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FOR P.V.GLOB

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ÅRBOG FOR JYSK ARKÆOLOGISK SELSKAB

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*With Summaries in English*

*Mit deutschen Zusammenfassungen*

JYSK ARKÆOLOGISK SELSKAB SATTE DETTE KUML FOR

P. V. GLOB

PÅ 60 ÅRS DAGEN DEN 20. FEBRUAR 1971

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NORDISK FORLAG  
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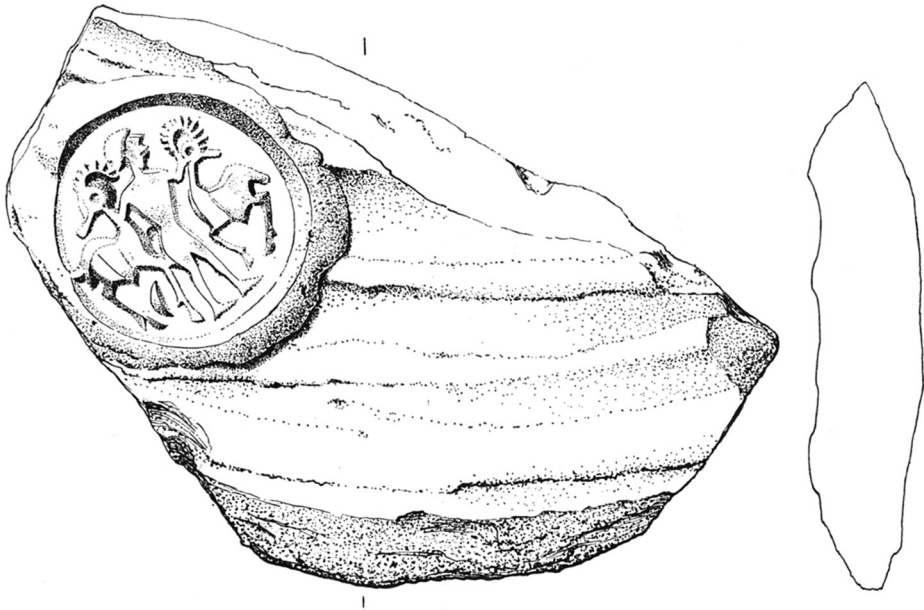


Fig. 1. Skår af rødt, riflet lerkar med aftryk af stempelsegl, fundet i det tredje tempels bassin. 3:2.

Impression of stamp seal on sherd found in the basin of the third temple. 3:2.

## OM BARBARTEMPLETS DATERING

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Af Peder Mortensen

Under sit første ophold på Bahrain, i vinteren 1953–54, opdagede P. V. Glob ved en rekognoscering langs øens nordkyst i nærheden af landsbyen Barbar » . . . i kanten af en anselig grushøj toppen af en stor stenblok med udhuggede huller, to firkantede og et rundt« (1). Samme vinter foretog Glob en prøvegravning på stedet, og det viste sig, at højen rummede en monumental bygning fra 3. årtusind f. Kr. – et tempel i provinsiel sumerisk stil. I de følgende år blev det meste af højen og dens omgivelser udgravet. Undersøgelsen viste, at der kunne udskilles tre hovedfaser i templets udvikling (2):

Det ældste tempel var opført på en godt to meter høj, rektangulær platform, næsten 25 meter lang, og 16–18 meter bred, indesluttet af en stenmur. På toppen af platformen var der langs kanten rester af små værelser omkring en åben gårdsplads. Fra vest førte en rampe eller trappe op til templet, og i

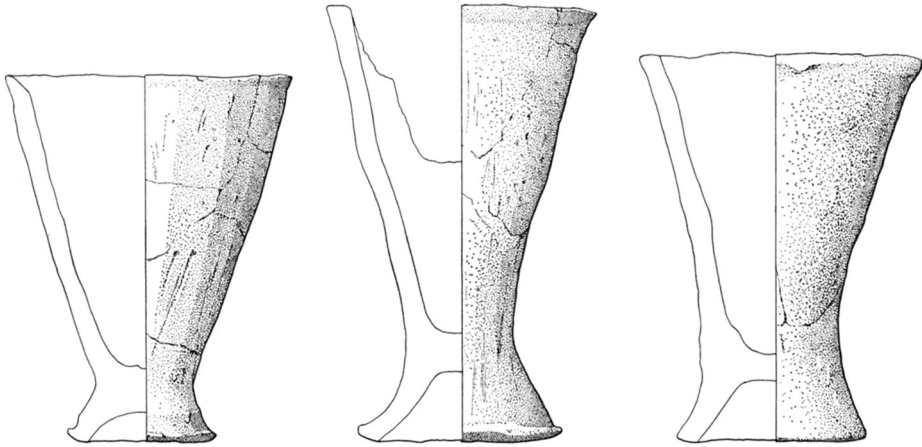


Fig. 2. Lerbægre fra det første tempels grundlæggelsesdepot. Ca. 1:2.  
Clay goblets from the foundation deposit of the first temple. Ca. 1:2.

det sydvestlige hjørne førte to trapper ned til en firkantet brønd. Vandet i denne brønd har utvivlsomt spillet en vigtig rolle for kulten allerede i det ældste tempel, og brøndens betydning i det hele taget ses deraf, at den fungerede – i en lidt ændret ydre skikkelse – også i templets anden og tredje fase. Et depot bestående af knapt hundrede koniske lerbægre og nogle få våben af kobber fandtes i platformens lerkærne. Og i en lille niche under rampen, som førte op til templet, stod en cylinderformet vase af kalksten, dækket af en flad sten, som var holdt på plads af jordbeg. Netop på dette sted ville vi have kunnet vente at finde en grundlæggelsesindskrift. Men vasen var tom. Det organiske materiale, den oprindelig har rummet, var forlængst forsvundet.

