PUBLICATIONS OF THE CARLSBERG EXPEDITION TO PHOENICIA 3

P.J. RIIS and HENRIK THRANE

# SŪKĀS

# III

The Neolithic Periods

Det Kongelige Danske Videnskabernes Selskab Historisk-Filosofiske Skrifter 7, 2



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#### ABBREVIATIONS

The abbreviations are those indicated in the Archäologische Bibliographie, Beilage zum Jahrbuch des deutschen archäologischen Instituts, and in Sūkās I (Hist. Filos. Skr. Dan. Vid. Selsk 5,1, Copenhagen 1970). In addition, the following are used:

BMusBeyr - Bulletin du Musée de Beyrouth.

BSPF, CRSM – Bulletin de la Société Préhistorique Française, Comptes-rendus des sessions mensuelles.

Byblos IV - J. CAUVIN, Fouilles de Byblos IV, Paris 1968.

MélBeyr - Mélanges de l'Université Saint-Joseph, Beyrouth.

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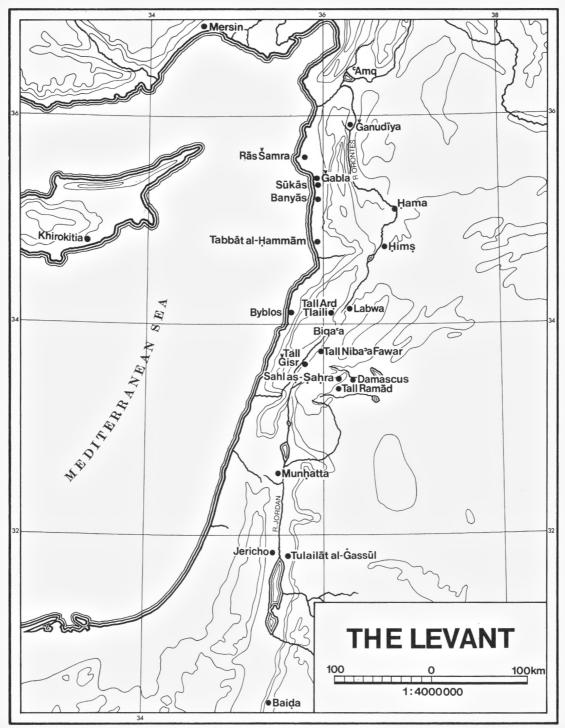
#### Ι Introduction

Although the primary purpose of the Carlsberg Expedition to Phoenicia 1958–63 was to study the Iron Age remains at certain sites, it was deemed necessary already during the first season of excavations at Tall Sūkās (fig. 1) also to try to provide a reliable archaeological chronology for the earlier periods through deep digging in one of the sectors near the supposed original centre of the mound (fig. 2). The sector G 11 SW appeared to be the most instructive in this respect, so work was continued there throughout three seasons until the virgin soil was reached<sup>1</sup>.

The excavations in the sector in question were supervised in 1958 by the Director of the Expedition, P. J. Rus, and in 1959 and 1960 by H. THRANE, who in addition took over the measuring and surveying from E. FUGMANN. The present volume only deals with Layers 59 A–84, representing eleven Neolithic periods (Sūkās  $N^{1-11}$ ) (figs. 3-10), and is the result of a teamwork. The original excavation notes, plans and sections were made by H. THRANE, who together with J. JENSEN also registered and described the flints for the excavation files; similarly, P. J. Rus took care of most of the pottery and the so-called "White Ware", J. JENSEN of the remaining pottery, while Mrs. Tove HATTING determined the animal bones and shells<sup>2</sup>.

When field work ceased the files, notes, drawings and photographs were studied in detail in the University Institute of Classical and Near-Eastern Archaeology, Copenhagen, where Miss JYTTE LAVRSEN, Lecturer in Prehistory, worked out the classifications, lists and preliminary statistics of all the minor finds, while Mr. POUL T. CHRI-STENSEN, draughtsman of the Institute, made the final drawings based upon the originals by the members of the Expedition. The text of the present volume was written by P. J. Rus and has on certain points been supplemented by Miss LAVRSEN and Mr. THRANE, who is now Keeper of Danish Antiquities at Fyens Stiftsmuseum, Odense, and Lecturer in Prehistory at the University of Odense. To both of these prehistorians, to Mrs. HATTING, and to Messrs. CHRISTENSEN and JENSEN the writer wishes to express his hearty thanks, as well as to the Director of the Carbon-14 Laboratory of the Danish National Museum, Mr. H. TAUBER.

<sup>1</sup> AASyr 8/9 1958/9, 127-128, 131-132; 10 1960, 128-130; 11/12 1961/2, 135-137; Sūkās I (Hist. Filos. Skr. Dan. Vid. Selsk. 5,1) 1970, 10-12. <sup>2</sup> Cf. Sūkās I, 14-15.



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Fig. 1. Map of the Levant. 1:4000000.

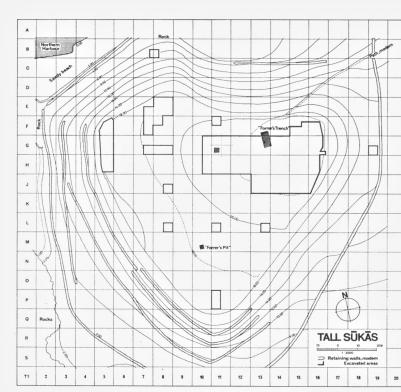


Fig. 2. Plan of Tall Sūkās. 1:2000.

After the publication of P. J. Rus's short preliminary remarks in his official report on the 1960 season<sup>3</sup>, the Neolithic finds at Sūkās have been repeatedly referred to<sup>4</sup>, and thus it was found reasonable to publish them separately before the rest of the material from the same sector.

#### Π

Period N<sup>11</sup> (Layers 84-82) The First Settlement

#### (Plan, fig. 11)

Before excavating, the surface of the sector G 11 SW, which measured  $5 \times 5$  m, lay at 20.67–20.78 m above sea-level, i.e. gently sloping down towards the northwest. For reasons of safety the shaft was made narrower as work proceeded. Bedrock was

Nr. 2

<sup>&</sup>lt;sup>3</sup> AASyr 11/12 1961/2, 135–136 with fig. 3 A–G.

<sup>&</sup>lt;sup>4</sup> H. de Contenson, in BASOR 172 1963, 37 fig. 1; W. J. van Liere & H. de Contenson, in AASyr 13 1963, 175, 180, and 14 1964, 121, 127–128; H. de Contenson, in BJbV 5 1965, 208–209 with "Taschentabelle", P. J. Watson, in R. W. Ehrich a.o., Chronologies in Old World Archaeology, 1965, 66 and 82; J. Perrot, in Supplément au Dictionnaire de la Bible 43 1968, 369–370 fig. 836, 401–402 fig. 843, 405, 407; J. Cauvin, in Byblos IV 1968, 346; D. Kirkbride, in MélBeyr 45 1969, 51, 59; H. de Contenson, in Archaeology 24 1971, 278, 283.

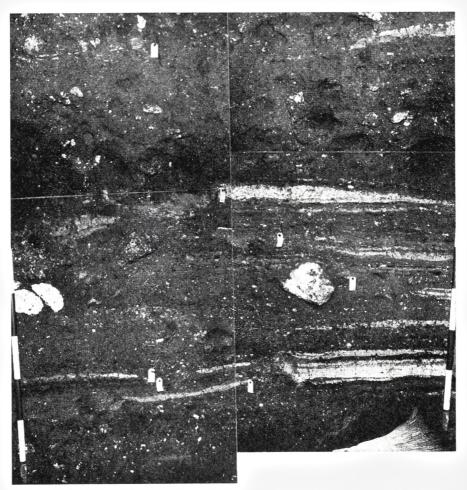


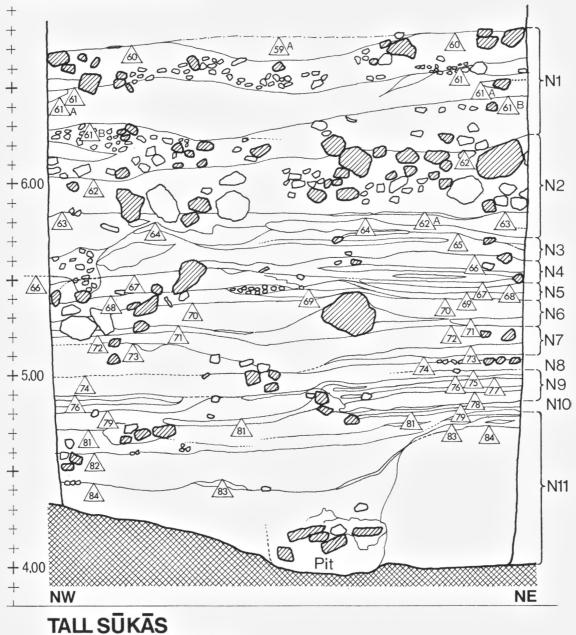
Fig. 3. Composite photo of northern section of Layers 59 A-84 in G 11 SW. C. 1:20.

reached at a depth of c. 16.55 m, the four corners of the shaft attaining it at levels 4.32 (NW), 4.00 (NE), 4.04 (SE) and 4.29 (SW); the width from north to south had here diminished to c. 2.50 m, from east to west to c. 2.70 m. There were a few depressions in the rock which, but for the pit No. 1 mentioned below, looked natural. The rock was part of the platform of oolitic limestone underlying the whole of Tall Sūkās and covered with red, sandy loam, our Layer 84; the latter had the character of an archaeologically almost sterile reddish clay up to the levels 4.44 (NW), 4.72 (NE), 4.74 (SE) and 4.55 (SW). Thus these figures indicate the surface of the virgin soil<sup>5</sup>.

The interruption, north and south of Tall Sūkās, of the north-southgoing storm-

<sup>5</sup> Sūkās I, 10, cf. W. J. van Liere, Observations on the Quaternary of Syria, BerROB 10/11 1960/1, 15, 24 qnd 27 No. 1 fig. 12. The level of the loam-covered platform, as given in Sūkās I, is only a round average figure.

#### + 7.00 metres above sea-level



G11 SW. PERIODS N1-N11

# Section W-E (Northern Side)

Fig. 4. Northern section of Layers 59 A-84 in G 11 SW. 1:20.

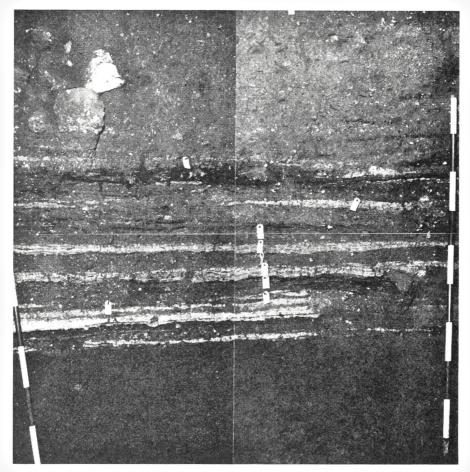
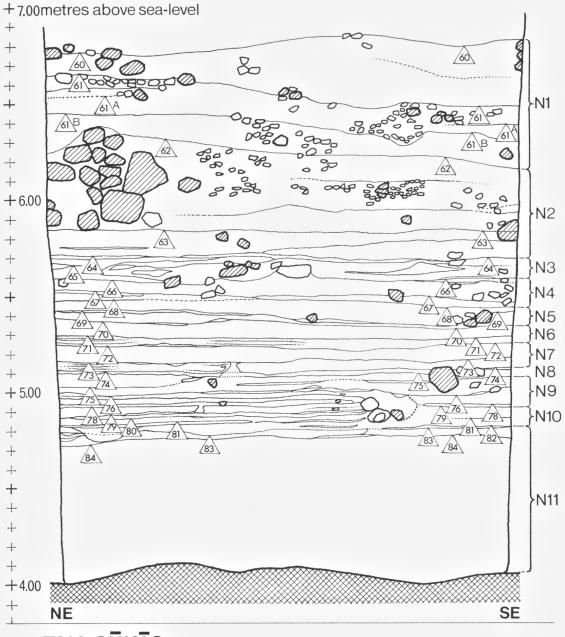


Fig. 5. Composite photo of eastern section of Layers 61-84 in G 11 SW. C. 1:20.

beach gravels of the Pleistocene and Holocene<sup>6</sup>, as well as the occurrence of post-Palaeolithic, partly Neolithic implements in the black colluvium visible in the gap south of Tall Sūkās and more to the east<sup>7</sup>, make it likely that the site at the time of the Neolithic settling on the coast was a low, flat table between two rivers, now reduced to brooks flowing into the two natural harbours of Sūkās, and of which the southern is called Sūkās River, Nahr Sūkās<sup>8</sup>, the northern Sāqī Qantarat al-Maḥfīya, i.e. Stream of the Hidden Bridge<sup>9</sup>. The coastal plain seems to have had a light vegetation, mainly tamarisk, whereas the slopes of the inland hills were densely wooded (see below, p. 88 fig. 223<sup>10</sup>).

The architectural remains of the first Neolithic settlement were but few (fig. 11).

- <sup>6</sup> Van Liere, op. cit. 17, 24 and 27-28 Nos. 6-7 fig. 12.
- 7 Van Liere, op. cit. 22, 24 and 27 No. 4, cf. No. 2, figs. 9 and 12.
- <sup>8</sup> Cf. Sūkās I, 11 fig. 3.
- <sup>9</sup> So called, as the brook passes under the road through a vaulted gutter.
- <sup>10</sup> AASyr 14 1964, 125 fig. 1.



9

# TALL SUKAS G11 SW. PERIODS N1-N11

# Section N-S (Eastern Side)

Fig. 6. Eastern section of Layers 59 A-84 in G 11 SW. 1:20.

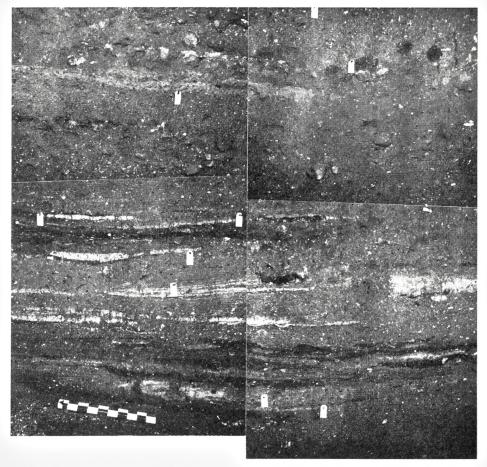
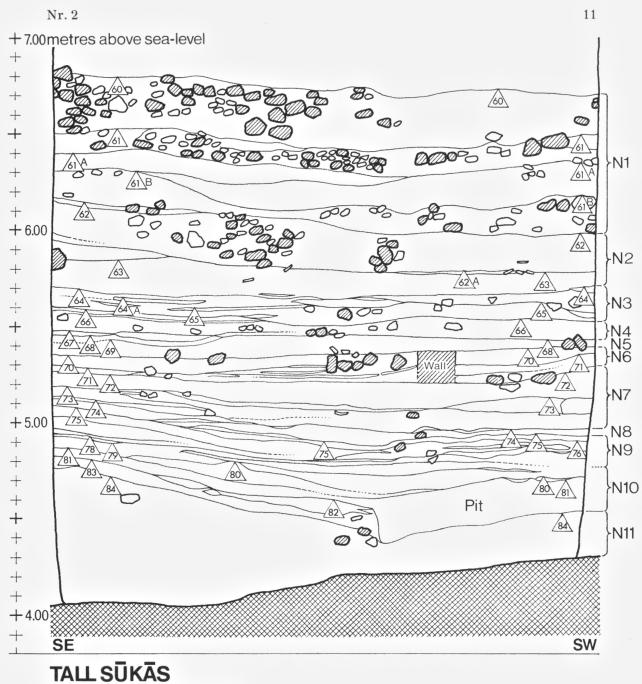


Fig. 7. Composite photo of southern section of Layers 60-84 in G 11 SW. C. 1:20.

Cut by the northern border of the sector there was a roughly circular, flat-bottomed pit, dug not only into the red clay, Layer 84, but even a little into the bedrock (figs. 11–12, No. 1, top levels 4.39-4.62, bottom level  $3.96^{10a}$ ). A yellowish, lime-plastered floor, Layer 83, actually produced by two strata of crushed limestone, was found in the northeastern angle of the sector at levels 4.78-4.79, continuing c. 0.40 m westwards and c. 1.60 m southwards; its thickness did not exceed 0.05 m. Where a partition of the two plaster strata occurred they were separated by a stratum of brownish clay with charcoal, which seems to indicate that the upper plaster stratum was a sort of repair after accumulation of refuse during some time of use. A shallow intrusive pit (diam. 0.25 m) of a later period (N<sup>10</sup>), cut into Layers 82–84 and containing a mixed fill with pieces of plaster, was visible in the eastern section near the northeast corner (figs. 5–6); but no definite traces of walls or post-holes were found anywhere. Nor

<sup>10 a</sup> G 11 CCLXXVI.



G11 SW. PERIODS N1-N11

# Section E-W (Southern Side)

Fig. 8. Southern section of Layers 59 A-84 in G 11 SW. 1:20.

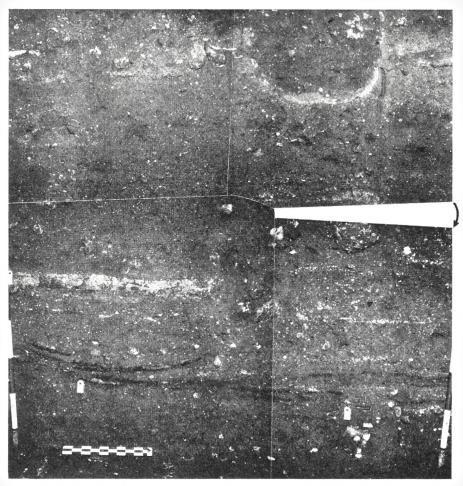
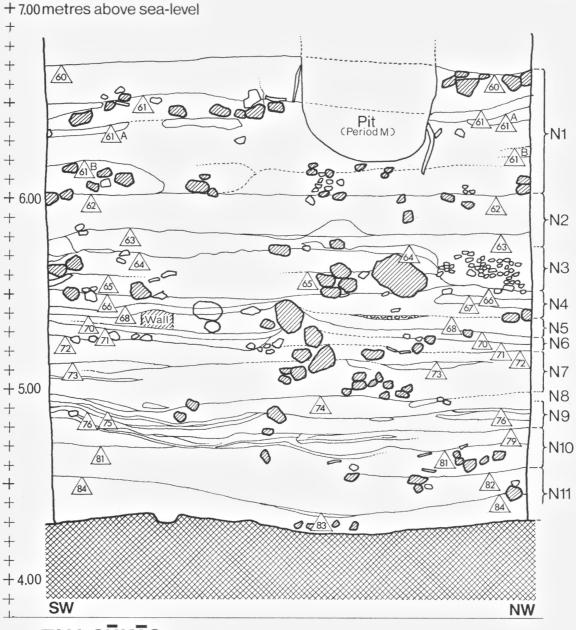


Fig. 9. Composite photo of western section of Layers 60-84 in G 11 SW. C. 1:20.

was it possible to ascertain the original plan of the dwelling implied by the plastered floor. It is not precluded that the reddish, on top ashy fill, Layer 82, which covered the floor, was produced from the clay of destroyed adobe walls<sup>10b</sup>. More towards the west, before reaching the pit No. 1, the ancient surface sloped down, gradually attaining the appearance of a mixture of crushed limestone and red earth. In the southeastern part of the sector the floor was only discernible as a layer of varying thickness (0.005–0.080 m) and consisting of dark brownish earth mixed with plaster; here it sloped from level 4.81 towards the west down to level 4.55. In the southwestern quarter of the sector the edge of this floor described a concave figure like part of an ellipse, enclosing brownish earth containing remains of plaster and charcoal, appar-

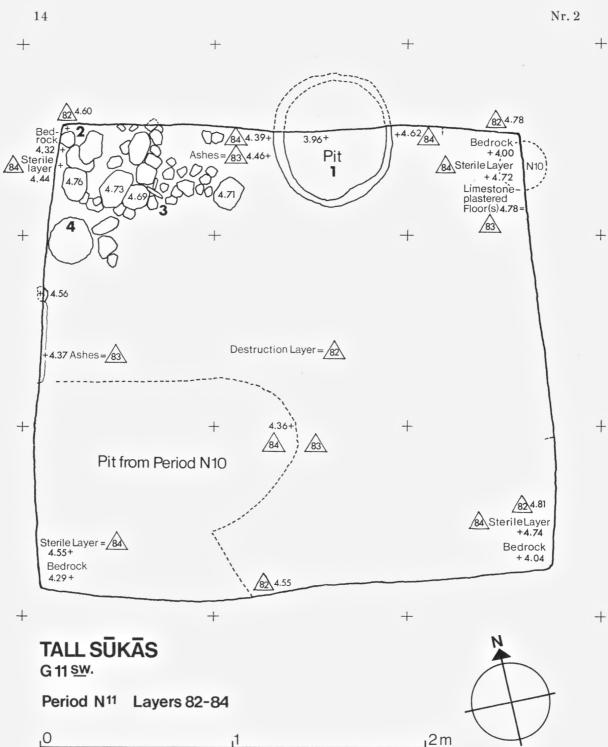
 $^{10\,\mathrm{b}}$  Cf. the very irregular huts or cottages in the earliest settlement at Tall Ramād (I), AASyr 19 1969, 27 and 30 pl. 7.



# TALL SUKAS G11 SW. PERIODS N1-N11

# Section S-N (WesternSide)

Fig. 10. Western section of Layers 59 A-84 in G 11 SW. 1:20.





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S

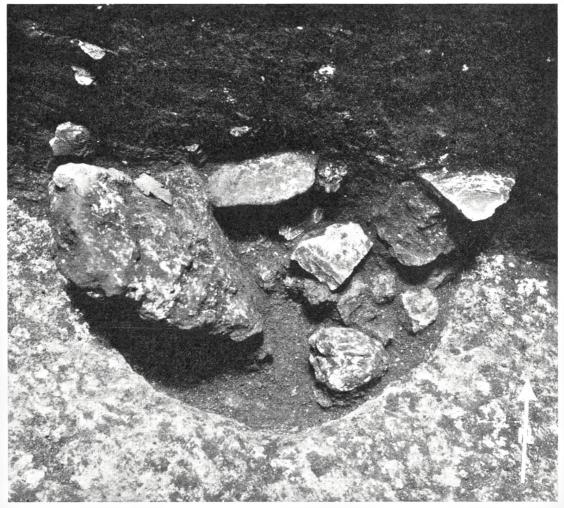


Fig. 12. Southern portion of pit, Period N<sup>11</sup> No. 1, seen from above.

ently a refuse pit dug into the N<sup>11</sup> deposits and belonging to the succeeding period, N<sup>10</sup>. At the middle of the western border of the sector the ancient floor level was represented by a patch of grey ashes, 0.62 m long and sloping down towards the north (levels 4.39–4.34). In the northwestern angle, between this patch and the pit No. 1, the red surface earth had been cobbled with stones of varying sizes (levels 4.39–4.56), and the latter floor was scattered with larger stones (top levels 4.60–4.76). It seems that in the subsequent period, N<sup>10</sup>, the inhabitants had dug for stones west of the plastered floor in the northwestern part of the sector. Immediately west of the pit another patch of grey ashes, 0.30 m long (top level 4.46), was discovered.

The pit No. 1 was partly concealed by a layer of grey ashes sloping down from the plastered floor in the northeastern angle. The destruction layer, 82, containing the larger stones mentioned above, reached to level 4.60 in the northwestern, and to 4.78 in the northeastern angle of the sector.

The following minor finds came from the surface of the red earth (Layer 84) forming the original soil of the site: a flint burin (fig. 15)<sup>11</sup>, a small flint flake with some retouche along the edge, probably a scraper<sup>12</sup>, five fragmentary flint blades<sup>13</sup>, twenty-two flint chips<sup>14</sup>, a hammer(?) stone of basalt<sup>15</sup>, two fragments of polished stone axes<sup>16</sup>, a considerable amount of potsherds of the so-called Dark-Faced Burnished Ware (i.a. figs. 39, 42, 44, 45, 47–49, 52 and 53)<sup>17</sup>, one of these with impressions (fig. 55)<sup>17a</sup>, not a few fragments of pozzolanic White Ware, some with remainders of bitumen on them (e.g. figs. 58 and 63)<sup>18</sup>, a small number of shells<sup>19</sup>, and numerous animal bones, mostly of pigs (among them one burnt), some of sheep, one of a goat, but only two or three of game (red and fallow deer)<sup>20</sup>. Secondary cleanings of the sections of this layer, 84, and the floor over it, 83, produced more fragments of White Ware (e.g. fig. 64)<sup>21</sup>, one bone of a pig and a shell<sup>22</sup>.

The pit No. 1 belonging to floor Layer 83 contained stones and a loose reddishbrown fill with stripes of lime, with charcoal, shells and bones, as well as artifacts: three limestone slabs of different lengths (0.25, 0.20 and 0.13 m) and widths (0.16, 0.18 and 0.09 m)<sup>22a</sup>, five smaller stones, two of them reddened from lying in the earth<sup>23</sup>, a flint core with percussion marks at one end<sup>24</sup>, two fragmentary flint blades<sup>25</sup>, eleven flint chips<sup>26</sup>, twenty-one sherds of Dark-Faced Burnished Ware (figs. 38, 37, 51 and 40, pl. I A–D)<sup>27</sup>, eight fragments of White Ware with traces of bitumen on them (e.g. fig. 60)<sup>28</sup>, eight shells<sup>29</sup> and some sheep bones<sup>30</sup>.

In the reddish destruction fill, Layer 82, over the floor, a large number of objects

<sup>11</sup> G 11 CCLXXIII, Inv. No. 5189 = TS 3297.

12 Inv. No. 3986/8.

<sup>13</sup> Inv. Nos. 3986/7, 6297/3-5 and 6298/1.

<sup>14</sup> Inv. Nos. 3985/14-23, 3986/9-10, 6296/1-2, 6297/6-11 and 6298/2-3.

<sup>15</sup> Inv. No. 6297/12.

<sup>16</sup> Inv. Nos. 6297/1-2 = TS 4249-4250.

<sup>17</sup> Inv. Nos. 3985/1-11, 3986/1-6, 3987/1-3 = TS 6017 (TS 6017c: fig. 39), 3987/4 = TS 6015, 3987/5-76 (3987/35: fig. 52), 3988/1-18, 3989/1-3, 6239/1-9 = TS 4143-4151 (TS 4143: fig. 49, TS 4144: fig. 48, TS 4145: fig. 45, TS 4150: fig. 44, TS 4151: fig. 47) and 6243/1-3 = TS 4165-4167 (TS 4166: fig. 42, TS 4167: fig. 53).

<sup>17 a</sup> Inv. No. 6238 = TS 4142, AASyr 11/12 1961/2, 136 fig. 3 E.

<sup>18</sup> Inv. Nos. 6259 = TS 4191, 6260/1-3 = TS 4192-4194 (TS 4192: fig. 63, TS 4194: fig. 58) and 6260/4-34.

<sup>19</sup> Inv. No. 3985/13: helix sp.; G 11 SW 3/10 1960, no Inv. No.: dentalium sp.

<sup>20</sup> Inv. Nos. 3985/12–13: twelve of sus scrofa domesticus (a joining fragment was found in Layer 82), seven of ovis aries, one of capra hircus, one of capreolus capreolus, one of cervus sp. (dama?) and sixteen indeterminable fragments. Bones of cattle and pigs were found in Rās Šamra V B, see Ugaritica IV, 262. <sup>21</sup> Inv. Nos. 6261/1 = TS 4195 (fig. 64), and 6261/2–3.

<sup>22</sup> G 11 SW 4/11 1960, no Inv. No.: sus scrofa domesticus and arca noae.

<sup>22 a</sup> Inv. Nos. 3983/1-3.

<sup>23</sup> Inv. Nos. 3983/8-9 and 3984/36-38.

<sup>24</sup> Inv. No. 3983/4.

<sup>25</sup> Inv. Nos. 3983/6–7.

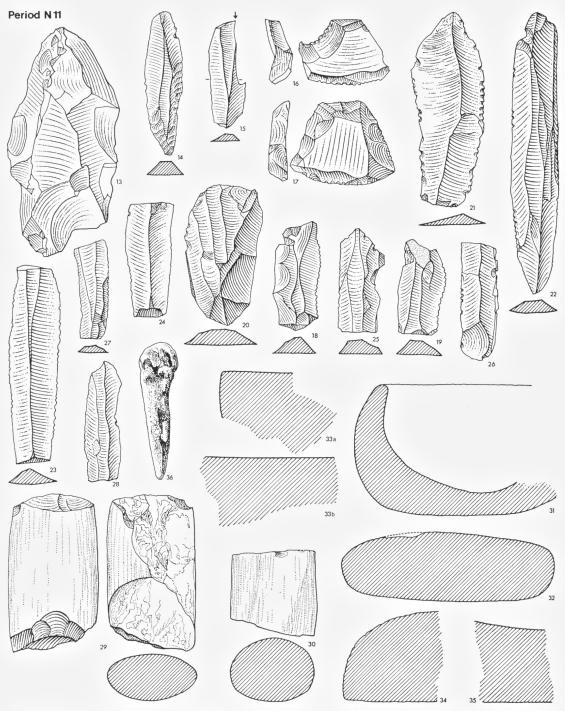
<sup>26</sup> Inv. Nos. 3984/18-28.

 $^{27}$  Inv. Nos. 6237/1–4 = TS 4138–4141 (pl. I A–D), and 3984/1–17.

<sup>28</sup> Inv. Nos. 3983/5, 6263/1 = TS 4196 (fig. 60) and 6263/2.

<sup>29</sup> Inv. Nos. 3984/29-35: five specimens of dentalium sp., three specimens of helix sp.

<sup>30</sup> Inv. No. 3984/39: five of ovis aries.



