

AN ARCHAEOLOGICAL POTTERY SEQUENCE FROM NILANDU, THE MALDIVE ISLANDS

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Introduction

As part of the archaeological test-excavations on Nilandu, The Maldivian Islands, in 1984, a trench was cut through the edge of the elevated temple area north of the main Havitta, (cfr. article by Arne Skjølsvold, Fig. 4, structure IV). According to local tradition the wall surrounding the old Buddhist temple area was located at this place. Potsherds were found on the surface here, on the top of a slight elevation.

The trench was 9.4 m long, 1 m wide and orientated N-S, the southern end being located 36 m north of the Havitta. The excavation was carried out in 10 cm levels, and from layer 4 onwards, all the soil and sand was screened through a fine-meshed screen. Eleven layers were surveyed.

The excavation of structure IV is briefly mentioned in Skjølsvold's article. Here a more detailed account will be put forward with special importance attached to the artefact and pottery sequences. It seems obvious that the upper layers belong to the time after the introduction of Islam in the twelfth century AD, while the lower ones must have been deposited during the period when the temple area was still in use. Pottery is dominating among the finds, but objects of glass and metal and ecofacts were also encountered.

This is the first archaeological excavation ever done on the Maldivian Islands with a stratigraphically documented pottery and artefact sequence. Because of the lack of clay on the islands, one has to look for parallels to the pottery in areas outside the Maldives, on Sri Lanka, India and other places around the Indian Ocean. Some time was spent looking for parallels to the material from the trench in museums in Colombo, Sri Lanka, New Delhi in India, Karachi in Pakistan, Bangkok in Thailand and Jakarta, Indonesia. The material has also been discussed with archaeologists taking part in the British Museum colloquium in London in 1988 on «The Indian Ocean in Antiquity». Very little research has, however, been done on the pottery from these areas, and little has been published.

It is therefore possible only to offer suggestions as to the possible origin of the pottery and other artefacts, but parallels cannot be adduced by referring to the literature. I have, however, found it valuable to present a material publication in this paper, in order to make the finds from the Maldivian Islands known, and thereby to start a discussion on the problems of dating, origin and connections between the islands and other areas around the Indian Ocean.

The chronological framework of the excavation and the archaeological material found must therefore rest mainly on the radiocarbon datings that have been carried out on organic material found in the trench.

Stratification and constructions (Figs. 1-3)

The upper layers, varying from 20-50 cm depth in the trench, consisted of dark humus soil mixed with coral sand. About 3.5 m north of the southern end of the trench, the top of a *stone wall* was uncovered at a depth of 40 cm. The wall was about 1.3 m wide and constructed of two rows of edging stones with an 85 cm wide fill of earth and coral rubble between. In its present state the wall consists of two tiers of rectangular stones about 20 x 20 x 30 cm. One of the stones in the northern row of the wall was a re-used limestone with a dentilated profile, similar to those found inside the Havitta. Outside the wall to the north, stones, both rectangular and irregular, had fallen out. The bottom of the wall was reached 60 cm below the surface. Dark humus soil mixed with coral sand was found from the surface and down to the top of the wall. This was obviously due to secondary destruction of the wall, to get building stones when the wall was no longer in use. At the northern and southern side of the wall, there was light grey to white coral sand, layers 5-6 (40-60 cm deep), with a thin, dark coral sand fill just south of the wall. Layers 7 and 8 (60-80 cm deep) consisted of grey to greyish-brown coral sand, mixed with corals, also some big coral blocks south of the wall.

At a depth of 72 cm, 2.35 m north of the southern end of the trench and 80 cm south of the wall just described, another wall was uncovered. It consisted of three tiers of rectangular stones, 25-29 x 26-27 cm, the base occurring at a depth of about 100 cm. The wall was plastered with lime on the outer (northern) side. This is obviously a more ancient wall than the one described above. Between the two walls, layers 8-10, there was dark sand mixed with humus soil and several limestone fragments with impressions of branches (72 fragments were counted in layer 8 and 9). These are parts of an ancient floor, where branches were covered with lime, according to Mr. Mohamed Loutfi. South of the old wall, layer 9-11 (80-110 cm), there was light, nearly white coral sand, with irregular coral stones in the upper part of layer 9. North of the two walls layer 9 had the character of light brown coral sand with a few stones, whereas layers 10 and 11 consisted of greyish-brown sand. Near the bottom of layer 10 the layers between the two walls changed from dark sand mixed with humus to greyish coral sand. At a level of about 110 cm depth, sterile coral sand was reached.