Med det andet tempel skete der en betydelig udvidelse af anlægget. Den centrale platform blev bibeholdt, men den blev omgivet af en lavere terrasse, indesluttet af en oval mur, som på den længste led måler ca. 70 meter. På templets sydfacade førte en bred trappe op til den godt to meter høje ovale terrasse, og fra den centrale platform var der mod øst, via en 8 meter lang

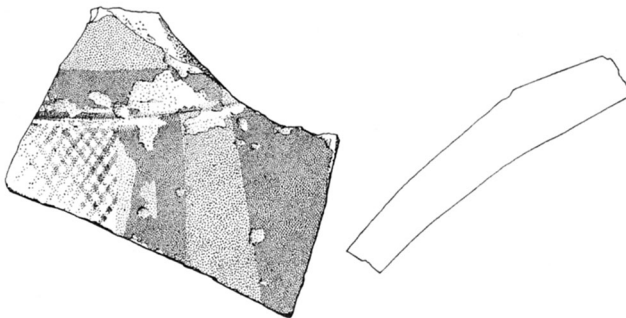


Fig. 3. Polykromt Jamdat Nasr skår fra tempel I-lag. 2:3.

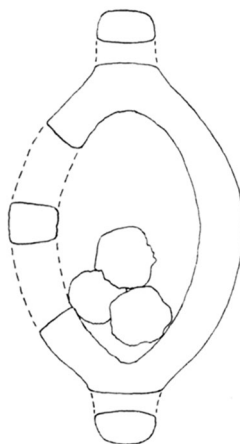
Polychrome Jamdat Nasr sherd from layer belonging to the first temple. 2:3.

rampe, adgang til en lavere oval gårdsplads med et forhøjet cirkulært ildsted i midten. Gårdspladsen var dækket af tykke askelag med knogler af brændofrede dyr. Mod vest førte en 15 meter lang trappe fra den centrale tempelplatform ned over den ovale terrasse til et 3 x 4 meter stort bassin. Både trappen og bassinet var bygget af fornemt tildannede kalkstenskvadre, og på begge sider af trappen var der spor af en dobbelt række af træ søjler. Søjlerne har stået i fundamenter af kalksten, og de har – ligesom andet træværk i templet – været beklædt med tynde kobberplader. Langs ydersiden af den ovale mur førte en smal trappe ned til den brønd, som allerede fungerede i det ældste tempels tid. Kobbermodeller af spydspidser og halvmåneformede skaft-huløksker fandtes i det andet tempels lerkærne sammen med perler af marmor, lapis lazuli og karneol, dekorerede elfenbensfragmenter og et enkelt smalt guldbånd. Desuden fandtes to kobberøkser, hvoraf den ene er afbildet fig. 5, samt en lille bjælde af kobber (fig. 4).



Fig. 4. Kobberbjælde fra det andet tempels grundlæggelsesdepot. 1:1.

Rattle of copper from the foundation deposit of the second temple. 1:1.



Det tredje og yngste tempel er både større og mere regelmæssigt end de to ældre anlæg. I midten opførtes en ny central platform, denne gang kvadratisk og ca. 30 meter på hver led, indesluttet af en kolossal kvaderstensmur, som nogle steder endnu var bevaret i 6 meters tykkelse. I tilslutning til muren var der mod vest og nord rester af kvaderstensbyggede værelser. Det meste af plat-



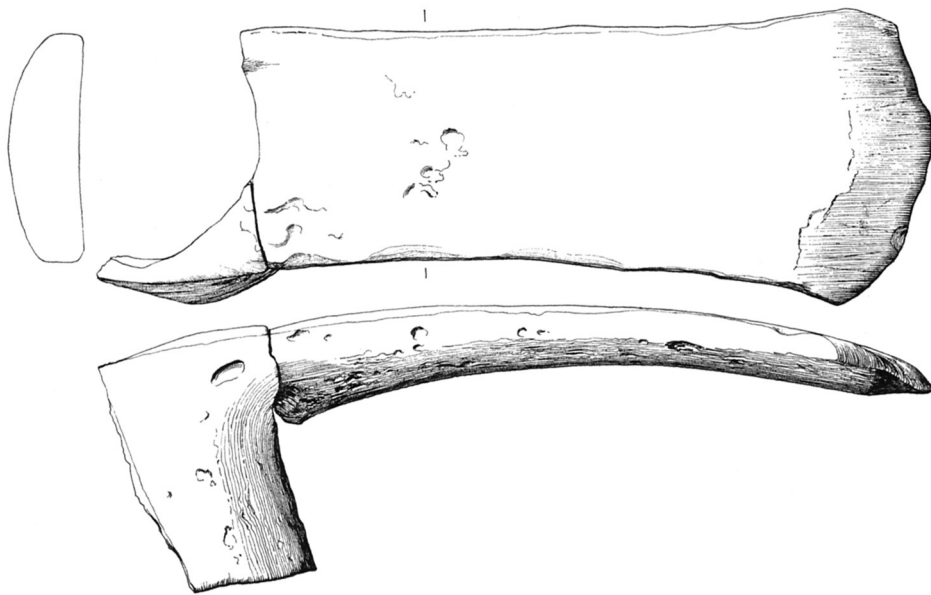


Fig. 5. Tværøkse af kobber fra det andet tempels grundlæggelsesdepot. 2:3.  
 Adze of copper from the foundation deposit of the second temple. 2:3.

