), but some of these could be of ED III date. The rest of the representations depict unidentified quadrupeds (seven specimens). Some of these could have represented cattle. Analogous finds from

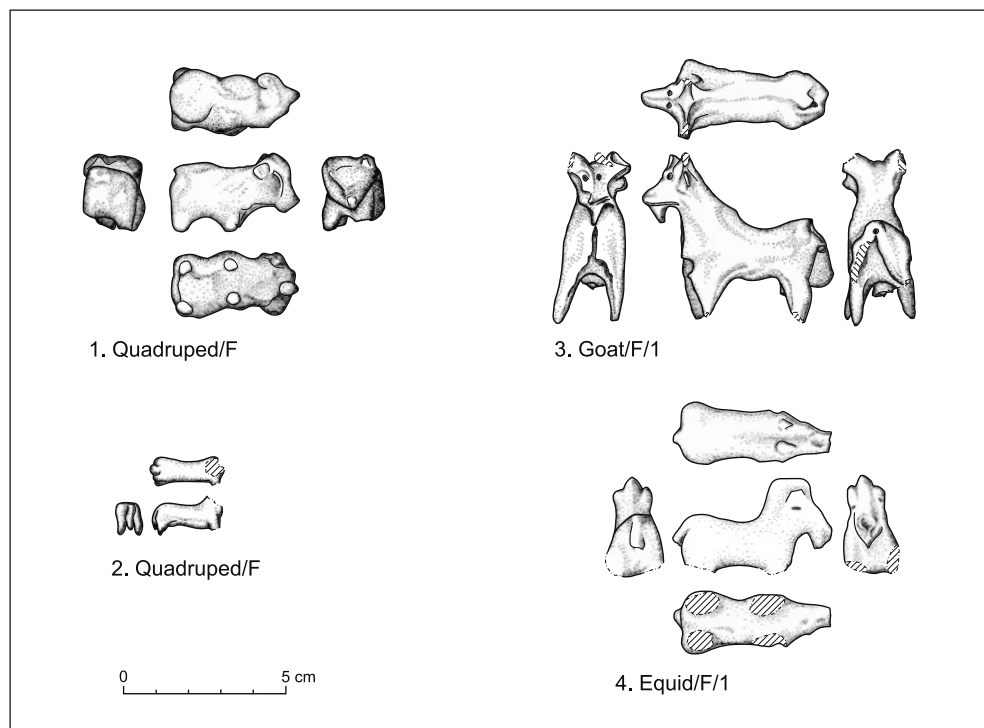


Fig. 2. Zoomorphic figurines of Ninevite 5 (1, 2, 4) or Ninevite 5/ED III (3) date; Inv. Nos: 1 – ARB'08 SS 36/57-23-28; 2 – ARB'09 W 52/55-4B-1; 3 – ARB'98 SD 36/66-1A; 4 – ARB'07 W 52/55-56 (Drawing M. Momot, A. Oleksiak; digitizing M. Momot)

Ninevite 5 times are known from other sites in the Khabur region (Valentini 2008: 348, Fig. 6; Matthews 2003: Figs 5.74:4–5, 8, 19; 5.78:11, 15–17; 5.80: 3).

ED III AND ED III/AKKADIAN ASSEMBLAGE

The ED III period is represented by 16 figurines, ten of which could be assigned with fair certainty to the late phase of the period. Eleven specimens could be either ED III or Akkadian. All were solid figurines [Figs 3, 4]. The most numerous

group was constituted by representations of equids (17 specimens), the rest being sheep (five specimens) and unidentified quadrupeds (five specimens). Appearing beside the unbaked examples are many that are well fired, presumably in pottery kilns; these were especially figurines from the late phase of ED III.

Equids

Among equid figurines [see Figs 3, 17:3] middle-sized and large examples predominated, measuring originally about

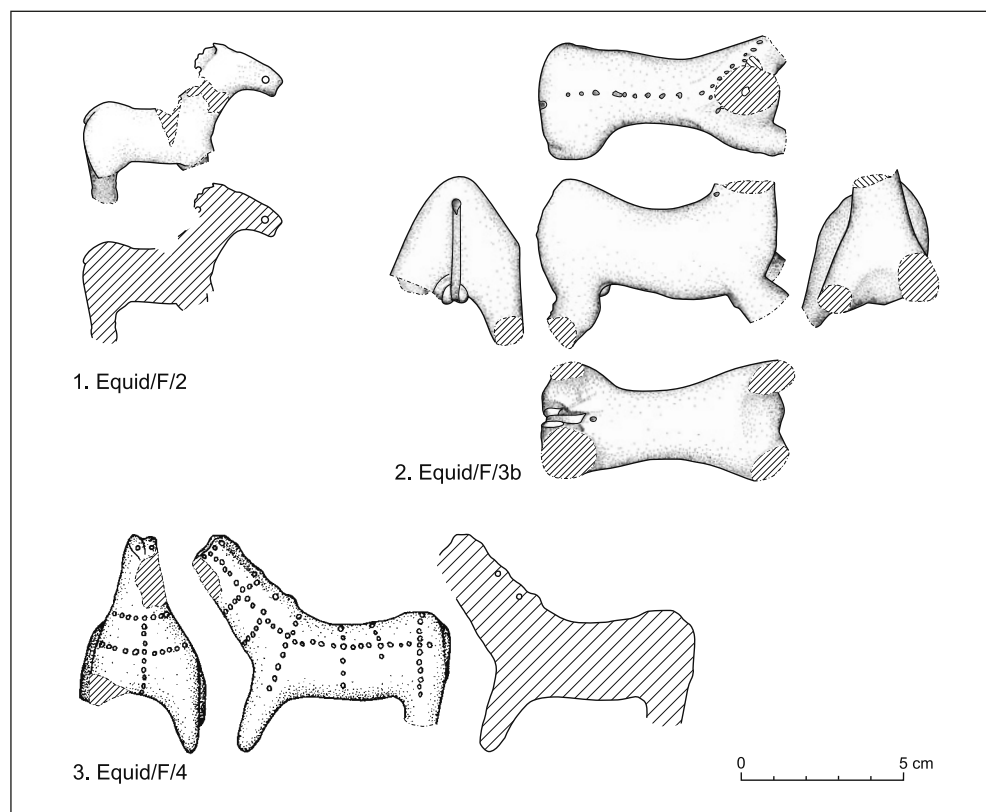


Fig. 3. Equid figurines from the late ED III (1, 3) or ED III/Akkadian (2) period; Inv. Nos: 1 – ARB'03 SD 35/65-20A-2; 2 – ARB'03 D 30/42-29; 3 – ARB'03 SD 36/65-31A (Drawing M. Momot, Ł. Wojnarowicz; digitizing M. Momot)

5 cm to 10 cm in height. Few details were marked save for usually two mane perforations and a head perforation in the middle of the height of the head (Equid/F/2 group). Figurines identified as parallels dated to the ED III and Akkadian periods are known also from other sites in the region (McDonald 2001: Figs 291/ top row, right and 489/57; Steele et al. 2003: 197, Fig. 6.61:6–7; Wissing 2009: Pl. 10/67).

The form of other middle-sized and large figurines made during this period became entrenched in the plastic arts tradition of the region. These were representations of slender proportions, featuring a long neck and short mane, usually without perforations, the body narrowing in the middle and the rump raised high. Some had clearly marked tails (Equid/F/3a group), others, rarely, had a rounded cavity in this spot (Equid/F/3b group). An incised line or groove was sometimes marked between

the buttocks, running toward the genitals, which occasionally were strapped. The ends of the penises and the strapping bands were punctated. Shoulder and dorsal stripes were marked with punctations or impressed circles on some of the figurines from these two groups. Parallels for both groups are known from other sites in the region, chiefly from ED III and Akkadian layers (Equids/F/3a: Wissing 2009: Pls 8/57, 9/62, 12/81, 13/95; Hauser 2006: 377–378, 426, 442, Pls LI, LVI, LIX, Equus 5, 200, 302; Oates 2001: Figs 312, 489/603; Lebeau 1993: 534, Pl. 189/5; Equids/F/3b: Wissing 2009: Pls 8/58, 20/216–217; Hauser 2006: 286, Comparative Table 9C, Felis 35).²

A characteristic figurine with perforated mane and the body patterned in complex fashion with rows of impressed circles (Equid/F/4 group) comes from the late ED III period. The decoration may illustrate elements of equipment typical

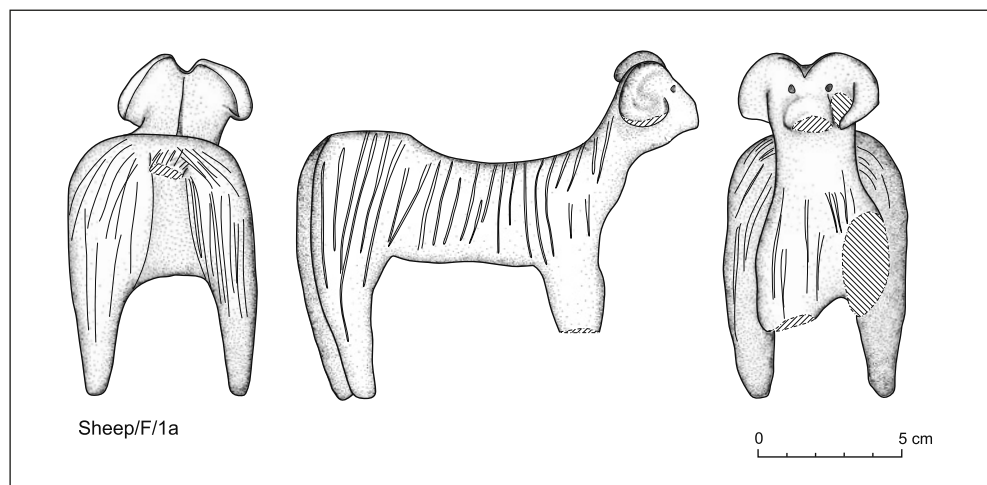


Fig. 4. Sheep figurine from the late ED III period; Inv. No. ARB'01 SS 36/55-102b (Drawing M. Tchórzewska; digitizing M. Momot)

² On the identification of felid figurines from Tell Mozan as equid representations, see Makowski 2014: 260, note 11.

of draught animals (see Makowski 2014: 274–276). Similar figurines of the kind are encountered on other sites in the region, mainly in layers from the Akkadian period (Wissing 2009: Pl. 21/243; Mallowan 1936: 21, Fig. 5, No. 15; Hauser 2006: 292, *Felis* 211).