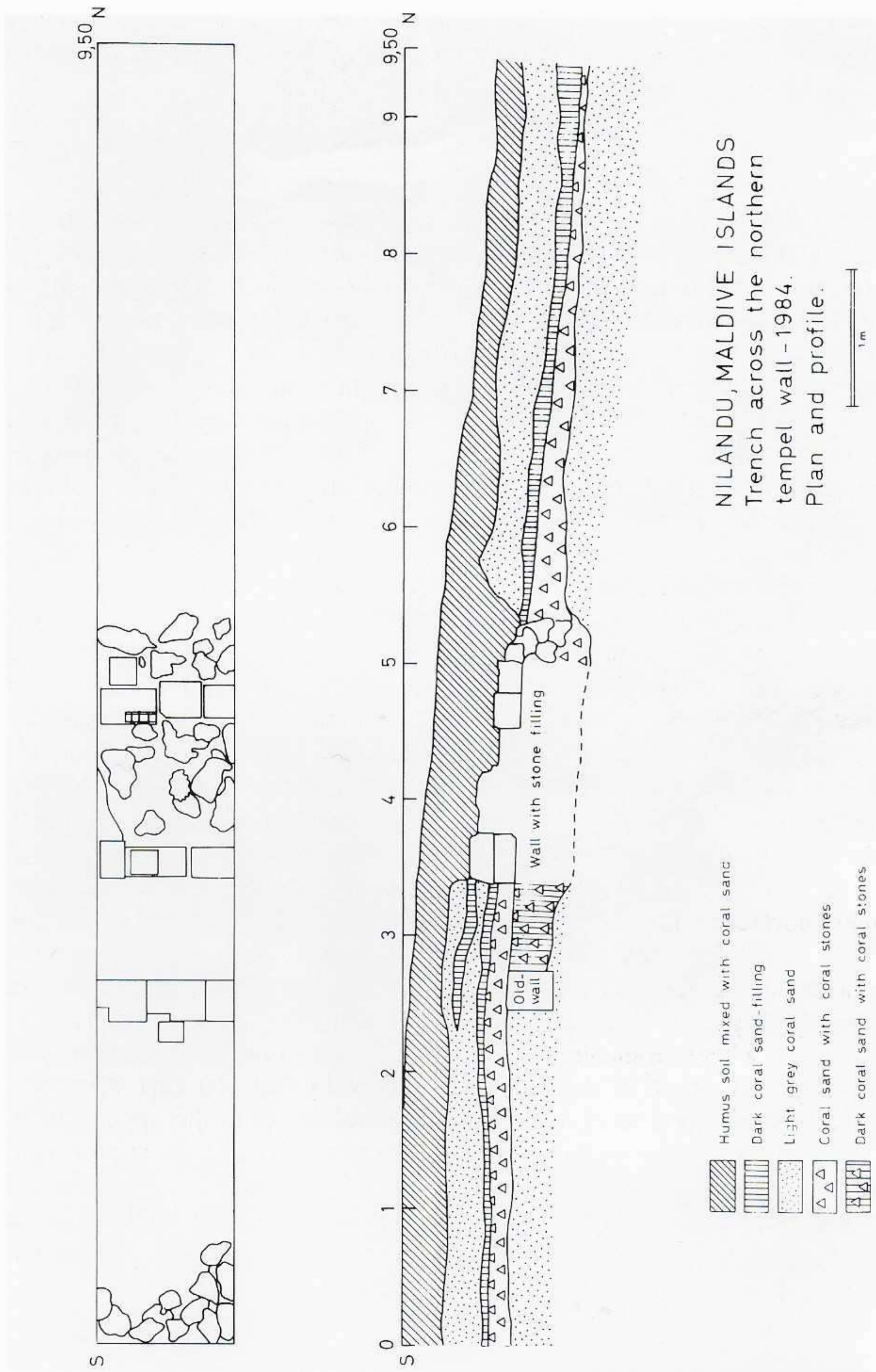


Fig. 1. Plan and profile of structure IV, trench across the northern temple walls.