formen var imidlertid opfyldt af en åben, trapezformet plads, belagt med kalkstensfliser. Midt på gårdspladsen stod to cirkulære offerborde, bygget op i sten og med et lavt sæde imellem. Øst for offerbordene var der rejst tre stenaltre, og i gårdens sydvestlige ende stod en lille række af knapt 1 meter høje stenblokke, hver gennemboret med et cirkulært hul. Langs hullernes kanter var der kraftige slidmærker, hvilket fik Glob til at formode, at stenene havde været brugt til at binde offerdyrene ved (3). I gårdspladsens nordøstlige hjørne var der en forsænkning i gulvet. Her fandtes resterne af et grundlæggelsesdepot: tre alabastkrukker (fig. 7), et bæger, et par våben, en mandsfigur, en lille fugl og et betydeligt antal nagler og plader – alt i kobber. Under gulvet, i umiddelbar nærhed af forsænkningen, fandtes et tyrehoved af kobber, samt skår af adskillige stenkar. Den centrale platform stod ligesom i den foregående fase på en lavere oval terrasse, omgivet af en kvaderstensmur, som endnu mod syd var bevaret i over 4 meters højde. Den nye terrasse dækkede et noget større område end den ældre. Den har antagelig målt omkring 100 meter i øst-vestlig retning, og ca. 60 meter fra nord til syd. Bassinet og den lange trappe, som blev opført i forbindelse med det andet tempel, blev indpasset i den nye arkitektoniske helhed, og den vigtige brønd sydvest for templet kom nu til at ligge inden for ovalterrassens ydermur. Det blev derfor nødvendigt at gøre brøndskakten godt to meter højere, så at dens overkant svarede til den nye terrasses gulv.

Både i sin grundplan og i en række detaljer er Barbartemplet nært beslægtet

med de samtidige sumeriske ovaltemppler i Khafajah og al-'Ubaid. Disse temppler er begge dediceret til frugtbarhedsgudinden Ninhursag, og man har da også – foreløbig som en hypotese – knyttet denne gudindes navn til Barbartemplet (4).

Allerede i 1954 – efter den første prøvegravning i Barbar – stod det Glob klart, at templet skulle dateres til 3. årtusind f. Kr. (5). I de mellemliggende år har både P. V. Glob og T. G. Bibby udbygget periodens kronologi gennem påvisning af indiske og mesopotamiske forbindelser til bronzalderfundene fra Bahrain (6). De følgende bemærkninger om dateringen af Barbartemplet må derfor i denne forbindelse opfattes som et foreløbigt supplement til det, som allerede er kendt.

De sikreste holdepunkter for dateringen af det ældste tempel er de lerbægre, som forekom i rigelig mængde i platformens kerne (7), og et bemalet skår, som fandtes i et affaldslag nord for det første tempel.

Bægrene, der er 10–14 cm høje, har en konisk overdel og en lav fod, som nogle gange er massiv, i andre tilfælde er udhulet (fig. 2). De er uregelmæssigt formet af kalkholdigt ler, magret med fint sand, og brændt så at både overflade og skærv har en bleg rød farve. Bægrene kendes i Barbar kun fra det ældste tempels grundlæggelsesdepot. De er imidlertid varianter af en type af koniske bægre, som i Mesopotamien kendes fra alle de tidlig-sumeriske byer, og som ofte ligesom i Barbar findes i tempeldepoterne. De er der i tid begrænset til den første af de tidlig-dynastiske perioder (ED I) (8), i Nippur synes de endda at koncentrere sig omkring periodens midte (9), medens de i Warka muligvis begynder en smule tidligere (10).

Af betydning for dateringen af det ældste tempel er også det skår, som er afbildet fig. 3. Det stammer fra overgangen mellem bug og skulder af en stor, drejet krukke, bemalet i sort og blommerødt. Forneden (på bugen) er der en horisontal metopedekoration: et bredt felt udfyldt med sort krydsskravering, begrænset af smallere sorte og røde felter. På overgangen mellem bug og skulder er der en svagt fordybet fure, langs med hvilken der på skulderen løber et horisontalt sort bånd. Inden for dette bånd ses en fladedækkende rød bemaling. Skærven er svagt rødlig, magret med fint sand, og leret er meget glimmerholdigt. Medens de ovenfor omtalte bægre må opfattes som lokalt fremstillede varianter, stammer skåret utvivlsomt fra en importeret vase af sen Jamdat Nasr type. Polykrome vaser af denne form og med samme dekoration er fundet i Ur (11), Jamdat Nasr (12), Tell Uqair (13), Warka (14), Telloh (15) og i Khafajah (16). Med en enkelt undtagelse (17) tilhører de alle den seneste fase af Jamdat Nasr perioden og overgangen til tidlig-dynastisk tid.

Hvis man forsigtigvis antager, at der er hengået flere hundrede år mellem Jamdat Nasr karrets fremstilling og aflejringen af skåret i Barbar, må man til gengæld regne med, at de lokale imitationer af tidlig-dynastiske lerbægre er lavet på et tidspunkt, hvor typen endnu var i brug i Mesopotamien. Selv

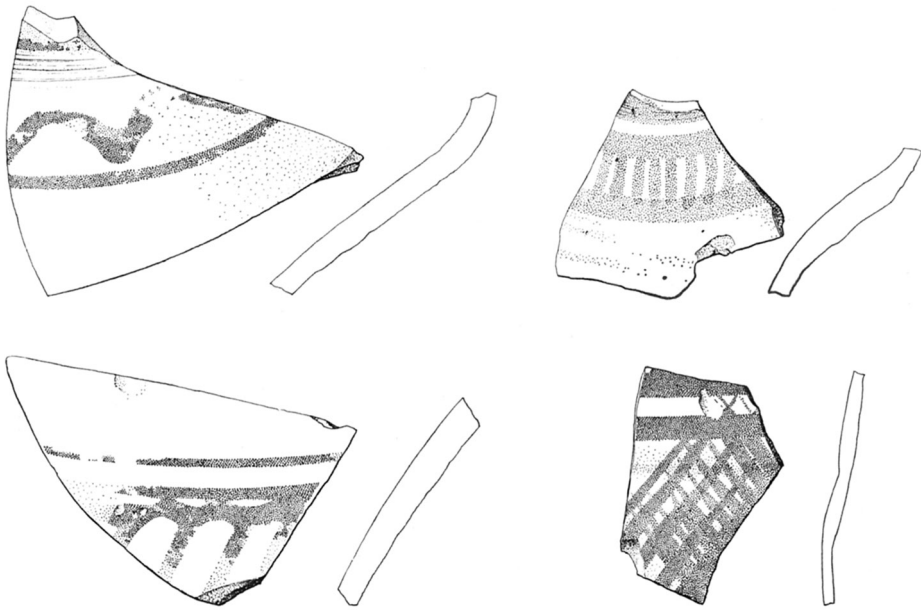


Fig. 6. Bemalede lerkarskår fra tempel II og III-lag. Ca. 2:3.  
Painted sherds from layers belonging to the second and the third temple. Ca. 2:3.