Sheep

Figurines of sheep with massive curved horns and bodies covered with characteristic incised decoration reflecting fleece (*Sheep/F/1a* group) appeared in the ED III, probably in the late phase of the period [see *Fig. 4*]. These representations were either middle-sized, large or very large. Similar images occurred until at least the end of the 3rd millennium BC. Parallels from other sites in the region are dated chiefly to the Akkadian and later times (see below).

Other

The earliest bird figurines can also be dated to the ED III period (see below).

AKKADIAN AND AKKADIAN/ POST-AKKADIAN ASSEMBLAGE

Representing the Akkadian period are 20 zoomorphic figurines with another 94 attributed to Akkadian or post-Akkadian times. The figurines are solid or, much more rarely, wheeled [*Figs 5–9, 17:4*]. A few were hollow figurines/zoomorphic vessels. The most numerous group was that of solid figurines of equids (73 specimens). Other depicted animals included sheep (21 specimens), goats (seven), dogs and birds (one and two respectively). The remaining set included solid figurines of unidentified quadrupeds (10 specimens). From the Akkadian period onward, the animal figurines were usually well-fired,

some of them undoubtedly in pottery kilns.

Equids

In the equid group, middle-sized and large figurines with mane and head perforations were common [see *Fig. 5*], the only difference from the previous period being that the head perforations were level with the muzzle and not in the middle of the head height (*Equid/F/2* group). At other sites in the region the oldest representations of this kind are also of Akkadian date (Wissing 2009: Pl. 12/80; McDonald 2001: *Figs 290/bottom row, left and 489/59, 63*).

The tradition of making figurines of slender proportions (*Equid/F/3a–b* group) remained strong in this period, displaying some differences in the marking of details, like the strapped male genitals. On some of these representations the place of the tail was taken by rounded cavities or a diagonal rump perforation (*Equid/F/3b* group). Some of these figurines could be of post-Akkadian date. A few examples, but originating from a later period, had a neck strap with fringes. Similar figurines from other sites in the region are dated to the Akkadian period, although they are present also in layers of later date (*Equid/F/3a*: Wissing 2009: Pl. 10/69; Oates 2001: *Figs 311, 489/56*; *Equid/F/3b*: Wissing 2009: *Pls 9/61, 13/94, 19/202, 22/226*; Hauser 2006: 280–281, 288–289, *Comparative Table 9B, Pl. XXXVIII, Felis 38, 202*).

The last group (*Equid/F/5*) is derived also from representations typical of the late phase of ED III (*Equid/F/4* group). These are middle-sized, large and very large figurines, occasionally with head or mane perforations, distinguished by a complex headstall marked with applied stripes

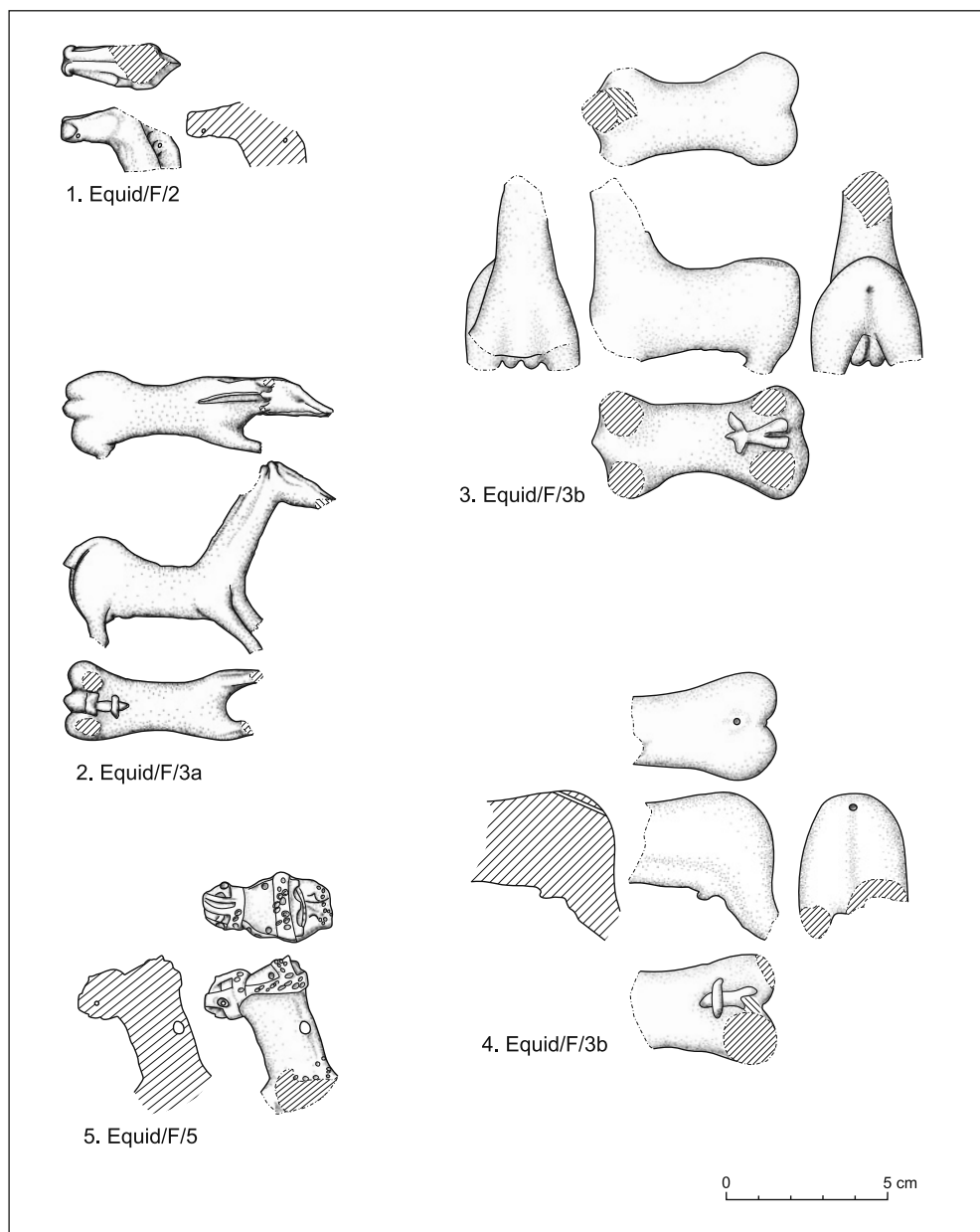


Fig 5. *Equid* figurines of Akkadian (1, 2) or Akkadian/post-Akkadian (3–5) date; Inv. Nos: 1 – ARB'01 SL 37/56-10A; 2 – ARB'97 SS 36/56-70; 3 – ARB'08 W 54/56-6; 4 – ARB'10 W 51/58-3-1; 5 – ARB'00 J 47/15-2 (Drawing M. Momot, A. Oleksiak; digitizing M. Momot)

covered by impressed circles. Bodies were occasionally decorated with three rows of impressed circles depicting a trapper and a dorsal stripe. Analogous figurines from the Khabur region are dated generally to the Akkadian and possibly also post-Akkadian periods (Oates 2001: 287–288, Figs 308, 489/53–55; Hauser 2006: 416–418, 434–436, Pls LXV, LXVII, Equus 36, 37, 39, 209, 212; Wissing 2009: Pls 17/145, 18/163, 167; Mallowan 1937: 130, Fig. 10/23–24), although it is not to be excluded that they started being produced already in the ED III period (Wissing 2009: 38, Pl. 17/152).

Sheep

Solid figurines are the most common form of sheep representations in this as in the previous period (Sheep/F/1a group)

[see Fig. 6:1]. They can be middle-sized, large and very large, from about 5.5 cm to 14 cm high. Male sexual parts were marked on some of the figurines, a detail not apparent on the ED III representations of sheep. Analogous finds from other sites in the region have been dated to Akkadian, post-Akkadian and Khabur-Ware periods (Wissing 2009: Pls 24/275, 26/291; McDonald 2001: Figs 290/68, 489/68–69). Some of the middle-sized sheep figurines without incised decoration on the torso (Sheep/F/1b group; see below) could also be of Akkadian date.