Fig. 2. Big wall made of stone blocks and filled with soil and irregular coral stones.



Fig. 3. The trench excavated to the sterile bottom north of the big wall, which is seen in the background.

Ecofacts

The ecofacts found during excavation of the trench consisted of animal bones, mostly fish bones, mollusks and charcoal. None of the material has yet been determined as to species. The ecofacts are presented according to layer, number and weight in tables I-III.

Table I. Animal bones.

Layer	Number			Total	Weight g
	S of wall	Between walls	N of wall		
1				3	11
2				360	89
3				380	77
4				103	25
5	14		112	126	42
6	2		6	8	3
7	1		8	9	4,5
8	1		5	6	3
9			2	2	1
10	11	4	5	20	10
11	15		3	18	5
Total	44	4	141	1035	270,5

Table II. Mollusks.

Layer	Number			Total	Weight g
	S of wall	Between walls	N of wall		
1				1	1
2				26	148
3				15	52
4				7	9
5	15		3	18	68
6	35		2	37	48
7	108		3	111	>1000
8	22		9	31	82
9	1	11	5	17	31
10	60	11	6	77	86
11	50	2	3	55	18
Total	291	24	31	395	>1543

Of the total number of mollusks, 71% consist of cauri shells, 6% are different types of snails and 23% are other mollusk species.

Table III. Charcoal from the trench.

Layer	Part of trench	Weight g
1		-
2		1,5
3		-
4		4,0
5	S of wall	1,5
6	N of wall	1,0
7	N of wall	0,5
8	N of wall	2,5
9	N of wall	2,0
10	Between walls	0,5
11	S of wall	0,5
11	N of wall*	1,1

* Radiocarbon dated to 1430±110 BP (T-5577)

Artefacts

Potsherds were found at several places on the temple area at Nilandu. A selection of these surface finds is shown in fig. 4-5. Some of them have parallels on Sri Lanka and in India (Prematilleke 1982), but Indonesia has also been suggested as a possible origin for some of the sherds depicted on fig. 4. They will not be further commented on in this paper.

Among the artefacts found in the trench, pottery dominated.

In layers 1-5 potsherds were the most frequent specimens north of the big wall, whereas most sherds in layers 6-11 were found south of the old wall and especially between the two walls. The distribution of potsherds in the different layers is shown in table IV-V.

In addition to pottery, glas was found in the trench, both more «modern» and antique, pieces of copper, one bead etc. (Cfr. table VI).



Fig. 4. Potsherds from surface finds at Nilandu.