 $\begin{array}{l} Figs. \ 13-36. \ - \ 13: \ TS \ 4265. \ - \ 14: \ TS \ 4270. \ - \ 15: \ TS \ 3297. \ - \ 16: \ TS \ 4258. \ - \ 17: \ TS \ 4286. \ - \ 18: \ TS \ 4254. \ - \ 19: \ TS \ 4285. \ - \ 20: \ TS \ 4257. \ - \ 21: \ TS \ 4251. \ - \ 22: \ TS \ 4116. \ - \ 23: \ TS \ 3317. \ - \ 24: \ TS \ 4260. \ - \ 25: \ TS \ 4252. \ - \ 26: \ TS \ 4253. \ - \ 27: \ TS \ 4255. \ - \ 28: \ TS \ 4251. \ - \ 29: \ TS \ 4249. \ - \ 30: \ TS \ 4250. \ - \ 31: \ TS \ 4126. \ - \ 32: \ TS \ 4127. \ - \ 33a-b: \ TS \ 4133-4134. \ - \ 34: \ TS \ 4163. \ - \ 35: \ TS \ 4164. \ - \ 36: \ 3315. \ - \ 1:2. \end{array}$ 

Hist. Filos. Skr. Dan. Vid. Selsk. 7, no. 2.

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17

came to light. Firstly, among the stones on the floor a small clav ladle or dish with handle (fig. 11 No. 2, fig. 54, pl. III B, level 4.64)<sup>31</sup>, as well as a flint knife (fig. 11 No. 3, fig. 22, level 4.63)<sup>32</sup>, another flint knife (fig. 23)<sup>33</sup>, a flint projectile point (fig. 14)<sup>34</sup>, a fragmentary limestone bowl (fig. 31)<sup>35</sup>, and two bone awls, presumably from bones of sheep (fig. 36) and  $0x^{36}$ . Further, immediately south of the stones on the floor in the northwestern angle of the sector, a collection of forty-one flints was found forming a sort of "patch" with a diameter of roughly 0.25 m (fig. 11 No. 4, level c. (4.55). With the exception of one sickle (fig.  $19)^{37}$ , a knife and two small blades servated along the cutting edges and thus probably used as sickles<sup>38</sup>, these flints were mostly blades of poor quality<sup>39</sup> and chips<sup>40</sup>. Moreover the destruction layer contained a scattered number of other stone objects: four fragments of basalt querns<sup>41</sup>, two percussion stones<sup>42</sup>, six atypical stones<sup>43</sup>, an oblong rounded piece of limestone probably used for polishing<sup>44</sup>, a flint biface used as a percussion stone (fig. 13)<sup>45</sup>, two scrapers of flint (figs.  $16-17)^{46}$ , three broad flint blades, one without traces of use, one possibly the start of a knife, and one apparently a real knife47, thirty-seven narrower flint blades, two of them most likely used as sickles (fig. 18)48, seven others as plain knives<sup>49</sup>, whereas thirty-two were irregular, atypical or without traces of use<sup>50</sup>, three similar obsidian blades and one fragmentary blade of slate<sup>51</sup>, seventy-six flint chips<sup>52</sup>, and one obsidian chip<sup>53</sup>. Most of the pottery fragments from the destruction fill were of the ordinary Dark-Faced Burnished Ware (i.a. figs. 41, 43, 46 and 50)<sup>54</sup>. One, however, was a sherd of a similar ware, but with a burnished pattern fig. 56)<sup>55</sup>, and

<sup>31</sup> G 11 CCLXXV, Inv. No. 6222 = TS 4117.

<sup>32</sup> G 11 CCLXXIV, Inv. No. 6221 = TS 4116.

<sup>33</sup> G 11 CCLXXII, Inv. No. 5222 = TS 3317.

<sup>34</sup> G 11 CCLXX, Inv. No. 6320 = TS 4270.

<sup>35</sup> G 11 CCLXXI, Inv. No. 6231 = TS 4126, AASyr 11/12 1961/2, 136 fig. 3 A.

<sup>36</sup> G 11 CCLXIX, Inv. No. 5221 = TS 3315 (fig. 36): metatarsus or metacarpus of ovis aries(?); G 11 CCLXVIII, Inv. No. 5220 = TS 3316: ulna of bos taurus domesticus (?).

<sup>37</sup> Inv. No. 6334/1 = TS 4285.

<sup>38</sup> Inv. Nos. 6334/2-4.

<sup>39</sup> Inv. Nos. 6334/5-14.

40 Inv. Nos. 6334/15-41.

<sup>41</sup> Inv. Nos. 6235/1-2 = TS 4133-4134, and 6242/1-2 = TS 4163-4164.

42 Inv. Nos. 6302/2-3.

43 Inv. Nos. 3978/19-21 and 3981/15-17.

<sup>44</sup> Inv. No. 6232 = TS 4127.

<sup>45</sup> Inv. No. 6302/1 = TS 4265.

<sup>46</sup> Inv. Nos. 6301/8 = TS 4258, and 6335/1 = TS 4286.

<sup>47</sup> Inv. Nos. 6301/6-7 = TS 4256–4257, and 6301/1 = TS 4251.

 <sup>48</sup> Inv. Nos. 6301/4 = TS 4254 (fig. 18), and 6301/13.
 <sup>49</sup> Inv. Nos. 6301/2 = TS 4252, 6301/10 = TS 4260, 6301/5 = TS 4255, 6301/3 = TS 4253, 6301/11 = TS 4261, 6303/1 = TS 4266, and 6335/2.

<sup>50</sup> Inv. Nos. 3978/16, 3981/9–10, 6301/9 = TS 4259, 6301/12 = TS 4262, 6301/16 = TS 4264, 6301/15 = TS 4263, 6301/14, 6301/17-34,/6303/2-3, and 8429/1-4.

<sup>51</sup> Inv. Nos. 8429/5-7 and 6335/3.

<sup>52</sup> Inv. Nos. 3978/9–15, 3981/11–14, 6301/35–79, 6302/4–9, 6303/4–10, 6304/1–4, and 6335/5–7.

53 Inv. No. 6335/4.

<sup>54</sup> Inv. Nos. 3978/1-8, 3981/1-8, 3982/1-8, 6234/1-4 = TS 4129-4132 (TS 4129: fig. 43, TS 4130: fig. 41, TS 4131: fig. 46), 6236/1-3 = TS 4135-4137 (TS 4136: fig. 50), 6240/2-4 = TS 4153-4155, and 6241/1-6 = TS 4156-4161.

<sup>55</sup> Inv. No. 6240/1 = TS 4152.

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another of greyish clay had remains of light brownish matt paint (fig. 57)<sup>56</sup>. Thirtyeight pieces of White Ware vessels were recovered, some of them to be recomposed of several fragments (e.g. figs. 59, 61, 62, 65–70)<sup>57</sup>. The fill also contained some fragments of wall stucco<sup>58</sup>, made of a light greyish plaster or calciferous clay, tempered with gravel and charcoal or bitumen, and with a coating of finer, whiter plaster, on which there were remains of brownish-red matt paint and on top of the latter traces of bitumen and a little sandy substance, as well as some black or gray stains from fire. Ochre clay on the back of the fragments indicates that at least part of the wall itself had been made of that material, i.e. made of adobe or wattle and daub. The bitumen on the surface may have trickled down from the roof where it could have been used for tightening. Finally, there was quite a number of animal bones, the majority of pigs, less of sheep, very few of cattle and deer, but some shells<sup>59</sup>.

These were the finds in the deposits of the first settlement at Sūkās. The following table presents a survey of the material.

Chipped flint	Items	<sup>0</sup> / <sub>0</sub>
Biface, secondarily used as a percussion stone	1	0.1
Core with percussion marks	1	0.1
Projectile point	1	0.1
Burin	1	0.1
Scrapers	3	0.3
Sickle-blades	6	0.7
Retouched blades	9	1.0
Blades and flakes without retouche	13	1.5
Irregular blades	45	5.0
Chips	155	17.3
Total chipped flint	235	26.2
Other stones		
Percussion stones or hammers (see also above: biface and core	3	0.3
Ground axes	2	0.2
Polishing stone	1	0.1
Limestone bowl	1	0.1
Basalt quern fragments	4	0.5
Basalt chip	1	0.1
Slate blade	1	0.1
Obsidian blades	4	0.5
Obsidian chip	1	0.1
Total other stones	18	2.0

<sup>56</sup> Inv. No. 6241/7 = TS 4162.

 $^{57}$  Inv. Nos. 6264/1 = TS 4197,  $6264/2-8,\ 6265/1$  = TS 4198,  $6265/2-3,\ 6266/1-9$  = TS 4199-4207 (TS 4199: fig. 68, TS 4200: fig. 69, TS 4201: fig. 67, TS 4202: fig. 62, TS 4203: fig. 70, TS 4204: fig. 65, TS 4205: fig. 59, TS 4206: fig. 66, TS 4207: fig. 61), 6266/10-23 and 6269/1-4.

<sup>58</sup> Inv. Nos. 6267/1 = TS 4208, 6267/2-10, and 6268 = TS 4209.

 $^{59}$  G 11 SW 29/9-1/10 1960, no Inv. No., and Inv. Nos. 3978/17-18 and 3981/18: thirty-two of sus scrofa domesticus, eleven of ovis aries, two of bos taurus domesticus, one of cervus sp. (dama?), one specimen of patella lusitanica, four of dentalium sp., one fragment of pecten clavatus, as well as one hundred and sixty indeterminable fragments of animal bones.

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Pottery	Items	°/0
Simple Dark-Faced Burnished Ware		10
Bowl fragments	73	8.1
Jar fragments	25	2.8
Ladle or dish	1	0.1
Fragments of indeterminable vessels	116	12.9
Total	215	24.0
Impressed Dark-Faced Burnished Ware		0.1
Bowl fragment Dark-Faced Pattern-Burnished Ware	1	0.1
Jar fragment	1	0.1
Painted Dark-Faced Unburnished Ware		
Bowl (?) fragment	1	0.1
Total pottery	218	24.3
White Ware, etc.		
Bowl fragments	120	13.4
Wall fragments	7	0.8
Traces of bitumen	27	3.0
Total White Ware, etc	154	17.2
Bones		
Bones	44	
Bones Sus scrofa domesticus	44	4.9
Bones Sus scrofa domesticus Capreolus capreolus	$\begin{array}{c} 44\\1\\2\end{array}$	4.9 0.1
Bones Sus scrofa domesticus Capreolus capreolus Cervus sp. (dama?)	1	$4.9 \\ 0.1 \\ 0.2$
Bones Sus scrofa domesticus Capreolus capreolus Cervus sp. (dama?) Capra hircus	1 2 1	$4.9 \\ 0.1 \\ 0.2 \\ 0.1$
Bones Sus scrofa domesticus Capreolus capreolus . Cervus sp. (dama?) Capra hircus Ovis aries.	$1 \\ 2$	$4.9 \\ 0.1 \\ 0.2$
Bones Sus scrofa domesticus Capreolus capreolus Cervus sp. (dama?) Capra hircus Ovis aries. Bos taurus domesticus	$\begin{array}{c}1\\2\\1\\23\end{array}$	4.9 0.1 0.2 0.1 2.6
Bones Sus scrofa domesticus Capreolus capreolus . Cervus sp. (dama?) Capra hircus Ovis aries.	$     \begin{array}{c}       1 \\       2 \\       1 \\       23 \\       2     \end{array} $	$\begin{array}{c} 4.9 \\ 0.1 \\ 0.2 \\ 0.1 \\ 2.6 \\ 0.2 \end{array}$
Bones Sus scrofa domesticus Capreolus capreolus Cervus sp. (dama?) Capra hircus Ovis aries. Bos taurus domesticus Indeterminable fragments.	$\begin{array}{c}1\\2\\1\\23\\2\\182\end{array}$	$ \begin{array}{r} 4.9\\ 0.1\\ 0.2\\ 0.1\\ 2.6\\ 0.2\\ 20.3 \end{array} $
Bones Sus scrofa domesticus Capreolus capreolus. Cervus sp. (dama?) Capra hircus Ovis aries. Bos taurus domesticus Indeterminable fragments. Total bones Shells	$     \begin{array}{r}       1 \\       2 \\       1 \\       23 \\       2 \\       182 \\       255 \\     \end{array} $	$ \begin{array}{r} 4.9\\ 0.1\\ 0.2\\ 0.1\\ 2.6\\ 0.2\\ 20.3\\ \hline 28.4 \end{array} $
Bones         Sus scrofa domesticus         Capreolus capreolus         Cervus sp. (dama?)         Capra hircus         Ovis aries         Bos taurus domesticus         Indeterminable fragments         Total bones         Shells         Scaphopoda: Dentalium sp.	$     \begin{array}{r}       1 \\       2 \\       1 \\       23 \\       2 \\       182 \\       255 \\       10 \\       10 \\       \end{array} $	$ \begin{array}{r} 4.9\\ 0.1\\ 0.2\\ 0.1\\ 2.6\\ 0.2\\ 20.3\\ \hline 28.4\\ 1.1\\ \end{array} $
Bones         Sus scrofa domesticus         Capreolus capreolus         Cervus sp. (dama?)         Capra hircus         Ovis aries         Bos taurus domesticus         Indeterminable fragments         Total bones         Shells         Scaphopoda: Dentalium sp.         Prosobranchia: Patella lusitanica	$ \begin{array}{r} 1 \\ 2 \\ 1 \\ 23 \\ 2 \\ 182 \\ 255 \\ 10 \\ 1 \end{array} $	$ \begin{array}{r} 4.9\\ 0.1\\ 0.2\\ 0.1\\ 2.6\\ 0.2\\ 20.3\\ \hline 28.4\\ 1.1\\ 0.1\\ \end{array} $
Bones         Sus scrofa domesticus         Capreolus capreolus         Cervus sp. (dama?)         Capra hircus         Ovis aries         Bos taurus domesticus         Indeterminable fragments         Total bones         Scaphopoda: Dentalium sp.         Prosobranchia: Patella lusitanica         Pulmonata: Helix sp.	$ \begin{array}{r} 1\\2\\1\\23\\2\\182\\255\\10\\1\\4\end{array} $	$ \begin{array}{r} 4.9\\ 0.1\\ 0.2\\ 0.1\\ 2.6\\ 0.2\\ 20.3\\ \hline 28.4\\ 1.1\\ 0.1\\ 0.5\\ \end{array} $
Bones         Sus scrofa domesticus         Capreolus capreolus         Cervus sp. (dama?)         Capra hircus         Ovis aries         Bos taurus domesticus         Indeterminable fragments         Total bones         Scaphopoda: Dentalium sp.         Prosobranchia: Patella lusitanica         Pulmonata: Helix sp.         Bivalvia: Arca noae	$ \begin{array}{c} 1\\2\\1\\23\\2\\182\\255\\10\\1\\4\\1\end{array} $	$ \begin{array}{r} 4.9\\ 0.1\\ 0.2\\ 0.1\\ 2.6\\ 0.2\\ 20.3\\ \hline 28.4\\ 1.1\\ 0.1\\ 0.5\\ 0.1\\ \end{array} $
Bones         Sus scrofa domesticus         Capreolus capreolus         Cervus sp. (dama?)         Capra hircus         Ovis aries         Bos taurus domesticus         Indeterminable fragments         Total bones         Scaphopoda: Dentalium sp.         Prosobranchia: Patella lusitanica         Pulmonata: Helix sp.         Bivalvia: Arca noae         Pecten clavatus	$ \begin{array}{c} 1\\2\\1\\23\\2\\182\\255\\10\\1\\4\\1\\1\end{array} $	$\begin{array}{c} 4.9\\ 0.1\\ 0.2\\ 0.1\\ 2.6\\ 0.2\\ 20.3\\ \hline 28.4\\ \end{array}$ $\begin{array}{c} 1.1\\ 0.1\\ 0.5\\ 0.1\\ 0.1\\ \end{array}$
Bones         Sus scrofa domesticus         Capreolus capreolus         Cervus sp. (dama?)         Capra hircus         Ovis aries         Bos taurus domesticus         Indeterminable fragments         Total bones         Scaphopoda: Dentalium sp.         Prosobranchia: Patella lusitanica         Pulmonata: Helix sp.         Bivalvia: Arca noae	$ \begin{array}{c} 1\\2\\1\\23\\2\\182\\255\\10\\1\\4\\1\end{array} $	$ \begin{array}{r} 4.9\\ 0.1\\ 0.2\\ 0.1\\ 2.6\\ 0.2\\ 20.3\\ \hline 28.4\\ 1.1\\ 0.1\\ 0.5\\ 0.1\\ \end{array} $

M. 0

Generally speaking it must be admitted that the chipped stone industry of N<sup>11</sup> is of poor quality. Very few of the flint objects can in this respect be compared to the Neolithic material from the 'Amq Plain at the Lower Orontes, nor to that from Tabbāt al-Hammām on the coast near Tartūs. Two categories of raw flint were used; one was an essentially brown variety, dark, reddish, spotted, yellowish or greyish, the other definitely grey, whether it be smoky dark, speckled or whitish. Both varieties occur among the actual tools and among the flints without traces of use. It seems

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evident from the comparatively large total number of chips, from the flints found on the surface of the virgin soil, and from the collective finds, Nos. 1 and 4, that flint tools were made on the spot throughout the period. Natural occurrences of flint were noticed by the Expedition at Dair Mamma, east of Ğabla, and at Sģurt al-Faṭrīya on the Sinn River<sup>59a</sup>. When recently worked, the flint from Dair Mamma appeared to be of a light greyish colour and of a rather impure nature; when heavily patinated it assumed a light brown, rather whitish hue. There seems to be a possibility that part of the material used on Tall Sūkās, e.g. below fig. 13, originated from this locality near Ğabla. The flint of Sġurt al-Faṭrīya is of a comparatively poor quality, light grey to drab with a patina that varies from white to brown, often rather light yellowish, and the sizes of the raw pieces do not permit the fashioning of large tools, which is moreover impeded by the impurity of the material. Some characteristic flints from Sūkās N<sup>11</sup> are here selected for description and illustration.

The only biface (fig.  $13)^{60}$  was apparently the preliminary work for a core axe, but was a failure, after which it had been used as a percussion stone; two different phases of chipping could be ascertained. It has a relative in Basal Tabbāt al-Hammām<sup>61</sup>. A point which seems to be an unfinished arrow-head, in spite of its asymmetric shape and its lack of a definite tang, was made from a blade, the upper side being partly flaked from the edges towards the middle (fig.  $14)^{62}$ . As a projectile point it was obviously inferior to the types represented at Tabbāt al-Hammām; but related ones were actually found in Preceramic Rās Šamra (VC) and in Basal Buqrās (I) on the Euphrates<sup>63</sup>. Also to the same flint tradition as the latter belongs an angle burin made of a blade on a broken transversal edge; another burin blow had been directed against the other end, but failed (fig. 15)<sup>64</sup>. Related specimens have come from Tall Ramad I in the Damascus basin and from Buqrās II<sup>65</sup>. Two scrapers must be mentioned, both made on flat flakes with the retouche on the upper surface. One is made on an irregular flake with one concave and one slightly convex, rather steep scraping edge (fig. 16)<sup>66</sup>. The other is roughly trapezoid with the bulbar side intact and the slight convex scraping edge formed by regular flaking and steep retouche fig.17)<sup>67</sup>. The latter may be compared with scrapers from Preceramic Rās Šamra and from Buqrās<sup>68</sup>. Only two blades are beyond doubt sickle flints, both with neatly serrated cutting edge made by

<sup>59 a</sup> AASyr 15 1965, 77 fig. 20 Nos. 6 and 32, Sūkās I, 9 fig. 2 Nos. 6 and 32; cf. Van Liere, op. cit. 21–22 fig. 7, 23–24 figs. 9 and 12.

<sup>60</sup> Inv. No. 6302/1 = TS 4265. L. 0. 115 m. Worn flint, with yellowish brown patina.

<sup>61</sup> Syria 36 1959, 165–166 fig. 7.3.

<sup>62</sup> Inv. No. 6320/1 = TS 4270. L. 0.075 m. Dark brown, patinated flint.

<sup>63</sup> Ugaritica IV, 508 fig. 33 C, AASyr 16.2 1966, 188 fig. 8a.7-8. Perhaps comparable to De Contenson's "pointe naturelle sur lame prédéterminée" or rather an unsuccessful or unfinished "pointe 2 d'Amouq", cf. MélBeyr 45 1969, 68, 75 No. 46 pl. 8.

<sup>64</sup> Inv. No. 5189 = TS 3297. L. 0.056 m. Reddish-brown flint.

<sup>65</sup> Archaeology 24 1971, 279; AASyr 16.2 1966, 188 fig. 8b.13, AASyr 13 1963, 208–209 fig. 14.17.

<sup>66</sup> Inv. No. 6301/8 = TS 4258. L. 0.043 m. Brown, somewhat patinated flint.

 $^{67}$  Inv. No. 6335/1 = TS 4286. L. 0.055 m. Whitish patinated flint, cf. below p. 32 note 149 fig. 73, TS 4271 from Layer 79 (N^{10}).

68 Ugaritica IV, 508 fig. 33 B; AASyr 13 1963, 208-209 fig. 14.7.

retouche from the bulbar side (figs. 18–19)<sup>69</sup>; the technique is related to that of certain specimens from Preceramic Rās Šamra<sup>70</sup>. From among the remaining blades nine should be singled out as examples. Although of different types, all seem to have been used as knives. Two of the nine were made from broad flakes; one is perhaps only a preliminary work, the upper side of which was possibly shaped by secondary flaking (fig. 20)<sup>71</sup>. The other has a simple triangular section, tapers towards one end, and has some retouche, or perhaps only notches from use, along the cutting edges (fig. 21)<sup>72</sup>. Such pieces resemble certain sickle blades, except that they have neither denticulations nor sheen<sup>73</sup>. A long pointed blade with retouche on one edge near the point and with the cutting edges slightly notched as the result of use (fig. 22)<sup>74</sup> recalls Preceramic Neolithic knives and sickles from Tall Ramād and later instances from Ţabbāt al-Hammām and Ğanudīya north of the swamps along the Middle Orontes<sup>75</sup>. Other knives are fragmentary (figs. 23–28)<sup>76</sup>, and for them, too, counterparts may be quoted from the sites mentioned above<sup>77</sup>.

So much for the chipped stone industry. The ground stones comprised two fragments of flint axes of slightly asymmetric section, therefore at least in one case more likely an adze than a real axe (figs. 29–30)<sup>78</sup>. There are parallels from Byblos<sup>79</sup>. A fragmentary bowl with a round, slightly flattened bottom, convex sides and inverted rim (fig. 31)<sup>80</sup> was carved out of a yellowish-white limestone boulder originating from the bedrock at the eastern border of the Ğabla Plain about 6 kilometres from Tall Sūkās<sup>81</sup>; comparable, although somewhat different bowls are also known from Tall Ramād<sup>82</sup>. The same local limestone was the material of a polisher, probably made

 $^{69}$  Inv. Nos. 6301/4=TS 4254 and 6334/1=TS 4285. L. 0.055 and 0.050 m. Brownish patinated flint and greysih somewhat patinated flint. Both broken.

<sup>70</sup> Ugaritica IV, 508 fig. 34 B 1.

<sup>71</sup> Inv. No. 6301/7 = TS 4257. L. 0.073 m. Dark greyish, somewhat patinated flint.

 $^{72}$  Inv. No. 6301/1 = TS 4251. L. 0.102 m. Whitish-grey spotted flint with white patina.

<sup>73</sup> Syria 36 1959, 169–170 fig. 9.8, from Basal Țabbāt al-Hammām; AASyr 14 1964, 120–122 pls. 1 D 7 and 3 B 2, from Tall Ramād I and III.

<sup>74</sup> Inv. No. 6221 = TS 4116. L. 0.150 m. Worn and patinated greyish-brown flint.

<sup>75</sup> Archaeology 24 1971, 279; Syria 36 1959, 168–170 fig. 9.1–2; MelBeyr 45 1969, 76–77 Nos. 62, 63 and 72 pls. 13–14.

<sup>76</sup> Inv. No. 5222 = TS 3317. L. 0.103 m. Grey flint; retouched or notched on one edge. – Inv. No. 6301/10 = TS 4260. L. 0.060 m. Spotted brownish, somewhat patinated flint; cutting edges somewhat notched. – Inv. No. 6301/2 = TS 4252. L. 0.055 m. Dark greyish, smoky flint; slightly notched cutting edge, possibly from use, the other edge being damaged by secondary flaking. – Inv. No. 6301/3 = TS 4253. L. 0.060 m. Greyish patinated flint; notched cutting edge, possibly the result of use. – Inv. No. 6301/5 = TS 4255. L. 0.050 m. Light greyish, patinated flint; cutting edge finely notched, possibly from use. – Inv. No. 6301/11 = TS 4261. L. 0.060 m. Brownish-grey, somewhat patinated flint; slightly notched edges, possibly the result of use.

 $^{77}$  E.g. OIP 61 1960, 56 fig. 30.7, 85 fig. 59.7 and 9, from 'Amq A and B; Ugaritica IV, 508 fig. 34 B, from Preceramic Rās Šamra.

 $^{78}$  Inv. Nos. 6297/1-2 = TS 4249-4250. L. 0.083 and 0.045 m. Spotted grey or greyish, patinated flint.  $^{79}$  Byblos IV, 146 fig. 59.1, cf. similar specimens of granite and basalt, from the same site and from Tall Ramād, ibid. 82 fig. 28.2-3, 146 fig. 59.2, AASyr 13 1963, 200-201 fig. 10.2.

 $^{80}$  Inv. No. 6231 = TS 4126, AASyr 11/12 1961/2, 136 fig. 3 A. Diam. c. 0.118 m. H. 0.069 m. Scratches betray the cutting instrument.

<sup>81</sup> Van Liere, in BerROB 10/11 1960/1, 27 No. 5 fig. 12.

82 AASyr 14 1964, 120-122 pls. 1 C 6 and 3 B 8, Archaeology 24 1971, 280.

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from a pebble (fig. 32)<sup>83</sup>, whereas the basalt used for saddle querns (figs. 33–35)<sup>84</sup> certainly came from elsewhere<sup>85</sup>. Neolithic sites in the Damascus region have provided the same or related types<sup>86</sup>.

We cannot leave the tools without commenting upon the two awls mentioned above p. 18. One was made from a hand or foot bone, the joint roll of which served as a handle (fig. 36); of the other, longer and more slender specimen, made from an elbow bone, only the pointed part was preserved<sup>87</sup>. Such awls are well-known from other Neolithic contexts in Syria<sup>88</sup>.

As will be recalled the great majority of the pottery fragments belonged to the hand-made grevish or brownish to black, so-called Dark-Faced Burnished Ware (often abbreviated DFBW)<sup>89</sup>. In about three quarters of the cases where the shape of the vessel could be defined, the sherds came from bowls; sherds in nearly all of the remaining definable cases belonged to collared jars. The ordinary bowl apparently had an almost hemispherical outline. The rim was rounded with a more or less pronounced shallow groove on the exterior just below the edge; sometimes the part immediately under the groove was considerably thicker than that over it (figs. 37–41, pl. I A–B and D)<sup>90</sup>. The profiles are easily paralleled in the material from the 'Amq A and B periods, from Rās Šamra V and from Ţabbāt al-Ḥammām<sup>91</sup>. Other bowls did not have the groove, but a plain rim, and the sherd might be thicker towards the rounded rim, or it might taper at its upper part (figs. 42-43)<sup>92</sup>. These varieties, too, are represented among the 'Amq finds, and the first of them in Ras Samra and Tall Ramād III as well<sup>93</sup>. In a few instances the bowl was provided with a sort of ledge or blob handle a little below the rim (figs. 44-45, pl. III A)<sup>94</sup>; the counterparts lead us to the same sites outside the Gabla Plain<sup>95</sup>. Whether the bowls of the simple Dark-Faced Burnished Ware had a rounded or flattened bottom cannot be stated with

<sup>83</sup> Inv. No. 6232 = TS 4127. L. 0.110 m.

 $^{84}$  Inv. Nos. 6235/1--2 = TS 4133–4134 and 6242/1--2 = TS 4163–4164. L. 0.061, 0.074, 0.050 and 0.051 m.

 $^{85}$  The nearest available may have been at present Banyās c. 20 km south of Sūkās, cf. J. Weulersse, Le pays des Alaouites 1940, 20 fig. 6.

<sup>86</sup> AASyr 13 1963, 178, 183 fig. 1, from Sahl aş-Şaḥra, AASyr 14 1964, 120 pl. 4 A-B and AASyr 16.2 1966, 182, 190 fig. 12a, from Tall Ramād I.

 $^{87}$  Inv. No. 5221 = TS 3315. L. 0.072 m. – Inv. No. 5220 = TS 3316. L. 0.082 m. Composed of two fragments.

<sup>88</sup> OIP 61 1960, 66 fig. 38.1 and 7, 98 fig. 70.1, from 'Amq A-B; Ugaritica IV, 284-285 pl. 11.23, from Rās Šamra V A; Archaeology 24 1971, 281, AASyr 14 1964, 122 pls. 2 D 12 and 3 B 5, from Tall Ramād I-III.

<sup>89</sup> Syria 36 1959, 154 ff, OIP 61 1960, 49 ff, Ugaritica IV, 160 ff, 245 ff.

<sup>90</sup> Inv. Nos. 6373/2 = TS 4139 (pl. I A), 6237/1 = TS 4138 (pl. I B), AASyr 11/12 1961/2, 136 fig. 3 D, 3987/1 = TS 6017 c, 6237/4 = 4141 (pl. I D), and 6234/2 = TS 4130. H. 0.074, 0.085, 0.060, 0.080 and 0.061 m.
 <sup>91</sup> OIP 61 1960, 50 fig. 22.14, 74 fig. 44.10; Ugaritica IV, 165 fig. 6.10: 2; Syria 36 1959, 155–156 fig. 2.32, 157–158 fig. 3.1.

<sup>92</sup> Inv. Nos. 6243/2 = TS 4166 and 6234/1 = TS 4129. H. 0.088 and 0.052 m.