om man accepterer den opfattelse, at den første af de tidlig-dynastiske perioder – i hvert fald i Diyala området – har strakt sig over næsten 300 år (18), kan man derfor næppe sætte opførelsen af det første tempel i Barbar senere end ca. 2700 f. Kr., snarere måske en smule tidligere.

To af metalfundene fra det andet tempels grundlæggelsesdepot har mesopotamiske og persiske paralleller:

En lille bjælde af kobber med gennembrudte sider og en øsken i hver ende (fig. 4) svarer til en bjælde fundet i området omkring kongegravene i Ur (19), af hvilke hovedparten henføres til slutningen af den tidlig-dynastiske periode (ED IIIa-b, ca. 2600–2370 f. Kr.). En lidt senere variant af typen er fundet i tre eksemplarer i en grav i Tepe Giyan (20). På grundlag af keramik er denne grav dateret til Giyan IV C, der sandsynligvis er samtidig med Ur III perioden i Mesopotamien (ca. 2113–2006 f. Kr.) (21).

En tværøkse af kobber med skaftdølle (fig. 5) tilhører en gruppe af økser, som er behandlet af Jean Deshayes (Deshayes' undertyper B1-2a) (22). Økser af denne type kendes fra Tell Fara (ca. 2700–2500 f. Kr.), Ur (ca. 2500 f. Kr.), Susa (ca. 2500 f. Kr.), Tepe Gawra (ca. 2500–2250 f. Kr.), Assur (22.-21. årh. f. Kr.) og Maikop (2. halvdel af 3. årtusind f. Kr.) (23).

Det er klart, at kobberbjælden og tværøkserne ikke kan danne grundlag for en nøjere datering af det andet tempels opførelse. Men det er vel mest sandsynligt, at tidspunktet må søges omkring midten af 3. årtusind f. Kr. En an-

tydning i den retning giver måske også de tre mesopotamiske ovaltemppler i Khafajah, al-'Ubaid og al-Hiba, som det andet Barbartempel arkitektonisk knytter sig til. De er alle opført i den midterste af de tidlig-dynastiske perioder (ED II, ca. 2750–2600 f. Kr.) (24).

Det er rimeligt i denne forbindelse at nævne, at der både i det andet og det tredje tempels aflejringer er fundet ganske enkelte bemalede lerkarskår (fig. 6), som hænger sammen med den keramik, der i de seneste år er fundet på Umm an-Nar og i Hili af den danske arkæologiske ekspedition i Abu Dhabi (25). Disse fund, der har forbindelse til det sydøstlige Iran og Afghanistan, synes at tilhøre midten af 3. årtusind f. Kr. (26).

Blandt genstandene fra det tredje tempels grundlæggelsesdepoter har man allerede tidligere påvist lighedspunkter mellem den lille mandfigur og tyrehovedet af kobber og fund fra Ur og Susa tilhørende midten eller sidste halvdel af 3. årtusind f. Kr. (27). Og det har også været nævnt, at alabastervaserne, som fandtes under det tredje tempels gulv var ægyptiske (28). Alabastvaser af ægyptisk type kendes fra en række nærorientalske byer (Byblos, Mari, Ur o.s.v.), og i nogle tilfælde er det klart, at de også er fremstillet i Ægypten. For de sumeriske vasers vedkommende har der imidlertid været rejst tvivl om oprindelsesstedet (29), og den lille alabastkrukke med låg fra Barbar, som er afbildet til højre på fig. 7, er da netop fremstillet af et meget grovkornet materiale, som ikke forekommer i Ægypten. Derimod er der ingen tvivl om, at de to høje cylindriske vaser, som er afbildet på fig. 7, er ægyptiske. De må på grundlag af randprofilerne henføres til den senere del af det Gamle Rige (30).

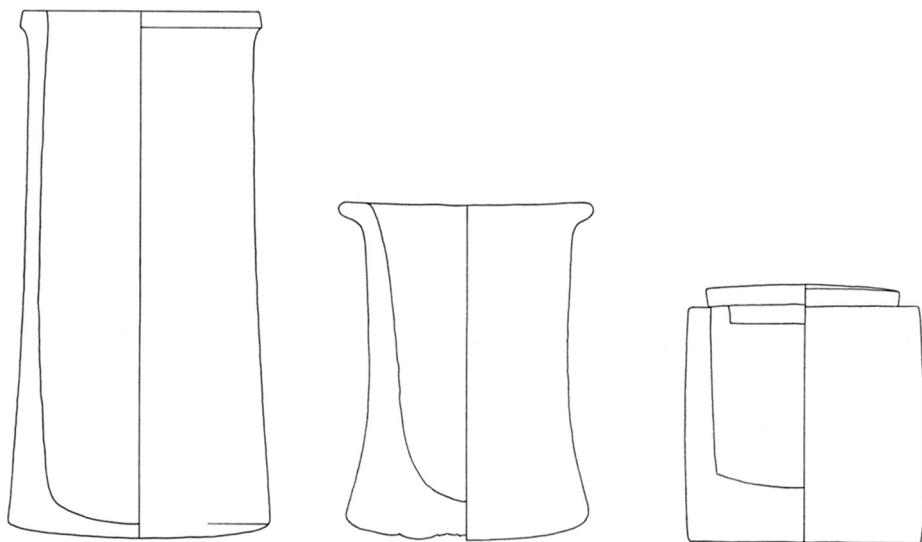


Fig. 7. Alabastvaser fra det tredje tempels grundlæggelsesdepot. 1:4.  
Alabaster jars from the foundation deposit of the third temple. 1:4.