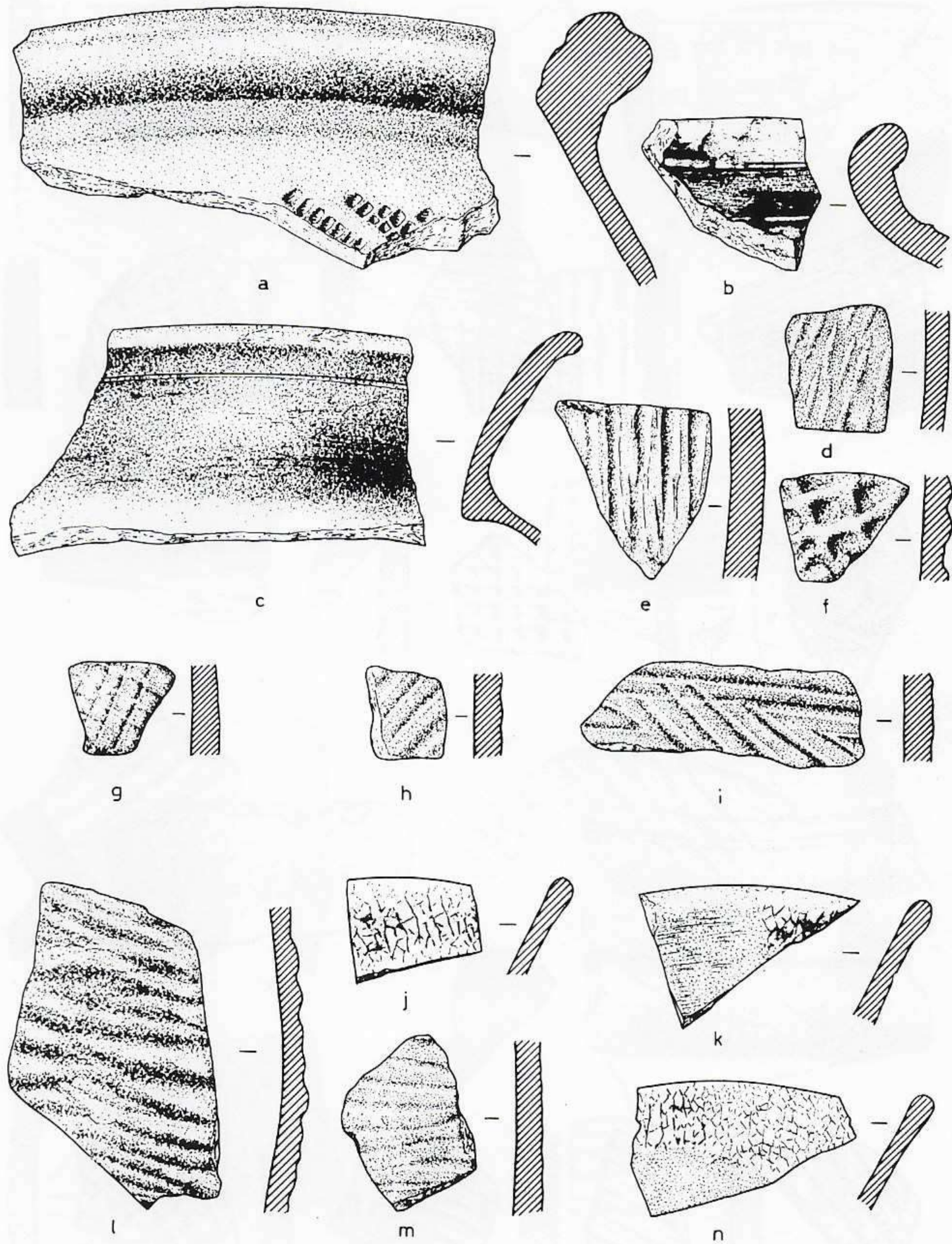


Fig. 5. Potsherds from surface finds at Nilandu.

Table IV. Decorated and glazed pottery found in the trench (Figs. 6-8)

Type of pottery, ornaments etc.	Layer/number of sherds											
	1	2	3	4	5	6	7	8	9	10	11	
<i>Decorated pottery:</i>												
Comb/shell impressions	1											
Lines		6	5	3	1	7	21	4	4	6	5	
Irregular pit impressions		2										
Horizontal and diagonal lines				1								
Net pattern				1			5	1				
Lines or net pattern							7					
«Brushed lines»						3						
Rect.conical pit impressions							3					
Zigzag lines								1				
Waffle pattern								5				
Lines in different directions									4	1	3	
Rows of rectang. impressions									1			
<i>Glazed pottery and porcelain:</i>												
Yellow-green pottery	1											
Brown and green pottery	1	1										
Black-green pottery	2											
Brown-black pottery		1	1									
White porcelain		1										
Porcelain, white with blue dec.			1									
Porcelain partly cov. with light green glaze						3	4					
Dark brown porcelain/pottery							1					

Nilandu, Maldives.



0 1 2 3 4 5 cm

F. Strenge

Fig. 6. Pottery from the trench at Nilandu. a-c: layer 1, d-f: layer 2, g-i: layer 4, j-n: layer 6.

Nilandu, Maldives.