The period also witnessed the appearance of wheeled sheep figurines [see Fig. 6:2]. A figurine undoubtedly assigned to the Akkadian period (Bieliński 2002: 294, Fig. 12), 6.5 cm high, is characterized by massive curved horns,

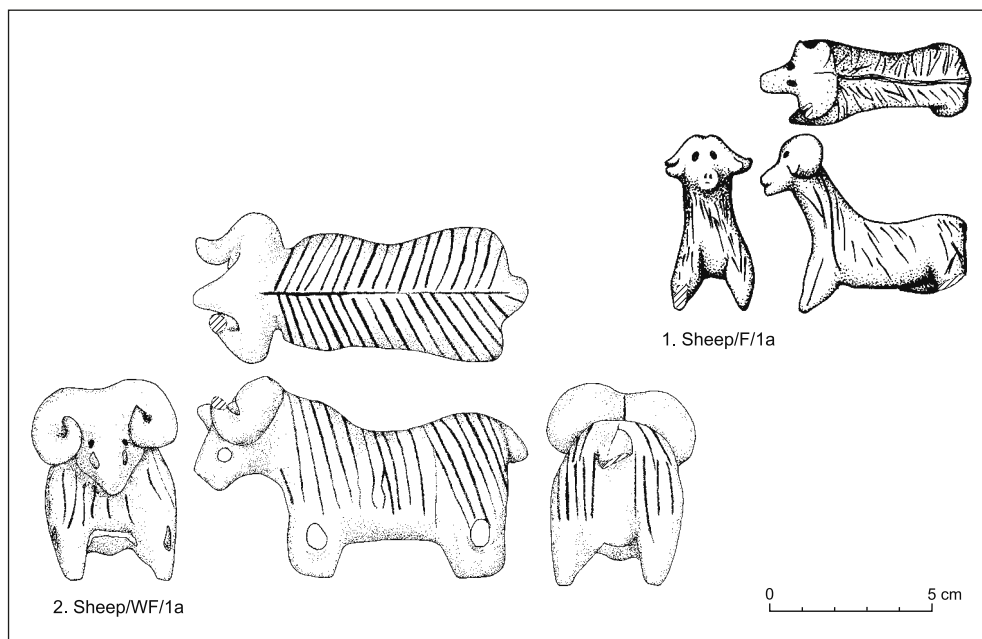


Fig. 6. Sheep figurines from the Akkadian period; Inv. Nos: 1 – ARB'03 SD 36/64-140-10; 2 – ARB'01 D 30/42-49-01 (Drawing and inking M. Momot, M. Wagner)

incised decoration rendering fleece and clearly distinct legs (Sheep/WF/1a group). Other middle-sized and large wheeled figurines, including specimens without incised decoration (Sheep/WF/1b group), often with less distinctly differentiated legs or two “axle tubes” attached on the underside, should also be dated to the Akkadian or post-Akkadian period. Most finds of this class from other sites in the region have also been assigned to Akkadian and post-Akkadian layers (Wissing 2009: Pls 29/326, 30/328, 332, 327, 31/334, 32/336; Hauser 2006: 136–137, 158–159, 167–168, 269–270, Pl. VI, Ovis 3,

26, 301, Felis 26; McDonald 2001: 274, Figs 291/51, 488/51–52; Mallowan 1947: Pl. LIV/18; Debruyne, Jans, and van der Stede 2003: 204, Pl. II/6832-M-3).

Some hollow figurines/vessels shaped as sheep (Sheep/V group) [see Fig. 7] should also be dated to the Akkadian period, presumably the late phase, or to post-Akkadian times. The figurines are large, more than 8 cm high; they were wheeled and pulled on a string. The modeling of individual pieces could have been more or less natural, and they may or may not have had incised decoration rendering the fleece. One vessel was furnished with

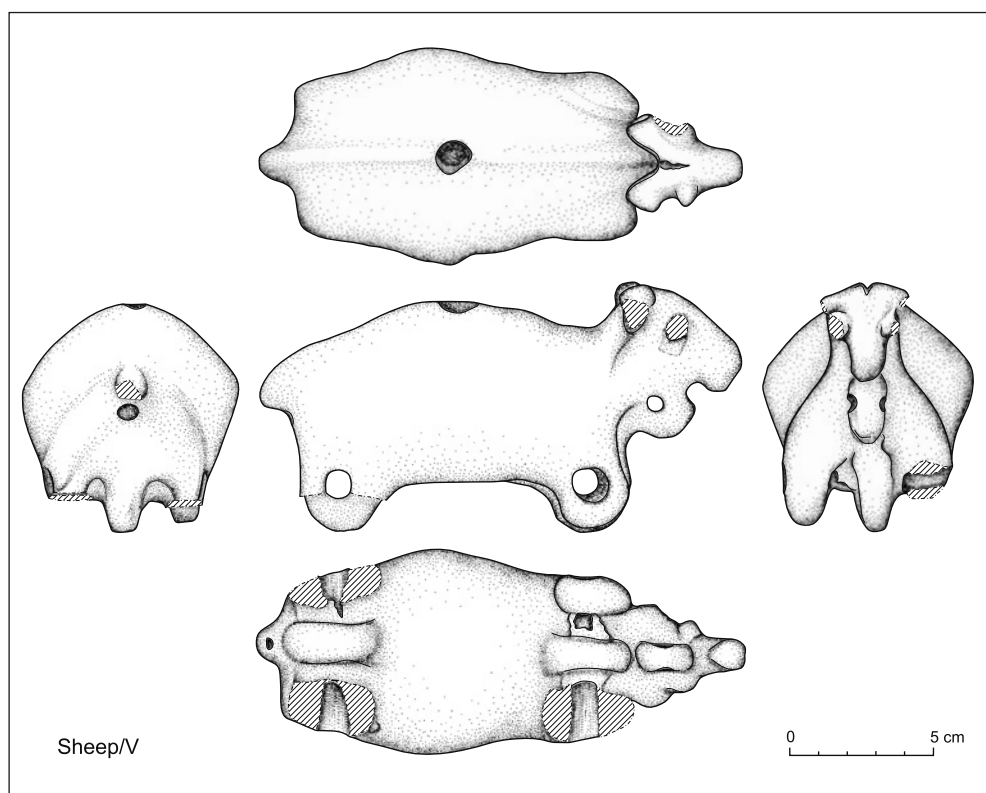


Fig. 7. Sheep representation from the Akkadian/post-Akkadian period; Inv. No. ARB'07 D 31/41-8-14 (Drawing M. Mierzejewska; digitizing M. Momot)

two openings, one in the middle of the back and the other under the tail. Similar zoomorphic vessels are known from Akkadian layers on other sites in the region (McDonald 2001: 274, Fig. 488/47–50; Mallowan 1947: 216, Pl. LIV/17; Wissing 2009: Pl. 31/333).

Goats

Among goat representations, solid, naturalistic and very large (measuring up to 15 cm in height) figurines were typical of the Akkadian period (Goat/F/2 group) [see Fig. 8:1]. Some had the pelt marked with incisions. A post-Akkadian date for some of these images is not excluded. Fragments of similar images are known from some other sites in the region (Hauser 2006: 317–319, 321–322, 330, 336–342, 349–350, Comparative Table 2, 7–7A; Pl. XLIII; Capra 5, 9, 18, 23, 25, 28–30, 32, 214). Most of these examples are dated to the second half of the 3rd millennium BC, starting with the Akkadian period.

Dog

The oldest known dog representations from Tell Arbid [see Fig. 8:2] are also dated to the Akkadian period. These figurines are small and solid, approximately 3.5–4 cm high as a rule. They feature typically a block and blunt muzzle, outward pointed ears, either no neck or a very short one, squat body and tail either upturned or lowered (Dog/F/1 group). One of the figurines can be dated to the Akkadian period, others may possibly be post-Akkadian. A few parallels from other sites in the region are dated similarly (Hauser 2006: 205–206, Pl. XVI, Canis 1).

Birds

Small and middle-sized bird figurines were attested in the Akkadian period [see Figs 9:1, 17:4]. Some of them have feathers rendered with incised decoration (Bird/F/1a group). Analogous figurines of Akkadian date are known from other sites in the region (McDonald 2001: 273,

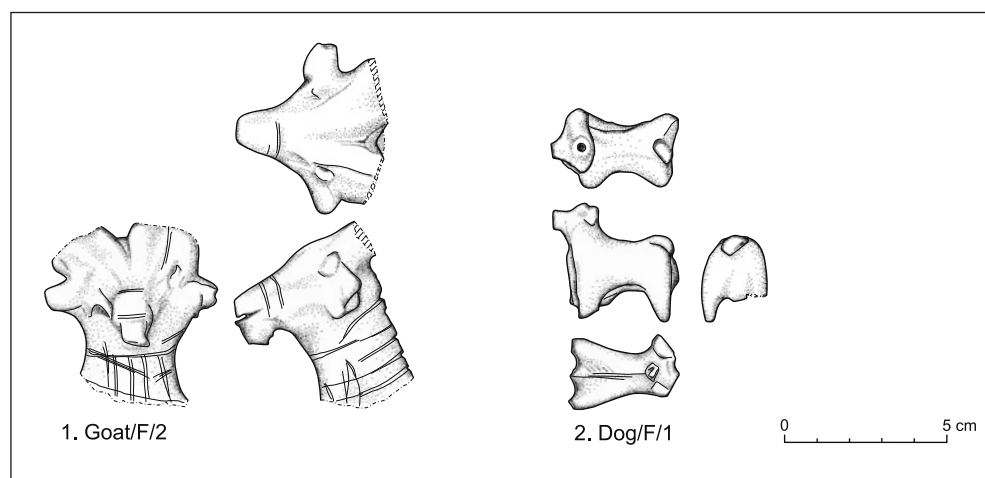


Fig. 8. Zoomorphic figurines of Akkadian (2) or Akkadian/post-Akkadian (1) date; Inv. Nos: 1 – ARB'00 SS ext.2 36/54-34; 2 – ARB'00 SL 37/56-28 (Drawing A. Oleksiak; digitizing M. Momot)

Fig. 290/4398; Debruyne, Jans, and van der Stede 2003: 204, Pl. III/6888-M-23). Other bird figurines, which may be of post-Akkadian date, are distinguished by the absence of this kind of decoration (Bird/F/1b group).