Fig. 8. Stempelsegl af steatit fundet i det tredje tempels bassin. 3:2.  
Stamp seals of steatite found in the basin of the third temple. 3:2.

Der er endnu en detalje i det tredje tempel, som synes at afspejle ægyptisk indflydelse. Paralleller til de ovenfor omtalte hulsten, der af Glob var tolket som tøjringssten for offerdyrene, kendes fra Ægypten, hvor de har været anvendt i forbindelse med tyreofringer. Stenene forekommer i grave fra VI. dynasti (ca. 2320–2160 f. Kr.), f. eks. i Mereruka's grav i Saqqara (31).

I aflejringerne fra det tredje tempels anvendelsestid finder vi for første gang i Barbar stempelsegl af steatit af den type, som i bronzealderen findes i stort antal langs vestkysten af den Arabiske Golf fra Kuwait til Bahrain (32). I Barbar fandtes 9 af disse segl (fig. 8), 6 seglaftryk på små lerklumper (fig. 9) og et aftryk på siden af et rødt, riflet lerkar (fig. 1). En udtømmende analyse af disse segls kronologiske placering har endnu ikke været foretaget, men det er klart, at der inden for de næsten 500 segl, som nu kendes, kan skelnes forskellige stilgrupper, som både i tid og rum fordeler sig bredt. I Kuwait er flere af seglene fundet sammen med akkadiske cylindersegl, og et enkelt guldindfattet stempelsegl, som adskiller sig fra de øvrige ved at have en dobbelt billedfremstilling, har på den ene side fire gazeller skåret i en stil, som er karakteristisk for de bedste af de lokale segl, på den anden side en typisk tidlig-akkadisk fremstilling af to nøgne heroer (33).

Medens nogle af seglene således går tilbage i hvert fald til akkadisk tid, har andre været i brug endnu i Isin-Larsa perioden. Et aftryk af et stempelsegl af sen type er således fundet på en kileskrifttavle, som er dateret til det tiende år af kong Gungunum af Larsas regeringstid (ca. 1923 f. Kr.) (34).

De fleste af Barbartemplets segl fandtes i bassinet på templets vestside. Herfra stammer også en enkelt C14-datering på 2050 ± 100 f. Kr. En anden C14-datering er foretaget på trækul fra det affaldslag, hvori seglaftrykene fandtes. De dateres til 2080 ± 100 f. Kr.) (35).

Sammenfattende kan man da sige, at det første tempel i Barbar er blevet anlagt i begyndelsen af 3. årtusind, og næppe senere end ca. 2700 f. Kr. Opførelsen af det andet tempel, som samtidig er det første ovaltempel, kan ikke dateres med sikkerhed, men det er sandsynligt, at bygningen stammer fra midten af 3. årtusind. Det tredje tempel kan, på grund af mesopotamiske og ægyptiske paralleller til genstande i grundlæggelsesdepotet, næppe sættes senere end omkring 2200 f. Kr. Stempelsegl og C14-dateringer antyder, at templet endnu har været i brug henimod 2000 f. Kr. P. V. Glob havde altså ret, da han allerede efter det første års prøvegravning i Barbar skrev: »De fund, der er gjort i Barbartemplerens øverste anlæg, hvoraf kun en meget lille del endnu er undersøgt, knytter således forbindelse både til Mesopotamien og Indien i 3. årtusind, hvilket tidsrum det øverste anlæg må henføres til, vel nærmest dets slutning« (36).

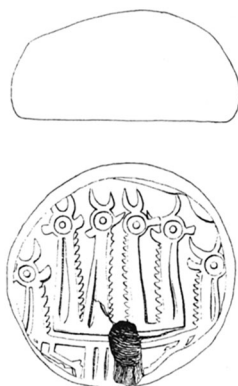


Fig. 9. Seglaftryk på lerklump fundet i tempel III-lag. 3:2. Clay impression of stamp seal found in a layer belonging to the third temple. 3:2.

## ENGLISH VERSION

### *On the Date of the Temple at Barbar in Bahrain*

During his first stay at Bahrain, in the winter of 1953–54, P. V. Glob discovered on a survey along the northern coast of the island near the village of Barbar«. . . in the edge of a gravel mound of considerable size the top of a large stone block with carved holes, two square ones and a round one« (1). The same winter Glob made a sounding on the site and it transpired that the mound contained an impressive building dating from the 3rd millennium B.C. – a temple in provincial Sumerian style. In the following years most of the mound and its surroundings were excavated.

The investigation showed that three main phases in the development of the temple could be distinguished.

The earliest temple was built on a rectangular platform about 2 m. high, nearly 25 m. long and 16–18 m. wide, surrounded by a stone wall. On top of the platform there were along the edge remains of small rooms placed around an open courtyard. From the west a ramp or stairway led up to the temple, and in the south-western corner two staircases descended to a square well. The water in this well has undoubtedly played an important part in the cult already in the time of the earliest temple, and the significance of the well is shown by the fact that it was also in use – in a slightly altered outer form – during the second and third phases of the temple. A deposit consisting of nearly a hundred conical clay goblets and a few weapons of copper was found in the fill of the platform. In a small recess under the ramp leading up to the temple a cylinder-shaped jar of limestone was found, covered by a stone slab secured with bitumen. In just such a position one might have expected to find a foundation tablet. But the jar was empty. The organic material that it originally contained had long since vanished.