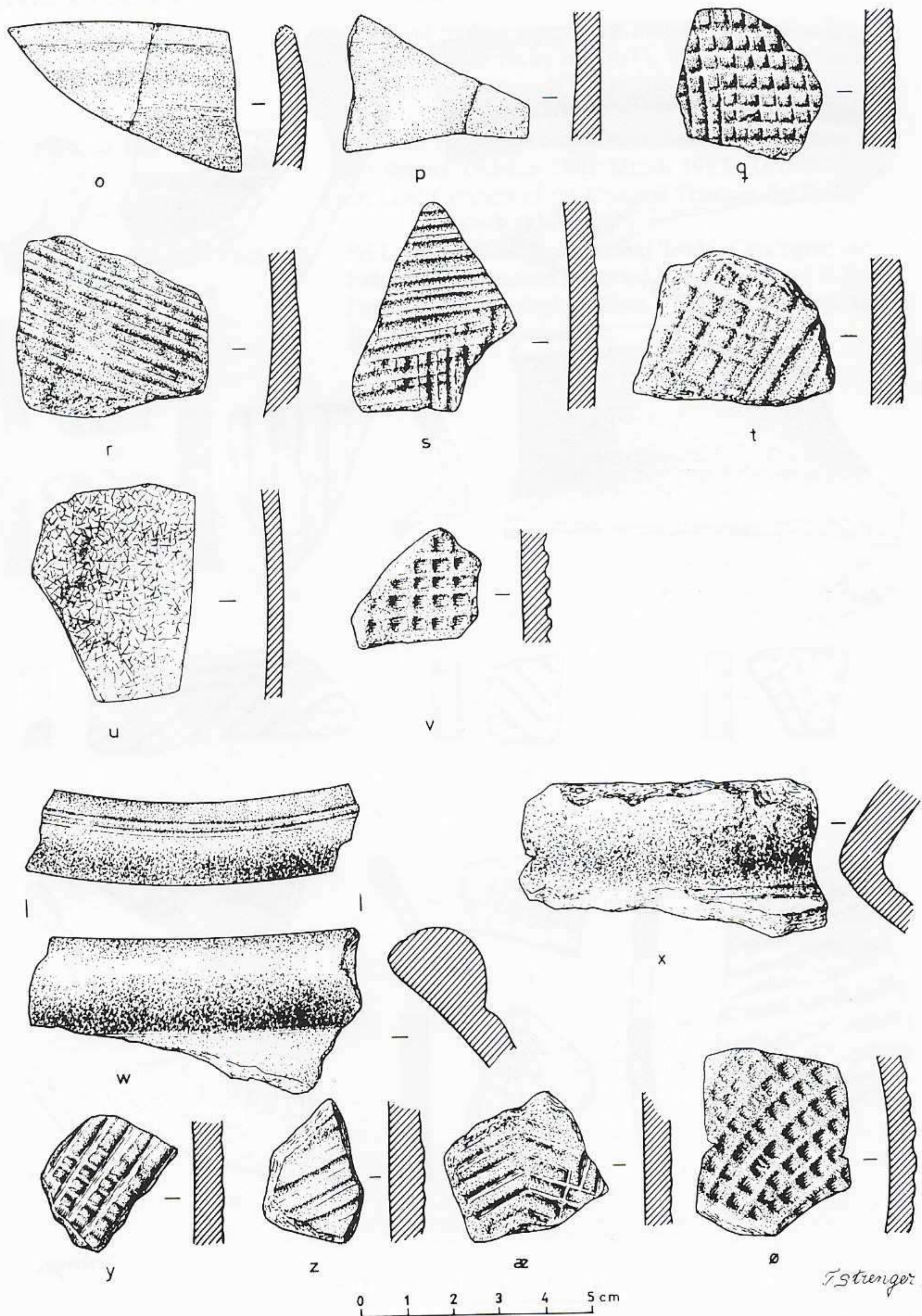


Fig. 7. Pottery from the trench at Nilandu. o-v: layer 7, w-ø: layer 8.