<sup>93</sup> OIP 61 1960, 50 fig. 22.3, 53 fig. 27.12; Ugaritica IV, 165 fig. 6.11:2; AASyr 13 1963, 180, 194– 195 fig. 7.3.

 $^{94}$  Inv. Nos. 6239/8 = TS 4150, AAS yr 11/12 1961/2, 136 fig. 3 F, and 6239/3 = TS 4145. H. 0.063 and 0.055 m.

<sup>95</sup> OIP 61 1960, 50 fig. 22.20, 53 fig. 27.46–47, 74 fig. 44.25; Ugaritica IV, 165 fig. 6.6:1; Syria 36 1959, 155 fig. 2.1 and 3, 21 and 22; AASyr 14 1964, 122–123 pl. 5 C 1 and 4.

certainty, as the very small number of sherds with remains of a flat base could not be put together with side- or rim-sherds betraying the type of vessel; the thicker ones (fig. 46)<sup>96</sup> may have been of bowls, the thinner (fig. 47)<sup>97</sup> of jars. Both types occur in several of the places mentioned above and moreover at Labwa in northern Coele Syria or Biga'a<sup>98</sup>. Where burnishing of the interior is lacking, as on the specimen fig. 44, the attribution to a jar is most likely. The collars or necks of the jars vary considerably (figs. 48-53, pl. I C)<sup>99</sup>. Some are nearly vertical, but all have a more or less distinctly outwards-directed and usually tapering rim. In the only case where the shoulder is completely preserved, the belly has a soft carination. Similar pieces are known from 'Amq A–B, Rās Šamra V and Basal Țabbāt al-Ḥammām<sup>100</sup>. The last object of simple Dark-Faced Burnished Ware to be mentioned here is what may have been a ladle or small dish with handle (fig. 54, pl. III B)<sup>101</sup>: it has a flattened, unburnished underside, a shallow cavity and a protuberance on one side, which probably served as a handle, and there are remains of a burnish in the hollow, at the handle and on the edge. It seems to be a local ceramic equivalent to certain stone vases found in Neolithic contexts in Iraq, Anatolia and Cyprus, and it is not without counterparts of pottery and stone in Syria and Palestine, although much later<sup>102</sup>.

Only one fragment of Dark-Faced Burnished Ware has an impressed decoration (fig. 55)<sup>103</sup>. It is part of the side and the bottom of a bowl with flat base, and the decoration consists of a roughly horizontal row of lentoid impressions on the exterior a little over the base. The impressions may have been made by means of the nails of the potter or by a special instrument. A similar decoration occurs on the same and related wares from 'Amq A, Rās Šamra V, Ğanudīya, several places in the Lebanon, and Tall Ramād III<sup>104</sup>.

Likewise there is only a single specimen of Pattern-Burnished Ware, a rim- and side-sherd of a hole-mouth jar of greyish-brown clay with numerous dark and white particles; the burnish has produced what resembles a horizontal band of parallel zig-zags (fig. 56)<sup>105</sup>, which recalls pieces from Rās Šamra V A and 'Amq B<sup>106</sup>.

<sup>96</sup> Inv. No. 6234/3 = TS 4131. L. 0.077 m.

<sup>97</sup> Inv. No. 6239/9 = TS 4151. L. 0.093 m.

<sup>98</sup> OIP 61 1960, 51 fig. 25.5 and 8, 53 fig. 27.32, 76 fig. 48.6; Syria 36 1959, 155 fig. 2.20; AASyr 14 1964, 122–123 pls. 4 D 1, 6 A 2; MélBeyr 45 1969, 48.
<sup>99</sup> Inv. Nos. 6239/2 = TS 4144, 6239/1 = TS 4143, 6236/2 = TS 4136, 6237/3 = TS 4140 (pl. I C),

<sup>99</sup> Inv. Nos. 6239/2 = TS 4144, 6239/1 = TS 4143, 6236/2 = TS 4136, 6237/3 = TS 4140 (pl. I C), AASyr 11/12 1961/2, 136 fig. 3 G, 3987/35, and 6243/3 = TS 4167. H. 0.052, 0.049, 0.050, 0.048, 0.025 and 0.041 m.

<sup>100</sup> OIP 61 1960, 51 fig. 24.6-7, 53 fig. 27.29-30, 75 fig. 47.7-9 and 18, 76 fig. 48.2-4; Ugaritica IV, 165 fig. 6.1:7, 9:10 and 12, 10:6, 11:11 and 16:1; Syria 36 1959, 155 fig. 2.16.

<sup>101</sup> Inv. No. 6222 = TS 4117. L. 0.100 m. W. 0.061 m. H. 0.044 m.

<sup>102</sup> Sumer 21 1965, 22 pl. 74 below and H. Müller-Karpe, Handbuch der Vorgeschichte 2 1968, 419 pl. 60 B 13, from Tall as-Sawwān I; J. Garştang, Prehistoric Mersin 1953, 32 fig. 57, from Mersin XXVI; P. Dikaios, Khirokitia 1953, 256 and 372 No. 660 pls. 61 and 127 ("dish"), 258, 382 and 390 Nos. 815 and 930 pls. 63 and 129 ("ladle"), from Khirokitia; R. Amiran, Ancient Pottery of the Holy Land 1969, 25–26 pl. 2.19 ("spoon"), from Tulailāt al-Gassūl; Hama II 1, 57–58 figs. 63–64 No. 42, from Hama J 6.

<sup>103</sup> Inv. No. 6238 = TS 4142, AASyr 11/12 1961/2, 136 fig. 3 E. H. 0.024 m. L. 0.060 m.

<sup>104</sup> OIP 61 1960, 51 fig. 26.11 and 54 fig. 28.15; Ugaritica IV, 165 fig. 6.15 A: 4, 282–283 pl. 10.20, 504 fig. 27. 8; MélBeyr 45 1969, 77 pl. 15.89, 53 pl. 4. 2 and 10, 89 fig. 2 A: 12; AASyr 14 1964, 122–123 pl. 5 A 1–3, B 5–6, C 5 and D 3.

<sup>105</sup> Inv. No. 6240/1 = TS 4152. H. 0.049 m.

<sup>106</sup> Ugaritica IV, 504 fig. 27. 10; OIP 61 1960, 77-78 fig. 51. 7 and pl. 12. 11, 74-75 fig. 46 and pl. 12. 9.



 $\begin{array}{l} Figs. 37-70. & -37: TS \ 4139. & -38: TS \ 4138. & -39: TS \ 6017 c. & -40: TS \ 4141. & -41: TS \ 4130. & -42: TS \ 4166. \\ -43: TS \ 4129. & -44: TS \ 4150. & -45: TS \ 4145. & -46: TS \ 4131. & -47: TS \ 4151. & -48: TS \ 4144. & -49: TS \ 4143. \\ -50: TS \ 4136. & -51: TS \ 4140. & -52: \ 3987/35. & -53: TS \ 4167. & -54: TS \ 4117. & -55: TS \ 4142. & -56: TS \ 4152. \\ -57: TS \ 4162. & -58: TS \ 4194. & -59: TS \ 4205. & -60: TS \ 4196. & -61: TS \ 4207. & -62: TS \ 4202. & -63: TS \ 4192. \\ -64: TS \ 4195. & -65: TS \ 4204. & -66: TS \ 4206. & -67: TS \ 4199. & -69: TS \ 4200. & -70: TS \ 4203. & -1: 2. \\ \end{array}$ 

Lastly, a hand-made Washed or Matt-Painted Dark-Faced Unburnished Ware is represented by one specimen, a fragment with part of a ring-foot, apparently of a bowl; the clay is grevish with dark and light particles with remains of a light brownish, i.e. ochre matt paint or wash (fig. 57)<sup>107</sup>. This ware is related to the Washed Impressed Ware and the Coarse Simple Ware of 'Amq A-B, and the ring-foot is known both from 'Amq B and from Tall Ramād III<sup>108</sup>.

Perhaps the Carlsberg Expedition's most important contribution to the study of the Neolithic cultures in the Levant was the discovery in 1960 of an astonishing quantity of White Ware fragments, more than half the number of potsherds. This pozzolanic ware, the "vaisselle blanche" of the French archaeologists, is now known from quite a series of sites, ranging from Ras Samra in the north to Munhatta in the south and Buqrās in the East<sup>109</sup>. The material of the vessels is generally the same: white "plaster" or lime mortar tempered with straw and gravel, and with a tendency to flake longitudinally, apparently a consequence of the modelling<sup>109a</sup>. In some cases the plaster has a white colour and a very fine texture<sup>110</sup>, in others it is light grey, resembling calciferous clav<sup>111</sup>. The vessels are always hand-made with the surfaces smoothed; occasionally fine surface layers on a coarser core are distinctly visible<sup>112</sup>, in others again the material also includes a little charcoal (apparently burnt straw)<sup>113</sup>. Three vessel shapes are represented, all open. One seems to have been a conical bowl or basin with rather straight sides, either of equal thickness and rounded above (figs. 58-60)<sup>114</sup>, or with a tapering and more or less pointed edge (figs. 61-65)<sup>115</sup>. The thickness of the sides varies considerably, from 0.003 to 0.026 m. Both rim profiles, except that with a very pointed edge, have parallels among the specimens from Labwa and Tall Niba'a Fawar<sup>116</sup>. The other principal shape is a nearly hemispherical bowl, which

<sup>107</sup> Inv. No. 6241/7 = TS 4162, AASyr 11/12 1961/2, 136 fig. 3 C. H. 0.030 m. L. 0.068 m.

<sup>108</sup> OIP 61 1960, 52-55 and 70-71 fig. 40. 31; AASyr 14 1964, 122-123 pls. 4 D 2, 5 A 6 and C 5.

<sup>109</sup> AASyr 14 1964, 121 pl. 9, 127 fig. 2. BSPF,CRSM 66 1969, 188-192. - Rās Šamra V A-B: Ugaritica IV, 506-507 fig. 30 and possibly also 258-259, 278-279 pl. 8. 29-30, 282-283 pl. 10. 26-27. - Byblos, Early Neolithic: AASyr 13 1963, 180, 14 1964, 121 and MélBeyr 45 1969, 142. - Labwa BEPN 1 (Biqa'a Early Pottery Neolithic 1): MélBeyr 45 1969, 47-50 figs. 1 above and 2-3, pl. 2,87, 90-91 and 102. - Tall Niba'a Fawar, BEPN 2: MélBeyr 45 1969, 90-91, 102 and 109 fig. 2 B 1-5. - Tall Ramad II: AASyr 13 1963, 180 and 194–195 fig. 7.1–2, 14 1964, 116, 121 pl. 2 C 11, 16.2 1966, 169 pl. 2b, Archaeology 24 1971, 282–283. – Munhatta III: MélBeyr 45 1969, 90 and 102. – Tall al-Kaum, Pre-Pottery and Early Pottery Neolithic: Archaeology 22 1969, 69. - Buqrās II: AASyr 16.2 1966, 185. - It has been mentioned that a white clay outcrops at various places in the Biqa'a, particularly near Labwa, MélBeyr 45 1969, 57; it was also to be had in the Gabla Plain, see Van Liere, in BerROB 10/11 1960/1, 25-26 and 28 No. 13 fig. 12. fig. 12. The finds at Tall Ramād, on the other hand, lead to presuppose the invention of lime-burning; cf. below p. 38 note 179. As to limestone at Sūkās, see above p. 6 note 5 and p. 22 note 81.

<sup>109 a</sup> Cf. BSPF,CRSM 66 1969, 189 fig. 1 and the description ibid. 191.

<sup>110</sup> E.g. Inv. No. 6260/1 = TS 4192. <sup>111</sup> E.g. Inv. No. 6260/3 = TS 4194. See below p. 27 note 121. <sup>112</sup> E.g. Inv. Nos. 6264/1 = TS 4197, 6266/5 = TS 4203 and 6266/8 = TS 4206.

<sup>113</sup> E.g. Inv. Nos. 6261/1 = TS 4195, 6266/2-4 = TS 4200-4202 (TS 4200: AASyr 11/12 1961/2, 136 fig. 3 B), and 6266/7 = TS 4205.

<sup>114</sup> Inv. Nos. 6260/3 = TS 4194, 6266/7 = TS 4205, and 6263/1 = TS 4196. H. 0.067, 0.034 and 0.091 m. In the case of TS 4196 the diameter could be estimated at c. 0.250 m.

<sup>115</sup> Inv. Nos. 6266/9 = TS 4207, 6266/4 = TS 4202, 6260/1 = TS 4192, 6261/1 = TS 4195 and 6266/6 = TS 4204. H. 0.086, 0.062, 0.058, 0.026 and 0.048 m. The diameters of TS 4192 and TS 4202 could be estimated at c. 0.260 and 0.280 m, respectively.

<sup>116</sup> MélBeyr 45 1969, 48-50 fig. 2, 109 fig. 2 B 5:4 and 10.

at least in one case had a flattened bottom (fig. 66)<sup>117</sup>; here the same two types of rims occur (figs. 67-69)<sup>118</sup>, and counterparts are offered by the same sites, as well as by Tall Ramād<sup>119</sup>. The third form of vessel was a sort of dish or fruit-stand with tapering rim (fig. 70)<sup>120</sup>.

In one case, on the fragment of a large conical bowl or basin<sup>121</sup>, there were remains of reddish-brown matt paint on the interior; at Tall Ramād II occasional painted red bands have been noticed<sup>122</sup>. On many specimens at Sūkās there were, moreover, traces of bitumen both on the smooth surfaces and on the fractures; on the fragment quoted above also on top of the paint. These traces should probably be explained in the same way as those on the fragments of wall stucco (see above p. 19, note 58).

The White Ware and the plastered floors have been regarded as parallel phenomena and used to characterize a certain stage of Neolithic culture<sup>123</sup>. At any rate there is no complete conformity between neighbouring sites such as Rās Šamra and Sūkās. The White Ware at the latter site seems much more abundant, nevertheless the basal stratum was not Preceramic; on the other hand, both Labwa and Tall Ramād had White Ware before true pottery, in strata I and II respectively. On the preceding pages we have constantly had to compare with material from a limited number of excavations. For the stone and bone implements we referred to 'Amq A-B, Rās Šamra V C, Basal Tabbāt al-Hammām, Tall Ramād I-III, Byblos and Buqrās I-II, and none of them was necessarily later than the Early Neolithic period. The Sūkās pottery had its nearest parallels in 'Amq A-B, Rās Šamra V B, - a singular Pattern-Burnished piece, however, only in 'Amq B and Rās Šamra V A -, Basal Tabbāt al-Hammām, Labwa II and Tall Ramād III. Unfortunately, charcoal was not found in the deposits of Sūkās N to such an extent as to make a carbon-14 analysis possible; but material from Rās Šamra V B and Labwa II gave the conventional average figures 5736 and 5950 B.C., Rās Šamra V A 5528 and 5234 B.C., and Tall Ramād II, where the White Ware first appeared, 5950 and 5930 B.C.<sup>124</sup>. Sūkās N<sup>11</sup>, being so close to Rās Šamra and having roughly the same sorts of pottery and implements as its stratum V B, cannot be of a much different age. No doubt it is later than Preceramic Rās Šamra V C, conventionally carbon-14 dated about 6192 B.C.<sup>125</sup>; but on account of its greater

<sup>117</sup> Inv. No. 6266/8 = TS 4206. The rim is missing. H. 0.087 m. Diam. estimated at c. 0.200 m.

 $^{118}$  Rounded: Inv. No. 6266/3 = TS 4201. H. 0.066 m. Diam. estimated at c. 0.180 m. – Tapering: Inv. Nos. 6266/1–2 = TS 4199–4200, AASyr 11/12 1961/2, 136 fig. 3 B.

<sup>119</sup> MélBeyr 45 1969, 47-48 figs. 1-2 and 109 fig. 2 B 5:6; AASyr 14 1964, 121-122 pl. 2 C 11 and 16.2 1966, 169 pl. 2b.

 $^{120}$  Inv. No. 6266/5 = TS 4203. H. 0.041 m. Diam. c. 0.200 m. A somewhat steeper profile: MélBeyr 45 1969, 109 fig. 2 B 5:5, from Tall Niba'a Fawar.

<sup>121</sup> Inv. No. 6260/3 = TS 4194. H. 0.067 m. See above p. 26 note 111.

<sup>122</sup> AASyr 14 1964, 116 fig. 2 C 11.

<sup>123</sup> H. Balfet a.o., in BSPF,CRSM 66 1969, 188–192, cf. Supplément au Dictionnaire de la Bible 43 1968, 395, 400 and MélBeyr 45 1969, 137. Plastered floors, however, occurred not only in Tall Ramād, Tall Niba'a Fawar, Labwa, Byblos, Rās Šamra, and probably Hama, but also outside the area of the White Ware, e.g. in Baida, Jericho and Hacilar.

<sup>124</sup> Ehrich, Chronologies 88; Supplément au Dictionnaire de la Bible 43 1968, 405; MélBeyr 45 1969, 50; BASOR 172 1963, 36–37; Archaeology 24 1971, 282.

<sup>125</sup> Ehrich, Chronologies, 86; Supplément au Dictionnaire de la Bible 43 1968, 400.

amount of White Ware one would like to place at least its beginning rather early, as near to the Preceramic phase as possible, if not exactly corresponding to the earliest layer of Rās Šamra V B<sup>126</sup>. Nevertheless, the occurrence of one sherd of Pattern-Burnished Ware in the destruction fill shows that the end of N<sup>11</sup> probably fell after the beginning of 'Amq B and Rās Šamra V A. As to absolute chronology, the conventional date resulting from these comparisons — a period within the first half and the middle of the 6th millenium B.C. — might now be converted into an approximately absolute figure by means of the new calibration curve for carbon-14 dates<sup>127</sup>, i.e. probably 800 years earlier.

#### III

### Period N<sup>10</sup> (Layers 81-79) The Second Building Phase

#### (Plan, fig. 71)

This is the period of the first more or less rectangular house traced with certainty. Over the reddish ash-covered destruction fill of N<sup>11</sup>, Layer 82, new floors, Layer 81, were laid, separated by two walls orientated north-north-west and east-north-east and forming an obtuse, nearly right angle. The walls, contemporary with the floors, were of red clay, only 0.12-0.17 m wide (top level of preserved parts 4.98), and rested upon a foundation of field stones of varying dimensions, laid in one or two courses (top levels 4.91-4.95), the largest having a length of about 0.30 m, the smaller being about the size of a fist (fig. 72)<sup>128</sup>. The floor east and north of the two walls was a 0.02 m thick layer of yellowish plaster (top levels 4.83-4.89) curving upwards on reaching the foundation stones. Cut by the eastern border, there was in the northeast angle of the sector, under the floor and dug out into the layers of N<sup>11</sup> a shallow pit, c. 0.25 m wide and c. 0.08 m deep; it contained earthen fill with fragments of plaster. This pit was made before the floor, but no doubt later than Period N<sup>11</sup>. An irregularly preserved part of a similar floor was found immediately west of the northern end of the north-north-west-going wall (top levels 4.75-4.81). In the northern section an isolated stone was found lying on the floor (top level 4.88). Outside the well-defined plaster floors the same floor level was ascertained in the southeastern angle at 4.85, sloping westwards to 4.81. In the southwestern quarter of the sector the earth was a light brownish fill with charcoal and a weak mixture of lime, reaching down to the virgin soil, Layer 84. Apparently we have here a rounded pit dug into the remains of Period  $N^{11}$ ; the bottom of this pit, which was 1.05 m wide in the southern section, but had its easternmost point 1.38 m from the western section, lay at level 4.36 in the east, at 4.55 in the west, its top being at 4.53 in the east and at 4.71 in the west.

 $^{126}$  Ugaritica IV, 509 ("couche 1" 11.50–12.00 m), cf. 507 (White Ware). See also the chronological tables BASOR 184 1966, 4–5 and MélBeyr 45 1969, 102.

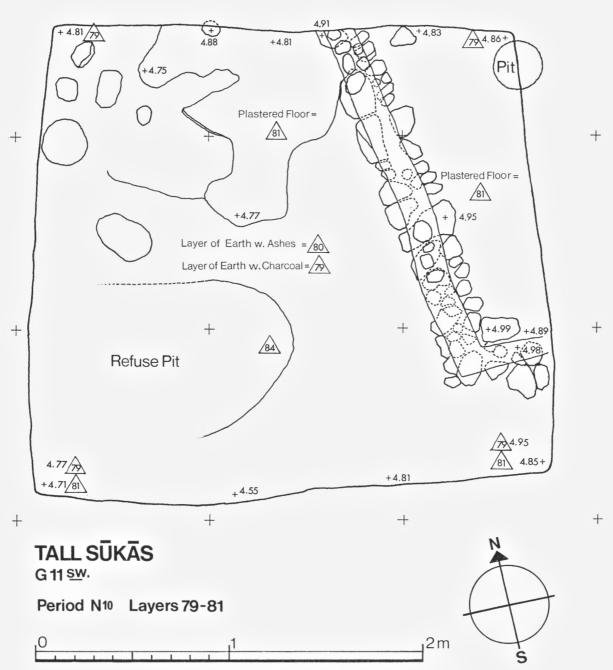
<sup>127</sup> Antiquity 44 1970, 91-99.

128 Cf. AASyr 19 1969, 28-30 pls. 10-12: Tall Ramad II.

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Fig. 71. Plan of architectural remains of Period  $N^{10}.$  1:20.

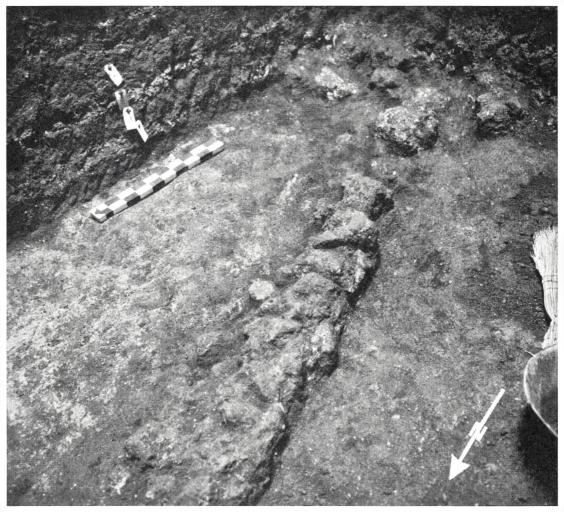


Fig. 72. Stone foundation and floors of Period  $N^{10}$  seen from the northwest.

The floors were partly covered by horizontally divided gray clayish earth, Layer 80, about 0.01–0.10 m thick, mostly consisting of ashes, and a blackish, 0.01 m thick, dark grey clayish mixture of red fill, charcoal, earth and occasional white lime, Layer 79, curving at the walls (top level in the northeast corner 4.86, rising to 4.89 at the wall in the south, reaching level 4.95 in the southeast, 4.77 in the southwest and 4.81 in the northwest).

The lower destruction layer, 80, contained a considerable number of stone implements. With the exception of two small obsidian blades, one complete and one fragmentary<sup>129</sup>, they were all of flint: a knife with one end broken off and a flake

<sup>129</sup> Inv. Nos. 6305/21–22.

Nr. 2

scraper<sup>130</sup>, eight fragmentary blades with serrated cutting edge, two of them rather coarse<sup>131</sup>, sixteen coarse unsuccessfully made blades<sup>132</sup>, a few small slightly curved blades<sup>133</sup>, one intact and six fragmentary blades without traces of use<sup>134</sup>, eight atypical, irregular blades, and many chips<sup>135</sup>.

In addition to these stone objects, there were seventeen potsherds of Dark-Faced Burnished Ware: seven fragments of bowls (e.g. figs. 75–76), one of a collared jar (fig. 77), the rest from vessels of indeterminable shapes<sup>136</sup>. Moreover, twenty-three fragments of White Ware bowls were registered (e.g. fig. 78), sixteen of them with traces of bitumen<sup>137</sup>, and a large amount of animal bones, among them those of pigs and gazelles, as well as a few shells<sup>138</sup>.

The upper destruction layer, 79, contained far fewer objects. The flints well outnumbered the other artifacts, counting one flake scraper (fig. 73)<sup>139</sup>, one blade with accidental notchings<sup>140</sup>, one blade with serrated edge<sup>141</sup>, four irregular blades<sup>142</sup> and sixteen chips<sup>143</sup>. Of obsidian one fragmentary blade was found (fig. 74)<sup>144</sup>. Two bowl fragments of Dark-Faced Burnished Ware<sup>145</sup>, a potsherd of Dark-Faced Unburnished Ware transformed into a disk-shaped spindle-whorl<sup>146</sup>, three pieces of a White Ware bowl<sup>147</sup> and some animal bones, of which the four determinable ones were of sheep and one probably of a hare<sup>148</sup>, complete the picture. These objects may be summarized in tabular form as follows:

Chipped flint	Items	<sup>0</sup> / <sub>0</sub>
Scrapers	2	0.5
Sickle-blades		2.2
Retouched blades	18	4.4
Blades and flakes without retouche	10	2.4
Irregular blades	12	2.9
Chips	139	33.7
Total chipped flint	190	46.0

<sup>130</sup> Inv. Nos. 6305/23 and 6500/2.

<sup>131</sup> Inv. Nos. 6305/1-6 and 18-19.

<sup>132</sup> Inv. Nos. 6305/20 and 24-38.

<sup>133</sup> Inv. Nos. 6305/7–9.

<sup>134</sup> Inv. Nos. 6500/1 and 3-8.

<sup>135</sup> Inv. Nos. 6305/10-17, 6305/39-109 and 6500/9-60.

<sup>136</sup> Inv. Nos. 3980/1-3 = TS 6000-6001 (figs. 76 and 75) and 3980/4-17 (3980/4: fig. 77).

<sup>137</sup> Inv. Nos. 6270/1-6 = TS 4210-4215 (TS 4211: fig. 78) and 6270/7-16.

<sup>138</sup> G 11 SW 28/9 1960, no Inv. No.: eight of sus scrofa domesticus, three of gazella sp., one hundred and sixteen indeterminable fragments, three of dentalium sp. and one fragment of a conus mediterraneus.
 <sup>139</sup> G 11 SW CCLXVII, Inv. No. 6321 = TS 4271.

<sup>140</sup> Inv. No. 8494.

141 Inv. No. 6306/1.

142 Inv. Nos. 6306/3-6.

143 Inv. Nos. 6306/7-22.

<sup>144</sup> Inv. No. 6306/2 = TS 4267.

145 Inv. Nos. 3979/1-2.

146 Inv. No. 5219.

<sup>147</sup> Inv. No. 6271 = TS 4216.

 $^{148}$  G 11 SW 28/9 1960, no Inv. No.: four of ovis aries, one of lepus capensis (?) and twenty-two indeterminable fragments.

M	**	9
1.4	1.	4

Other stones	Items	°/0
Obsidian blades	3	0.7
Total other stones	3	0.7
Pottery		
Simple Dark-Faced Burnished Ware		
Bowl fragments	8	1.9
Jar fragment	1	0.2
Fragments of indeterminable vessels	10	2.4
Total	19	4.6
Simple Dark-Faced Unburnished Ware		
Spindle-whorl made of potsherd	1	0.2
Total pottery	20	4.8
White Ware, etc		
Bowl fragments	26	6.3
Traces of bitumen	16	3.9
Total White Ware etc	42	10.2
Bones	τŵ	10.2
	1	0.2
Lepus capensis (?)	8	1.9
Sus scrofa domesticus Ovis aries	4	1.9
	3	0.7
Gazella sp	138	33.4
Indeterminable fragments		
Total bones	154	37.3
Shells		
Scaphopoda: Dentalium sp	3	0.7
Prosobranchia: Conus mediterraneus	1	0.2
Total shells	4	1.0
Total N <sup>10</sup>	413	100.0

Very few objects are of so special a character that they need be expressly singled out. From among the flints we may mention a trapezoid steep scraper made on a thick flake; on the upper side the original surface has been removed by secondary flaking, and there is some retouche on the scraping edge (fig. 73)<sup>149</sup>. Related pieces have been discovered in Preceramic Rās Šamra and among the Early Neolithic surface finds in the Sahl aş-Ṣaḥra near Damascus<sup>150</sup>. Of obsidian there is the upper part of what seems to have been a knife with the cutting edges somewhat notched, possibly the result of use (fig. 74)<sup>151</sup>. Similar obsidian implements occurred in Tall Ramād II<sup>152</sup>.

Three examples of the Dark-Faced Burnished Ware must be given here: the rim- and side-sherd of a large conical bowl with upwards slightly curved sides and a large horizontal lug handle below the rim (fig. 75)<sup>153</sup>, the lower part of a hemispher-

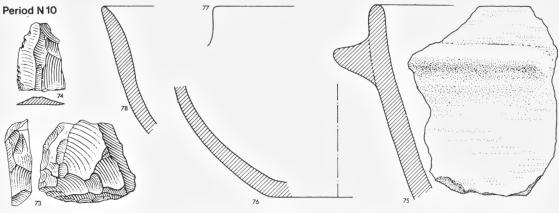
<sup>&</sup>lt;sup>149</sup> Inv. No. 6321/1 = TS 4271. L. 0.050 m. Dark brown, somewhat patinated flint.

<sup>&</sup>lt;sup>150</sup> Ugaritica IV, 508 fig. 33 B; AASyr 13 1963, 178 and 185 fig. 2.6.

<sup>&</sup>lt;sup>151</sup> Inv. No. 6306/2 = TS 4267. L. 0.035 m. Smoky black, translucent obsidian.

<sup>&</sup>lt;sup>152</sup> Archaeology 24 1971, 283, cf. the flint knives from Tall Ramād I, AASyr 14 1964, 122 pl. 1 D 7, and Basal Tabbāt al-Hammām, Syria 36 1959, 169–170 fig. 9.8.

<sup>&</sup>lt;sup>153</sup> Inv. No. 3980/3 = TS 6001. H. 0.093 m.