With the second temple a considerable expansion of the plan took place. The central platform was retained, but it was now surrounded by a lower terrace, confined by an oval wall measuring ca. 70 m. in length. On the south facade of the temple a wide staircase led up to the more than two meter high oval terrace. From the central platform there was towards the east, via an 8 m. long ramp, access to a lower, oval courtyard with a circular, raised fire-place in the middle. The courtyard was covered with thick layers of ashes containing burnt bones of sacrificed animals. Towards the west there was a 15 m. long flight of steps from the central platform down across the oval terrace to a basin measuring 3 x 4 m. The steps as well as the basin were made of finely cut limestone ashlar and on both sides of the staircase there were traces of a double row of wooden pillars. The pillars had stood in sockets of limestone, and – like other wood-work in the temple – they had been coated with thin copper sheets. Along the outer side of the oval wall a narrow staircase led down to the well which was already in use in the time of the first temple. Copper models of spearheads and crescent-shaped shafthole axes were found in the fill of the central platform together with beads of marble, lapis lazuli and carnelian, decorated fragments of ivory and a single narrow sheet of gold. Furthermore, a copper axe, a copper adze (Fig. 5), and a small rattle (Fig. 4) of copper were found.

The third and most recent temple is bigger and more regularly shaped than the two older constructions. In the middle a new central platform was erected, this time a square one ca. 30 m. on either side, enclosed by a colossal wall of stone ashlar, which in places is still preserved in a thickness of 6 meters. Along the wall there were remains of ashlar-built rooms towards west and north. Most of the platform had, however, been laid out as an open, trapezoid space paved with limestone slabs. Two circular offering tables built of stone and with a low seat between them stood in the middle of the courtyard. East of the offering tables three stone altars were erected, and in the southwestern end of the courtyard stood a short row of nearly 1 m. high stone blocks, each of which was perforated by a round hole. Along the edge of the holes clear marks of wear were visible. They led Glob to suppose that the stones had been used when tethering the animals for sacrificing (3).

In the northeastern corner of the courtyard there was a square pit in the floor. Here the remains of a foundation deposit were found: three alabaster jars (Fig. 7), a beaker, a few weapons, a male figure, a small bird, and a considerable number of nails and fragmentary sheets – everything of copper. In the same area a bull's head of copper and several stone jars were found under the floor.

As in the preceding phase the central platform rested on a lower, oval terrace enclosed by an ashlar wall, which still stands to a height of more than 4 m. towards the south. The new terrace covered a somewhat larger area than the older one. It has presumably measured about 100 m. in east-west direction, and ca. 60 m. from north to south. The basin and the long flight of steps that were built in connection with the second temple, and the well southwest of the temple, were incorporated in the new architectural unit.

In its general plan as well as in many details the Barbar temple is closely related to the contemporary Sumerian temples at Khafajah and al-'Ubaid. These temples were both dedicated to Ninhursag, goddess of the earth, and as a hypothesis the name of this goddess has also been connected with the Barbar temple (4).

Already in 1954 – after the first sounding in Barbar – Glob realized that the temple should be dated to the 3rd millennium B.C. (5). In the intervening time both P. V. Glob and T. G. Bibby have elaborated the chronology of this period by demonstrating Indian and Mesopotamian connections to the Bronze Age finds from Bahrain (6). The following comments on the date of the Barbar temple must therefore be taken as a provisional supplement to what is already known.

The most reliable evidence for the dating of the earliest temple is provided by the clay goblets found in abundance in the fill of the platform, and by a painted sherd, found in a layer north of the first temple.

The goblets, which are 10–14 cm. high, have a conical upper part and a low foot, that in some cases is solid and in other cases hollow (Fig. 2). They are irregularly shaped, made of clay containing some lime and tempered with fine sand, and fired so that the surface as well as the core has a pale red colour. In Barbar the goblets are only known from the foundation deposit of the earliest temple. They are, however, variants of a type of conical goblets that in Mesopotamia is known from all the Early-Sumerian cities, and they are often – as in Barbar – found in temple deposits. In Mesopotamia they are in time confined to Early Dynastic I (8). In Nippur they even seem to concentrate around the middle of that period (9), while in Warka they possibly start a little earlier (10).

Of importance for the dating of the earliest temple is also the sherd seen on Fig. 3. It belongs to the transition between the body and the shoulder of a large, wheel-made jar, painted in black and plum-red. On the lower part of the body is a horizontal metope-decoration: a wide area filled in with black cross-hatching, limited by narrow black and red bands. On the transition between the body and shoulder of the jar there is a slightly incised groove, along which a horizontal black band runs on the shoulder of the jar. Inside this band the space is filled out with red paint. The core is reddish buff, tempered with fine sand, and the clay contains a large quantity of mica. While the above-mentioned goblets must be seen as locally made variants, the sherd undoubtedly comes from an imported jar of late Jamdat Nasr type. Polychrome jars of this form, and with the same decoration, have been found in Ur (11), Jamdat Nasr (12), Tell Uqair (13), Warka (14), Telloh (15), and in Khafajah (16). With a single exception (17) they all belong to the latest phase of the Jamdat Nasr period and the transition to E.D.I.

Even if it is tentatively assumed that several centuries passed between the manufacture of the Jamdat Nasr jar and the depositing of the sherd at Barbar, it must nevertheless be assumed that the local imitations of Early-Dynastic goblets were produced at a time when the type was still in use in Mesopotamia. If the opinion is accepted that the first of the Early-Dynastic periods – in any case in the Diyala area – has covered nearly 300 years, the date for the erection of the first temple at Barbar can hardly be put later than 2700 B.C., possibly a little earlier.



Two of the metal finds from the foundation deposit of the second temple have Mesopotamian and Persian parallels:

The small rattle of copper with sides pierced by triangular holes and a lug at either end (Fig. 4) corresponds with a rattle found in the area near the royal tombs in Ur (19). The main part of these have been referred to ED IIIa-b (ca. 2600–2370 B.C.). Three rattles found in a grave on Tepe Giyan (20) represent a slightly later variant of this type. On account of the pottery this grave has been dated to Giyan IV C, which is probably contemporary with the Ur III period in Mesopotamia (ca. 2113–2006 B.C.) (21).