Bird representations also come as middle-sized hollow figurines/zoomorphic vessels (Bird/V group) [see Fig. 9:2]. Two openings are made in the body of the vessel, which bears incised decoration imitating feathers: one is in the middle of the back and the other under the tail. This example is of Akkadian or possibly post-Akkadian date, as suggested by analogies from Tell Brak among others (McDonald 2001: 273, 594, Figs 292/75, 489/75 and No. 5398; see also McDonald 1997: 131, Fig. 239/18).

POST-AKKADIAN AND POST-AKKADIAN/KHABUR-WARE PERIOD ASSEMBLAGE

The assemblage dated to the post-Akkadian period counted 146 figurines; another 94 could be considered as either post-Akkadian or Khabur-Ware period. The figurines were mostly solid, much more rarely wheeled or hollow [Figs 10–15, 17:1–2, 6]. Equids continued to be the most common kind of animal represented (89 specimens). Sheep and goat representations were also popular (58 and 25 specimens respectively). Dogs were exceedingly rare (four specimens), as were birds (two specimens), cattle (one figurine) and other animals (three examples). Figurines of unidentified quadrupeds constituted a significant share of the assemblage (58 specimens).

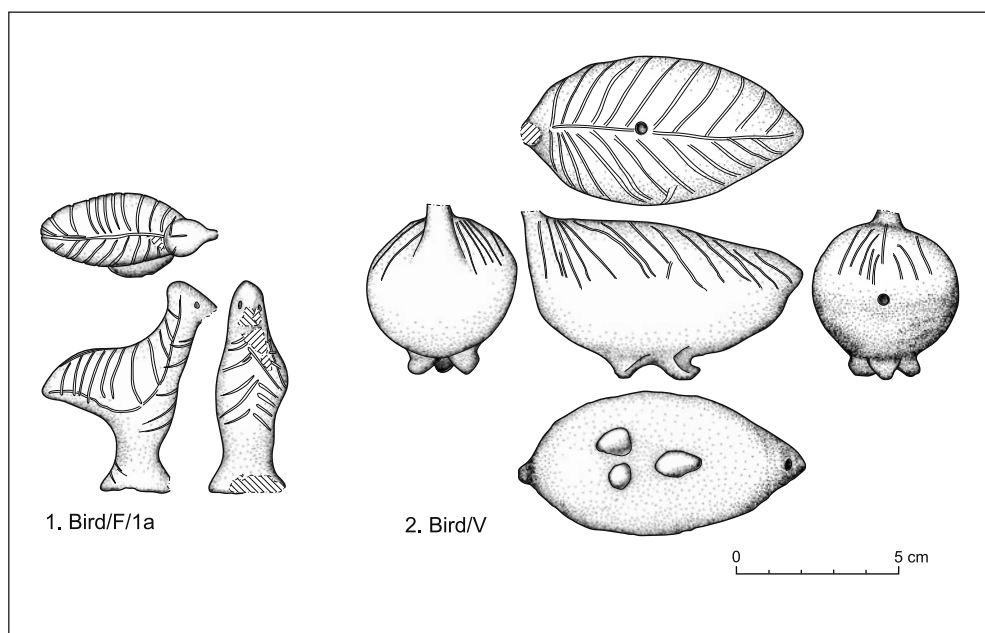


Fig. 9. Bird representations of Akkadian (1) or Akkadian/post-Akkadian (2) date; Inv. Nos: 1 – ARB'07 D 31/41-17-3; 2 – ARB'09 W 52/57-33-101 (Drawing M. Momot, Ł. Wojnarowicz; digitizing M. Momot)

Equids

A considerable part of the equid figurines [see *Figs 10–12*] followed the same models as were en vogue in Akkadian times, differing from the earlier examples in details of the decoration and manner of their representation. Incised decoration on the torso and heads of the figurines appears to have been a characteristic feature of the post-Akkadian production [see *Figs 10:1, 11:2, 12:1, 2*]; other typical elements

included eyes in the form of knobs with a rounded cavity or impressed circle in the center [see *Figs 10:2, 11:1*], as well as three perforations in the mane [see *Figs 10:3, 12:1*]. The headstall was usually simplified in form, without a browband and rendered most frequently by applied stripes or incised lines, or both techniques in combination [see *Fig. 10:1*].

Middle-sized figurines with few details, perforated mane (mostly in three places) and

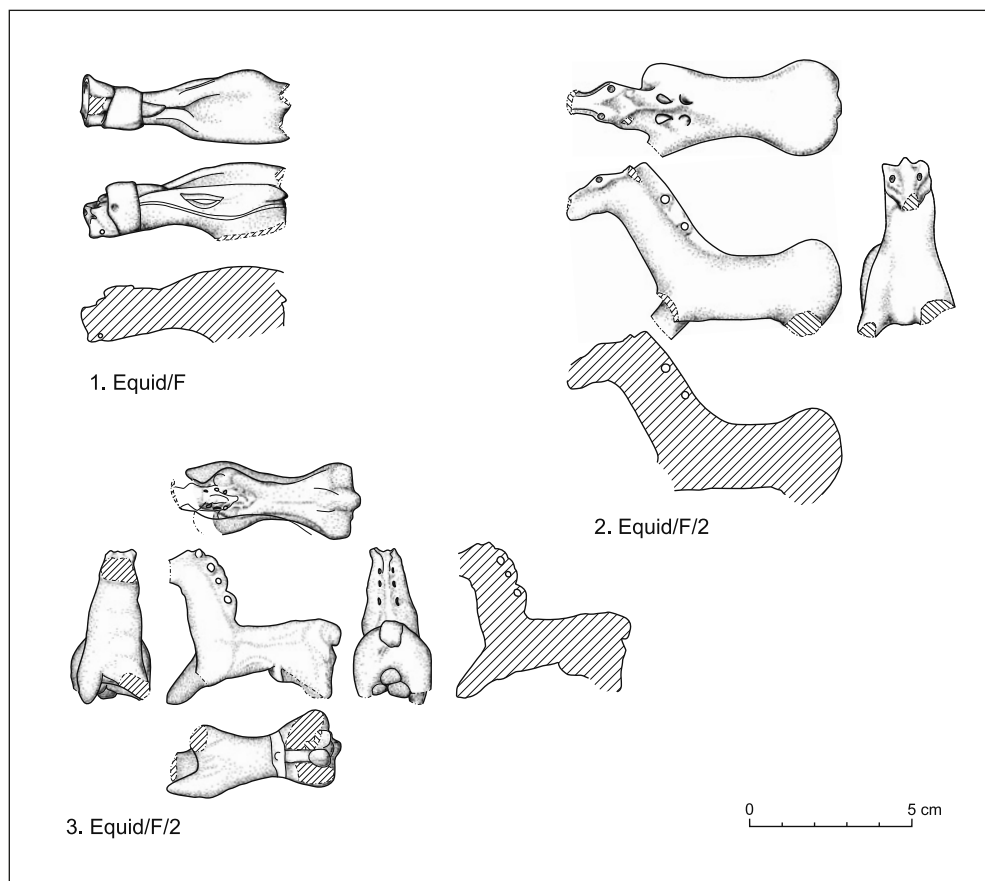


Fig. 10. *Equid figurines of post-Akkadian date; Inv. Nos: 1 – ARB'98 SD 36/65-4; 2 – ARB'00 SL 37/55-33; 3 – ARB'00 SS 36/54-41?* (Drawing A. Oleksiak, A. Szymczak; digitizing M. Momot)

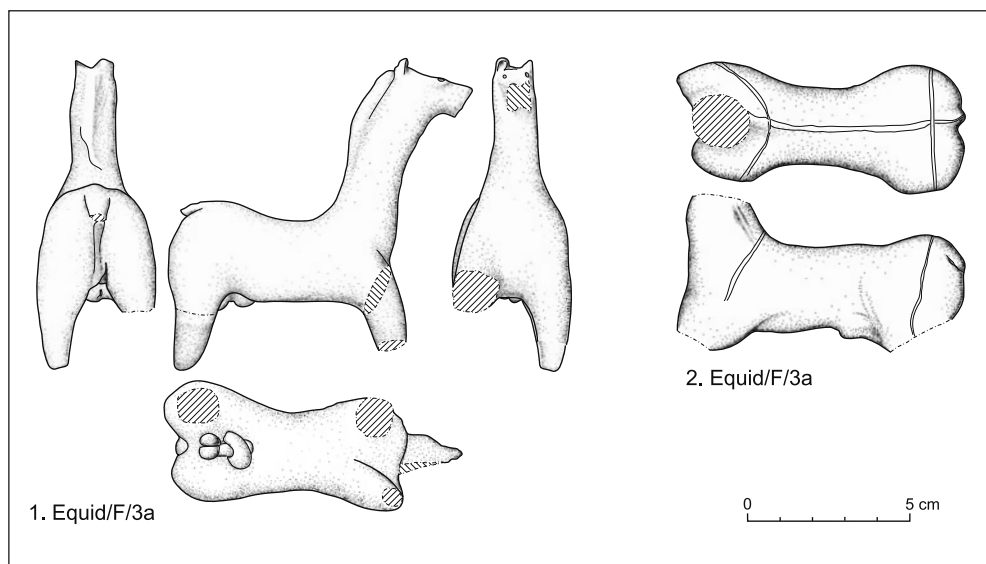


Fig. 11. *Equid figurines from Tell Arbid of post-Akkadian date; Inv. Nos: 1 – ARB'03 SD 36/65-36-2; 2 – ARB'96 A 29/19-120 (Drawing A. Oleksiak, M. Ozdarska; digitizing M. Momot)*