Figs. 73–78. – 73: TS 4271. – 74: TS 4267. – 75: TS 6001. – 76: TS 6000. – 77: 3980/4. – 78: TS 4211. – 1:2.

ical bowl with a rather large, flat bottom (fig. 76)<sup>154</sup>, and the rim-sherd of a collared jar (fig. 77)<sup>155</sup>. Like the last, the spindle-whorl mentioned earlier<sup>146</sup> has parallels in 'Amq A–B and Basal Tabbāt al-Hammām<sup>156</sup>.

Finally, there are the representatives of the White Ware. In addition to ordinary rim-sherds and flat bottom-sherds of the same kinds as in N<sup>11</sup>, we may cite a rim-fragment resembling a bowl from Labwa and sherd from Tall Niba'a Fawar (fig. 78)<sup>157</sup>.

Regarding the date of N<sup>10</sup>, the quoted parallels were found in contexts roughly belonging to the same times as those used in dating N<sup>11</sup>.

#### IV

# Period N<sup>9</sup> (Layers 78–75) The Third Building Phase

(Plan, fig. 79)

This phase was initiated by the spreading of a new yellowish plaster floor, 0.03-0.08 m thick, Layer 78, which was found only in the northern and eastern parts of the sector, preserved to an extent of 0.96 and 1.57 m respectively. It seems to have been made in two stages, as it definitely shows a lower and an upper spread separated by a fill layer. The top level of the latter was at 4.92 to the northeast, at 4.94 to the southeast, and at 4.86 to the northwest, where it covered only part of the house wall of Period N<sup>10</sup>; apparently the range of stones at the west front of this wall was reused (top level 4.91). Towards the southeast a stone (top level 4.96) marked the limit of

<sup>154</sup> Inv. Nos. 3980/1–2 = TS 6000. H. 0.070 m. W. 0.127 m. Preserved diam. c. 0.170 m. Composed of two fragments. Cf. AASyr 14 1964, 122–123 pl. 6 A 2, and Archaeology 24 1971, 284, from Tall Ramād III.
 <sup>155</sup> Inv. No. 3980/4. H. 0.021 m. Cf. OIP 61 1960, 75 fig. 47. 8 and 17, from 'Amq B.

 $^{157}$  Inv. No. 6270/2 = TS 4211. H. 0.073 m. Diam. estimated at c. 0.200 m. Cf. MélBeyr 45 1969, 48-50 fig. 2, 109 fig. 2 B 5.1.

Hist. Filos. Skr. Dan. Vid. Selsk. 7, no. 2.

<sup>&</sup>lt;sup>156</sup> OIP 61 1960, 55, 83-84 fig. 58. 2-3; Syria 36 1959, 155 fig. 2. 25. For the clay, cf. the fragment above p. 26 fig. 57 note 107 and the Dark-Faced Unburnished Ware OIP 61 1960, 69 and 77-78.

the floor. A small hole in the floor, 0.84 m north of the stone, may have held a wooden peg or rod (diam. 0.02-0.04 m). South of the floor, in the southeastern angle of the sector, there was a patch of gravel measuring  $0.41 \times 0.20 \times 0.02$  m and sloping down towards the west (top level 4.92); it was covered by a 0.02-0.07 m thick layer of grey ashes. In the southern and western parts of the sector the soil corresponding to the plaster floor consisted of more than one layer of brownish or grey earth and ashes with obvious signs of fire on top of red ashes at the middle of the southern section. In the west it seemed that these layers sloped down northwards, gradually disappearing so that the upper layer of N<sup>10</sup> constituted the soil in the northwestern angle of the sector.

Layer 77, a plaster coating of a dark greyish-brown fill belonging to 78, is a repair of the plaster floor discussed above. It, again, was covered by a similar floor, Layer 76, which, however, extended beyond the limits of the earlier floors so as to be seen in most parts of the sector (top levels 4.82–50.1, lowest in the southern part of the western border, where the floor repeats the marked depression in the earlier layers). The eastern contours of the northwestern floor fragment might reflect a destroy-ed clay wall, which, to judge from the gap between this fragment and the eastern floor, was roughly 0.25–0.30 m wide.

Over the enlarged floor there was a dark reddish clayey layer, 75, with some patches of ashes, obviously traces of a fire, particularly clear along the southern border (top levels 4.86–5.08, lowest at the middle).

The brown fill of Layer 77 contained a number of animal bones, i.a. a few of sheep, more of pigs and one probably of a shark<sup>158</sup>. In the destruction fill, Layer 75, there were a couple of bones of the same domestic quadrupeds as in 77, as well as a shell and a piece of a coral<sup>159</sup>. Layer 75 also contained all the artifacts of the period. As in N<sup>10</sup>, stone implements outnumbered pottery and White Ware. Only one obsidian chip and one fragment of a basalt quern (fig. 80) being found<sup>160</sup>, flint was still the common material for tools, comprising one flake, possibly used as a scraper, sixteen blades, mostly of a rather poor quality, and forty-six chips<sup>161</sup>. With one exception the pottery was of the simple Dark-Faced Burnished Ware, represented by five fragments of deep bowls (e.g. fig. 81), four of collared jars, and two bottom-sherds from vessels of indeterminable shape, one with a flattened base, the other with a disc foot<sup>162</sup>. In addition there were one sherd of a jar of Dark-Faced Unburnished Ware<sup>163</sup> and thirteen pieces of White Ware bowls (e.g. figs. 82–85), six of them with traces of bitumen<sup>164</sup>.

<sup>158</sup> G 11 SW 28/9 1960, no Inv. No.: two of ovis aries, thirteen of sus scrofa domesticus, one of a member of the selachii (shark?, less likely a ray), and forty indeterminable fragments. Concerning the shark in the northern Phoenician Sea, cf. Ugaritica IV, 255, 304 fig. 3, 307 pl. 5. 17.

<sup>159</sup> G 11 SW 28/9 1960, no Inv. No.: two of ovis aries, three of sus scrofa domesticus, twenty indeterminable fragments, one conus mediterraneus and one solitary stalky fluted coral.

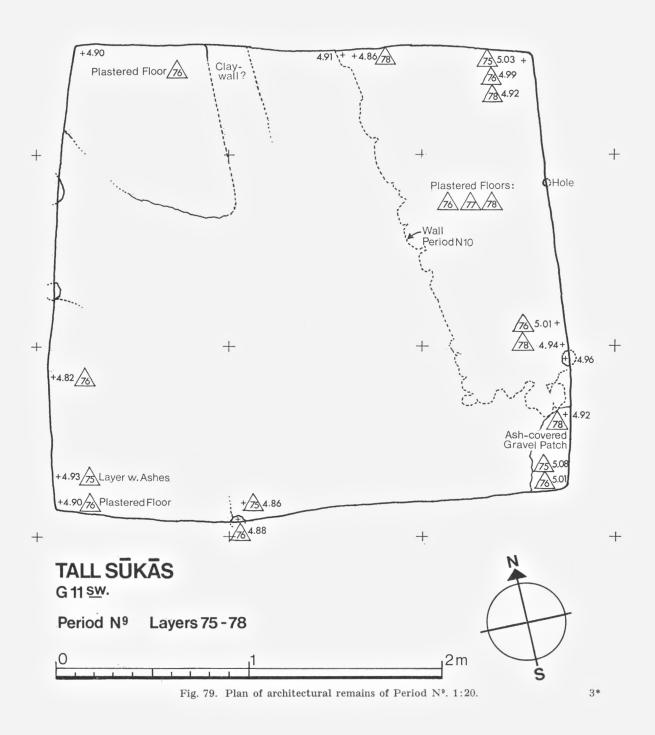
<sup>160</sup> Inv. Nos. 6307/1 and 6233 = TS 4128 (fig. 80).

<sup>161</sup> Inv. Nos. 6336/16–17, 6336/1–15, 6307/2–4 and 6336/18–60.

<sup>162</sup> Inv. Nos. 6244/1-3 = TS 4168–4170, 6244/6-7 = TS 4173–4174 (TS 4173: fig. 81), 6244/4-5 = TS 4171–4172, 6244/8-9 = TS 4175–4176, and 6244/10-11 = TS 4177-4178.

<sup>163</sup> Inv. No. 6244/12 = TS 4179.

<sup>164</sup> Inv. Nos. 6272/1-4 = 4217-4220 (figs. 82-85) and 6272/5-11.



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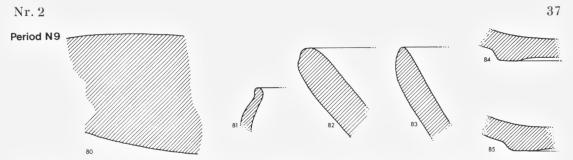
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Chipped flint	Items	<sup>0</sup> / <sub>0</sub>
Scraper	1	0.6
Irregular blades	16	8.9
Chips	46	25.7
Total chipped flint	63	35.2
Other stones	05	00.2
Obsidian chip	1	0.6
Basalt quern fragment	1	0.6
Total other stones	2	1.1
Pottery	2	1.1
0		
Simple Dark-Faced Burnished Ware Bowl fragments	5	2.8
Jar fragments	5 4	$2.0 \\ 2.2$
Fragments of indeterminable vessels	2	1.1
Total	11	6.1
Simple Dark-Faced Unburnished Ware	11	0.1
Jar fragment	1	0.6
Total pottery	12	6.7
White Ware, etc.	1~	0.7
Bowl fragments	13	7.3
Traces of bitumen	6	3.4
Total White Ware, etc	19	10.6
Bones	10	10.0
Sus scrofa domesticus	16	8.9
Ovis aries	4	2.2
Selachii	1	0.6
Indeterminable fragments	60	33.5
Total bones	81	45.3
Shells, etc.	01	40.0
	1	0.6
Prosobranchia: Conus mediterraneus Coral	1	$0.6 \\ 0.6$
Total shells, etc	2	1.1
Total N <sup>9</sup>	179	100.0

Accordingly, a statistical survey is as follows:

A few objects must be mentioned separately. The fragment of a basalt quern is apparently the remainder of a rather flat, lower grinding stone with parts of two opposite, slightly convex surfaces preserved; it is similar to specimens from Tall Ramād I and Buqrās I (fig. 80)<sup>165</sup>. Among the potsherds of Dark-Faced Burnished Ware, the inverted concave rim of a deep bowl is a variety easily paralleled in the material from 'Amq A and B (fig. 81)<sup>166</sup>. As already noted, there is one instance of a jar of Dark-Faced Unburnished Ware, a category which in 'Amq did not appear till

<sup>165</sup> Inv. No. 6233 = TS 4128. L. 0.068 m. W. 0.055 m. H. 0.062 m. Cf. AASyr 14 1964, 114 pl. 4 A 1, AASyr 16. 2 1966, 190 fig. 12a centre. <sup>166</sup> Inv. No. 6244/6 = TS 4173. H. 0.023 m. Cf. OIP 61 1960, 51 fig. 24.3, 75 fig. 47.6.



Figs. 80-85. - 80: TS 4128. - 81: TS 4173. - 82: TS 4217. - 83: TS 4218. - 84: TS 4219. - 85: TS 4220. - 1:2.

the B Period<sup>167</sup>. The White Ware fragments include two sherds of conical bowls with peculiar profiled rims, and two bottom-sherds with part of a very low, flat, broad type of ring foot, also known from vessels found at Tall Niba'a Fawar (figs. 82–85)<sup>168</sup>. Three of the fragments are of a yellowish-white material tempered with gravel, straw and some charcoal (burnt straw?); on the upper side of the bottomsherds a reddish-brown matt colour was observed, which means that the vessel either had a painted interior or had contained a pigment for painting<sup>169</sup>. Traces of bitumen occurred both on the paint and on the fractures, consequently being secondary to the breaking of the vessels, i.e. a result of the destruction of the dwellings (see above p. 19, 27).

The comparisons indicate that N<sup>9</sup> cannot be much later than N<sup>10</sup> and N<sup>11</sup>.

#### V

## Period N<sup>8</sup> (Layer 74)

## The Fourth Building Phase

(Plan, fig. 86)

Layer 74 was a dark grey clayey fill on either side of a slightly curved wall running from north-north-west to south-south-east and with its western front as the convex side. The wall was built of clay or unbaked bricks, c. 0.22–0.24 m wide, i.e. considerably wider than the corresponding wall in N<sup>10</sup>, but it could only just be traced on top of a low foundation of field stones in one or two courses; the top levels of the latter were at 4.92–5.08. The surface of the surrounding fill lay respectively at 5.09, 5.12 and 4.96 in the northeastern, southeastern and southwestern corners of the sector. In the western section the stratification was not quite distinct; but the top level of N<sup>8</sup> must have been at c. 5.00 in the northwest, to judge from the neighbouring parts of the north border. At the eastern end of this border, a row of stones seems to indicate

 $<sup>^{167}</sup>$  Inv. No. 6244/12 = TS 4179. H. 0.068 m. The clay is greyish or brownish and coarse with numerous dark and white particles and mica. Cf. OIP 61 1960, 69 and 77–78.

<sup>&</sup>lt;sup>168</sup> Inv. Nos. 6272/1-2 = TS 4217–4218. H. 0.046 and 0.047 m. – Inv. Nos. 6272/3-4 = TS 4219–4220. H. 0.016 and 0.019 m. Cf. MélBeyr 45 1969, 109 fig. 2 B 1.

<sup>&</sup>lt;sup>169</sup> Cf. AASyr 16.2 1966, 169 pl. 2b, from Tall Ramād II.

another wall foundation or simply a cobbled floor. A number of large stones in the southeast corner, not flush with the foundation of the wall (top levels 5.02–5.11, the largest c. 0.26 m long and c. 0.22 m wide), served perhaps as a paved entrance to the room east of the wall.

The fill was rather rich in finds, particularly of chipped flint. The flint implements comprised five complete or fragmentary projectile points (e.g. figs. 87–90)<sup>170</sup>, two knives (figs. 91 and 93)<sup>171</sup>, a sickle (fig. 92)<sup>172</sup>, twenty-seven blades<sup>173</sup>, one flake<sup>174</sup>, two pieces with some rudimentary chipping<sup>175</sup> and ninety-seven chips<sup>176</sup>. There was only one piece of obsidian, a fragmentary blade<sup>177</sup>. Twelve different unworked stones, four of them of basalt<sup>178</sup>, were registered; only the latter offer some interest as imported material (see above p. 23, note 85). Also worthy of note is a small limestone fragment cracked by heat and on one side showing traces of charcoal and bitumen; it betrays either the existence of a nearby fire-place, a destruction or perhaps a deliberate burning of lime<sup>179</sup>. All the pottery fragments were of the simple Dark-Faced Burnished Ware: five sherds of bowls (e.g. figs. 94–96)<sup>180</sup>, five of collared jars (figs. 97–101 and pl. III c)<sup>181</sup> and forty-one of indeterminable vessels<sup>182</sup>. Of White Ware there were thirty-three pieces of bowls (e.g. figs. 102–104), one of them with remains of bitumen<sup>183</sup>. Finally, the fill contained a number of animal bones, including those of oxen, sheep, pigs, a gazelle and a polecat, plus indeterminable fragments<sup>184</sup>.

To sum up:

Chipped flint	Items	<sup>0</sup> / <sub>0</sub>
Projectile points	5	1.5
Retouched blade	1	0.3
Blades and flakes without retouche	3	0.9
Irregular blades	27	8.2
Pieces with rudimentary chipping	2	0.6
Chips	97	29.5
Total chipped flint	135	41.0

<sup>170</sup> G 11 CCLXIV, Inv. No. 6494 = TS 4318 (fig. 90); G 11 CCLXV, Inv. No. 6323 = TS 4273 (fig. 89);
 G 11 CCLXVI, Inv. No. 6322 = TS 4272 (fig. 87); Inv. Nos. 6308/1 = TS 4268 and 6337/1 = TS 4287 (fig. 88).
 <sup>171</sup> Inv. Nos. 6337/2 and 4 = TS 4288 and TS 4290.

<sup>172</sup> Inv. No. 6337/3 = TS 4289.

<sup>173</sup> Inv. Nos. 6308/2 and 6337/5-30.

<sup>174</sup> Inv. No. 6309/2.

<sup>175</sup> Inv. Nos. 3975/1–2, these found between stones in the wall, i.e. probably "wasters".

<sup>176</sup> Inv. Nos. 6308/3–14, 6309/3–15 and 6337/31–102.

<sup>177</sup> Inv. No. 6309/1.

<sup>178</sup> Inv. Nos. 6309/16-23 and 6308/15-18.

<sup>179</sup> Inv. No. 6274/2 = TS 4223. Cf. above p. 26 note 109.

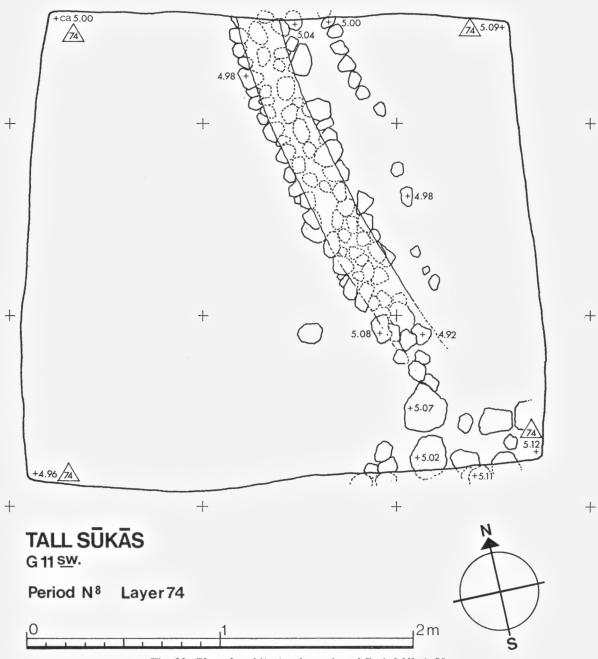
<sup>180</sup> Inv. Nos. 3976/4 (fig. 96), 3977/1 = TS 6002 (fig. 94), and 3977/3-5 (3977/3: fig. 95).

<sup>181</sup> Inv. Nos. 3976/1 = TS 6003 (fig. 97 and pl. III C), 3976/2-3 (figs. 99–100), 3976/5 (fig. 98) and 3977/2 (fig. 101).

<sup>182</sup> Inv. Nos. 3976/6-40 and 3977/6-11.

<sup>183</sup> Inv. Nos. 6273/1 = TS 4221 (fig. 103), 6273/2, 6274/1 = TS 4222 (fig. 102), 6274/3 = TS 4224 (fig. 104) and 6274/4-29.

<sup>184</sup> G 11 SW 28/9 1960, no Inv. No.: three of bos taurus domesticus, eleven of ovis aries, six of sus scrofa domesticus, one of gazella sp., one of mustela putorius, and eighty indeterminable fragments.



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Other stones	Items	°/0
Obsidian blade	1	0.3
Unworked basalt	4	1.2
Burnt limestone	1	0.3
Total other stones	6	1.8
Pottery		
Simple Dark-Faced Burnished Ware		
Bowl fragments	5	1.5
Jar fragments	5	1.5
Fragments of indeterminable vessels	41	12.5
Total	51	15.5
Total pottery	51	15.5
White Ware, etc.		
Bowl fragments	33	10.0
Traces of bitumen	2	0.6
Total White Ware, etc	35	10.6
Bones		
Mustela putorius	1	0.3
Sus scrofa domesticus	6	1.8
Ovis aries	11	3.3
Gazella sp	1	0.3
Bos taurus domesticus	3	0.9
Indeterminable fragments	80	24.3
Total bones	102	31.0
Total N <sup>8</sup>	329	99.9

The flint projectile points are of three types. One was of ovoid leaf shape without tang; it was made from a blade, with one edge and the tip carefully retouched on the bulbar side, whereas the other edge was partly retouched on the upper side (fig. 87)<sup>185</sup>. It is an example of De Contenson's "pointe naturelle" and has counterparts among the finds at Rās Šamra V (B?), Tall Ramād II and the Himş region<sup>186</sup>. The second rather coarse type, a sort of Cauvin's "pointe de Byblos", also made from a blade, has a tang produced by flaking on the upper side (fig. 88)<sup>187</sup>; parallels can be quoted from Rās Šamra V B, Basal Țabbāt al-Hammām, Byblos, Tall Ramād I and other places<sup>188</sup>. The third type, Cauvin's "pointe 2 d'Amouq", is represented by another fragmentary specimen (fig. 89)<sup>189</sup>, which may be compared with pieces from Rās Šamra V B, Basal Țabbāt al-Hammām, 'Amq A–B, Early Neolithic Byblos and the

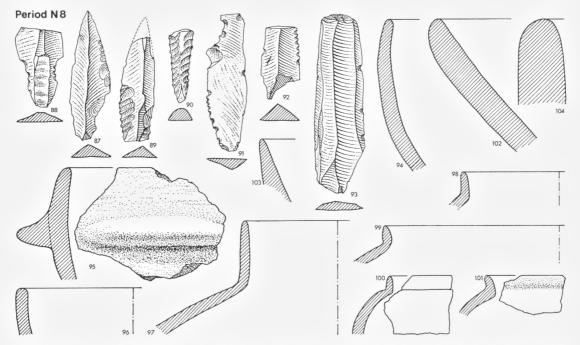
 $^{185}$  Inv. No. 6322 = TS 4272. L. 0.065 m. Dark brownish to greyish flint, somewhat patinated. A flake is broken from the lower part.

 $^{186}$  AASyr 14 1964, 121–122 pl. 2 A 3 (retouched on both faces), MélBeyr 45 1969, 67, 73 No. 28 pl. 4. Apparently, the type is an "ancestor" of Cauvin's "pointe ovalaire", cf. Byblos IV, 61 fig. 13, 62 figs. 14a and 15.

<sup>187</sup> Inv. No. 6337/1 = TS 4287. L. 0.042 m. Greyish-brown, patinated flint. Upper part missing.

<sup>188</sup> E.g. Ugaritica IV, 288–289 pl. 13. 10 (tang retouched on both faces), Syria 36 1959, 160–161 fig. 5.1, Byblos IV, 56 fig. 8.3 (retouche on both faces), Archaeology 24 1971, 280.

<sup>189</sup> Inv. No. 6323 = TS 4273. L. 0.050 m. Greyish, somewhat patinated flint. Tip and tang missing.



Figs. 87–104. - 87: TS 4272. - 88: TS 4287. - 89: TS 4273. - 90: TS 4318. - 91: TS 4288. - 92: TS 4289. - 93: TS 4290. - 94: TS 6002. - 95: 3977/3. - 96: 3976/4. - 97: TS 6003. - 3976/5. - 99: 3976/2. - 100: 3976/3. - 101: 3977/2. - 102: TS 4222. - 103: TS 4221. - 104: TS 4224. - 1:2.

Hims region<sup>190</sup>. Of the remaining two projectile points too little is preserved to permit an exact classification; a tang fragment, however, worked on all three faces, might be of a "pointe 2 d'Amouq" or of a "pointe 1 d'Amouq" (fig. 90)<sup>191</sup>. Three more flint implements, made from blades, arouse a certain interest, all of them probably knives (figs. 91–93)<sup>192</sup>. The first is a rather coarse and somewhat worn specimen, the others, of which one is denticulated, are of better workmanship<sup>193</sup>.

Of the Dark-Faced Burnished Ware three fragments of bowls and five of jars should be adduced as particularly characteristic examples of the variety of types. The open vessels were a large bowl with slightly inverted convex rim, a similar one with a horizontal lug-handle, and a smaller bowl of nearly hemispherical shape (figs. 94–96)<sup>194</sup>; the same or approximately the same types are known from 'Amq

<sup>190</sup> Ugaritica IV, 288–289 pl. 13.12, Syria 36 1959, 161–162 fig. 5.5. Also with some retouche on underside: OIP 61 1960, 56 fig. 30.1, 86 fig. 60.2, Byblos IV, 52 fig. 5.6, MélBeyr 45 1969, 66, 72, 80 No. 18 pl. 3.

18 pl. 3.
<sup>191</sup> Inv. No. 6494 = TS 4318. L. 0.039 m. Light grey flint, somewhat patinated. Cf. OIP 61 1960, 56 fig. 30.1-2, 85 fig. 59.2-4, 86 fig. 60.1 and 3, from 'Amq A-B; Ugaritica IV, 288-289 pl. 13.12, from Rās Šamra V B; AASyr 16.2 1966, 173 pl. 2c 15, Archaeology 24 1971, 282, from Tall Ramād II.

<sup>192</sup> Inv. Nos. 6337/2-4 = TS 4288–4290. L. 0.072, 0.038 and 0.094 m. Greyish-brown patinated flint, brown-speckled very patinated flint, and greyish patinated flint.

<sup>193</sup> Cf. Ugaritica IV, 290-291 pl. 14.1, from Rās Šamra V (B?).

 $^{194}$  Inv. No. 3977/1 = TS 6002. H. 0.075 m. Diam. estimated at 0.227 m. - Inv. No. 3977/3. H. 0.062 m. - Inv. No. 3976/4. H. 0.024 m. Diam. estimated at 0.122 m.

A-B, Rās Šamra V, Basal Ṭabbāt al-Ḥammām and Tall Ramād<sup>195</sup>. Concerning the jars, a large example has a comparatively high vertical collar, but low collars seem to have been the general rule, even if occasionally combined with a very large aperture (figs. 97–101, pl. III C)<sup>196</sup>; also in these cases 'Amq A-B and Rās Šamra V offer near parallels<sup>197</sup>, but it may be that the high collar hints at an advanced Neolithic date corresponding to 'Amq B.

Three rim profiles of White Ware bowls deserve to be singled out (figs. 102–104)<sup>198</sup>. All of them are of white plaster tempered with gravel and straw. One is of the ordinary conical type with thick rim<sup>199</sup>, another has a tapering rim tending more towards the vertical<sup>200</sup>, while the third is vertical and very thick; in the last case the bowl must have had the character of a large basin<sup>201</sup>.

The striking similarities of certain objects to material from Early Neolithic Byblos and 'Amq B leave no doubt that N<sup>8</sup> was contemporary with part of the latter period and Rās Šamra V A<sup>201</sup>a, which gives a conventional date to the second half of the 6th millenium B.C., still to be pushed back somewhat according to the new calibrated carbon-14 results (see above p. 28).

VI

## Period N<sup>7</sup> (Layers 73-72) The Fifth Building Phase

#### (Plan, fig. 105)

Layer 73 was a hard yellow plaster floor, towards the north, however, somewhat mixed with gravel and earth, 0.04–0.09 m thick, with a rather uneven surface (top levels 5.04–5.18); it was lacking in the northwestern and southwestern parts of the sector. A few patches of a similar floor found on top of 73 presumably indicate later repairs. At the middle of the eastern section the floor was pierced by a hole, c. 0.04 m wide, perhaps intended for a wooden peg or rod supporting something. The floor was covered by a fine light brown to reddish clayey fill, Layer 72, extending all over the sector and probably the wash-down of lost clay walls; it rose to 5.25, 5.23, 5.30

<sup>196</sup> Inv. No. 3976/1 = TS 6003 (pl. III C). H. 0.080 m. Diam. of neck 0.102 m. - Inv. No. 3976/5. H. 0.018 m. Diam. of neck 0.102 m. - Inv. No. 3976/2. H. 0.020 m. Diam. of neck 0.182 m. - Inv. No. 3976/3. H. 0.031 m. - Inv. No. 3977/2. H. 0.020 m.

<sup>197</sup> OIP 61 1960, 75 fig. 47.14. – Ibid., 51 fig. 24.1, 75 fig. 47.3, 7–8, Ugaritica IV, 165 fig. 6.9:9 and 11. – OIP 61 1960, 75 fig. 47.4. – Ibid., 51 fig. 24.4, 75 fig. 47.5. – Ibid., 53 fig. 27.27, 75 fig. 47.5, Ugaritica IV, 165 fig. 6.9:1.

<sup>198</sup> Inv. Nos. 6274/1 = TS 4222, 6273/1 = TS 4221 and 6274/3 = TS 4224. H. 0.070, 0.041 and 0.045 m. In one case (TS 4221) the diameter can be estimated at c. 0.240 m.

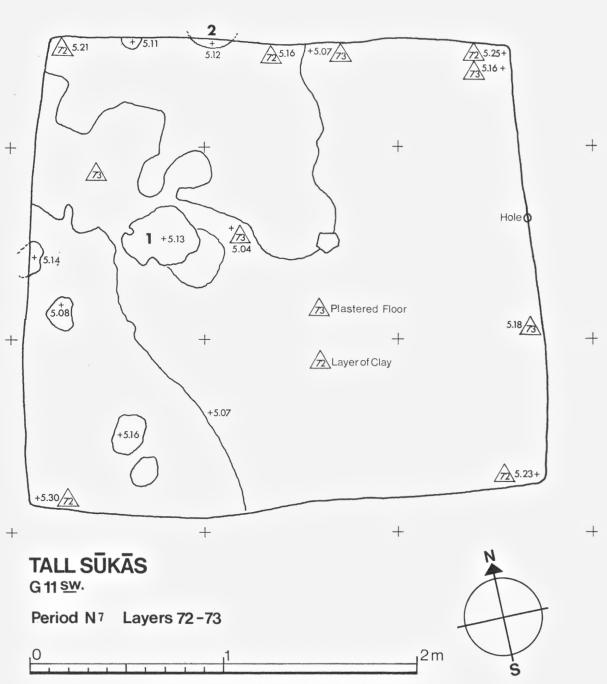
<sup>199</sup> Cf. AASyr 16.2 1966, 173 pl. 2b 12, MélBeyr 45 1969, 109 fig. 2 B, from Tall Ramād II.

<sup>200</sup> Cf MélBeyr 45 1969, 109 fig. 2 B 1: inner layer, from Tall Niba'a Fawar.

 $^{201}$  Cf. Mél<br/>Beyr 45 1969, 49 fig. 3 above, from Labwa, Ugaritica IV, 286–287 pl. 12.5, from Rās Šamra V B.

<sup>201 a</sup> Cf. BASOR 184 1966, 3-4.