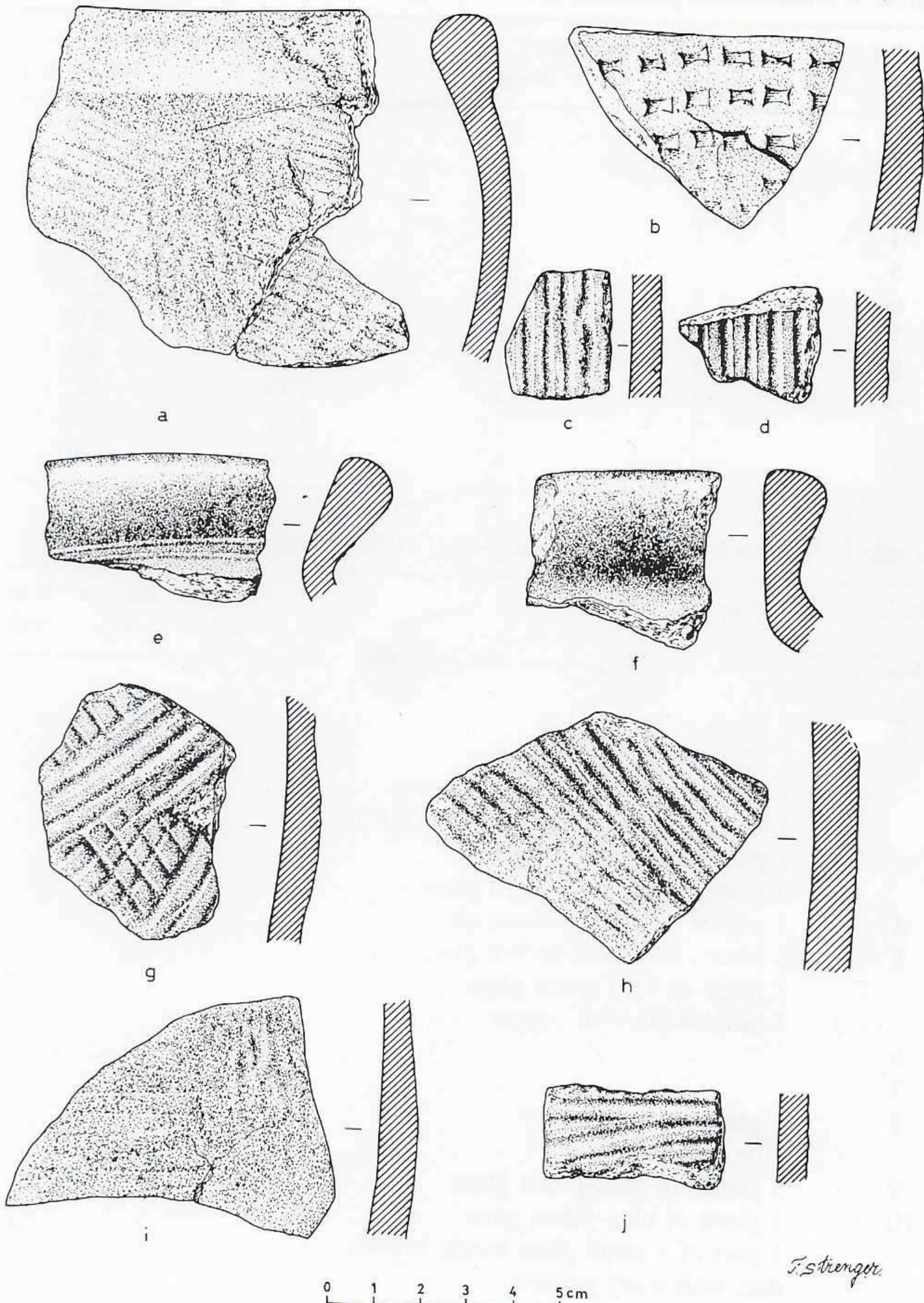


Fig. 8. Pottery from the trench at Nilandu. a-f: layer 9, g-h: layer 10, i-j: layer 11.

Table V. Undecorated potsherds and rim fragments.

Layer	Rim fragments		Undecorated potsherds	
	Number	Weight g	Number	Weight g
1	7	350	11	96
2	7	56	47	223
3	2	25	36	53
4	1	2	13	40
5			41	93
6	8	51	53	216
7	26	240	253	513
8	17	116	112	346
9	7	79	195	301
10	7	17	154	227
11	4	47	30	60

Table VI. Artefacts of different kinds found in the trench (Fig 9).

Layer	Artefact description	S of wall	Between walls	N of wall
1				
2	1 piece of green glass			
	1 piece of transparent glass			
	1 piece of thin hammered copper			
	1 bone bead made of vertebra of fish			
3	1 piece of light green glass			
	4 pieces of yellow-brown glass			
4	8 pieces of yellow-brown glass			
5	5 pieces of yellow-brown glass	+		
	1 piece of light green glass			+
	1 tubular piece of copper			+
6				
7				
8	1 glass mosaic bead, blue, red and yellow	+		
9	3 pieces of blue-green glass		+	
10	1 piece of blue-green glass		+	
	1 part of a small glass bottle, brown, dec. with wavy pattern		+	
11	1 shell fragment with 4 parallel lines		+	