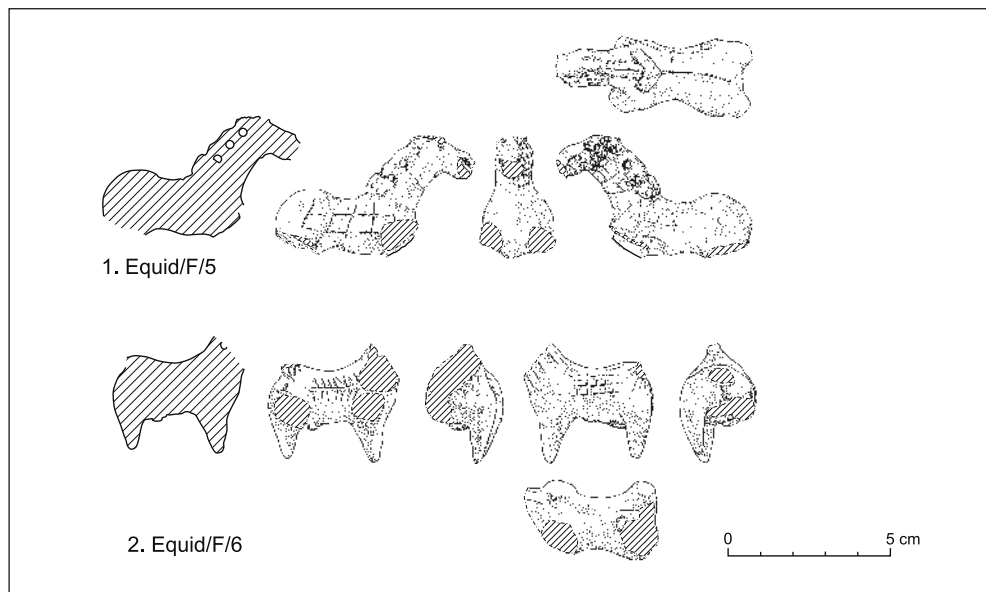


Fig. 12. *Equid figurines of post-Akkadian date; Inv. Nos: 1 – ARB'09 P 37/60-140-3?; 2 – ARB'09 P 37/61-134-1 (Drawing S. Al-Hussein, M. Puskarski; digitizing M. Puskarski)*

possible muzzle perforations (Equid/F/2 group) [see *Fig. 10:2, 3*] continued to be made in the post-Akkadian period. The eyes and headstall were marked on some figurines in a manner characteristic of the period, as was the dorsal stripe. Strapped male genitalia were shown on many of them. The clay and degree of firing in the case of some specimens pointed to a date in the late post-Akkadian or early Khabur-Ware periods. Similar objects are known from other sites in the region, from layers dated to the post-Akkadian period and the first half of the 2nd millennium BC (Oates 2001: *Fig. 310/TB 6184*; McDonald 2001: *Fig. 489/58*; McDonald and Jackson 2003: 285, *Fig. 7.34:23*).

Middle-sized and large figurines of elongated proportions, often with strapped male genitals, were also produced in the post-Akkadian period (Equid/F/3a group) [see *Fig. 11:1, 2*]. Among these are examples with bodies bearing incised decoration imitating a trapper as well as dorsal and shoulder stripes.

Figures with elaborate headstalls marked with applied straps covered with impressed circles continued to be made (Equid/F/5 group) [see *Fig. 12:1*]. One of the post-Akkadian specimens is distinguished by a trapper, which is incised instead of being marked with rows of impressed circles as in the previous period. Small and middle-sized figurines with elaborate patterns of incised lines on the bodies (Equid/F/6 group) [see *Fig. 12:2*] do not have counterparts in the earlier period. This kind of decoration suggests saddlebags as well as identifying marks on the animals ('x' mark or circle with 'x' mark). Occasionally they have mane perforations or strapped male genitalia. Some specimens from this group may date

to the Khabur-Ware period, presumably an early phase. No analogous finds are known from other sites in the region.

Sheep

Solid figurines dominated among the representations of sheep [see *Figs 13, 17:1*]. Part of them copied models worked out in the ED III and Akkadian periods (Sheep/F/1a group), occasionally being different in how details were marked: rendering of the fleece as well as eyes and ears as projecting knobs. Analogous figurines, middle-sized, large and even very large, but without the incised decoration marking the fleece, became common in post-Akkadian times (Sheep/F/1b group). Parallels from other sites are known from both the Akkadian and post-Akkadian periods, although some of the figurines could be later (Wissing 2009: Pls 24/274, 276, 27/310, 28/320, 29/323; McDonald 2001: 272, *Figs 290/4527, 293, 489/70*; Hauser 2006: 152–153, Pl. XI, Ovis 202).

Small solid sheep figurines, 3 cm to 4.5 cm high, were extremely popular. Part of them (Sheep/F/2a–b group) were like the previously described group of larger representations (Sheep/F/1a–b group). Some had the genitals marked or an 'x' mark. Technological characteristics suggest a late post-Akkadian or early Khabur-Ware period date for some of specimens. Some of the small sheep figurines from other sites could be compared with this group (Wissing 2009: Pls 25/290, 26/292, 294, 27/302).

Small figurines with a characteristic head featuring a slightly convex upper surface that slopes down to the front were more numerous (Sheep/F/3a–b group). The horns were invariably marked with such lightness, incorporated into

the outline of the head, that only the tips could be seen. Most of the figurines were characterized by fairly squat proportions, a short neck and a massive body. A few were more slender in shape. Udder and male genitals were marked occasionally, as well as 'x' marks on the body. Similarly as in the previous group, there were specimens with and without marked fleece. None of the sites in the region has produced analogous representations.

Wheeled figurines of sheep continued to be made in the post-Akkadian period (Sheep/WF group) [see *Fig. 14:1*]. It is difficult to determine whether and which of the previously described variants of this kind of representation were characteristic of the period. Figurines with attached "axle

tubes" were produced undoubtedly until the end of the post-Akkadian period.

Vessels in the form of sheep also continued to be made (Sheep/V group). The only specimen surely dated to the post-Akkadian period was represented by the spout of the vessel in the shape of a sheep's head. This piece is several times larger than similar representations described above. No parallels are known from the Khabur region.

Goats

Large solid figurines of goats (Goat/F/2 group) continued to be produced also in the post-Akkadian period, although some of these representations could have depicted wild bovids resembling goats.

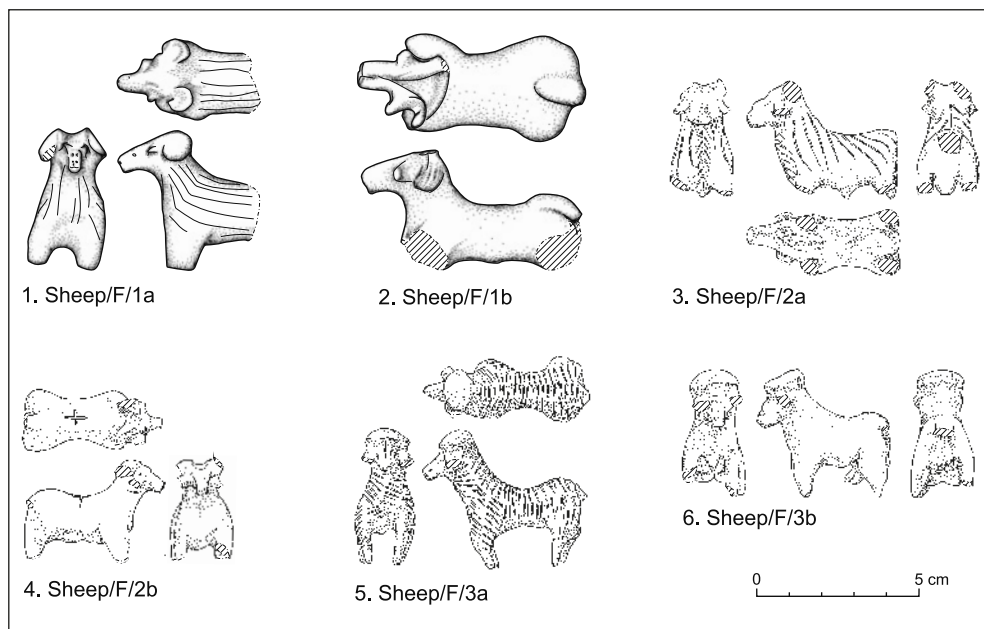


Fig. 13. Sheep figurines of post-Akkadian date; Inv. Nos: 1 – ARB'00 SS ext.2 36/54-2; 2 – ARB'98 SD 36/65-4; 3 – ARB'09 P 37/60-151; 4 – ARB'09 P 37/60-184-1; 5 – ARB'09 P 37/62-79-1; 6 – ARB'09 P 37/60-173-1 (Drawing A. Oleksiak, M. Puzkarski, M. Świążkowska; digitizing M. Momot, M. Puzkarski)

Small figurines about 4 cm high were typical of the post-Akkadian period (Goat/F/1 group) [see *Fig. 14:2*]. Many had male genitals marked, one specimen had an 'x' mark. This kind of figurine is known also from the Khabur-Ware period layers. Parallels are known mainly from post-Akkadian and Khabur-Ware period contexts (Wissing 2009: Pls 32/337–339, 33/340–341, 347, 35/356; McDonald 2001: Figs 291, 489/66; Hauser 2006: Pls XLVII, XLIX, Capra 14, 204).