The shaft-hole adze of copper belongs to a group of adzes, examined by Jean Deshayes (Deshayes' types B1-2a) (22). Adzes of this type are known from Tell Fara (ca. 2700–2500 B.C.), Ur (ca. 2500 B.C.), Susa (ca. 2500 B.C.), Tepe Gawra (ca. 2500–2250 B.C.), Assur (22nd–21st century B.C.), and Maïkop (second half of the 3rd millennium B.C.) (23).

It is obvious that the copper rattle and adze cannot alone form the basis of a precise dating of the erection of the second temple. But it is most probable that the time must lie around the middle of the 3rd millennium B.C. Support for this assumption may perhaps also be drawn from the three Mesopotamian oval temples in Khafajah, al-'Ubaïd and al-Hiba, to which the second Barbar temple is related as far as the architecture is concerned. They were all built in ED II (ca. 2750–2600 B.C.) (24).

It is not unreasonable in this context to mention the fact that in the deposits of the second as well as the third temple a few painted sherds (Fig. 6) were found. They are similar to the pottery that in the last few years has been found on Umm an-Nar and in Hili by the Danish archaeological expedition in Abu Dhabi (25). These finds, which show connections to southeastern Iran and Afghanistan, seem to belong to the middle of the 3rd millennium B.C. (26).

Among the objects from the foundation deposits of the third temple, the similarity of the small male figure and the bull's head of copper to finds from Ur and Susa belonging to the middle or later half of the 3rd millennium B.C. has already been pointed out (27). It has also been mentioned that the alabaster jars, found beneath the floor of the third temple, were of Egyptian origin (28). Alabaster jars of Egyptian type are known from many Near-Eastern cities (Byblos, Mari, Ur etc.), and in some cases it is evident that they were also made in Egypt. As far as the Sumerian jars are concerned, doubt has, however, been cast on the place of their origin (29), and the small alabaster jar with a lid from Barbar, seen to the right on Fig. 7, is indeed of a very coarse material which is not to be found in Egypt. On the other hand there is no doubt that the two tall cylindrical jars, seen on Fig. 7, are Egyptian. They must on account of the rim profiles be assigned to the later part of the Old Kingdom (30).

There is one more detail in the third temple that seems to reflect Egyptian influence. Parallels to the above mentioned stone blocks with holes, which by Glob were interpreted as tethering stones for the sacrificial animals, are known from Egypt, where they have been used in connection with bull offerings. The stones are found in burial monuments from the VIth Dynasty (ca. 2320–2160 B.C.), e. g. in the tomb of Mereruka in Saqqara (31).

In the time of the third temple stamp seals of steatite occur. They are of the type that in the Bronze Age is found in great number along the west coast of the Arabian Gulf from Kuwait to Bahrain (32). In Barbar 9 of these seals (Fig. 8) were found, together with 6 seal impressions on small lumps of clay (Fig. 9) and an impression on the side of a red jar (Fig. 1). A thorough analysis of the chronological placing of these seals has not as yet been made, but it is obvious that within the nearly 500 seals

known today various styles can be distinguished which both in time and space are widely spread. In Kuwait some of the seals have been found in association with Akkadian cylinder seals. A unique double-convex seal in a gold setting has on one side four gazelles cut in a style characteristic of the best local seals, on the other side a typical Early-Akkadian representation of two naked heroes (33). While some of the seals thus go back to at least Akkadian time, others were still in use in the Isin-Larsa period. An impression of a stamp seal of late type has for instance been found on a cuneiform tablet, dated to the tenth year of the reign of king Gungunum of Larsa (ca. 1923 B.C.) (34).

Most of the seals from the Barbar temple were found in the basin west of the temple. Also a sample giving a C-14 date of  $2050 \pm 100$  B.C. originates in this place. Another C-14 date has been run on charcoal from the layers in which the seal impressions were found. They have been dated to  $2080 \pm 100$  B.C. (35).

In conclusion, then, it can be stated that the first temple at Barbar was built in the beginning of the 3rd millennium, and hardly later than ca. 2700 B.C. The construction of the second temple, which at the same time is the first oval temple, cannot be dated with certainty, but it is likely that the building derives from the middle of the 3rd millennium. On account of the Egyptian and Mesopotamian parallels to objects from the foundation deposit, the third temple can scarcely be put back later than around 2200 B.C. Stamp seals and C-14 dates suggest that the temple was still in use towards 2000 B.C. P. V. Glob was therefore right when already after the first year's sounding in Barbar he wrote: »The discoveries made in the upper level of the Barbar temples, of which only a small area has yet been investigated, thus show connections with both Mesopotamia and India in the third millennium, to which period the upper complex must thus be ascribed, and most probably to the latter end of the period« (36).

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#### NOTER

- 1) P. V. Glob, *Templer ved Barbar* (KUML 1954: 142–153), p. 142.
- 2) Preliminary reports on the excavations at Barbar have been published since 1954: P. V. Glob, *Templer ved Barbar* (KUML 1954: 142–153), P. V. Glob, *Udgravninger på Bahrain* (KUML 1955: 178–193), Harald Andersen, »Der skal ikke blive sten på sten tilbage« (KUML 1956: 175–188), Peder Mortensen, *Barbartemplets ovale anlæg* (KUML 1956: 189–198), P. V. Glob, *Slangeofre i Bahraíns oldtidshovedstad* (KUML 1957: 114–127), P. V. Glob, *Alabasterkar fra Bahraíns templer* (KUML 1958: 138–145), P. V. Glob, *Arkæologiske undersøgelser i fire arabiske stater* (KUML 1959: 233–239), T. G. Bibby, *Arabie ns arkæologi* (KUML 1964: 86–111). The reports all have translations in English. Supported by the Carlsberg Foundation, the final publication of the temple at Barbar is now in preparation. The drawings for the final report as well as for this preliminary note on the chronology are made by Flemming Bau.
- 3) Glob (KUML 1955), p. 184–185.
- 4) Peder Mortensen, *The Excavation of the Temple at Barbar on Bahrain*. (Lecture given in the Arabian Society, London, January 1970).
- 5) Glob (KUML 1954), p. 149.
- 6) Glob, *op. cit.*, and T. G. Bibby, *Bahraíns oldtidshovedstad gennem 4000 år* (KUML 1958: 128–163).
- 7) Glob (KUML 1955), p. 182, Fig. 5.
- 8) P. Delougaz, *Pottery from the Diyala Region* (OIP Vol. LXIII, Chicago 1952), p. 56, and Pl. 45.