 $<sup>^{195}</sup>$  OIP 61 1960, 75 fig. 45, Ugaritica IV, 165 fig. 6.14 right, AASyr 13 1963, 194–195 fig. 7.3. – OIP 61 1960, 50 fig. 22. 20. – Ibid., 74 fig. 44.5, Ugaritica IV, 165 fig. 6.11: 2,3 and 5, Syria 36 1959, 155 fig. 2.5.



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and 5.21 in the northeast, southeast, southwest and northwest corners respectively, while at the middle of the northern border it sank to 5.16. A large isolated stone slab, measuring  $0.19 \times 0.15 \times 0.08$  m, lay on the plastered floor possibly originally serving as a kind of work-table, or as the base of a roof support (fig. 105, No. 1, top level 5.13). In the southwestern part of the sector some boulders were found aligned in a northwest-southeast direction (top levels 5.08–5.16). In Layer 72, in a sort of pit near the middle of the northern section, were found thirty-five pottery fragments composing the side of a large vessel of Dark-Faced Burnished Ware with burnish on both sides, therefore most likely a bowl, as well as a rim-sherd of a bowl of the same ware, two flint blades and the tooth of a pig (fig. 105, No. 2, level c. 5.10–5.15)<sup>202</sup>.

All the other artifacts were discovered in the fill, Layer 72. The amounts of stone and clay objects roughly equal each other. The flints included two projectile points (figs. 106-107)<sup>203</sup>, three finely serrated blades<sup>204</sup>, a considerable number of irregular blades<sup>205</sup>, and many chips<sup>206</sup>. There were two obsidian chips<sup>207</sup>, three pieces of unworked basalt<sup>208</sup>, and a fragment of a limestone spindle-whorl (fig. 108)<sup>209</sup>. The majority of the pottery comprised fragments of bowls of simple Dark-Faced Burnished Ware (e.g. figs. 109-112 and 114)<sup>210</sup>; the collared jar was also represented (e.g. figs. 113 and 115)<sup>211</sup>, but frequently the shape of vessel could be determined<sup>212</sup>. In this connection a fragment of a clay figurine must be expressly mentioned (fig. 116 and pl. III D)<sup>213</sup>. Finally the layer contained twenty fragments of White Ware bowls (e.g. figs. 117-119)<sup>214</sup>, a number of animal bones, i.a. of sheep and a pig, and a few shells<sup>215</sup>.

A statistical survey gives the following:

Chipped flint	Items	<sup>0</sup> / <sub>0</sub>
Projectile points	2	0.9
Retouched blades	3	1.4
Irregular blades	17	7.9
Chips	59	27.4
Total chipped flint	81	37.7

<sup>202</sup> G 11 CCLXII, Inv. Nos. 3973/1-39.
<sup>203</sup> G 11 CCLX-CCLXI, Inv. Nos. 6324-6325 = TS 4274-4275.
<sup>204</sup> Inv. Nos. 6338/1-3.
<sup>205</sup> Inv. Nos. 6310/1-2, 6338/4-11 and 6338/13-17.
<sup>206</sup> Inv. Nos. 6310/4-33 and 6338/18-46.
<sup>207</sup> Inv. Nos. 6310/34 and 6338/12.
<sup>208</sup> Inv. Nos. 6310/34-36.
<sup>209</sup> Inv. Nos. 6310/34-36.
<sup>209</sup> Inv. Nos. 6374/1 (fig. 110), 3974/3-5 (figs. 109, 111 and 112) and 3974/7-13 (3974/7: fig. 114).
<sup>211</sup> Inv. Nos. 3974/1 (fig. 115), 3974/6 = TS 6028 (fig. 113) and 3974/14-15.
<sup>212</sup> Inv. Nos. 6417 = TS 4304.
<sup>214</sup> Inv. Nos. 6275/1-3 = TS 4225-4227 (figs. 119, 118 and 117) and 6275/4-20.

<sup>215</sup> G 11 SW 27/9 1960, no Inv. No.: six of ovis aries, one of sus scrofa domesticus, fourteen indeterminable bone fragments, and seven fragmentary shells of helix sp.

Other stones	Items	<sup>0</sup> / <sub>0</sub>
Obsidian chips	2	0.9
Unworked basalt	3	1.4
Limestone spindle-whorl	1	0.5
Total other stones	6	2.8
Pottery, etc.		
Simple Dark-Faced Burnished Ware		
Bowl fragments	47	21.9
Jar fragments	4	1.9
Fragments of indeterminable vessels	25	11.6
Total	76	35.4
Clay figurine	1	0.5
Total pottery, etc	77	35.8
White Ware, etc.		
Bowl fragments	20	9.3
Traces of bitumen	2	0.9
Total White Ware, etc	22	10.2
Bones		
Sus scrofa domesticus	2	0.9
Ovis aries	6	2.8
Indeterminable fragments	14	6.5
Total bones	22	10.2
Shells		
Pulmonata: Helix sp	7	3.3
Total shells	7	3.3
Total N <sup>7</sup>	215	100.0

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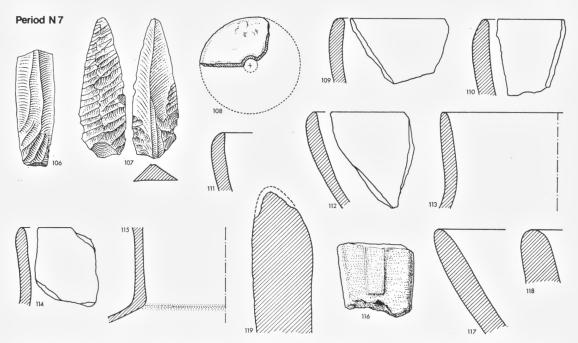
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The projectile points, although differing in the manner of retouching, are both of Cauvin's type called "pointe 2 d'Amouq", and they are paralleled in the same places as the previously mentioned specimens from N<sup>8</sup> (figs. 106–107)<sup>216</sup>. The fragment of a flat limestone spindle-whorl has its nearest counterparts in 'Amq A and B, Rās Šamra V A and Tall Ramād I (fig. 108)<sup>217</sup>. Regarding Dark-Faced Burnished Ware, we may cite four bowl rims and three jar necks, for which there are parallels from 'Amq A–B, Rās Šamra V and Tall Ramād III (figs. 109–115)<sup>218</sup>. The figurine

<sup>216</sup> G 11 CCLXI, Inv. No. 6324 = TS 4274. L. 0.060 m. Grey, much patinated flint. Point and lower part of tang missing. Cf. OIP 61 1960, 56 fig. 30.1–2, from 'Amq A; Byblos IV, 52 fig. 5.2–3, from Early Neolithic Byblos; MélBeyr 45 1969, 65, 72, 80 No. 18, from the Hims region. – G 11 CCLX, Inv. No. 6325 = TS 4275. L. 0.073 m. Greyish, patinated flint. Tang missing. Cf. OIP 61 1960, 85 fig. 59.4, from 'Amq B; Byblos IV, 52 fig. 5.6–7, from Early Neolithic Byblos; Syria 36 1959, 161–162 fig. 5.3, from Basal Tabbāt al-Hammām. – The considerable size suggests the use as javelin points, cf. Byblos IV, 69.

<sup>217</sup> Inv. No. 6250 = TS 4185. L. 0.055 m. Cf. OIP 61 1960, 60-61 fig. 35.3, 90-91 fig. 65.8-10 and pl. 69.4, Ugaritica IV, 284-285 pl. 11.19, AASyr 14 1964, 120-121 pl. 1 A 10, Archaeology 24 1971, 280.
<sup>218</sup> Inv. Nos. 3974/3, 3974/1, 3974/4 and 3974/5. H. 0.034, 0.040, 0.030 and 0.050 m. Cf. OIP 61 1960, 50 fig. 22.10 and 74 fig. 44.4, Ugaritica IV, 165 fig. 6.11:2, 6.12:2 and 6.13:2, AASyr 13 1963, 194-195 fig. 7.3. - Inv. Nos. 3974/6 = TS 6028, 3974/7 and 3974/2. H. 0.051, 0.041 and 0.048 m. Neck diameters of the first and third specimens estimated at 0.122 and 0.096 m; in the latter case the rim is not preserved. Cf. OIP 61 1960, 79 fig. 52.15-16, Ugaritica IV, 165 fig. 6.16:1.

Nr. 2



Figs. 106–119. – 106: TS 4274. – 107: TS 4275. – 108: TS 4185. – 109: 3974/3. – 110: 3974/1. – 111: 3974/4 – 112: 3974/5. – 113: TS 6028. – 114: 3974/7. – 115: 3974/2. – 116: TS 4304. – 117: TS 4227. – 118: TS 4226. – 119: TS 4225. – 1:2.

fragment (fig 116, pl. III D)<sup>219</sup> is the earliest of its kind from Tall Sūkās. It is handmade of a light brownish clay with numerous dark and white particles; the surface is covered with lime deposits. It has an oval section, tapers downwards, and is pierced vertically; probably it was built up around a wooden rod or a piece of reed which has disappeared, or it was fixed to its place by means of a rod or peg. On one side there is a flat rectangular elevation. The fragment may be interpreted in two ways, either as the pelvic part of a male figure with a phallos case, or as part of a head with a long, flat nose<sup>220</sup>. Lastly, we may give three examples of White Ware bowl rims (figs. 117–119)<sup>221</sup>. The first is of greyish-white material tempered with straw and gravel; the others are purer white, and the last of the three, the profile of which resembles that of some pottery bowls, clearly has a thick coating of a material finer than the core.

The finds make it impossible to regard N<sup>7</sup> as much later than N<sup>8</sup>.

<sup>219</sup> Inv. No. 6417 = TS 4304. H. 0.039 m.

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<sup>220</sup> Cf. the clay heads from Tall Ramād III, AASyr 19 1969, 33, 35 figs. 13-14 and Archaeology 24 1971, 285.

 $^{221}$  Inv. Nos. 6275/3 = TS 4227, 6275/2 = TS 4226 and 6275/1 = TS 4225. H. 0.055, 0.030 and 0.074 m. Diam. of TS 4225 estimated at 0.416 m.

#### VII

# Period N<sup>6</sup> (Layers 71-70) The Sixth Building Phase

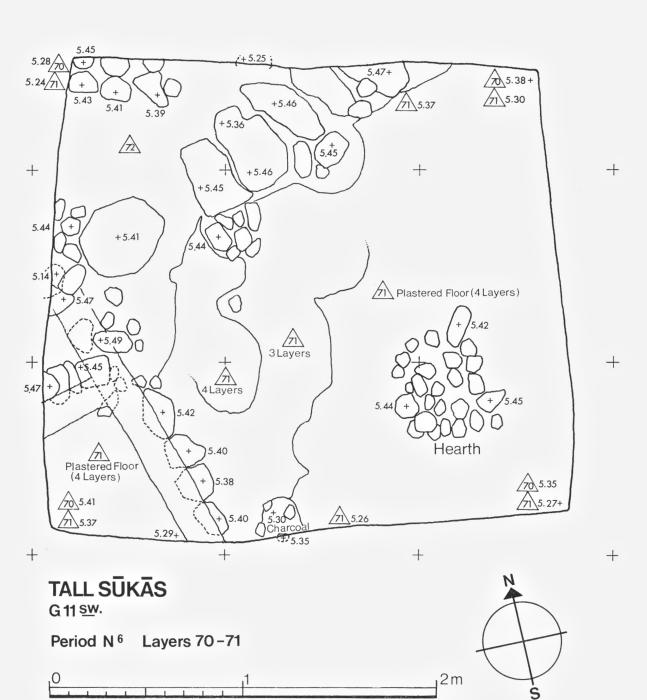
#### (Plan, fig. 120)

The fill layer of  $N^7$  formed the soil on which a new house was built in the succeeding period, N<sup>6</sup>. A row of some very large and some smaller stones in one course directed northeast-southwest (top level 5.47) was laid out as the foundation of a wall delimiting a room southeast of it. This room had a very hard, yellowish plaster floor, Layer 71, which in places appeared to consist of four identical strata separated by thin layers of fill. A single row of stones of medium size more or less perpendicular to the first one (top level 5.49) seems to have been a later addition intended to produce a division of the interior, as it rests on the uppermost floor stratum but one (fig. 121). At the west side the upper stratum obviously stopped a little distance from these stones, which probably means that they were only a sort of outer foundation for an earth or clay wall; the traces of such a wall could in fact be seen in the southern section (width 0.20 m), and similar traces of a wall perpendicular to the former occurred in the western section on top of the floor. The top levels of the western plaster floor were at 5.29-5.37, those of the eastern one at 5.26-5.37. A roughly semicircular cutting in the north border of the floor at the inner side of this wall contained a grevish-brown fill and may have marked the original existence of a wooden post resting on a bedding of small stones (fig. 122; diam. c. 0.38 m, top level 5.45)<sup>222</sup>. In the southeastern part of the sector there were only two floor strata, the lower one being very hard with a smooth white surface. On the lower floor stratum a limited layer of small stones (top levels 5.42-5.45) was found in a burnt red fill and covered with black ashes, no doubt a hearth surrounded by the upper floor stratum<sup>223</sup>. Besides, at the middle of the southern section, there was a small patch of charcoal surrounding a few stones embedded in the floor (fig. 123; diam. c. 0.24 m, top levels 5.30-5.35); presumably this was either an auxiliary cooking-place or the traces of a wooden post corresponding to the supposed one at the northwest side of the room. Finally, there were a few stones in the northwestern corner of the sector, where the lime floor was missing (top levels 5.41-5.43), and c. 0.40 m east of them an oblong patch of dark grey clay (length 0.19 m, top levels 5.23–5.25); but for the patch, which is a sign of fire, these remains are inexplicable on account of the limitation of the excavated area. The greyish to brown clayish destruction fill over the floors constituted our Layer 70 (top levels 5.38, 5.35, 5.41 and 5.28 in the northeast, southeast, southwest and northwest respectively); in the northern part of the eastern section, as in the northern section, there was clear evidence of fire (top levels 5.35-5.38).

<sup>&</sup>lt;sup>222</sup> For a similar location of a roof-and-wall-supporting post, see AASyr 19 1969, 27, 30 pl. 9: Tall Ramād I.

<sup>223</sup> Cf. AASyr 19 1969, 27, 30 pl. 8: Tall Ramād I.

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Fig. 120. Plan of architectural remains of Period N<sup>6</sup>. 1:20.

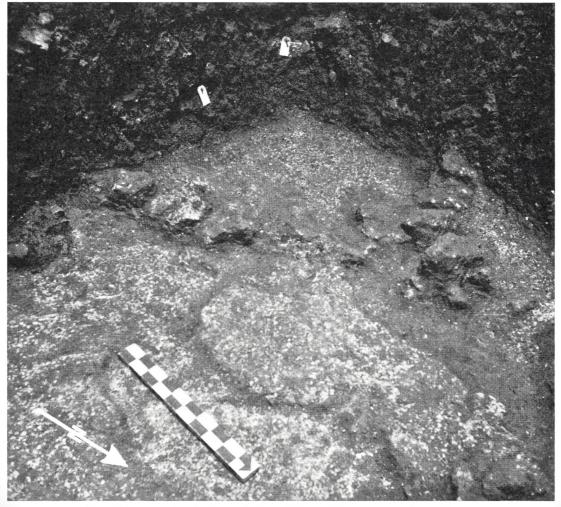


Fig. 121. Stone foundation and floor of Period N<sup>6</sup> seen from the northeast.

In the floor layers and especially in the earthen fill among the wall stones a small number of artifacts was discovered, but no animal bones: four flint blades without retouche and two raw flint stones<sup>224</sup>, one fragment of a basalt quern<sup>225</sup>, six sherds of simple Dark-Faced Burnished Ware, among them what is perhaps the rim of a bowl, and a round, flat clay piece, probably an unfinished spindle whorl<sup>226</sup>, as well as a small fragment of a shell<sup>227</sup>.

More came from the destruction layer, 70, over the floors. The stone objects comprised part of a flint projectile point and a plain-chipped flint blade which may

<sup>224</sup> Inv. Nos. 3972/9–14.
<sup>225</sup> Inv. No. 3972/2.
<sup>226</sup> Inv. Nos. 3972/1 and 3–8.
<sup>227</sup> Inv. No. 3972/15.
Hist. Filos. Skr. Dan. Vid. Selsk. 7, no. 2.

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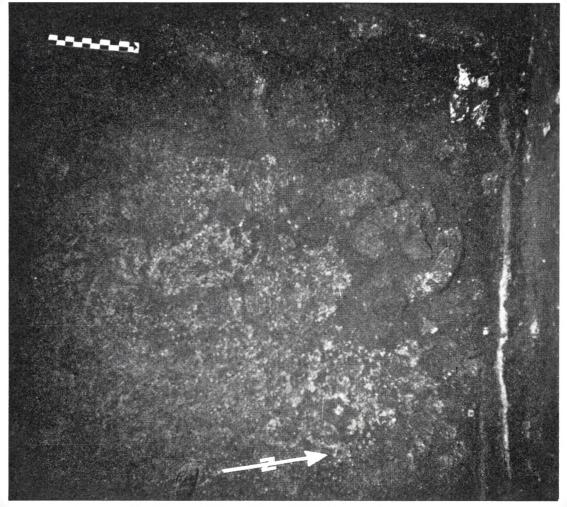


Fig. 122. Post hole and floor of Period N<sup>6</sup> seen from above.

have been intended as an arrow- or javelin-head (fig. 124)<sup>228</sup>, seven flint blades<sup>229</sup>, twenty-one flint chips and one obsidian chip<sup>230</sup>, twenty-one unworked stones, including five of basalt<sup>231</sup>, apparently originally used as building material in the walls in the western part of the sector. Of pottery there were five sherds of bowls and two of collared jars, all of simple Dark-Faced Burnished Ware (e.g. fig. 125)<sup>232</sup>; a bowl fragment of unburnished dark clay had a coating of plaster on its interior (fig. 126)<sup>233</sup>.

- <sup>228</sup> Inv. Nos. 6326 = TS 4276 (fig. 124) and 6339/1.
- <sup>229</sup> Inv. Nos. 6312/1-2 and 6339/2-6.
- <sup>230</sup> Inv. Nos. 6312/3-4, 6339/7-25 and 6311/16.
- <sup>231</sup> Inv. Nos. 6311/1–15 and 6312/5–10.
- <sup>232</sup> Inv. Nos. 3970/2-4, 3971/3, 3971/1 = TS 6025 (fig. 125), 3970/1 and 3971/2.
- <sup>233</sup> Inv. No. 6277/1 = TS 4230.

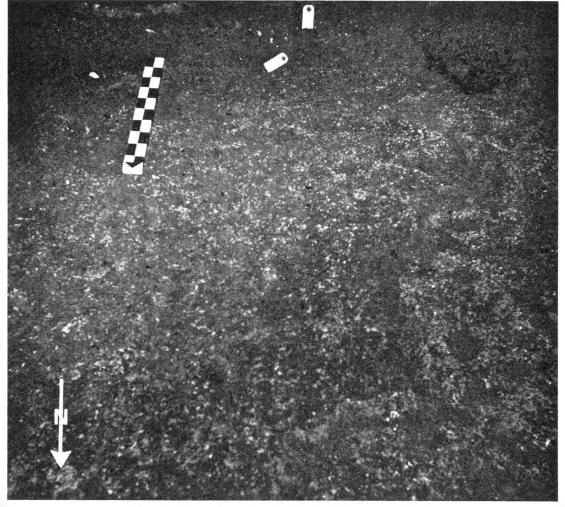


Fig. 123. Charcoal and floor of Period N<sup>6</sup> seen from above.

Twenty-one pieces of plaster bowls and five cases of traces of bitumen were recorded (e.g. figs. 127–128)<sup>234</sup>, but neither bones nor shells.

Thus we may give the following tabular survey:

Chipped flint	Items	0/0
Projectile points	2	2.4
Blades without retouche	4	4.7
Irregular blades	7	8.2
Chips	21	24.7
Total chipped flint	34	40.0

<sup>234</sup> Inv. Nos. 6276/1 = TS 4228 (fig. 128), 6276/2 = TS 4229 (fig. 127), 6276/3-10 and 6277/1-10.

Other stones	Items	º/o
Raw flint	2	2.4
Basalt quern fragment	1	1.2
Unworked basalt	5	5.9
Obsidian chip	1	1.2
Total other stones	9	10.6
Pottery		
Simple Dark-Faced Burnished Ware		
Bowl fragments	6	7.1
Jar fragments	2	2.4
Fragments of indeterminable vessels	5	5.9
Total	13	15.3
Simple Dark-Faced Unburnished Ware		
Unfinished spindle whorl	1	1.2
Plaster-coated Ware	1	1.2
Total pottery	15	17.7
White Ware, etc.		
Bowl fragments	21	24.7
Traces of bitumen	5	5.9
Total White Ware, etc	26	30.6
Shells		
Indeterminable fragment	1	1.2
Total shells	1	1.2
Total N <sup>6</sup>	85	100.1

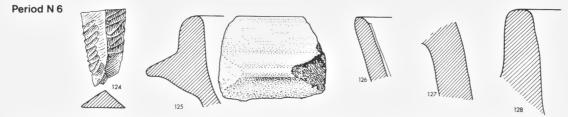
The paucity of objects and the lack of animal bones contrast with the amount and size of architectural remains as compared with the earlier periods. Obviously some specialization had developed, or at least some effective cleaning had taken place before the destruction. A few pieces deserve to be expressly described and illustrated, first the fragment of a projectile point of Cauvin's type "pointe 2 d'Amouq" (fig. 124)<sup>235</sup>. One rim-sherd of an open bowl of simple Dark-Faced Burnished Ware has a horizontal lug-handle (fig. 125)<sup>236</sup>; without being identical in profile, it resembles sherds from 'Amq A–B and Rās Šamra V<sup>237</sup>. A completely new phenomenon at Neolithic Sūkās, as we know it, was the pottery with plaster-coating, represented in the excavation by a rim fragment of a conical open bowl of dark reddish, on the surface grey clay tempered with sand and gravel including crushed flint; the smoothed white plaster contains some gravel (fig. 126)<sup>238</sup>. Similar wares occurred at Hama M<sup>4</sup>, Rās Šamra V B, Basal Byblos, Tall Ramād III, and a Pre-Pottery Neolithic site in

<sup>236</sup> Inv. No. 3971/1 = TS 6025. H. 0.044 m.

<sup>237</sup> OIP 61 1960, 50 fig. 22.20–21, 52 fig. 27.9, 71 fig. 40.19, 76 fig. 49.9, Ugaritica IV, 165 fig. 6. 6:1, 12:5 and 14.

 $^{238}$  Inv. No. 6277/1 = TS 4230. H. 0.034 m. The plaster-coating of rim and exterior has disappeared. Remains of bitumen on interior coating.

 $<sup>^{235}</sup>$  Inv. No. 6326 = TS 4276. L. 0.039 m. Greyish brown flint. Point and lower part missing. Cf. OIP 61 1960, 56 fig. 30.1–2, from 'Amq A; Ugaritica IV, 288–289 pl. 13.10, from Rās Šamra V B; MélBeyr 45 1969, 66, 72, 80 pls. 3–4, from the Hims region.



Figs. 124-128. - 124: TS 4276. - 125: TS 6025. - 126: TS 4230. - 127: TS 4229. - 128: TS 4228. 1:2\*

Wādi Šū'aib in Transjordania<sup>239</sup>. Two pieces of true White Ware must be mentioned here, as they appear to have preserved the root of a lug-handle, which is a rarity in this class. One is a side fragment of a conical bowl with a slightly everted rim, and the other the rim of a bowl or basin with nearly vertical sides (figs. 127–128)<sup>240</sup>. They recall specimens from Tall Niba'a Fawar and Rās Šamra V B<sup>241</sup>.

As to date, the general character of the finds is roughly the same as for N<sup>8</sup> and N<sup>7</sup>.

### VIII

# Period N<sup>5</sup> (Layers 69–68) The Seventh Building Phase

#### (Plan, fig. 129)

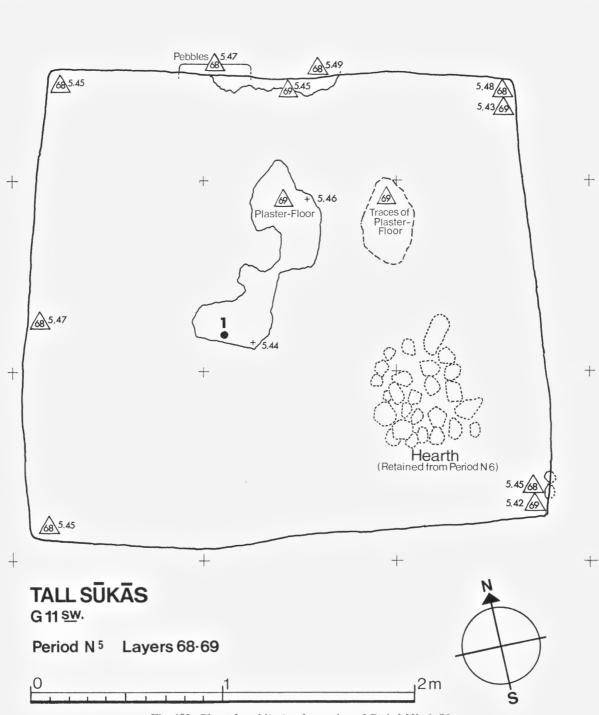
The question could be posed whether this period is, in fact, a later stage of  $N^6$ , or a separate seventh building phase. The architectural remains were very few, and it seemed without doubt that the hearth in the southeastern part of the sector, which was constructed in  $N^6$ , continued in use in  $N^5$ .

N<sup>5</sup> is here defined as the period comprising Layers 68 and 69, of which the latter was first observed as a partially preserved, 0.02 m thick white plaster floor discernible as two isolated patches roughly at the middle of the sector (top levels 5.44-5.46). To the north of the western patch, at the northern section, however, there was a corresponding remainder of a 0.035 m thick floor of yellowish-brown clay (top level 5.45), towards the west covered by a patch of pebbles (top level 5.47), towards the east by a continuous, 0.03 m thick layer of grey clay with obvious traces of fire (top levels 5.43-5.49, highest in the west). This was also found along the eastern border, but here very thin (top levels 5.35-5.43, highest in the north) and coinciding with the black ashes over the hearth of N<sup>6</sup>, practically vanishing in the southeastern corner,

<sup>&</sup>lt;sup>239</sup> Danish National Museum 3 A 177, from Hama, G 11  $x^{26}$  (cf. below p. 88 note 395); the clay is light reddish-brown with a blackish-grey core. – BSPF, CRSM 66 1969, 188–190 fig. 2; Ugaritica IV, 506–507 fig. 29 A 3–4; Revue Biblique 1950, 586 pl. 12.1:7; AASyr 14 1964, 118, 122–123, pl. 5 A 6–7; MélBeyr 45 1969, 53 and 90. It is this pottery and not, as stated in AASyr 14 1964, 121 pl. 9 and in BJbV 5 1965, 212–213 No. 25, the White Ware that was found at Hama M.

<sup>&</sup>lt;sup>240</sup> Inv. No. 6276/2 = TS 4229. H. 0.042 m. Tempered with straw, gravel and a little charcoal (burnt straw?). – Inv. No. 6276/1 = TS 4228. H. 0.053 m. Tempered with straw and gravel.





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Fig. 129. Plan of architectural remains of Period  $N^5$ . 1:20.

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where it joined a few stones (top level 5.42). In the southwestern corner the layer happened to be marked only by a small number of stones (top levels 5.44-5.46). In the northwestern corner, again, there were stones (top levels 5.43-5.45).

The reason for singling out N<sup>5</sup> as a separate period is that the remains of the plastered floor and its yellowish-brown equivalent at the north border partially covered the large stone foundation of N<sup>6</sup> so that this wall, which was the most essential feature of the sixth building phase, could not have existed any longer; nor were the secondary walls in the southwestern angle retained. Such profound changes justify our speaking of a new building period. Apparently the whole of the area discovered was laid out as one large room or rather courtyard; however, the comparatively small extent of the excavation, less than c. 2.60 by 3.00 m, does not permit more than a guess.

Above 69 there was a layer of greyish fill, numbered 68, which had its top levels at 5.48, 5.45, c. 5.45 and 5.45 in the four corners respectively, counting clockwise from the northeast; at the middle of the western border it rose to 5.47. Along the eastern part of the southern section the layer was blackish on top and clayey below. In the northwest corner it was rather thin.

All the minor finds were contained in Layer 68. There were only twenty-six flints: three blades with retouche (e.g. fig. 130)<sup>242</sup>, six irregular blades<sup>243</sup>, two microblades<sup>244</sup>, fourteen chips<sup>245</sup> and a polished transversal axe or rather adze, which piece lay directly on the floor, Layer 69 (fig. 129 No. 1, fig. 131; level c. 5.47)<sup>246</sup>. The other stones comprised twelve of basalt, among them one fragment of a quern and one chip<sup>247</sup>. Pottery was also rather sparingly represented by twenty-five sherds of simple Dark-Faced Burnished Ware, of which seven were of bowls and eight of jars (e.g. figs. 132–134)<sup>248</sup>. Finally, eight pieces of White Ware (e.g. fig. 135)<sup>249</sup> and eight bone fragments were recorded; the latter included bones of sheep and pig<sup>250</sup>.

The table of finds appears as follows:

Chipped flint	Items	<sup>0</sup> / <sub>0</sub>
Polished flaked axe	1	1.3
Retouched blades	3	3.8
Irregular blades	6	7.6
Microblades	2	2.5
Chips	14	17.7
Total chipped flint	26	32.9

<sup>241</sup> MélBeyr 45 1969, 109 fig. 2 B 5:7-8, Ugaritica IV, 286-287 pl. 12.5.

 $^{242}$  Inv. Nos. 6251 = TS 4186 (fig. 130) and 6314/1-2.

<sup>248</sup> Inv. Nos. 6313/1, 3–4 and 6341/1–3.

<sup>244</sup> Inv. Nos. 6341/4-5.

245 Inv. Nos. 6314/5-8 and 6341/6-15.

<sup>246</sup> G 11 CCLIX, Inv. No. 6328 = TS 4278.