A few middle-sized figurines of goats with the pelt marked with incised lines can be dated presumably to the post-Akkadian period.

Dogs

Representations of dogs continued to be attested, as before, by small figurines 3 cm to 4 cm high. Figurines with pointed muzzles were especially common in post-Akkadian times; the heads were elongated, the ears extended and pointed outward with flopping tips, distinct neck and rather slender and long body (Dog/F/2 group) [see *Figs 14:3, 17:2*]. The tail could be upturned and curly at the end or short and high on the back. All the figurines of this kind had the male genitals marked. They were dated to the post-Akkadian period, although in one case a Khabur-Ware date was also possible. Analogous figurines are very rare on other sites in the region.

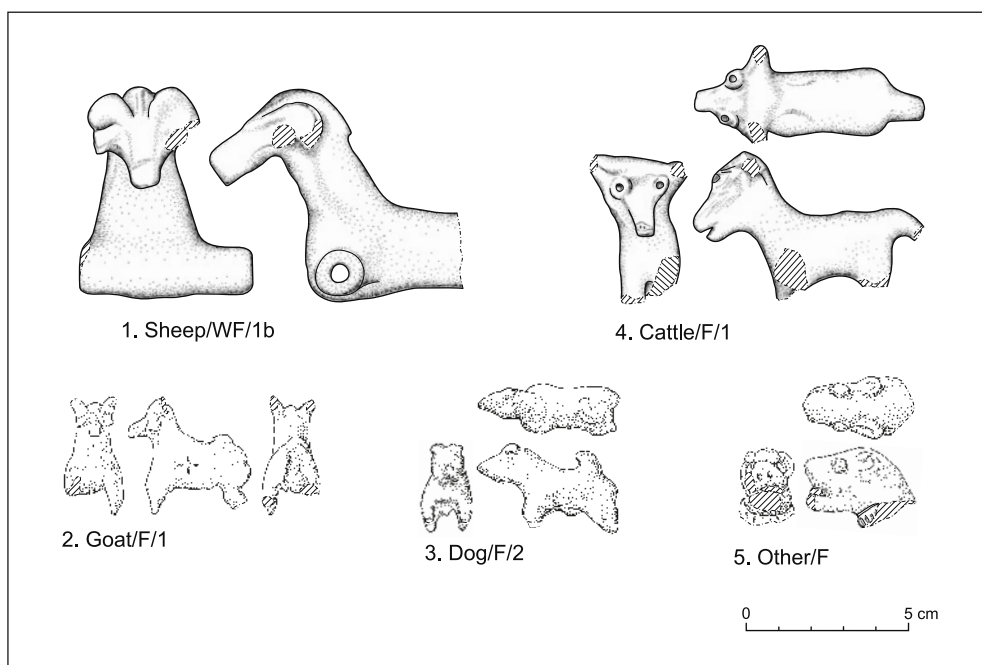


Fig. 14. Zoomorphic figurines of post-Akkadian (1, 3, 5) or post-Akkadian/Khabur-Ware period (2, 4) date; Inv. Nos: 1 – ARB'00 SS 36/55-21-8; 2 – ARB'10 P 37/62-266-4; 3 – ARB'08 P 37/62-51-1; 4 – ARB'00 SL 37/55-6; 5 – ARB'08 P 37/60-117-1 (Drawing A. Oleksiak, M. PuszkarSKI, M. Świążkowska; digitizing M. Momot, M. PuszkarSKI)

A similar representation was found at Tell Mozan in a post-Akkadian or Khabur-Ware period context (Wissing 2009: 45, Pl. 33/342).

Cattle

The oldest surely identified representation of cattle came from a late post-Akkadian or early Khabur-Ware period context. It was a solid figurine, originally 5 cm high, the horns typical of this kind of animal (Cattle/F/1 group) [see *Figs 14:4, 17:6*]. A similar figurine is known from a post-Akkadian context in Tell Brak and another one was found in layers of the second half of the 2nd millennium BC (McDonald 1997: 278, Fig. 239/19; 2001: 273, Fig. 292).

Other quadrupeds

In terms of images of other quadrupeds, the head of a middle-sized figurine of a felid, presumably a lion, should be dated most probably to the post-Akkadian period. It is distinguished by oval ears and an open muzzle, from which the tongue had once protruded, as well as decoration meant to represent the mane (Other/F) [see *Fig. 14:5*]. Solid figurines of the type are very rare in the region (Wissing 2009: 126–127, Pl. 22/256; Mallowan 1937: 129, Fig. 10/11; Koliński 2007: 92–93, Fig. 14/E; see also: McDonald 2001: 273, Fig. 294).³

Birds

Some of the solid bird figurines can presumably be dated to this period [see *Fig. 15:1*]. A middle-sized specimen

without decoration imitating feathers is known from the post-Akkadian period (Bird/F/1b group); it had spread wings rendered in plastic form.

A large rattle shaped like a bird (Bieliński 2004: 339, Figs 4–5) (group Bird/R) [see *Fig. 15:2*], more than 10 cm high, generally similar in appearance to solid figurines of these animals, can be dated to the post-Akkadian period as well. Analogous finds were rare on other sites in the region (Mallowan 1947: 214, Pl. LIV/4; Wissing 2009: 355, Pls 73/1198, 157/1197); they originated from contexts dated from the Akkadian to the Khabur-Ware period.

KHABUR-WARE PERIOD ASSEMBLAGE

The figurines assigned to the Khabur-Ware period counted 106 specimens. They included both solid and wheeled examples [*Fig. 16*]. Equid representations constituted the most numerous class (39 specimens). Other representations included sheep (five specimens), goats (seven specimens), cattle (six specimens), other quadrupeds (one example) and birds (four examples). A considerable percentage of the figurines represented unidentified quadrupeds (44 specimens).

Equids

Equid figurines made in the Khabur-Ware period, especially in the early phase, presumably followed forms of figurines from the post-Akkadian period (e.g., Equid/F/2 group). The representations that were typical of the first half of the 2nd

³ Rick Hauser identified a substantial number of felid figurines in the Tell Mozan material (Hauser 2006: 237–247, 251–294). Only one, which was severely damaged, preserved the head (Hauser 2006: 250, 253, Felis 3). Many others featured details typical of equids (see above, note 1). In my opinion, none of the representations published by Hauser, with the exception of the said head perhaps, could be identified surely as a felid image.

millennium BC comprised two groups of solid figurines. The first was composed of small and middle-sized representations, 4 cm to 6 cm high (Equid/F/7 group) [see *Fig. 16:1*]. These representations were characterized by a pinched snout, rectangular in side view, relatively short and usually lowered neck, standing mane with two, more rarely one perforation, and a body that widened toward a massive rump with a marked tail on it. All figurines of this kind were discovered in Khabur-Ware period contexts. No analogies are known from other sites in the region.

The other group is represented by heads with necks from very large, late Khabur-Ware period painted figurines (Equid/F/8 group) [see *Fig. 16:2*]. The decoration of these representations in stylized manner records features characterizing this animal family and elements of their equipment

(headstall). The biggest fragment, preserved to the base of the neck, measures 6 cm in height. The images are quite detailed, including nostrils, snout and ears. The eyes are typical of the late Khabur-Ware period: rounded appliqué pellets with a small cavity in the center. Few parallels are known from other sites in the region (Mallowan 1937: 130, *Fig. 10/29, 32*; see also McMahon 2009: Pl. 70/3, 6; Wissing 2009: Pl. 24/270–271).