- 9) Donald P. Hansen, *The Relative Chronology of Mesopotamia. Part II* (in: *Chronologies in Old World Archaeology*, edit. by Robert W. Ehrich, Chicago 1965), p. 209.
- 10) Robert McC. Adams, *Land Behind Baghdad* (Chicago 1965), p. 127–128, and Fig. 11:3B.
- 11) C. L. Woolley, *Ur Excavations IV: The Early Periods* (Philadelphia 1955), pp. 110 and 193, and Pl. 26a: U.18605.
- 12) Ernest Mackay, *Report on Excavations at Jemdet Nasr, Iraq* (Chicago 1931), p. 258, and Pls. LXVIII:17, LXXVII:1, LXXVII:3, LXXIX:1, and LXXIX:4.
- 13) Seton Lloyd and Fuad Safar, *Tell Uqair* (*Journal of Near Eastern Studies* II, 1943), Pl. XXVI:1, 2, and 4.
- 14) Wolfram Nagel, *Djamdet Nasr-Kulturen und fröhdyastische Buntkeramiker* (Berlin 1964), Taf. 4:8.
- 15) Nagel, *Djamdet Nasr-Kulturen*, Taf. 15:1-2.
- 16) Delougaz, *Pottery from the Diyala Region*, p. 48, and Pls. 6 and 35a.
- 17) A single polychrome Jamdat Nasr jar was found in an Early Dynastic II context in the temple oval of Khafajah, cf. P. Delougaz, *The Temple Oval at Khafajah* (OIP Vol. LIII, Chicago 1940), p. 25–27, and Figs. 20–21.
- 18) P. R. S. Moorey, *A Re-Consideration of the Excavations on Tell Ingharra (East Kish), 1923–33* (Iraq XXVIII, 1966), p. 40 ff.
- 19) Woolley, *Ur Excavations IV*, p. 187, and Pl. 29: U.17879.
- 20) G. Contenau et R. Ghirshman, *Fouilles du Tépé Giyan* (Paris 1935), Tombe 105.
- 21) Robert H. Dyson, Jr., *Problems in the Relative Chronology of Iran, 6000–2000 B.C.* (in: *Chronologies in Old World Archaeology*, edit. by Robert W. Ehrich, Chicago 1965), p. 232.
- 22) Jean Deshayes, *Les outils de bronze de l'Indus au Danube, II* (Paris 1960), Pl. XXX, Nos. 1846–1855.
- 23) Deshayes, *Les outils de bronze*, p. 95.
- 24) Delougaz, *The Temple Oval at Khafajah. – Lectures on Tell al-Hiba* by Vaughn E. Crawford and Donald P. Hansen at »The Third International Conference on Asian Archaeology« in Bahrain, March 1970.
- 25) Knud Thorvildsen, *Gravrøser på Umm an-Nar* (KUML 1962: 191–219), T. G. Bibby, *Arabiens arkæologi* (KUML 1966: 75–95), and Karen Frifelt, *Arkæologiske undersøgelser på Oman halvøen* (KUML 1968: 159–175).
- 26) Karen Frifelt, *Jamdat Nasr fund fra Oman* (KUML 1970: p. 355–384).
- 27) Glob (KUML 1954), p. 147–148, and Glob (KUML 1955), p. 178 ff.
- 28) Glob (KUML 1958), p. 139.
- 29) G. A. Reisner, *Stone Vessels Found in Crete and Babylonia* (*Antiquity* V, 1931), p. 208–212.
- 30) Professor Abdel-Moneim Abu Bakr (Cairo) and Dr. Bernard V. Bothmer (Brooklyn), personal communication.
- 31) I am grateful to Dr. Bernard V. Bothmer for photographs and references to tethering stones in Egyptian tombs from the VIth dynasty.
- 32) T. G. Bibby, *The »Ancient Indian Style« Seals from Bahrain* (*Antiquity* XXXII, 1958: 243–246), Edith Porada, *The Relative Chronology of Mesopotamia. Part I* (in: *Chronologies in Old World Archaeology*, edit. by Robert W. Ehrich, Chicago 1965), p. 171, and P. V. Glob, *Al-Bahrain* (København 1968), p. 193 ff.
- 33) *Archaeological Investigations in the Island of Failaka 1958–1964* (A Guidebook published by the Ministry of Guidance and Information, Kuwait, n. d.), p. 129, Fig. 68.
- 34) W. W. Hallo and Briggs Buchanan, *A »Persian Gulf« Seal on an Old Babylonian Mercantile Agreement* (*Studies in Honor of Benno Landsberger*, Chicago 1965), p. 199 ff.
- 35) The two dates have been obtained from the C14-Laboratory of the National Museum in Copenhagen. Calculated with the Libby half life of 5570, they run at  $1650 \pm 100$  B.C. (K-1575) and  $1680 \pm 100$  B.C. (K-1576). In order to compensate for the error caused by the influence of the geomagnetic field of the earth, about 400 years must be added to these dates.
- 36) Glob (KUML 1954), p. 149.