<sup>247</sup> Inv. Nos. 6315/1 = TS 4269, 6314/9, 6315/2-4 and 6313/2-8.

<sup>248</sup> Inv. Nos. 3968/1-15 (3968/6: fig. 134), 3969/1-2 = TS 6019 (fig. 133) and 3969/3-10 (3969/4: fig. 132). <sup>249</sup> G 11 CCLVIII, Inv. No. 6278 = TS 4231 (fig. 135) and 6279/1-3.

 $^{250}$  G 11 SW 25/9 1960, no Inv. No.: two of ovis aries, one of sus scrofa domesticus and five indeterminable fragments.

Other stones	Items	<sup>0</sup> / <sub>0</sub>
Basalt quern fragment	1	1.3
Unworked basalt	10	12.7
Basalt chip	1	1.3
Total other stones	12	15.2
Pottery		
Simple Dark-Faced Burnished Ware		
Bowl fragments	7	8.9
Jar fragments	8	10.1
Fragments of indeterminable vessels	10	12.7
Total	25	31.7
Total pottery	25	31.7
White Ware		
Bowl fragments	8	10.1
Total White Ware	8	10.1
Bones		
Sus scrofa domesticus	1	1.3
Ovis aries	2	2.5
Indeterminable fragments	5	6.3
Total bones	8	10.1
Total N <sup>5</sup>	79	100.0

In general, the objects are of little interest, the types being mostly known from the earlier deposits; but a few should be commented upon. One of the retouched blades is a parallelogramme-shaped fragment of a fine knife with retouche on one edge, apparently, however, without traces of use, therefore not a sickle-element as might be supposed from the drawing (fig. 130)<sup>251</sup>. As phenomena in both an early and an advanced Neolithic context the microblades are well known from Byblos<sup>252</sup>, where there are also some Middle and Late Neolithic counterparts to the polished adze (fig. 131)<sup>253</sup>; in section our adze is rhomboid, and edge as well as neck have been removed by damage or secondary flaking, but there are traces of primary flaking on all faces of the core.

Among the potsherds a side fragment of an indeterminable type of vessel is peculiar by being of a dark red clay with white grits and a darker core; seemingly it is a representative of a variety occurring in  $23^{0}/_{0}$  of the cases in 'Amq A, but not later<sup>254</sup>, obviously rare at Sūkās and therefore perhaps the remainder of an imported vase, if not made locally from the red clay covering the limestone bed-rock. Among the other pieces of Dark-Faced Burnished Ware there was one side-sherd with a lug-handle<sup>255</sup>, and moreover fragments of three jars: one is of the already encountered

 $^{251}$  Inv. No. 6251 = TS 4186. L. 0.025 m. Light brown, streaky, patinated flint. Cf. AASyr 16.2 1966, 188 fig. 8 a 5, from Buqrās I.

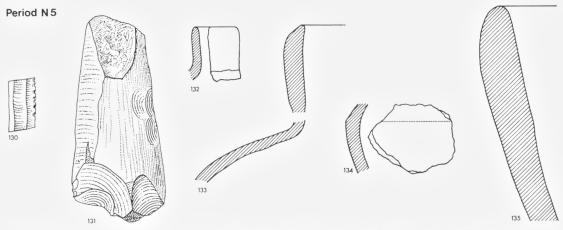
<sup>252</sup> Inv. Nos. 6341/4-5, cf. Byblos IV, 92 and 171: "Néolithique Ancien et Récent".

 $^{253}$  Inv. No. 6328 = TS 4278. L. 0.105 m. W. 0.048 m. T. c. 0.030 m. Grey, much patinated flint. Cf. Byblos IV, 142–143 figs. 56.3 and 57.2.

<sup>254</sup> Inv. No. 3968/1. Cf. OIP 61 1960, 49-50 and 73.

<sup>255</sup> Inv. No. 3969/3.





Figs. 130–135. – 130: TS 4186. – 131: TS 4278. – 132: 3969/4. – 133: TS 6019. – 134: 3968/6. – 135: TS 4231. – 1:2.

kind with a vertical collar (fig. 132)<sup>256</sup>, another has a more unusual and presumably late collar profile, rather convex with slightly inverted rim, to which the nearest parallels are found as 'Amq B and C (fig. 133)<sup>257</sup>; the third specimen is from a carinated jar, a type occurring both in 'Amq B and Rās Šamra V A (fig. 134)<sup>258</sup>. Lastly, we may cite a large White Ware bowl with the same club-shaped rim profile as in certain pottery bowls (fig. 135)<sup>259</sup>.

The jar sherds, figs. 133–134, and perhaps the adze, fig. 131, indicate that N<sup>5</sup> belongs to an advanced stage of the Neolithic Age, not too far from its end. For Rās Šamra V A there are conventional carbon-14 datings to c. 5528 and 5234 B.C., but 'Amq C and at least Byblos Middle Neolithic probably fall after 4500 B.C., also a conventional term<sup>260</sup>.

### $\mathbf{IX}$

# Period N<sup>4</sup> (Layers 67–66) The Eighth Building Phase

(Plan, fig. 136)

When a 0.04-0.05 m thick, very hard yellow plastered floor, Layer 67, was laid over both the hearth and the floor remains in the north, the N<sup>5</sup> deposits were completely buried in the eastern half of the excavated area; a small part of a corresponding floor was to be seen in the northwest corner. The top levels of the original floor of Period N<sup>4</sup> vary slightly, from 5.50 to 5.56. In the western half of the sector contem-

<sup>256</sup> Inv. No. 3969/4. H. 0.028 m. Cf. OIP 61 1960, 75 fig. 47.18, from 'Amq B.

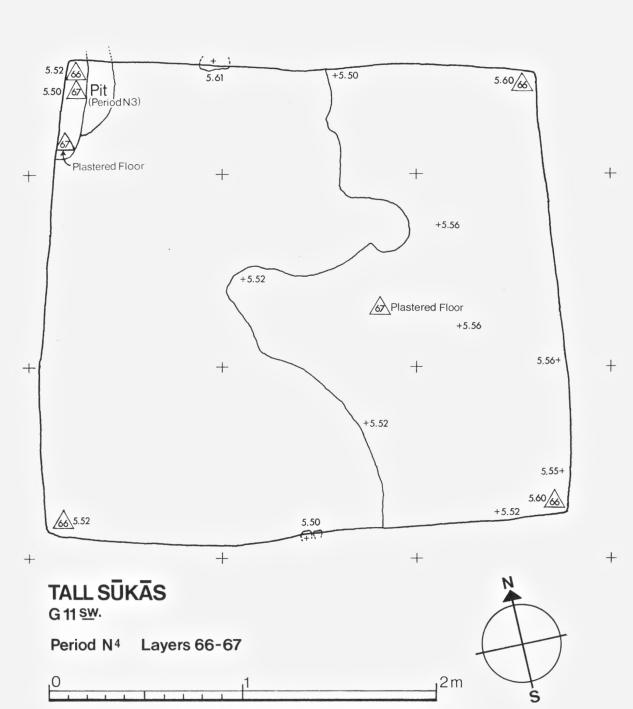
 $^{257}$  Inv. Nos. 3969/1–2 = TS 6019. Estimated height 0.078 m. Cf. OIP 61 1960, 79 fig. 52.16, from 'Amq B, and 143 fig. 111.17, from 'Amq C.

<sup>258</sup> Inv. No. 3968/6. H. 0.036 m. Cf. OIP 61 1960, 76 fig. 48. 2–4 and Ugaritica IV, 504 fig. 27.1.

<sup>259</sup> Inv. No. 6278 = TS 4231. H. 0.149 m. Diam. estimated at c. 0.410 m. Cf. OIP 61 1960, 53 fig. 27.15, 74 fig. 43.4, from 'Amq A-B.

<sup>260</sup> Ehrich, Chronologies, 88; BASOR 184 1966, 4; Levant 5 1973, 64.

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Nr. 2

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Fig. 136. Plan of architectural remains of Period N<sup>4</sup>. 1:20.

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### Nr.2

porary traces were scarce and difficult to interpret; a large stone in the northern section (top level 5.61) and a few smaller ones in the southern (top level 5.50) may be all that remained of walls or pavements. Apparently, the builders of the succeeding period, N<sup>3</sup>, took and reused every stone standing above ground after the end of N<sup>4</sup>. This event was marked by a greyish clayey destruction fill, Layer 66, which in the west was of a lighter colour and somewhat finer in substance, although occasionally mixed with charcoal, but in the southeast had a thin calciferous top covered with black earth (top levels 5.52–5.62). Perhaps this was in fact a secondary floor; it was missing in the west on account of the destruction caused by the building activities in the subsequent period, N<sup>3</sup>.

The artifacts and the few bones all lay in the destruction fill. There were eleven flint blades and forty flint chips<sup>261</sup>. Pottery was not well represented, there being only sixteen sherds of simple Dark-Faced Burnished Ware, among them three of bowls (figs. 137–139) and one of a collared jar (fig. 140)<sup>262</sup>. On the other hand, the White Ware fragments were comparatively numerous, with a total of twenty-seven, all from bowls (figs. 141–142)<sup>263</sup>. Shells did not occur, but there were forty-one bone fragments, including some of cattle, sheep and pigs<sup>263 a</sup>.

The summary follows:

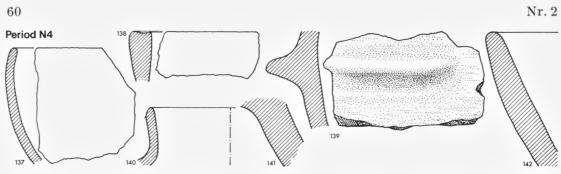
Chipped flint	Items	<sup>0</sup> / <sub>0</sub>
Irregular blades	11	8.0
Chips	40	29.2
Total chipped flint	51	37.2
Pottery		
Simple Dark-Faced Burnished Ware		
Bowl fragments	3	2.2
Jar fragment	1	0.7
Fragments of indeterminable vessels	12	8.8
Total	16	11.7
Total pottery	16	11.7
White Ware, etc.		
Bowl fragments	27	19.7
Traces of bitumen	2	1.5
Total White Ware, etc	29	21.2
Bones		
Sus scrofa domesticus	4	2.9
Ovis aries	3	2.2
Bos taurus domesticus	4	2.9
Indeterminable fragments	30	21.9
Total bones	41	29.9
Total $N^4$	137	100.0
<sup>261</sup> Inv. Nos. 6342/1-47 and 6316/1-4.		

<sup>261</sup> Inv. Nos. 6342/1-47 and 6316/1-4.

<sup>262</sup> Inv. Nos. 3967/1–16 (3967/1–4: figs. 138, 140, 139 and 137).

<sup>263</sup> Inv. Nos. 6280/1-2 = TS 4232-4233 (figs. 142 and 141) and 6280/3-29.

<sup>263 a</sup> G 11 SW 25/9 1960, no Inv. No.: four of bos taurus domesticus, three of ovis aries, four of sus scrofa domesticus, and thirty indeterminable.



Figs. 137–142. – 137: 3967/4. – 138: 3967/1. – 139: 3967/3. – 140: 3967/2. – 141: TS 4233. – 142: TS 4232. 1:2.

Only four examples of the Dark-Faced Burnished ware found in the destruction fill will be described. First there is a piece of a hemispherical bowl with slightly incurved rim such as known from Rās Šamra V (fig. 137)<sup>264</sup>. Another bowl has a club-formed rim profile paralleled in 'Amq A and later, but with a hardly discernible depression in the flattened upper surface, which seems to be a sign of a somewhat advanced date, as it also occurred in Rās Šamra V A (fig. 138)<sup>265</sup>. A horizontal lughandle is preserved on a side fragment of a third bowl; it resembles sherds from 'Amq A and Basal Țabbāt al-Ḥammām (fig. 139)<sup>266</sup>. The fourth specimen is a part of the neck of a collared jar, more or less akin to pieces from 'Amq B (fig. 140)<sup>267</sup>. In addition to the potsherds two White Ware fragments deserve to be mentioned; one is a piece of the side of a bowl with horizontally everted rim (fig. 141)<sup>268</sup>, the other comes from a conical bowl of the ordinary kind (fig. 142)<sup>269</sup>.

There is evidently no great chronological difference between  $N^4$  and its predecessor, as is shown by the fragments comparable to pieces from 'Amq B and Rās Šamra V A.

## X Period N<sup>3</sup> (Layers 65-63) The Ninth Building Phase

(Plan, fig. 143)

Layer 65 was a dark greyish sandy fill, in places paved with rather large cobbles and a few larger stones, particularly preserved towards the northwest and south of the sector (top levels 5.55–5.70 in the south and 5.69–5.79 in the north). In the north-

<sup>264</sup> Inv. No. 3967/4. H. 0.060 m. Cf. Ugaritica IV, 165 fig. 6.14:4 and 15:3.

<sup>265</sup> Inv. No. 3967/1. H. 0.025 m. Cf. OIP 61 1960, 50 fig. 22.2, Ugaritica IV, 165 fig. 6.9:12, 12:5 and 13:4, and particularly 282–283 pl. 10.16.

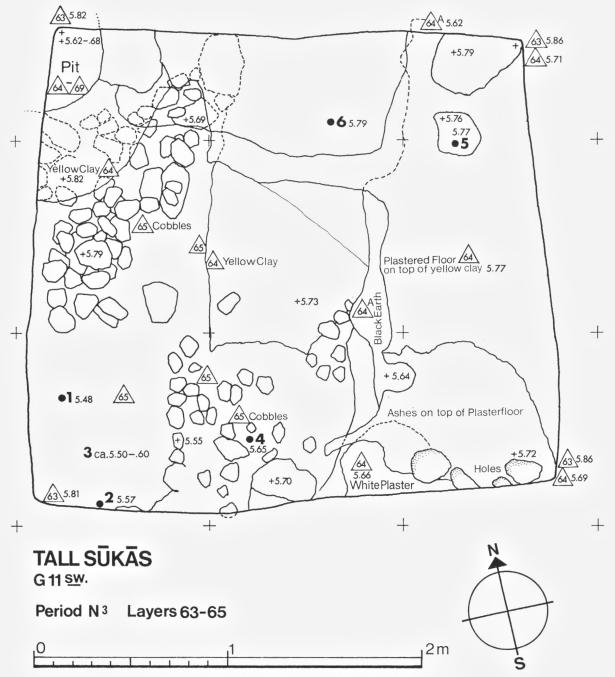
<sup>266</sup> Inv. No. 3967/3. H. 0.050 m. Cf. OIP 61 1960, 50 fig. 22.21, 53 fig. 27.9, Syria 36 1959, 155 fig. 2.21-22.

<sup>267</sup> Inv. No. 3967/2. H. 0.031 m. Neck diam. estimated at 0.086 m. Cf. OIP 61 1960, 75 fig. 47.18.
 <sup>268</sup> Inv. No. 6280/2 = TS 4233. H. c. 0.041 m. Cf. MélBeyr 45 1969, 109 fig. 2 B 5:7-8, from Tall Niba'a Fawar.

<sup>269</sup> Inv. No. 6280/1 = TS 4232. H. 0.075 m.

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Fig. 143. Plan of architectural remains of Period N<sup>3</sup>. 1:20.

western angle a 0.13-0.24 m deep pit containing yellow gravel and pebbles was discovered (top level 5.62-5.68). The excavation of the dark sandy fill in the southwestern angle yielded a deposit of twelve intact and unused flint blades, all struck from the same core and packed together, lying in a horizontal position and parallel to each other (fig. 143 No. 1, fig. 144, level 5.48)<sup>270</sup>; there were no signs of a pit. Southeast of this find, against a stone, two obsidian blades were also lying together (fig. 143 No. 2, figs. 149-150, level 5.57)<sup>271</sup>. Between the two finds, Nos. 1-2, there was refuse comprising nine flint blades, sixty flint chips, one obsidian blade, a fragment of a basalt grinding stone, thirty fragments of Dark-Faced Burnished Ware, ten of White Ware (e.g. fig. 175), one shell, and eighty-seven bones including those of cattle, sheep, goat and pig (fig. 143 No.3, level c. 5.50-5.60)<sup>272</sup>. A flint axe was found among the cobbles in the southern half (fig. 143 No. 4, fig. 145, level c. 5.65)<sup>273</sup>; from the pavement came, moreover, twenty sherds of Dark-Faced Burnished Ware (e.g. figs. 155 and 159), three fragments of White Ware (e.g. fig. 74) and twenty-five bones, i.a. of sheep and pig<sup>274</sup>. The remaining objects contained in Layer 65 were of the same general categories: nine fragments of Dark-Faced Burnished Ware (e.g. figs. 158 and 164), three of White Ware, nineteen flint blades (one possibly the very point of a projectile point), eighty flint chips and forty-five bones, e.g. of sheep, goats and pigs<sup>275</sup>.

In the eastern half of the sector a layer of ashes and fine black earth, grey on top towards the west, 64 A, corresponded to the cobbled floors in the west (levels 5.62-5.79); a huge field stone lay upon it in the northeast corner (top level 5.79). The only finds in this layer were a few animal bones, among others of ox and sheep<sup>276</sup>.

Above 64 A, and also spreading over the whole of the northeastern part, there was a 0.09 m thick floor, Layer 64, with very irregular limits and consisting of a hard whitish plaster over a yellow to greyish-brown clay, sloping down towards the south and with corresponding remains in the rest of the sector (levels 5.69-5.82). On top of the floor there was some yellow gravel. At the southern border towards the east the floor had four irregular shallow holes of varying widths, the westernmost one 0.05 m, the others 0.01 m deep (top levels 5.66-5.72). One fragmentary projectile point of flint and the tang of another (fig. 143 Nos. 5 and 6, figs. 146 and 148, levels 5.77 and 5.79)<sup>277</sup> as well as a primitive clay idol (fig. 173 and pl. III F)<sup>278</sup> lay in the

<sup>270</sup> G 11 CCLV, Inv. Nos. 6491/1-12 = TS 4314.

<sup>271</sup> G 11 CCLVI, Inv. Nos. 6330/1-2 = TS 4280-4281.

<sup>272</sup> Inv. Nos. 3964/1-30, 6281/1-2 = TS 4234-4235 (TS 4235: fig. 175), 6281/3-12, 6317/1-70, 8477, and G 11 SW 24/9 1960, no Inv. No.: four fragments of bos taurus domesticus, four of ovis aries, one of capra hircus, twelve of sus scrofa domesticus, sixty-eight indeterminable bone fragments and one of a helix sp. <sup>273</sup> G 11 CCLVII, Inv. No. 6329 = TS 4279.

 $^{274}$  Inv. Nos. 3963/1-15, 3966/1-5 (3966/1-2: figs. 155 and 159), 6284/1 = TS 4236 (fig. 174), 6284/2-3, and G 11 SW 25/9 1960, no Inv. No.: six fragments of ovis aries, one of sus scrofa domesticus and eighteen indeterminable bone fragments.

 $^{275}$  Inv. Nos. 3965/1 = TS 6021 (fig. 164), 3965/2 = TS 6016 (fig. 158), 3965/3-9, 6283/1-3, 6343/1-99, and G 11 SW 25/9 1960, no Inv. No.: three fragments of ovis aries, three of capra hircus, three of sus scrofa domesticus and thirty-six indeterminable bone fragments.

 $^{276}$  G 11 SW 25/9 1960, no Inv. No.: one of bos taurus domesticus, three of ovis aries (two of them burnt) and seventeen indeterminable fragments.

 $^{277}$  G 11 CCLII-CCLIII, Inv. Nos. 6332 and 6331 = TS 4283 and 4282.

<sup>278</sup> G 11 CCLIV, Inv. No. 6111 = TS 4041.

floor. Besides the layer contained six flint chips<sup>279</sup>, forty pottery fragments (e.g. figs. 153, 154 and 156)<sup>280</sup>, twenty-four fragments of plaster bowls (e.g. fig. 178)<sup>281</sup>, one awl of bone, a fragment of another bone implement, fifty-three fragments of animal bones, among which some of cattle and sheep, as well as one shell<sup>282</sup>.

Layer 63 was a fine dark greyish, rather hard, but also greasy fill, which in some places, e.g. along the northern part of the eastern border and at the middle of the southern section, contained a thin deposit of grey ashes (levels 5.76-5.77 and 5.66 respectively). In the southeastern angle Layer 63 was of a coarser and lighter substance with pebbles, but in the southern part of the western half with red and yellow patches. The layer reached up to levels 5.81-5.86, and apparently it constituted the destruction fill of the period. Into it was laid a wall of the succeeding building phase, and at the same time its surface was partly covered with a cobbling or clay coating functioning as a floor (see below, p. 70, Period N<sup>2</sup>).

In 63 there were numerous artifacts. The flints comprised one fragment of a projectile point (fig. 147)<sup>283</sup>, two scrapers<sup>284</sup>, thirty-eight blades<sup>285</sup> and two-hundred and forty-two chips<sup>286</sup>; stone grinding was represented by a bowl fragment of porphyry (fig. 151)<sup>287</sup>. The pottery was much more differentiated than before. The majority of the fragments still belonged to the category of Dark-Faced Burnished Ware (e.g. figs. 152, 157, 160–163, 165–172), but five sherds were of a coarse incised or impressed and two of a coarse undecorated ware, one of a light greyish ware with lustrous paint or slip, and two had a plaster coating<sup>288</sup>. In addition there were twenty-four fragments of White Ware (e.g. figs. 176–177)<sup>289</sup>, two hundred and seventy-six animal bones, e.g. of cattle, sheep, goat and pig, and two shells<sup>290</sup>.

The statistical picture of the total finds is as follows:

 $^{280}$  Inv. Nos. 3962/2 = TS 6018 (fig. 153) and 3962/1 and 3-40 (3962/3: fig. 154; 3962/8: fig. 156).

<sup>281</sup> Inv. Nos. 6285/1 = TS 4237 (fig. 178) and 6285/2-23.

<sup>282</sup> Inv. Nos. 5217 = TS 3862 (of sheep or goat), 5218 and G 11 SW 27/9 1960, no Inv. No.: five fragments of bos taurus domesticus, two of ovis aries, forty-six indeterminable bone fragments and one shell of a dentalium sp.

<sup>283</sup> Inv. No. 6327 = TS 4277, from the southeastern quarter.

<sup>284</sup> Inv. Nos. 6346/12–13.

<sup>285</sup> Inv. Nos. 6346/1-11, 6349/1-3, 6350/1-10 and 6351/1-14.

<sup>286</sup> Inv. Nos. 6346/14–68, 6349/4–43, 6350/11–80, 6351/15–88 and 8444/1–3.

<sup>287</sup> Inv. No. 3960.

<sup>288</sup> Inv. Nos. 3961/1 = TS 6034 (fig. 165), 3961/2 (fig. 170), 3961/3 = TS 6022 (fig. 163, and pl. III E), 3961/4, 3961/5 = TS 6024 (fig. 172), 3961/6-15 (3961/7: fig. 169; 3961/9-15: figs. 167, 160, 162, 163, 157, 171 and 168), 3961/16 = TS 6029 (fig. 152), 3961/17-19 (3961/17: fig. 161).

<sup>289</sup> Inv. Nos. 6286/1-2 = TS 4238-4239 (figs. 177 and 176) and 6286/3-21.

<sup>290</sup> G 11 SW 22/9 1960, no Inv. No.: twenty-three fragments of bos taurus domesticus, one of a bovid, one of capra hircus, fourteen of ovis aries, fourteen of sus scrofa domesticus, two hundred and twenty-two indeterminable fragments, two specimens of conus mediterraneus and two of helix sp.

<sup>&</sup>lt;sup>279</sup> Inv. Nos. 6319/1-6.

M	-		9
1.4	T	٠	4

Chipped flint	Items	0/0
Flaked axe	1	0.1
Projectile points	4	0.3
Scrapers	2	0.2
Retouched blades	9	0.8
Blades and flakes without retouche	16	1.4
Irregular blades	52	4.4
Chips	388	32.8
Total chipped flint	472	39.9
Other stones		
Fragment of porphyry bowl	1	0.1
Basalt quern fragment	1	0.1
Obsidian blades	2	0.2
	4	0.2
Total other stones	4	0.3
Pottery, etc		
Simple Dark-Faced Burnished Ware		~ -
Bowl fragments	32	2.7
Jar fragments	4	0.4
Fragments of indeterminable vessels	75	6.3
Total	111	9.3
Simple Dark-Faced Unburnished Ware		
Bowl fragment	1	0.1
Jar fragment	1	0.1
Total	2	0.2
Impressed Dark-Faced Unburnished Ware	0	0.0
Jar fragments	2	0.2
Total	2	0.2
Incised Dark-Faced Unburnished Ware	0	0.0
Fragments of indeterminable vessels	3	0.3
Total	3	0.3
Plaster-Coated Ware		0.1
Bowl fragment	1	0.1
Fragment of indeterminable vessel	1	0.1
Total	2	0.2
Light-Faced Ware	1	0.1
Jar (?) fragment	1	0.1
Clay idol	1	0.1
Total pottery, etc	122	10.3
White Ware, etc.		
Bowl fragments	69	5.8
Traces of bitumen	2	0.2
Total White Ware, etc	71	6.0
Bones		
Sus scrofa domesticus	30	2.5
Capra hircus	5	0.4
Ovis aries	32	2.7
Bos taurus domesticus	33	2.8
Bovid	1	0.1
Indeterminable fragments	407	34.4
Total bones	508	42.9

Nr. 2		65
Shells	Items	0/0
Scaphopoda: Dentalium sp	1	0.1
Prosobranchia: Conus mediterraneus	2	0.2
Pulmonata: Helix sp	3	0.3
Total shells	6	0.5
Total N <sup>3</sup>	1183	99.9

The stone industry of this period offers some points of special interest. Here we find the highest percentage of chips hitherto recorded since  $N^{10}$ , and the chipped flints were nearly as frequent as in N<sup>8</sup> and N<sup>6</sup>, if not so much as in N<sup>10</sup>. Moreover, the twelve intact and unused flint blades struck from the same core and lying together bear definitely witness to flint-working on the site, possibly a deposit or an offering (see above, fig. 143 No. 1, cf. Nos. 2-3, and fig. 144)<sup>291</sup> The blades were found in six "layers", one blade on top and one at the bottom of the bundle and two or three blades in each of the other "layers". All the blades were packed with the bulbar ends pointing in the same direction. Apart from "layer 2", whose blades had the bulbar sides touching the bulbar sides of those in "layer 3", all the blades lay with their bulbar sides upwards. Four of these blades are of rather good quality; but the rest must probably be characterized as waste, plunging flakes resulting from unsuccessful attempts to produce regular blades. Among the other flints four pieces stand out. One is a much worn core or core axe, used secondarily as a percussion stone; on the upper side it has been worked from the ends, on the under side by flaking from the edges (figs. 143 No. 4 and 145)<sup>292</sup>. It has counterparts in Early Neolithic Byblos, Basal Jabbāt al-Hammām and 'Amq A<sup>293</sup>. The second and third pieces are what remains of two projectile points: tangs of "pointes 1-2 d'Amouq" (figs. 143 No. 5, 146 and  $(147)^{294}$ . The fourth one is an unfinished fragmentary spearhead (or dagger) of a related type, but with an almost square section (figs. 143 No. 6 and 148)<sup>295</sup>. The two obsidian blades (figs. 143 No. 2, 149 and 150)<sup>296</sup> are small and fine with the cutting edges finely notched, possibly the result of use. At the bulbar end of one of them there is a fine retouche making a concave notch. The fragment fig. 151<sup>297</sup>

<sup>291</sup> Inv. No. 6491/1-12 = TS 4314. L. 0.072-0.111 m. T. 0.005-0.015 m. Brown greyish flint.

<sup>292</sup> Inv. No. 6329 = TS 4279. L. 0.085 m. W. 0.044 m. T. 0.035 m. Greyish-brown, much patinated flint. Cutting edge and neck damaged by secondary use.

<sup>293</sup> Byblos IV, 76-77 fig. 24.1, Syria 36 1959, 173-174 fig. 11, OIP 61 1960, 55-56 fig. 30.9.

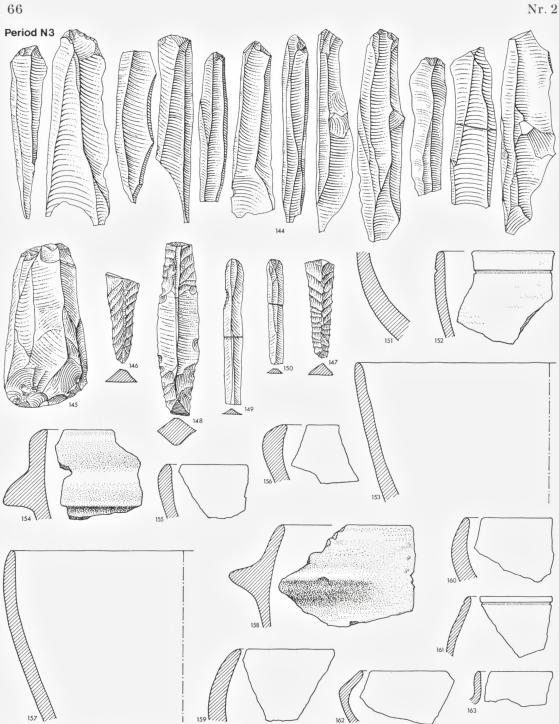
<sup>294</sup> Inv. No. 6332 = TS 4283. L. 0.046 m. Light grey flint, somewhat patinated; cf. above p. 41, fig. 88, note 191: TS 4318, of Period N<sup>8</sup>. - Inv. No. 6327 = TS 4277. L. 0.052 m. Brown, somewhat patinated flint. - Cf. OIP 61 1960, 56 fig. 30.1-2, 85 fig. 59.1-3, from 'Amq A and B, Ugaritica IV, 284-285 pl. 11.8, 288-289 pl. 13.12, from Ras Šamra V A and B, Byblos IV, 50 fig. 3.5 and 52-53 fig. 5.5-7, from Early Neolithic Byblos, MélBeyr 45 1969, 66, 72, 79 No. 17 pl. 3, from the Hims region, Archaeology 24 1971, 282, from Tall Ramād II.