Cattle

A group of representations characteristic of the Khabur-Ware period could be distinguished also among the solid cattle figurines. Beside middle-sized images (Cattle/F/1 group), there are also large and very large representations worked in considerable detail (Cattle/F/2a–b group) [see *Fig. 16:3, 4*]. Practically only

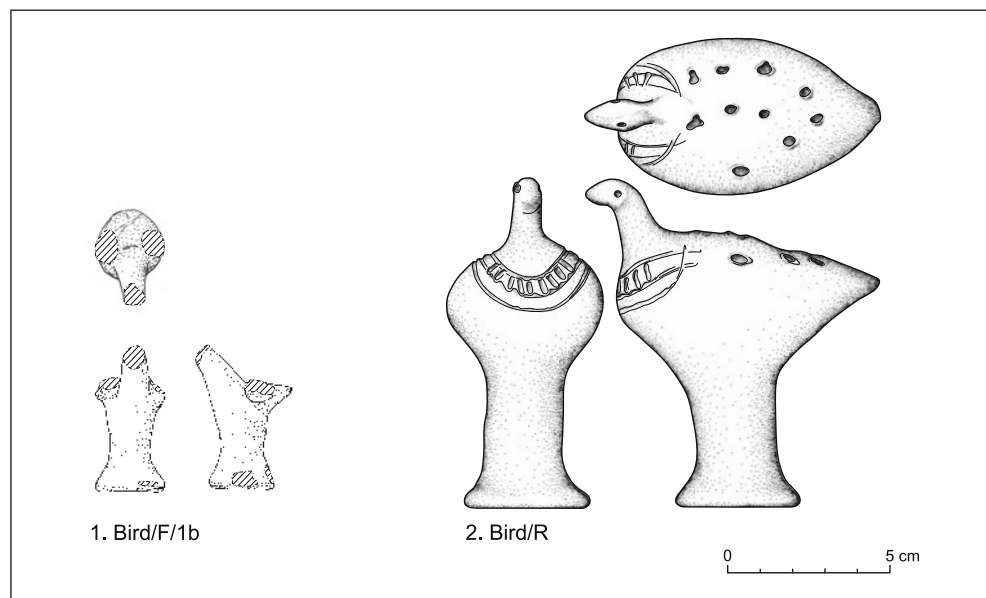


Fig. 15. Bird representations of post-Akkadian date; Inv. Nos: 1 – ARB'09 P 37/60-212-6; 2 – ARB'03 SD 35/64-62-7 (Drawing A. Oleksiak, M. Puzskarski; digitizing M. Momot, M. Puzskarski)

heads with fragments of necks, about 4–5 cm high, were preserved. Two featured a painted decoration (Cattle/F/2a group), which may have depicted in stylized manner elements of the equipment used with draught bovids or emphasizing the structure and appearance of heads of animals of this kind. The painted figurines were also distinguished by head perforations at mid-height of the head or level with the nose. Most of the figurines, perhaps all, were dated to the late Khabur-Ware period. Fragments of large and very

large representations of cattle, including specimens with painted decoration, were attested in Khabur-Ware period contexts also on other sites in the region (McMahon 2009: Pl. 70/11–14; Mallowan 1937: 130, Fig. 10/26; Wissing 2009: 42, Pl. 24/269; see also Koliński 2007: 93, Fig. 14/H).

Other

Small sheep figurines (Sheep/F/2a–b; Sheep/F/3a–b groups) and presumably also some large ones (Sheep/F/1a–b group), of a form attested in post-

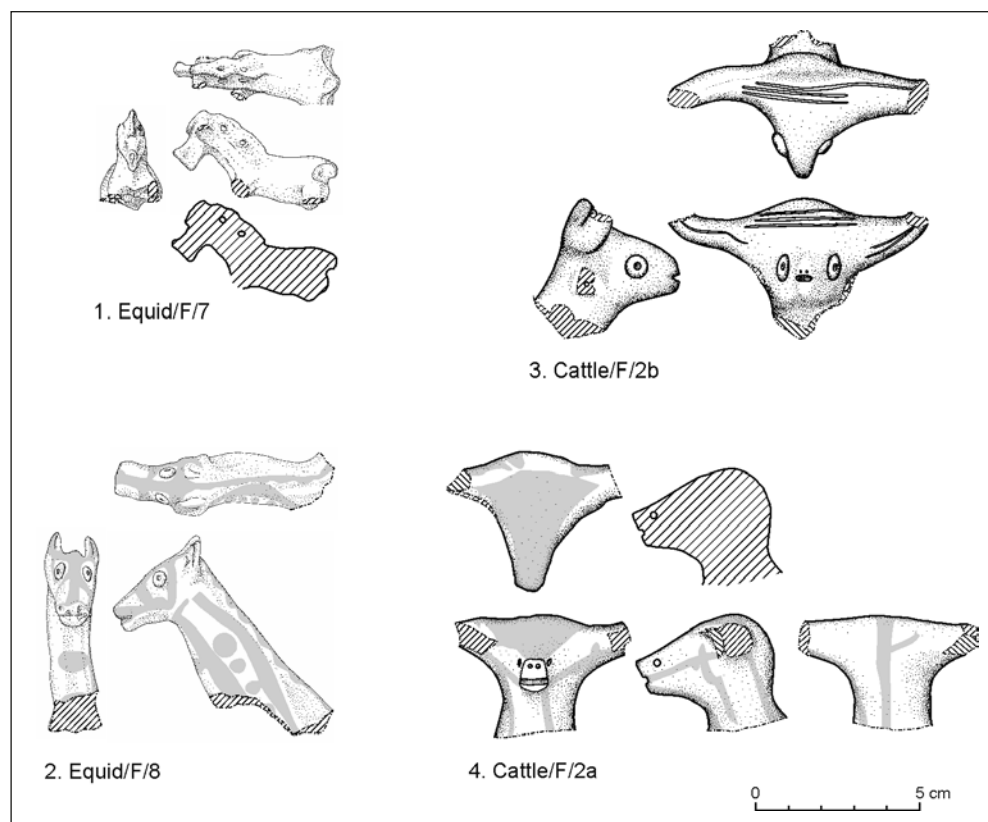


Fig. 16. Zoomorphic figurines of Khabur-Ware period date; Inv. Nos: 1 – ARB'09 P 37/60-147-1; 2 – ARB'09 P 36/61-4; 3 – ARB'01 SR 36/60-66-1?; 4 – ARB'98 SR 36/60-16 (Drawing and digitizing M. Momot, M. Puzkarski, M. Świążkowska)



Fig. 17. Zoomorphic figurines representing sheep (1 – Inv. No. ARB'10 P 37/62-263-1), dog (2 – Inv. No. ARB'08 P 37/62-51-1), equid (3 – Inv. No. ARB'03 SD 36/65-31A), bird (4 – Inv. No. ARB'07 D 31/41-17-3), goat (5 – Inv. No. ARB'98 SD 36/66-1A) and cattle (6 – Inv. No. ARB'00 SL 37/55-6) (Photos A. Oleksiak, A. Reiche, M. Szablowski, T. Tam)

Akkadian times, undoubtedly continued to be produced in the Khabur-Ware period. Some of the wheeled figurines of sheep (Sheep/WF group) could be dated to this period. Small goat (Goat/F/1 group) and bird (Bird/F/1a–b group) figurines from the Khabur-Ware period are no different from specimens coming from post-Akkadian layers. A fragment of an atypical figure, which could have had a single “axle tube” attached to the underside, was classified with the bird representations.

COMPARATIVE ANALYSIS OF CHRONOLOGICAL ASSEMBLAGES

A comparative analysis of chronological assemblages of zoomorphic clay figurines traces the changes that occurred in the production of these representations in the 3rd and the first half of the 2nd millennium BC. It also illustrates the changing popularity of images of different

kinds of animals over time in the epoch in question [Fig. 18]. However, the share of representations of particular kinds of animals observed in Ninevite 5, Ninevite 5/ED, ED III and Akkadian assemblages is of little value; it might be accidental since the number of figurines assigned to these assemblages was too small for the results to be of significance. The Khabur-Ware period assemblage also does not seem to be representative as it has been dated mainly on the grounds of secondary contexts, from which it follows that the figurines could be much older than the layers in which they were found. Moreover, relatively few of the chronologically distinctive groups of representations are dated to the Khabur-Ware period. Thus, the assemblages from the Akkadian/post-Akkadian to post-Akkadian/Khabur-Ware periods, constituting a combined total of nearly 60% of all the zoomorphic representations from Tell Arbid, hold the greatest potential for research.

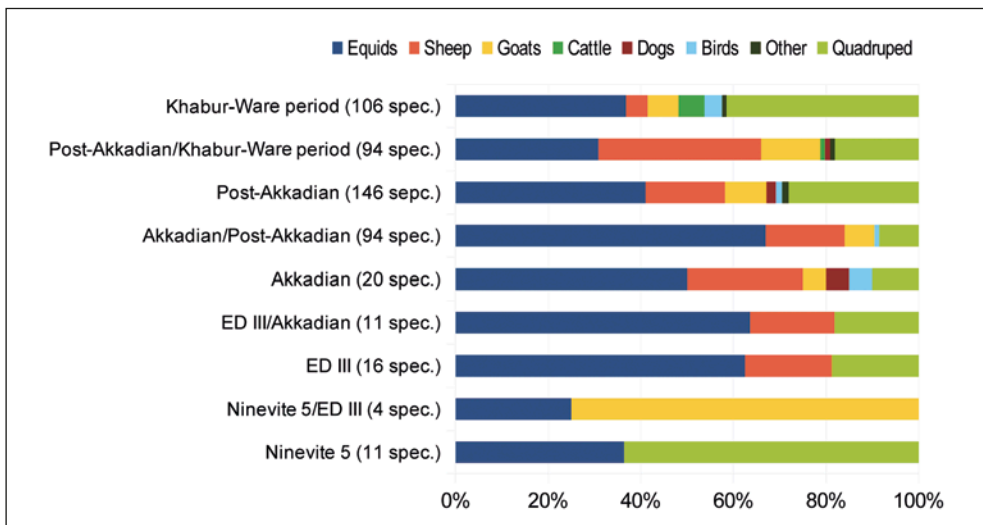


Fig. 18. Share of representations of particular kinds of animals in particular chronological assemblages

Two key regularities were observed:

1) equid figurines peaked in popularity in Akkadian/post-Akkadian contexts (~67.20%), then declined gradually to the lowest ever in the post-Akkadian/Khabur-Ware period (~30.85%) (beside Ninevite 5/ED III); and

2) the post-Akkadian/Khabur-Ware period assemblage revealed a sudden growth in the popularity of sheep and goat representations, which considered en bloc made for almost 48% of the zoomorphic figurines, whereas in the other chronological assemblages their share oscillates in the range of 25–30%.