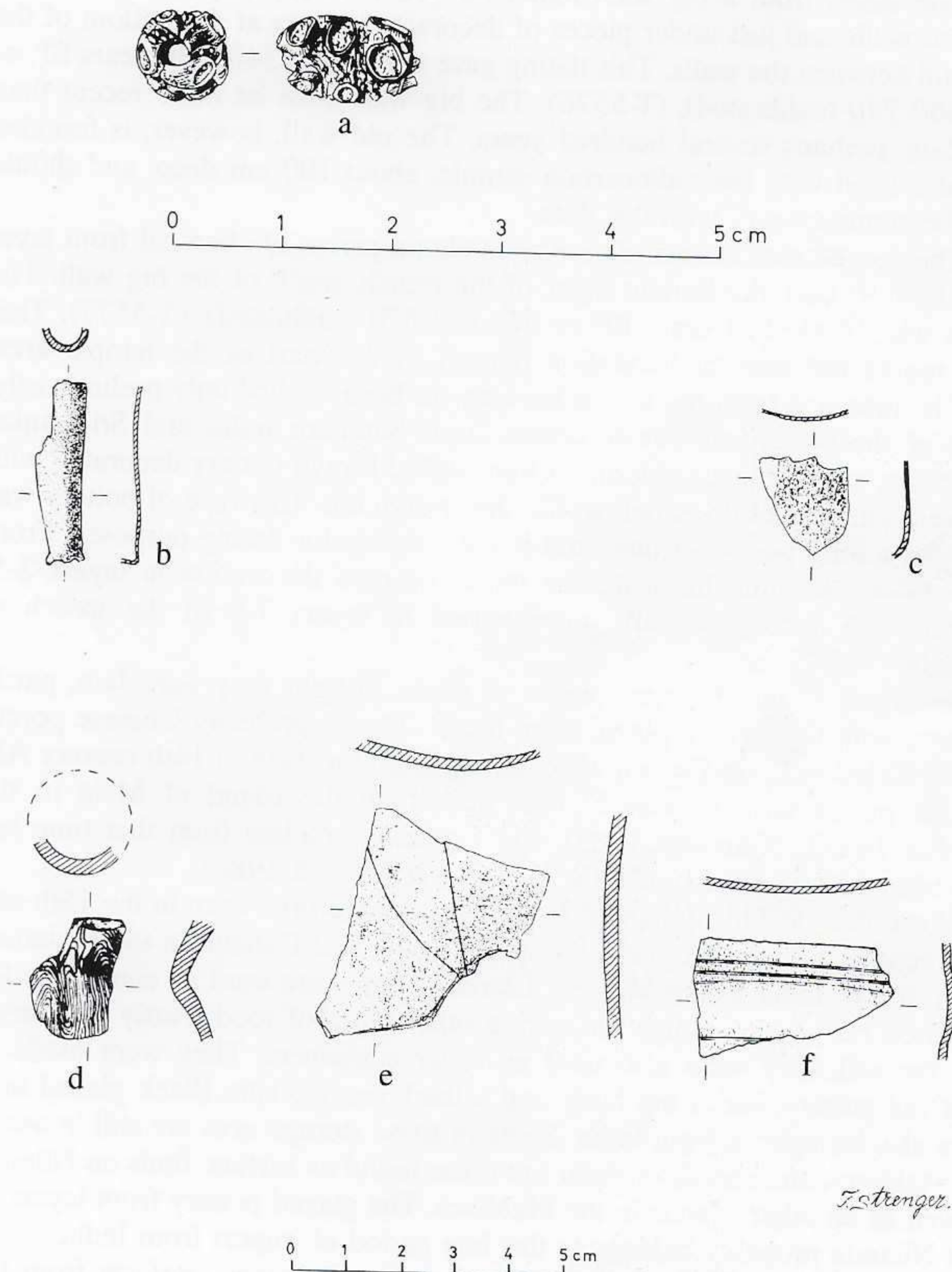


Fig. 9. Artefacts from the trench at Nilandu. a: glass mosaic bead from layer 8, b: tubular piece of copper from layer 5, c: piece of blue-green glass from layer 9, d: part of small glass bottle, brown, from layer 10, e: three pieces of blue-green glass from layer 9 and 10, f: shell fragment with four parallel lines.