295 Inv. No. 6331 = TS 4282. L. 0.090 m. Brown patinated flint; tip and tang missing. For the biconvex section, see Byblos IV, 64-65 fig. 18, from Early Neolithic Byblos, and AASyr 14 1964, 120-122 pl. 2 D 7, from Tall Ramād II.

<sup>296</sup> Inv. Nos. 6330/1-2 = TS 4280-4281. L. 0.076 and 0.054 m. Smoky-black, translucid obsidian. Both broken at the middle. Similar pieces were found in Early and Late Neolithic Byblos, Basal Tabbāt al-Hammām and Rās Šamra V A-B: Byblos IV, 92, 171-172, Syria 36 1959, 172, Ugaritica IV, 284 pl. 11. 14-16, 288 pl. 13.14-18 and 290 pl. 14.19-24.

<sup>297</sup> Inv. No. 3960. L. 0.070 m. H. 0.046 m. For the shape, cf. OIP 61 1960, 58 fig. 32.6, from 'Amg A. For the material, cf. ibid. 58 and 64 fig. 34.1, 87 and 94 fig. 62.5 pl. 67.6, from 'Amq A-B.

Hist. Filos. Skr. Dan. Vid. Selsk. 7, no. 2.



 $\begin{array}{l} \mbox{Figs. 144-163.}-144:\ \mbox{TS }4314.-145:\ \mbox{TS }4279.-146:\ \mbox{TS }4283.-147:\ \mbox{TS }4277.-148:\ \mbox{TS }4282.-149:\ \mbox{TS }4280.-150:\ \mbox{TS }4281.-151:\ \mbox{3960}.-152:\ \mbox{TS }6029.-153:\ \mbox{TS }6018.-154:\ \mbox{3962/3}.-155:\ \mbox{3966/1}.-156:\ \mbox{3962/8}.-157:\ \mbox{3961/13}.-158:\ \mbox{TS }6016.-159:\ \mbox{3966/2}.-160:\ \mbox{3961/10}.-161:\ \mbox{3961/17}.-162:\ \mbox{3961/11}.-163:\ \mbox{3961/12}.-1:2.\end{array}$ 

is from the convex side of a ground stone bowl, made of a red and black porphyry.

The Dark-Faced Burnished Ware does not include any decorated piece, but a few fragments differ from the rest in having a redder surface than usual, and one of these clearly appertains to the same dark red, perhaps imported variety occurring for the first time in Period N<sup>5</sup> (see above, p. 56 note 254)<sup>298</sup>. The vessels of the ordinary buff to brown fabric were mostly bowls, to judge from the preserved fragments, of which we may select a small series showing the range of variations. The hemispherical bowl seems to be represented by one fine specimen with a distinct groove roughly one centimetre under the rim (fig. 152)<sup>299</sup>. Another sherd comes from a plain and slightly conical bowl with convex side (fig. 153)<sup>300</sup>. A number of bowls had incurved rims, some of which were thicker above (figs. 154–156)<sup>301</sup>, while others more or less tapered upwards (figs. 157-160)<sup>302</sup>. Both varieties occasionally had horizontal lug-handles. One sherd with an inverted rim had a groove three millimetres under the rim (fig. 161)<sup>303</sup>, and there is also a case of a carinated bowl with an inverted rim (fig.  $162)^{304}$ . The traditional collared jar with a rather low neck occurred, just as the later type with a tall, cylindrical neck (figs. 163–164)<sup>305</sup>. Still another variety of jar is indicated by a sherd with sloping shoulder and a thick everted rim (fig. 165)<sup>306</sup>, while a large jar with a low ring-foot is only known from a bottom sherd<sup>307</sup>.

Most interesting was the appearance of unburnished impressed and incised wares related to those from Byblos of the so-called Middle Neolithic period, which chronologically seems to correspond to 'Amq C and Rās Šamra IV<sup>308</sup>. The impressed category is represented by a rim fragment of a collared jar with two parallel oblique punctated rows on the neck (fig. 166, pl. III E)<sup>309</sup>. Not only does it have a certain affinity to the impressed wares of 'Amq A and B, but also to finds at Byblos, Tall Ard Tlaili and

<sup>298</sup> Inv. No. 3964/2: fragment of rounded rim, dark red clay with white grits, both surfaces red with lustrous burnish. H. 0.035 m. – Inv. No. 3963/6: side sherd of buff gritty clay, exterior surface yellowish-red and burnished, interior red. H. 0.050, T. 0.007 m. – Inv. No. 3964/1: bottom fragment of coarse greenish-black clay, exterior surface pinkish-red with matt burnish. H. 0.030 m. T. 0.018 m.

<sup>299</sup> Inv. No. 3961/16 – TS 6029. H. 0.045 m. Cf. OIP 61 1960, 51 fig. 26. 1, 140 fig. 105. 19, from 'Amq A and C, Syria 36 1959, 154–156 fig. 2.26, from Basal Tabbāt al-Ḥammām.

<sup>300</sup> Inv. No. 3962/2 = TS 6018. H. 0.070 m. Estimated diam. 0.202 m.

<sup>301</sup> Inv. Nos. 3962/3, 3966/1 and 3962/8. H. 0.046, 0.028 and 0.031 m. Cf. OIP 61 1960, 50 fig. 22.10, 74 fig. 44.4, not so pronounced from 'Amq A–B, Ugaritica IV, 165 fig. 6.13: 3, from Rās Šamra V.

<sup>302</sup> Inv. Nos. 3161/13, 3965/2 = TS 6016, 3966/2 and 3961/10. H. 0.090, 0.055, 0.037 and 0.033 m. Estimated diam. of 3961/13: 0.188 m. Cf. OIP 61 1960, 50 fig. 22.20, 107 fig. 76.13, 140 fig. 105.11, 14 and 24, from 'Amg A, First Mixed Range and C, Ugaritica IV, 286–287 pl. 12.1, from Rās Šamra V B.

<sup>303</sup> Inv. No. 3961/17. H. 0.032 m. Cf. OIP 61 1960, 75 fig. 46.14, from 'Amq B.

<sup>304</sup> Inv. No. 3961/11. Cf. OIP 61 1960, 53 fig. 27.8, 74 fig. 43.9-10 and 12, from 'Amq A-B, either steeper or thicker.

 $^{305}$  Inv. Nos. 3961/12 and 3965/1 = TS 6021. H. 0.018 and 0.060 m. Estimated neck diam. of TS 6021: 0.071 m. Cf. OIP 61 1960, 51 fig. 24.1 and 4, 75 fig. 47.3, 6 and 14, 82 fig. 56.7–8, 141 fig. 107.13, from 'Amq A–C.

 $^{306}$  Inv. No. 3961/1 = TS 6034. H. 0.048 m. Estimated neck diam. 0.145 m. Cf. OIP 61 1960, 71 fig. 49 and 141 fig. 107. 15, from 'Amq B–C.

<sup>307</sup> Inv. No. 3964/3. H. 0.035 m. Cf. below, p. 68 note 317.

<sup>308</sup> Cf. Byblos IV, 41-42, Supplément au Dictionnaire de la Bible s.v. Phénicie, 1151, J. Mellaart, The Chalcolithic and Early Bronze Ages in the Near East and Anatolia, Beirut 1966, 15 and table facing viii.
 <sup>309</sup> Inv. No. 3961/3 = TS 6022. H. 0.038 m. Coarse grey clay with greyish-black core.

Tall Ğisr in the Biqa'a, and particularly in Northern Palestine, i.e. to phenomena at home in the so-called "Coastal Culture"<sup>310</sup>. Three specimens of incised, probably combed ware are equally important, all of them side sherds. One has parallel angular and straight lines (fig. 167)<sup>311</sup>, the second two groups of parallel lines crossing each other (fig. 168)<sup>312</sup>, and the third vertical double lines (fig. 169)<sup>313</sup>; comparable material spans from 'Amq B over Basal Țabbāt al-Ḥammām to Middle Neolithic Byblos. An unburnished sherd has on both sides criss-cross incisions as a base for a white plaster coating, of which traces are still visible (fig. 170)<sup>314</sup>. The simple Dark-Faced Unburnished Ware, on the other hand, may be exemplified by a late-looking rimsherd of a collared jar with a rather tall profiled neck (fig. 171)<sup>315</sup>.

The last potsherd to be mentioned in this connection is a bottom fragment of a jar with ring-base; the fabric is whitish-grey with remains of a slightly lustrous brownish-red paint or very thin slip on the exterior (fig. 172)<sup>316</sup>. The occurrence in the Near East of a light coloured ware decorated in red paint is usually taken as a sign of the Chalcolithic Age, especially when combined with the first production of metal<sup>317</sup>. Nevertheless in this case it would seem we have an isolated find, probably an import and not one of a numerous series indicating either mass importation or local make. Similar light red slipped sherds were found at Rās Šamra IV C, at Tall Ard Tlaili and among the surface gatherings at Tall Ramād, where they have been ascribed to Period III or even regarded as contemporary with 'Amq D<sup>318</sup>.

Closely related to the pottery is a small flat, oblong object with rounded ends, made of greyish clay with numerous dark and light particles and mica; at one end, on one of the broad sides, there are six incised short parallel strokes (fig. 173, pl. III F)<sup>319</sup>. Probably this object is a representation of a hand or foot rather than of an entire human being, and so it may have served some sort of magic purpose.

White Ware bowls continued to be made in the N<sup>3</sup> period, all of them of traditional shapes (e.g. figs. 174–178)<sup>320</sup>. The plaster is white, tempered with gravel, in most

<sup>310</sup> Cf. OIP 61 1960, 52 fig. 27.36 pl. 12.1, 72 fig. 42.8, 76 fig. 49.5, 79 fig. 54.11, BMusBeyr 12 1955 pls. 3 below left and 5 below left, MélBeyr 45 1969, 53–54 pls. 4.5 and 8, 5.6, 8 and 10, 113 fig. 6 B 9, E. Anati, Palestine before the Hebrews, New York 1963, 269–273.

<sup>311</sup> Inv. No. 3961/9. H. 0.035 m. Buff hard-fired clay. Cf. BMusBeyr 9 1949/50 pl. 5.2, 12 1955 pl. 4.1, OIP 61 1960, 72 fig. 42. 3-6.

<sup>312</sup> Inv. No. 3961/15. H. 0.031 m. Brown gritty clay with blackened surface. Cf. Syria 36 1959, 155-156 fig. 2.33.

<sup>313</sup> Inv. No. 3961/7. H. 0.094 m. Buff, rather hard-fired clay with grey core. Cf. BMusBeyr 9 1949/50 pl. 4.1 left, 12 1955 pl. 9.2.

<sup>314</sup> Inv. No. 3961/2. H. 0.044 m. Coarse red gritty ware. See above, p. 53 note 239.

<sup>315</sup> Inv. No. 3961/14. H. 0.058 m. Estimated neck diam. 0.102 m. Brown gritty hard-fired clay with black surface. Cf. the somewhat different pieces OIP 61 1960, 75 fig. 47.11 and 15, 163 fig. 127.3, from 'Amq B and D, Ugaritica IV, 174 fig. 8. 20: 3, from Rās Šamra IV.

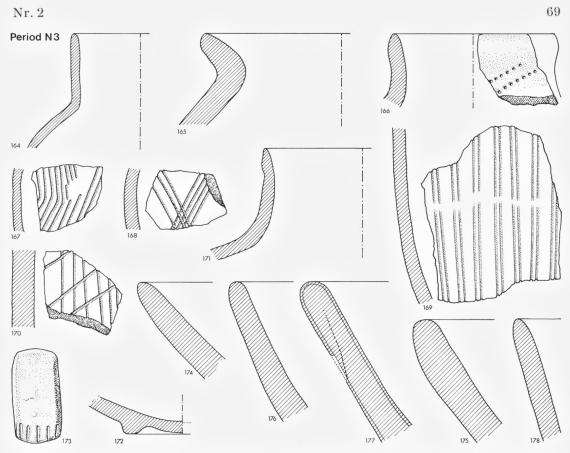
<sup>316</sup> Inv. No. 3961/5 = TS 6024. H. 0.020 m. Estimated diam. of base 0.063 m.

<sup>317</sup> Mellaart, op. cit. 12, still cf. 15 and table facing viii.

<sup>318</sup> Ugaritica IV, 168 and 170, pl. 1.7, 12 and 13, 245–248 pl. 3.21, 499–500 and 502 figs. 22 B and 24 A, MélBeyr 45 1969, 53 pl. 3. 6 and 11, AASyr 14 1964, 123–124 pl. 6 B, Archaeology 24 1971, 285.

<sup>319</sup> Inv. No. 6111 = TS 4041. L. 0.050 m. W. 0.027 m. Cf. H. Müller-Karpe, Handbuch der Vorgeschichte 2, 1968, 448 pl. 139 A 6, from Neolithic Knossos, B. L. Goff, Symbols of Prehistoric Mesopotamia 1963, 72 fig. 287. 23 and 113 fig. 463, from Warka, Uruk Period, and from Fāra, Gamdat Nașr Period.

 $^{320}$  Inv. Nos. 6284/1 = TS 4236, 6281/2 = TS 4235, 6286/2 = TS 4239, 6286/1 = 4238 and 6285/1 = TS 4237. H. 0.051, 0.065, 0.073, 0.091 and 0.064 m.



cases also with straw and sometimes with charcoal. In one instance (fig. 177) it seems that the bowl was originally planned with a different, slightly angular and tapering profile, but then transformed into the current conical shape and supplied with an extra coating<sup>321</sup>. Finally, the artifacts from N<sup>3</sup> comprised an awl made from a cannon-bone of sheep or goat<sup>322</sup>.

The appearance of local objects to be paralleled with material from 'Amq C and of remainders of foreign-influenced or imported vessels, like figs. 166–169 and 172, place it beyond doubt that the Sūkās culture of Period N<sup>3</sup>, although still having a Neolithic character, should be regarded as contemporary with Rās Šamra IV and 'Amq C, as well as with Middle Neolithic Byblos and Tall Ard Tlaili, from which

<sup>&</sup>lt;sup>321</sup> Cf. MélBeyr 45 1969, 109 fig. 2 B 5:7, from Tall Niba'a Fawar.

<sup>&</sup>lt;sup>322</sup> Inv. No. 5217 = TS 3862. L. 0.060 m. Cf. OIP 61 1960, 97–98 fig. 70. 1, from 'Amq B, Ugaritica IV, 284–285 pl. 11.23, from Rās Šamra V A.

latter site there are conventional carbon-14 dates with an average about 4890 and 4710 B.C. An advanced Rās Šamra IV context gave the average figure 4184 B.C.<sup>323</sup>. Calibrated, these dates cover the period c. 5700–5050 B.C.

## XI Period N<sup>2</sup> (Layers 62A-62) The Tenth Building Phase

(Plan, fig. 179)

As stated above, p. 63, the destruction fill of Period N<sup>3</sup>, Layer 63, was dug into by the builders of Period  $N^2$  and used as a floor. A thick wall of large field stones laid in this layer, resting directly on 64 and orientated northwest-southeast, was found in the northern part of the sector. The wall had two courses of stones towards the east, but only one towards the west, with a fill of smaller stones in the intervals between the larger; the width was 0.56-0.66 m, the visible length 1.10 m, and there was a straight end facing the southeast (top levels 5.94-6.06) (fig. 180). South of this wall, roughly at the middle of the excavation, two larger and a number of smaller stones might be interpreted as the remains of a corresponding wall (top levels 5.81-5.91). At the north end of the latter wall, which left open a 0.50 m wide passage between the two walls, there was an oval hole, 0.14 m long and immediately west of it grey ashes (level 5.78), possibly all that indicated the original presence of a wooden door. A thin greyish-white clayey coating, 62 A, covering the soil east of the northern wall, represented the related floor (level 5.85). In the south the earthen surface lay at 5.86 towards the east and at 5.81 towards the west. A rather large portion of this surface, in the southwestern part of the excavation and reaching the southern jamb of the door passage mentioned above, was cobbled (levels 5.78-5.80); this area should also be reckoned as 62 A. On the floor at the middle of the western section there was a small heap of earth mixed with charcoal (top level 5.91).

Layer 62 was a fine, loose brown fill mixed with mould and containing occasional heaps of stones in the size of a fist or a skull, particularly in the northeastern angle of the sector. These stones do not seem to constitute pavements, but are rather sloping layers of wall material fallen from the east towards the west. Clockwise from the northeast, the top levels of Layer 62 were 6.30, 6.17, 6.00 and 6.05; along the eastern part of the south border the surface had been tinted grey from fire.

The fill, Layer 62, contained a considerable amount of chipped flint: remains of eight projectile points (e.g. figs. 181–184), of which two were unfinished<sup>324</sup>, four flakes possibly used as scrapers<sup>325</sup>, a hundred and four blades<sup>326</sup> and seven hundred

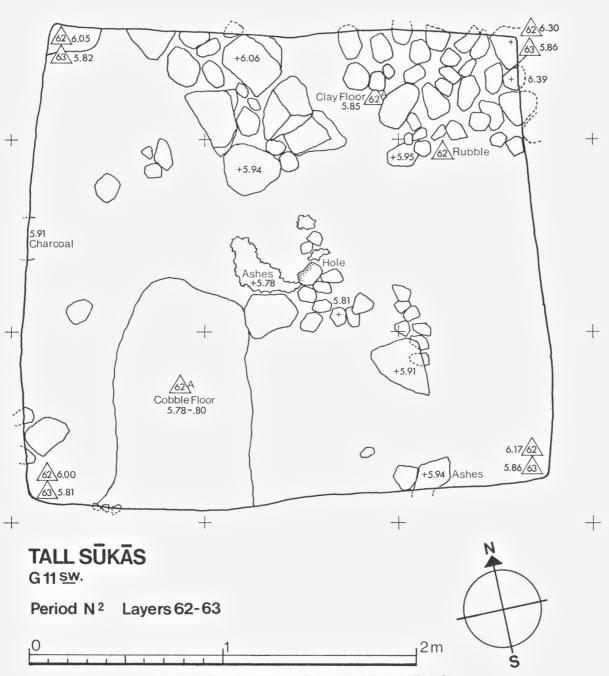
<sup>323</sup> Ehrich, Chronologies, 89, MélBeyr 45 1969, 55 and 102, Mellaart, op. cit. viii and Supplément au Dictionnaire de la Bible s.v. Préhistoire palestinienne, 446.

<sup>324</sup> G 11 CCLI, Inv. No. 6333 = TS 4284 (fig. 184), Inv. Nos. 6348/1, 6353/1 = TS 4291 (fig. 181), 6355/35, 6356/1 = TS 4292 (unfinished, fig. 183), 6357/1 = TS 4293 (fig. 182), 6357/2-3 (the latter one unfinished).
 <sup>325</sup> Inv. Nos. 6353/2-3, 6356/15-16.

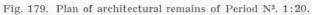
 $^{326}$  Inv. Nos. 6318/2, 6340/1–2, 6345/1–9, 6348/2–15, 6353/4–13, 6355/1–7 and 9–34, 6356/2–14, 6357/4–6 and 8–16, 6485/1–9.

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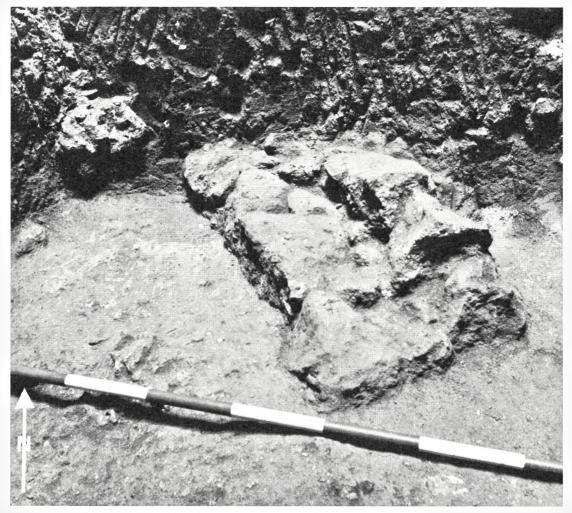


Fig. 180. Stone wall of Period N<sup>2</sup> seen from the south.

and nine chips<sup>327</sup>. To these must be added two obsidian blades, three obsidian chips, one percussion stone and part of a quadrangular rubbing stone with rounded edges<sup>328</sup>. Of pottery the Dark-Faced Burnished Ware was still the most numerous group (e.g. figs. 185–195), including a few incised pieces<sup>329</sup>. One sherd was of the dark red variety<sup>330</sup>, the others of the ordinary kind varying from buff and greyish- or reddish-

 $^{\texttt{327}}$  Inv. Nos. 6318/3–15, 6340/3–17, 6345/10–47, 6348/16–112, 6353/15–90, 6355/36–259, 6356/17–106, 6357/17–88, 6485/10–89, 8467/1–4.

<sup>328</sup> Inv. Nos. 6318/1, 6348/113, 6353/14, 6355/8, 6357/7, 7282 and 8476.

<sup>329</sup> Inv. Nos. 3954/1 (fig. 190), 3 and 6–25, 3957/1 = TS 6013 (fig. 186), 3957/2 (fig. 187) and 7–50, 3958/2-7 (3958/3-5: figs. 189, 191 and 188; 3958/7: fig. 185). – Incised: Inv. Nos. 3956 = TS 6004 (fig. 192 and pl. III G), 3957/4 and 6 (figs. 193–194) and 3958/8 (fig. 195).

<sup>330</sup> Inv. No. 3958/6.

#### Nr. 2

brown to dark leather brown and black, often with a mottled and sometimes very lustrous surface. The incised specimens do not differ from the others with regard to fabric. The Dark-Faced Unburnished Ware (e.g. figs. 196–200) — whether simple or, in rare cases, incised — was generally somewhat coarser and in some cases badly fired or with a black core, the surface colour ranging from light buff, grey or light brown to dark brown, brownish black and black<sup>331</sup>. Nine sherds were of a similar material, but covered with plaster (e.g. figs. 201–202, pl. II B and E)<sup>332</sup>. Two pieces represent a coarse whitish ware, one of them with traces of a red somewhat lustrous paint (fig. 203, pl. II D)<sup>333</sup>. Twenty-eight fragments of pozzolanic White Ware bowls were recovered (e.g. figs. 204–208)<sup>334</sup>. Finally there was a large number of animal bones, the identifiable of which particularly came from pigs and to a lesser degree from sheep, but also some from cattle and a few from dog, goat, fallow deer and an equid — a donkey rather than a horse — as well as three shells<sup>335</sup>.

The tabular survey is accordingly:

Chipped flint	Items	<sup>0</sup> / <sub>0</sub>
Projectile points	8	0.5
Scrapers	4	0.3
Retouched blades	18	1.1
Blades and flakes without retouche	44	2.9
Irregular blades	42	2.8
Chips	709	46.6
Total chipped flint	825	54.2
Other stones		
Percussion stone	1	0.1
Rubbing stone	1	0.1
Obsidian blades	2	0.1
Obsidian chips	3	0.2
Total other stones	7	0.5
Pottery		
Simple Dark-Faced Burnished Ware		
Bowl fragments	8	0.5
Jar fragments	3	0.2
Fragments of indeterminable vessels	63	4.1
Total	74	4.9

<sup>331</sup> Inv. Nos. 3953/1–9, 3954/2 (fig. 198) and 4, 3955/6, 3957/3 = TS 6020 (fig. 197), 3957/5 = TS 6014 (fig. 196), 3958/1 (fig. 199) and 12–28, 3959/4–11. – Incised: Inv. Nos. 3953/10 (fig. 200) and 3958/10–11.
 <sup>332</sup> Inv. Nos. 3954/5, 3955/1–5 = TS 6023 (fig. 202, pl. II B and E), 3958/9, 3959/1 and 6287/1 = TS 4240 (fig. 201).

 $^{333}$  Inv. Nos. 3959/2 = TS 6027 (fig. 203, pl. II D) and 3959/3.

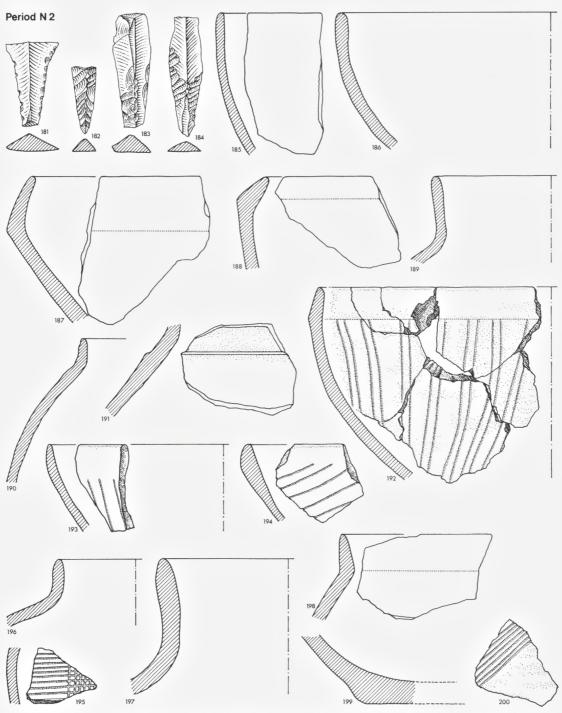
 $^{334}$  Inv. Nos. 6287/2-3 = TS 4241–4242 (figs. 205 and 208), 6287/4-11, 6288/1-3 = TS 4243–4245 (figs. 206, 204 and 207), 6288/4-11 and 6289.

<sup>335</sup> G 11 SW 20/9 1960, no Inv. No.: six fragments of bos taurus domesticus, eight of ovis aries, fourteen of sus scrofa domesticus and eighty indeterminable; G 11 SW 21/9 1960, no Inv. No.: one of bos taurus domesticus, four of a bovid, sixteen of ovis aries, thirty-five of sus scrofa domesticus, one of equus sp., two hundred and thirty-three indeterminable and two fragments of helix sp.; G 11 SW 22/9 1960, no Inv. No.: three of bos taurus domesticus, six of ovis aries, eighteen of sus scrofa domesticus, one of capra hircus, one of cervus sp. (dama?), one of canis familiaris, ninety-one indeterminable and one aphorrhais pes-pelicani.

Hist. Filos. Skr. Dan. Vid. Selsk. 7, no. 2.

11		111.2
Incised Dark-Faced Burnished Ware	Items	0/0
Bowl fragments	4	0.3
Total Simple Dark-Faced Unburnished Ware	4	0.3
Bowl fragment	1	0.1
Jar fragments	4	0.3
Fragments of indeterminable vessels	35	2.3
Total.	40	2.6
Incised Dark-Faced Unburnished Ware		
Jar fragment	1	0.1
Fragment of indeterminable vessels	2	0.1
Total	3	0.2
Plaster-Coated Ware		
Bowl fragments	8	0.5
Fragment of indeterminable vessel	1	0.1
Total	9	0.6
Light-Faced Ware		
Bowl fragments	2	0.1
Total	2	0.1
Total pottery	132	8.7
White Ware, etc.		
Bowl fragments	28	1.8
Traces of bitumen	8	0.5
Total White Ware, etc	36	2.4
Bones		
Canis familiaris	1	0.1
Sus scrofa domesticus	67	4.4
Cervus sp. (dama?)	1	0.1
Capra hircus	1	0.1
Ovis aries	30	2.0
Bos taurus domesticus	10	0.7
Bovid	4	0.3
Equus sp	1	0.1
Indeterminable fragments	404	26.5
Total bones	519	34.1
Shells		
Prosobranchia: Aphorrhais pes-pelicani	1	0.1
Pulmonata: Helix sp	2	0.1
Total shells	3	0.2
Total N <sup>2</sup>	1522	100.1

Most of the artifacts belonging to this period are of traditional types, and in spite of the large number of objects we need only mention a small selection, first four fragments of flint projectile points. One seems to be what H. de Contenson called "une pointe naturelle sur lame prédéterminée" (see above, p. 21, note 63), the tang



 $\begin{array}{l} Figs. 181-200. \ -\ 181:\ TS\ 4291. \ -\ 182:\ TS\ 4293. \ -\ 183:\ TS\ 4292. \ -\ 184:\ TS\ 4284. \ -\ 185:\ 3858/7. \ -\ 186:\ TS\ 6013. \ -\ 187:\ 3957/2. \ -\ 188:\ 3958/5. \ -\ 189:\ 3958/3. \ -\ 190:\ 3954/1. \ -\ 191:\ 3958/4. \ -\ 192:\ TS\ 6004. \ -\ 193:\ 3957/4. \ -\ 194:\ 3957/6. \ -\ 195:\ 3958/8. \ -\ 196:\ TS\ 6014. \ -\ 197:\ TS\ 6020. \ -\ 198:\ 3954/2. \ -\ 199:\ 3958/1. \ -\ 200:\ 3953/10. \ -\ 1:2. \end{array}$ 

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being formed by a slight retouche from both edges of the blade (fig. 181)<sup>336</sup>. Cauvin's "pointes 1 et 2 d'Amouq" are represented by a tip fragment, a medial portion and a lower one (figs. 182-184)<sup>337</sup>.

The shapes of the simple Dark-Faced Burnished Ware vary from deep semiovoid to shallow bowls with incurved convex or carinated sides (figs. 185-188)<sup>338</sup>; there are counterparts from 'Amq B and also C<sup>339</sup>, as well as possibly from Tall Ramād III<sup>340</sup>. Moreover, two neck and one shoulder fragments of jars must be singled out as interesting and comparable with objects of roughly the same periods as the foregoing (figs. 189–191)<sup>341</sup>. The incised examples resemble the three unburnished specimens of our ninth building phase, N<sup>3</sup> (above, p. 68-69, figs. 167-169); of one, which is a close parallel to fig. 169, so much is preserved that we are able to reconstruct most of the vessel: a large, nearly hemispherical bowl with offset inverted rim and combed vertical lines on the exterior (fig. 192, pl. III G)<sup>342</sup>. Two fragments of related, but shallower bowls are decorated with incised oblique lines (figs. 193-194)<sup>343</sup>, while a side sherd of a bowl of indefinite type has cross-hatched incisions (fig. 195)<sup>344</sup>.