CLAY ZOOMORPHIC REPRESENTATIONS AND ANIMAL BONE REMAINS

Research on clay zoomorphic figurines from the Khabur region has demonstrated the importance of this category — beside written sources, iconography of glyptic art and results of archaeozoological studies — for reconstructing the animal economy of centers in the region (Pruss and Sallaberger 2004). It is entirely possible that the fluctuating popularity of particular kinds of animals in the plastic arts of Tell Arbid in the 3rd and the first half of the 2nd millennium BC could reflect more general processes taking place at the site. This theory can be tested only by comparison with the results of an examination of the osteological material, due to the lack of written sources from Tell Arbid and the paucity of glyptics on the site for most of the 3rd and in the first half of the 2nd millennium BC.

Animals represented in the post-consumptional bone remains from Tell Arbid (Piątkowska-Malecka and Koliński 2006; Piątkowska-Malecka and Smogorzewska 2010; 2013) included foremost pigs, sheep, goats and cattle. Remains of other animals, including equids, birds, canids, felids and other, mainly wild animals, were much less numerous.

The animals represented in the osteological material, like the clay figu-

rines, were mostly domesticated species. But there are significant differences between the two categories of sources, principally, the evidence for the presence of pigs. Based on the animal bone remains, pigs were of key importance in the animal economy of the site, the percentage of pig bones in particular periods oscillating at ~35–45% of all the breeding animals. Their importance in the record dropped at the close of the 3rd millennium and in the first half of the 2nd millennium BC (Piątkowska-Malecka and Smogorzewska 2010: 30–34; 2013: 444–445, 447, Table 1; Piątkowska-Malecka and Koliński 2006: 24–25, Fig. 1, Tables 1, 2). But among the clay figurines from Tell Arbid only one representation of a pig has been identified. Moreover, pig representations are generally rare in the region (Pruss and Sallaberger 2004: 302; Piątkowska-Malecka and Smogorzewska 2010: 37, Fig. 8; see also Mallowan 1937: 129, Fig. 10/8, 10; McMahon 2009: Pl. 71/18; McDonald 2001: 271, 273, Fig. 489/74) as well as in Mesopotamia as a whole (see, e.g., Wrede 2003: 51–52, 347, Fig. 103; McAdam 1993: 85–86, Fig. 3.9, Nos 309–317; Cellerino 2009: 31–32, Pl. 7/41; Pruss and Link 1994: 116, Fig. 40, No. 175).

Glaring differences between the two categories of sources can be observed also in the case of equids. The number of equid bone remains at Tell Arbid is limited: no more than 2% of all animal bone remains in the Ninevite 5 and ED III period, rising to ~8% in the Akkadian period and declining to 6.3% in post-Akkadian times, only to reach the same levels in the Khabur-Ware period as in the early second half of the 3rd millennium BC (Piątkowska-Małecka and Smogorzewska 2010: 30–33, 40; 2013: 444–445, 448, Table 1; Piątkowska-Małecka and Koliński 2006: 25–27, Tables 1, 6). On the other hand, equid representations dominated the assemblage of clay zoomorphic figurines in all periods. The disproportion may be partly due to the fact that remains of equids, whether domesticated or not is difficult to say, were found in post-consumptional deposits, hence they need not reflect the role of these animals bred as draught animals (as well as pack and ridden animals) rather than for meat. However, the superior number of equid figurines is without doubt, as in the case of the minimal number of pig figurines, also a result of cultural factors. To a large degree it may be due, as suggested elsewhere (Makowski 2015: 133–137), to the popularity in the local culture of clay images of wheeled vehicles drawn by equids, sometimes supplemented with warriors or drivers.

On the other hand, there is some convergence between the two categories of sources concerning equids. The percentage of equid bone remains is the highest in the Akkadian period and remains on a relatively high level in post-Akkadian times. Compared to representations of other animals, figurines of equids gained the greatest popularity in the Akkadian/

post-Akkadian assemblage. The growing importance of equids in the Akkadian and post-Akkadian periods, observed in both categories of sources, appears to coincide with intensified use of these animals for pulling wheeled vehicles. This is illustrated by the frequent marking of elements of equipment typical of draught animals in these periods. At the same time, the marking of strapped male genitalia on equid figurines reached the greatest popularity. Available data allows to cautiously hypothesise that the center may have specialized in the exploitation and breeding of equids. As a matter of fact such specialization is attested in textual sources from an earlier period, concerning Tell Brak (Oates 2001: 286), the ancient Nagar, a center lying in the immediate neighborhood of Tell Arbid. Moreover, at Tell Brak equids played a particularly important role among the figurines, and, relatively, also in the osteological material (Pruss and Sallaberger 2004: 296, 301, Table 2, 6).

A similar regularity can be observed in the case of cattle. Figurines of these animals from post-Akkadian and chiefly Khabur-Ware periods were much less common than the actual bone remains in the archaeozoological record from the site. Both categories of sources indicated however a growing importance of cattle at the close of the 3rd millennium and in the first half of the 2nd millennium BC. Cattle is attested in the osteological material throughout the 3rd millennium BC, the percentage share growing in the post-Akkadian and Khabur-Ware periods, when it exceeded 10% at the beginning of the 2nd millennium BC (Piątkowska-Małecka and Smogorzewska 2010: 30–33, 35; 2013: 444–445, 448, Table 1; Piątkowska-

Małecka and Koliński 2006: 24, Tables 1, 2, Fig. 1). Figurines of cattle, like of equids, are presumably for the most part draught animals, as indicated by the head perforations of some of the images from Tell Arbid (Cattle/F/2a group) and from other sites in the region (McDonald 1997: 278, Fig. 239/19; 2001: 273, Fig. 292).

Sheep and goats played an important role in both the osteological material and the assemblage of clay zoomorphic figurines. The bone remains were just as abundant as the pig remains. During the Ninevite 5 and ED III periods they constituted at least ~45–50% of the domestic animal bone remains, the percentage share growing in the Akkadian period and the trend was maintained through the end of the 3rd millennium and in the first half of the 2nd millennium BC (Piątkowska-Małecka and Smogorzewska 2010: 30–35; 2013: 444–447, Table 1; Piątkowska-Małecka and Koliński 2006: 25, Fig. 1, Tables 1, 2). A similar process, as delineated above, can be observed in the case of the clay figurines, the popularity of representations of this kind of animals peaking (~48%) in the post-Akkadian/Khabur-Ware period assemblage. Small figurines were especially popular then (Sheep/F/2a–b, Sheep/F/3a–b, Goat/F/1 groups). Among them, contrary to earlier representations of these animals, individuals of both

sexes could be identified, even young creatures; there is also evidence for putting identifying marks on animals, practice associated with the organization of large herds. These characteristics of the figurines — sex and ontogenetic differentiation, as well as traces of breeding practices — suggest that these small representations could have reflected in a symbolic way the herds which played a particularly important role in the animal economy of Tell Arbid in the end of the 3rd millennium BC. The results of archaeozoological analysis suggest that there was a change in the animal economy at this time, a shift from a stationary economy based mainly on pig breeding to a pastoral economy, focused mainly on goat and sheep (Piątkowska-Małecka and Koliński 2006: 28; Piątkowska-Małecka and Smogorzewska 2013: 446, 448). It is in the context of these clay herds that one could perceive the figurines of dogs of similar size, which were the most numerous in the post-Akkadian period (Dog/F/2 group). They could have represented shepherd dogs. The growing share of wild game remains in the Tell Arbid assemblage, observed for the post-Akkadian period (Piątkowska-Małecka and Smogorzewska 2010: 35; Piątkowska-Małecka and Koliński 2006: 26), could also indicate the use of dogs for hunting in this period.

CONCLUSIONS

A formal analysis of clay zoomorphic figurines from Tell Arbid has led to two key determinations. Firstly, an approximate date was ascertained for all the objects and defined image groups. The dating considered to an equal degree the find context and the results of an analysis

of details of execution. Distinguishing such chronologically characteristic groups, of which only the most important ones were discussed here, was possible thanks to the quantitative richness and variety of the Tell Arbid assemblage. Further study is needed to establish

the degree to which these criteria are significant for dating representations of this kind from other sites (see Wissing 2009: 47).

Secondly, the repertoire of animal images was recognized and the frequency of particular kinds of animals in the plastic arts of Tell Arbid was established. Moreover, diachronic changes in the popularity of representations of particular kinds of animals can be referred at least in part to changes observed in the contemporary osteological material, i.e., the popularity of equids, cattle, sheep and goats peaks simultaneously in both categories of sources. Although the proportions of species (especially pigs and equids) represented in the figurines were culturally defined and the results of research on one category of sources do not translate directly into results of a study of the other category, both appear to be of significance for a reconstruction of the animal economy in this center (compare

Pruss and Sallaberger 2004: 301, 305). The results of a study of clay figurines not only complement conclusions drawn from the archaeozoological material, but also demonstrate processes attested little or not at all in other sources, such as putting identifying marks on sheep and goats or the exploitation range of equids. They can also serve as a base for hypothesizing on the specialization of the center in equid breeding.

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