Chronology and cultural contacts.

Two radiocarbon datings have so far been obtained from the trench. One date stems from a big shell found 98-102 cm deep (layer 10), between the two walls and just under pieces of decorated pottery at the bottom of the dark fill between the walls. This dating gave the result 1340 ± 40 years BP, or AD 660-740 (calibrated), (T-5576). The big wall must be more recent than this date, perhaps several hundred years. The old wall, however, is founded just at a level with the radiocarbon sample, about 100 cm deep, and should thus be contemporary with this date.

The second radiocarbon date was made on pieces of charcoal from layer 11 (100-110 cm), the bottom layer of the trench, north of the big wall. The result was 1430 ± 110 years BP or AD 540-670 (calibrated), (T-5577). That date marks the start of habitation deposit at this part of the temple area.

The artefacts from the trench have as yet been studied only preliminarily. Most of the pottery obviously comes from Southern India and Sri Lanka. There are, with a few exceptions, a thin-walled brown pottery decorated with different patterns of lines, net, waffle decoration etc. This type of pottery was used for a long period of time and is not suitable for dating purposes. From table IV we see that lines are the most common decoration in layers 2-5, whereas the decorations are more varied in layers 7-9 of the trench at Nilandu.

In layers 6 and 7, seven pieces of white to light grey porcelain, partly covered with light green glaze, were found. This is probably Chinese porcelain of Celadon Lung-Ch'uen ware, dating from the 10th to 14th century AD. Similar pieces have previously been found on the island of Malé in the Maldivé Islands (Carswell 1983), and Chinese porcelain from that time has also been found on Sri Lanka (Wijayapala & Prickett 1986).

According to Mr. Mohamed Loutfi, big storage urns were in the 15th and 16th century brought from the two ports Cohin and Calicut on the Malabare coast of SW India to the Maldivé Islands. They were used as containers for imported rice, later on also for storing other types of food. Partly dug down into the soil, they were also used as water containers. They were made of dark red pottery, had a big body and a thick everted rim. Black glazed urns were also brought in from India. Some of these storage urns are still in use in the Maldives, and sherds of them are often found as surface finds on Nilandu as well as on other islands in the Maldives. The glazed pottery from layers 1-3 at Nilandu probably belongs to this late period of import from India.

We have not yet found dating parallels for the other artefacts from the trench at Nilandu (see table VI). There is, however, a marked change in the character of artefacts between layers 2-5 and 8-11. In the upper layers the glass pieces are obviously quite recent, whereas the glass in layer 9 and 10 is

antique. Among the latter, part of a small perfume bottle of brown glass decorated with wavy lines from layer 10 has to be mentioned. It should be possible to find parallels to this piece and also to the multicoloured bead from layer 8.

Bearing in mind the differences in the artefact composition above, we might find a similar change in the other finds from the trench.

Looking first at the animal bones and their distribution in the different layers (table I), we find a marked decrease of bones between layers 5 and 6. Moving to the undecorated potsherds (table V), we find a change at the same level. The amount of potsherds (measured in g) shows a marked increase from layer 6 downwards. I have also mentioned a change in the decorated and glazed pottery and porcelain (table IV) at about the same level. Combining this with the radiocarbon datings and the few fixed points we have through the artefacts, it is possible to suggest a preliminary chronological sequence for the trench (structure IV):

1. The first habitation at this place started in the 6th century AD (layer 11).
2. The first wall was built in the 7th century AD. Line decorated pottery, probably from India and Sri Lanka, as well as pieces of blue-green glass and a small perfume bottle go back to the same time (layer 10).
3. Layers 6-7 belong to the 10th to 12th century, according to the evidence of the Chinese Celadon Lung-Ch'uen ware found. Decorated pottery still came from India and Sri Lanka. This is probably the last phase of the Buddhist temple area at Nilandu. The big wall was probably built at this phase or some time before, between about 700 and 1100 AD.
4. Layers 1-5 represent the Islamic settlement at Nilandu, after 1153, and reaching up to present time. Glazed pottery, probably of Indian origin, brown decorated pottery, pieces of «modern» glass and copper, together with a relatively big amount of animal bones (mostly fish bones) characterize this phase.

References

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