Simple Dark-Faced Unburnished Ware is represented by four cases of jars, three neck fragments (figs. 196–198)<sup>345</sup> and part of a bottom with disc-base (fig. 199)<sup>346</sup>. The fabric is coarse and varies both in firing and colour, the latter passing from light or greyish-brown to blackish, dark brown and in places even black; in one case there is a light buff or grey slip on the exterior<sup>346</sup>. Ordinary collared jar types, like those of Basal Tabbāt al-Hammām, 'Amq A and B<sup>347</sup>, occur together with one with offset,

336 Inv. No. 6353/1 = TS 4291. L. 0.040 m. Light greyish patinated flint. Cf. MélBeyr 45 1969, 67 and 73 No. 27 pl. 4, from the Hims region, AASyr 14 1964, 122 pl. 2 A 2 and 4, from Tall Ramad II.

<sup>337</sup> Inv. Nos. 6357/1 = TS 4293, 6356/1 = TS 4292 and 6333 = TS 4284. L. 0.036, 0.060 and 0.062 m. Brown patinated, dark brown lighter patinated, and light greyish patinated flint. Cf. Byblos IV, 47-55 figs. 3.1-3 and 5.1, from Early Neolithic Byblos, MélBeyr 45 1969, 65-66 and 72 Nos. 15-16 and 20, 78-79 figs. 2-3 pls. 3-4, from the Hims region, Ugaritica IV, 290-291 pl. 14.6 and 177 fig. 9.1:6, 288-289 pl. 13. 12, from Rās Šamra V B and IV, Syria 36 1959, 161-162 fig. 5.5, from Basal Tabbāt al-Hammām, AASyr 14 1964, 122 pl. 2 A 6, from Tall Ramad II.

<sup>338</sup> Inv. Nos. 3858/7, 3957/1 = TS 6013, 3957/2 and 3958/5. H. 0.074, 0.070, 0.077 and 0.048 m. Diam. of TS 6013: 0.223 m.

<sup>339</sup> OIP 61 1960, 74 figs. 43.9, 12–14 and 44.2, 75 fig. 45.1, 107 fig. 75.6, 112 fig. 83.1 and 140 fig. 105.8-10 and 15.

<sup>340</sup> AASyr 13 1963, 194–195 fig. 7.3.

<sup>341</sup> Inv. Nos. 3958/3, 3954/1 and 3958/4. H. 0.045, 0.076 and c. 0.040 m. Estimated neck diam. of 3958/3: 0.124 m. Cf. OIP 61 1960, 53 fig. 27.29, 75 fig. 47.18, 82 fig. 56.80 and 112 fig. 83.10; op. cit. 75 fig. 47.6 and 141 fig. 107.4; op.cit. 75 fig. 47.5 and 9.

342 Inv. No. 3956 = TS 6004. H. 0.104 m. Diam. 0.253 m. Gritty, reddish, on surface leather-brown clay with burnish in horizontal strokes. Cf. BMusBeyr 9 1949/50, 56-57 No. 3 pl. 4.1 left, 6.2: 4, 12 1955 pl. 9.2, fron Middle Neolithic Byblos.

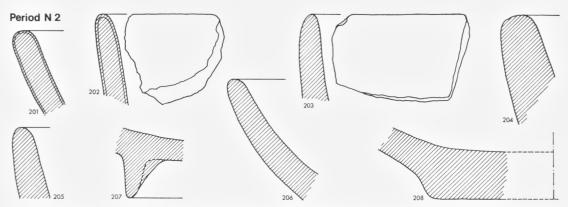
<sup>343</sup> Inv. Nos. 3957/4 and 6. H. 0.046 and 0.040 m. Estimated diam. of 3957/4: 0.184 m. - 3957/4: Dark reddish brown, in places on exterior black clay, lustrous stripe-burnish on both sides. - 3957/6: Buff, on the surface blackish-brown clay with lustrous burnish. - For the shapes, see OIP 61 1960, 71 fig. 40.3, 140 fig. 105.14, 143 fig. 111. 6, and 74 fig. 43.4, 140 fig. 105.9, from 'Amq B and C. For the decoration, see BMusBeyr 9 1949/50, 56-57 No. 3 pls. 4.1 left, 5.2, 6.1, from Middle Neolithic Byblos, and MélBeyr 45 1969, 53 pl. 4. 13, from Tall Ard Tlaili.

<sup>344</sup> Inv. No. 3958/8. H. 0.028 m. Greyish brown, on surface reddish-brown clay with matt burnish on both sides. Cf. BMusBeyr 9 1949/50, 56–57 No. 3 pl. 5.7, from Middle Neolithic Byblos. <sup>345</sup> Inv. Nos. 3957/5 = TS 6014, 3957/3 = TS 6020, and 3954/2. H. 0.035, 0.070 and 0.044 m. Estimated

neck diam. of the former two 0.085 and 0.135 m.

<sup>346</sup> Inv. No. 3958/1. H. 0.035 m. Diam. of base 0.100 m.

<sup>347</sup> Syria 36 1959, 155 fig. 2.19, OIP 61 1960, 51 fig. 24.1, 75 fig. 47.8 and 18.



Figs. 201–208. – 201: TS 4240. – 202: TS 6023. – 203: TS 6027. – 204: TS 4244. – 205: TS 4241. – 206: TS 4243. – 207: TS 4245. – 208: TS 4242. – 1:2.

slightly everted rim, which has parallels in both Basal Tabbāt al-Hammām, and 'Amq B and C<sup>348</sup>; the bottom fragment is akin to a piece from 'Amq B<sup>349</sup>. A side sherd has parallel incised, perhaps combed strokes; it has relatives not only on the coast, but also in the Biqa'a (fig. 200)<sup>350</sup>.

Plaster-coated ware is represented by fragments of at least three conical bowls (e.g. figs. 201–202, pl. II B and E)<sup>351</sup>, in two cases with remains of matt brick-red or dark reddish-brown paint. The clay is grey and gritty with a dark grey or black core, tempered with straw and gravel. Painted plaster-coated sherds were found in Rās Šamra V B<sup>352</sup>, and from such pieces there is only one step to the true Chalcolithic whitish ware with lustrous paint, which already appeared as an import in our preceeding building period (fig. 203, pl. II D)<sup>353</sup>.

The last objects to be enumerated here are a few fragments of White Ware, i.e. of plaster bowls. Three are rimsherds of current shapes, one is a piece of a bottom with a ring-foot, another has a disc-foot (figs. 204–208)<sup>354</sup>. In the case of the large basin fragment, fig. 201, the plaster is tempered with straw, clay, gravel and a little charcoal; the shape of the rim and the size recall a specimen from Labwa<sup>355</sup>. In other cases of mixed material the clay is lacking and occasionally also the charcoal. Two of the pieces (figs. 204 and 207) have remains of matt brick-red paint, the former

<sup>348</sup> Syria 36 1959, 155 fig. 2.33, OIP 61 1960, 75 fig. 47.8 and 107.4.

<sup>349</sup> OIP 61 1960, 71 fig. 40.28.

<sup>350</sup> Inv. No. 3953/10. H. 0.047 m. Cf. Syria 36 1959, 155–156 fig. 2. 33, from Basal Tabbāt al-Hammām, BMusBeyr 9 1949/50, 56–57 No. 4 pls. 4–6, from Middle Neolithic Byblos, MélBeyr 45 1969, 53 pl. 5.3, from Tall Ard Tlaili.

 $^{351}$  Inv. Nos. 3954/5, 6287/1 = TS 4240 and 3955/1 = TS 6023. H. of the largest rim-sherds 0.044 and and 0.051 m. Cf. above, p. 68 note 315.

<sup>352</sup> Ugaritica IV, 506-507 No. 3 fig. 29 A.

<sup>353</sup> Inv. Nos. 3959/2 = TS 6027 and 3959/3. H. 0.047 and 0.050 m. Cf. above p. 68 fig. 168 note 317.

 $^{354}$  Inv. Nos. 6288/2 = TS 4244, 6287/2 = TS 4241, 6288/1 = TS 4243, 6288/3 = TS 4245 and 6287/3 = TS 4242. H. 0.058, 0.038, 0.064, 0.036 and 0.039. Estimated rim diam. of TS 4244: c. 0.600 m. Estimated base diams. of TS 4245 and TS 4242: c. 0.360 and c. 0.130 m.

<sup>355</sup> MélBeyr 45 1969, 47 fig. 1 above.

on rim and both sides<sup>356</sup>, the bottom fragment on the exterior only: a broad horizontal band at the base and above it an oblique stripe<sup>357</sup>. Figs. 205–206 recall finds at Tall Niba'a Fawar<sup>358</sup>.

The dark incised pottery and the light-coloured painted ware, as well as certain shapes, clearly place our tenth building phase, N<sup>2</sup>, in the same general period as the preceeding one.

#### XII

### Period N<sup>1</sup> (Layers 61-59A) The Last Neolithic Occupation

#### (Plan, fig. 209)

The upper destruction fill of Period N<sup>2</sup> was covered by a fill of sporadic stones, in some places, however, with many pebbles and occasional intermediate strata of looser and coarser yellow or grey chalky fill. These deposits, 61 B, were overlaid by others of a finer and light brownish, slightly clayey fill, with remainders of two successive floors, 61 A and 61, between which there was a stony fill, and both sloped down towards the south. The floors were of varying thickness, from 0.03 to 0.10 m, and consisted of a hard yellow calciferous clay or chalk with red patches as the result of fire and changing into red-fired earth towards the north. The surface of the lower floor, 61 A, lay at levels 6.38-6.55, that of the upper, 61, at levels 6.50-6.65. A limestone pestle was found on the upper floor near the northern border (fig. 209 No. 1, level  $(6.57)^{359}$ , and there were ashes on the floor in the southwestern quarter (levels 6.43–6.58) as well as a large sherd near the northwestern corner (fig. 209 No. 2, level 6.49)<sup>360</sup>. The destruction fill, Layer 60, covering 61, was clayey and light yellowish, darker at the middle of the northern section; it contained larger and smaller stones, especially at the northern border and in the southeastern angle. Here again these are probably remains of fallen walls. The top levels vary from 6.70 in the northwest to 6.84 in the southeast.

The objects collected from the deposits numbered 61–61 B were mainly flints, seven blades and eighty-six chips<sup>361</sup>; but they comprised also the point of a bone awl<sup>362</sup>, three plaster-coated potsherds, three of ordinary Dark-Faced Burnished Ware (e.g. fig. 218)<sup>363</sup>, two fragments of plaster bowls (e.g. fig. 219)<sup>364</sup>, twenty-four pieces of animal bones and one shell<sup>365</sup>. More numerous were the finds in the destruction fill,

 <sup>&</sup>lt;sup>356</sup> Cf. for the shape Ugaritica IV, 282–283 pl. 10.26 and 286–287 pl. 12.5, from Rās Šamra VB and A.
 <sup>357</sup> Cf. AASyr 14 1964, 121 pl. 2 C 11, from Tall Ramād II.

<sup>&</sup>lt;sup>358</sup> MélBeyr 45 1969, 109 fig. 2 B 5: 5, and 6.

<sup>&</sup>lt;sup>359</sup> G 11 CCL, Inv. No. 7284.

 $<sup>^{360}</sup>$  Greatest dimension c. 0.160 m. The piece seems to be identical with Inv. No. 3952/2, the upper part of a jar, diam. 0.120 m.

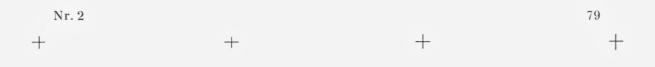
<sup>&</sup>lt;sup>361</sup> Inv. Nos. 6358/1-87 and 6486/1-6.

<sup>&</sup>lt;sup>362</sup> Inv. No. 5215 = TS 3314.

<sup>&</sup>lt;sup>363</sup> Inv. Nos. 6291/2 = TS 4247 (fig. 218) and 6291/3-7.

<sup>&</sup>lt;sup>364</sup> Inv. Nos. 6290 and 6291/1 = TS 4246 (fig. 219).

 $<sup>^{365}</sup>$  G 11 SW 20/9 1960, no Inv. No.: three fragments of bos taurus domesticus, three of sus scrofa domesticus, eighteen indeterminable fragments and one of a helix sp.



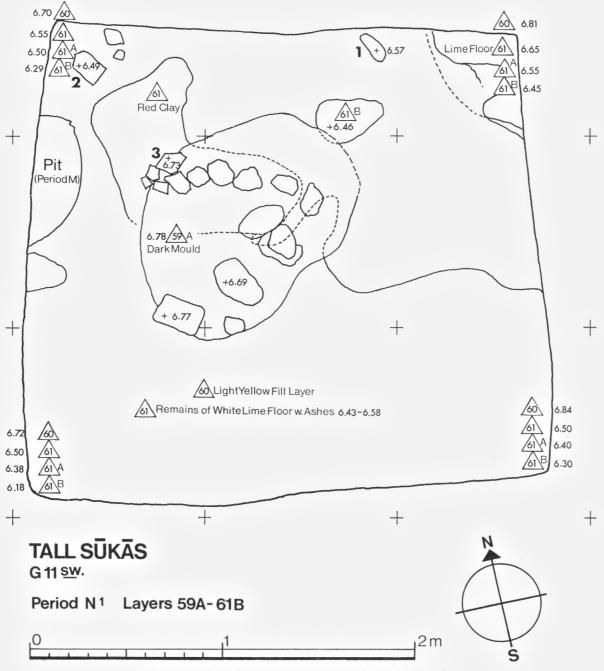


Fig. 209. Plan of architectural remains of Period  $N^{1}.\ 1:20.$ 

Layer 60. Flint, one scraper, thirty-three blades and one hundred and eighty-five chips<sup>366</sup>; obsidian, one blade and one chip<sup>367</sup>; basalt, one fragmentary grinding stone and part of a bowl<sup>368</sup>; pottery, eight sherds of Dark-Faced Burnished Ware (e.g. figs. 211–213)<sup>369</sup>, sixty-eight of Dark-Faced Unburnished Ware (e.g. figs. 215–216, pl. II A)<sup>370</sup>, two plaster-coated sherds<sup>371</sup>; plaster, five fragments of White Ware<sup>372</sup>; lastly eighty-nine pieces of animal bones and eleven shells<sup>373</sup>. The turtle was represented for the first time at Sūkās in this material.

On top of Layer 60, roughly at the middle of the sector, an irregular patch of dark mould, Layer 59 A, had been preserved in spite of the later building activities. It measured c.  $0.9 \times 1.3$  m and seems to be the remainder of the surface ground as it was after the fall of the last Neolithic structure on the spot (top level 6.78). It contained sporadic stones and the fragmentary lower part of a large jar with flat bottom and slightly rounded sides (fig. 209 No. 3, level 6.73)<sup>374</sup>, as well as a series of minor artifacts and zoological items. There were one projectile point, one blade and fourteen chips of flint<sup>375</sup>, one fragment of a basalt grinding stone (fig. 210)<sup>376</sup>, seven sherds of Dark-Faced Burnished Ware<sup>377</sup>, fifteen of Dark-Faced Unburnished Ware (e.g. fig. 214)<sup>378</sup>, one of a Light-Faced Ware with incisions (fig. 217, pl. II C)<sup>379</sup>, two of true pozzolanic White Ware (e.g. fig. 218)<sup>380</sup>, two animal bones and two shells<sup>381</sup>.

The finds of Period N<sup>1</sup> give the following statistical picture:

Chipped flint	Items	<sup>0</sup> / <sub>0</sub>
Projectile point	1	0.2
Scraper		0.2
Retouched blades	8	1.7
Blades and flakes without retouche	32	6.6
Irregular blades	1	0.2
Chips	185	38.1
Total chipped flint	228	47.0

 $^{366}$  Inv. Nos. 6362/15, 6362/1–14 and 16, 6363/1–8, 6370/1 and 3–11, 3949, 6362/16–130, 6363/10–42, 6370/12–48.

<sup>367</sup> Inv. Nos. 6370/2 and 6363/9.

<sup>368</sup> Inv. Nos. 6364/1 and 7280.

<sup>369</sup> Inv. Nos. 3950/1 = TS 6006 (fig. 212), 3950/2-5 (3950/4: fig. 213), 3951/2, 3952/3 (fig. 211).

 $^{370}$  G 11 CCXLIX, Inv. Nos. 3948/1–2, 3950/6–43 (3950/6: fig. 216), 3951/3–16, 3952/2 (fig. 215, pl. II A), and 4–16.

<sup>371</sup> Inv. Nos. 3951/1 and 3952/1.

 $^{372}$  Inv. Nos. 6292/1–2 and 6294/1–3.

 $^{373}$  G 11 SW 18/9 1960, no Inv. No.: two fragments of ovis aries, one of sus scrofa domesticus, fourteen indeterminable, one turris ps. and one helix sp. - G 11 SW 20/9 1960, no Inv. No.: two of bos taurus domesticus, six of ovis aries, five of sus scrofa domesticus, one of a chelonid, fifty-eight indeterminable bones, eight of helix sp. and one indeterminable shell.

<sup>374</sup> G 11 CCXLVIII, Inv. Nos. 3940/1-4.

375 Inv. Nos. 6373/1-16.

376 Inv. No. 7281.

<sup>377</sup> Inv. Nos. 3942/1-6 and 3943/2.

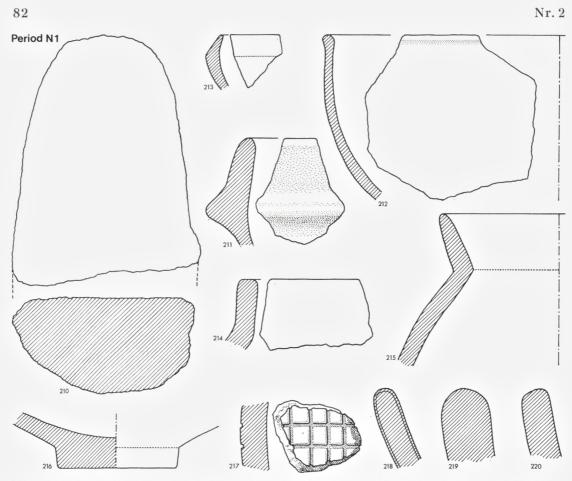
<sup>378</sup> Inv. Nos. 3943/3-11 (3943/3: fig. 214) and 3942/7-12.

<sup>379</sup> Inv. No. 3943/1.

<sup>380</sup> Inv. No. 6293/1 = TS 4248 (fig. 220) and 6293/2.

<sup>381</sup> G 11 SW 19/9 1960, no Inv. No.: one fragment of sus scrofa domesticus, one indeterminable fragment and two of helix sp.

		0.4
Nr. 2		81
Other stones	Items	0/0
Basalt quern fragments	2	0.4
Fragment of basalt bowl	1	0.2
Limestone pestle	1	0.2
Obsidian blade	1	0.2
Obsidian chip	1	0.2
Total other stones	6	1.2
Pottery		
Simple Dark-Faced Burnished Ware		
Bowl fragments	14	2.9
Fragments of indeterminable vessels	3	0.6
Total	17	3.5
Incised Dark-Faced Burnished Ware	11	0.0
Bowl fragment	1	0.2
Total.	1	0.2
Simple Dark-Faced Unburnished Ware	2	0.4
Bowl fragments	2	0.4
Jar fragments		1.4
Fragments of indeterminable vessels	78	16.1
Total Plaster-Coated Ware	87	17:9
Bowl fragment	1	0.2
Fragments of indeterminable vessels	4	0.8
Total	5	1.0
Light-Faced Ware Fragment of indeterminable vessel	1	0.2
Total	1	$0.2 \\ 0.2$
Total pottery	111	22.9
White Ware, etc.		
Bowl fragments	9	1.9
Traces of bitumen	2	0.4
Total White Ware, etc	11	2.3
Bones		
	0	1.0
Sus scrofa domesticus	9	1.9
Ovis aries	8	1.7
Bos taurus domesticus	5	1.0
Chelonid	1	0.2
Indeterminable	92	19.0
Total bones	115	23.7
Shells		
Prosobranchia: Turris sp	1	0.2
Pulmonata: Helix sp	12	2.5
Indeterminable	1	0.2
Total shells	14	2.9
Total N <sup>1</sup>	485	100.0



Figs. 210–220. – 210: 7281. – 211: 3952/3. – 212: TS 6006. – 213: 3950/4. – 214: 3943/3. – 215: 3952/2. – 216: 3950/6. – 217: 3943/1. – 218: TS 4247. – 219: TS 4246. – 220: TS 4248. – 1:2.

Few objects deserve to be expressly mentioned, among the stones only the fragment of a loaf-shaped upper part of a basalt quern (fig. 210)<sup>382</sup>. In addition to rather traditional types (e.g. fig. 211)<sup>383</sup>, the Dark-Faced Burnished pottery presents two kinds of rather advanced bowls, which have their counterparts in Rās Šamra IV and 'Amq C (figs. 212-213)<sup>384</sup>; in these cases the clay is greyish-brown or black and with the burnished surface jet-black. The fabric of the Unburnished Ware is usually coarse and gritty and varies from yellowish-buff or red to greyish-brown or leather brown, sometimes blackish-grey or even black and not seldom with a black core. In spite of their conservative appearance three jars must be singled out: a fragment of a nearly

 $^{382}$  Inv. No. 7281. L. 0.125 m. Cf. AASyr 13 1963, 178, 183 fig. 1, from Sahl aş-Şaḥra, 200–201 fig. 10, from Tall Ramād, surface, AASyr 14 1964, 120 pl. 4 A 1, from Tall Ramād I, AASyr 16.2 1966, 182 figs. 9.2 and 12a, from Buqrās I.

<sup>383</sup> Inv. No. 3952/3. H. 0.055 m. Cf. OIP 61 1960, 50 fig. 22.20, from 'Amq A.

<sup>384</sup> Inv. No. 3950/1 = TS 6006. H. 0.086 m. Estimated diam. 0.243 m. Ugaritica IV, 278–279 pl. 8.28, OIP 61 1960, 140 fig. 105.21. – Inv. No. 3950/4. H. 0.027 m. Cf. OIP 61 1960, 140 fig. 105.9.

cylindrical slightly sloping neck (fig. 214)<sup>385</sup>, an upper part with an everted offset rim and a convex shoulder (fig. 215, pl. II A)<sup>386</sup>, and a bottom-sherd having a disc-base (fig. 216)<sup>387</sup>. The Light-Faced side sherd of whitish calcareous, rather porous ware had cross-hatched incisions on the exterior (fig. 217, pl. II C)<sup>388</sup>. Finally, there are three rim profiles of conical bowls, one of plaster-coated pottery with matt brick-red paint (fig. 218)<sup>389</sup>, the others, also red-painted, of plaster alone tempered with straw and gravel (figs. 219–220)<sup>390</sup>.

The partially preserved layer of mould, 59 A, indicates a break in the stratigraphic sequence; a certain area, perhaps the whole site, must have been left uninhabited for a sufficient length of time to allow the surface of the destruction fill to transform into mould. The lowest deposits of the next culture period, viz. the floor Layer 59 with a great number of stones, and fill Layer 58 among and over the latter, contained inter alia an isolated White Ware fragment, the latest in the Sūkās series, and further specimens of Painted Light-Faced Ware as well as the first piece of copper. Consequently, this new phase of culture was no longer Neolithic, but Chalcolithic (Period M). In addition Layer 58 was the earliest stratum furnishing sufficient charcoal to provide us with a carbon-14 dating, the average figure being conventionally determined at c. 3960 B.C.<sup>390</sup><sup>a</sup>. Calibrated it would place the terminus ante quem for our latest Neolithic building phase N<sup>1</sup> at about 4800 B.C.

#### XIII

#### Summary and Conclusions

Evidently, Layer 84 was the original surface soil of the site, on which the first settlement was made, i.e. Basal Sūkās. The stone industry revealed by the earliest finds comprised a burin related to specimens found at Preceramic Tall Ramād I and ground axes as those in both Early and more advanced Neolithic Byblos. The contemporary Sūkās pottery, on the other hand, had a decidedly later appearance comparable to that of Ceramic Neolithic Rās Šamra V B–A and even Tell Ramād III. Pozzolanic White Ware recalled Rās Šamra V B–A, Early Neolithic Byblos, and corresponding sites in the Biqa'a as well as Tall Ramād II. The zoological material told of animal husbandry, particularly pigs — also represented in Rās Šamra V B — but moreover

<sup>390 a</sup> Radiocarbon 15 1973, 108: K-936.

<sup>&</sup>lt;sup>385</sup> Inv. No. 3943/3. H. 0.036 m. Cf. OIP 61 1960, 75 fig. 47.3 and 6, from 'Amq B.

<sup>&</sup>lt;sup>386</sup> Inv. No. 3952/2, see above p. 78 and note 360. H. 0.079 m. Diam. of neck 0.123 m. Cf. OIP 61
1960, 51 fig. 24.6, 107 fig. 74.3, 108 fig. 77.7, 111 fig. 82.10 and 12, from 'Amq A and First Mixed Range.
<sup>387</sup> Inv. No. 3950/6. H. 0.029 m. Diam. of base 0.063 m. Cf. OIP 61 1960, 48 fig. 21.16, 71 fig. 41.11

and 76 fig. 48.5, from 'Amq A-B.

<sup>&</sup>lt;sup>388</sup> Inv. No. 3943/1. H. 0.043 m.

 $<sup>^{389}</sup>$  Inv. No. 6291/2 = TS 4247. H. 0.041 m. Grey, in core blackish clay tempered with straw and gravel; the white coating also contains gravel.

<sup>&</sup>lt;sup>390</sup> Inv. Nos. 6291/1 = TS 4246 and 6293/1 = TS 4248. H. 0.038 and 0.035 m. In the core of TS 4246 an impression of a tubular object (twig or reed?) placed horizontally to reinforce the rim. For the profile of TS 4248, cf. MélBeyr 45 1969, 109 fig. 2 B 2, from Tall Niba'a Fawar.

some sheep and a goat, and of occasional hunting, viz. roe and fallow deer. Nevertheless, there were neither fish bones nor other signs of fishing and no cardium impressions on pottery, although shells of edible molluscs occurred. The lack of definite architectural remains may be interpreted as bearing witness either to a settlement without real structures or as indicating the possible existence of original permanent dwellings only outside the excavated area.

Such were the *beginnings* of Period N<sup>11</sup>, the duration of which was long enough to offer an instance of Pattern Burnished Ware and one of the bowl with ring foot as in Rās Šamra V A, while the objects found in the destruction fill also included a few bones of cattle — met with already in Rās Šamra V B — and fragments of sickles and querns, probably betraying some kind of agriculture. Layer 83 and the piece of wall stucco from the destruction fill showed that at least in the later part of N<sup>11</sup> huts with plastered floors and adobe walls had been constructed. Chronologically Sūkās N<sup>11</sup> lies on either side of the transition between Rās Šamra V B and A, and according to the recent readjustment of carbon-14 dates the settling on the site should perhaps be fixed about 6500 B.C. (see the chart fig. 218).

From the beginning of N<sup>11</sup> to the end of N<sup>1</sup> there seems to have been a continuous and gradual development spanning over more than 1500 years. There was no principal difference between N<sup>11</sup>, N<sup>10</sup> and N<sup>9</sup>; Dark Faced Unburnished Ware, as in 'Amq B, appeared in N<sup>9</sup>, but even the above-mentioned Pattern-Burnished Ware represented in N<sup>11</sup> is an advanced feature occurring in 'Amq B.

The characteristic projectile points of Cauvin's 'Amq types 1 and 2 and the Byblos type did not appear before N<sup>8</sup>, which, together with the fact that from N<sup>8</sup> onwards the collared jar might have a comparatively tall neck, seems to justify a separate classing of N<sup>11-9</sup> as Early Sūkās Neolithic. A subdivision of the later material is also indicated. Some of the objects found in N<sup>5</sup> could, although not cogently, be compared with those from Middle Neolothic Byblos and 'Amq C, but at least in N<sup>3</sup> and N<sup>2</sup> there were some presumably imported impressed and incised wares particularly known from Middle Neolithic Byblos and the contemporary Biqa'a, and besides represented as foreign goods at Tall Rāmad III<sup>391</sup>. Similarly, isolated examples of imported Light-Faced, usually Painted Ware in N<sup>3-1</sup> afford links with Ras Šamra IV C, Tall Ard Tlaili in the Biqa'a and Tall Ramad III or later, and also the Dark-Faced Burnished Ware of the later Sūkās periods presented parallels to phenomena in Rās Samra IV and 'Amq C. However, indisputable signs of the beginning of a local Copper Age at Sūkās did not occur in layers earlier than 59 and 58, and  $N^1$  was separated from these earliest deposits of Period M by a layer of mould (59 A), no doubt indicating a temporary desertion of this part of the site. This hiatus in our stratigraphy is apparently to be dated about 4900 B.C., to judge from the carbon-14 evidence from Layer 58 and from Rās Šamra IV (see fig. 221)<sup>392</sup>.

<sup>391</sup> MélBeyr 45 1969, 53-54, 58, 89-90, AASyr 16. 2 1966, 169, 173, 176 pl. 2a 1-2.

<sup>392</sup> See above p. 83 note 390a, Ehrich, Chronologies, 89, Radiocarbon 14 1972, 50, and Levant 5 1973, 64.

Sūkās Periods		Datable Horizons in Syria and Lebanon	Conventional Carbon-14 Dates B.C.	Absolute Dates B.C.
		Rās Šamra V B	P-458: c. 5736	c. 6550?
N <sup>11</sup>	Early			c. 6500?
N <sup>10</sup>	Local	Byblos Early Neolithic (Middle)	GrN-1544: c. 5410	c. 6200?
$N^9$	Neolithic	Rās Šamra V A	P-457: c. 5234	c. 6050?
N.79	1			c. 6000?
N <sup>8</sup> N <sup>7</sup>	Middle			
N <sup>6</sup>	Local	Tall Ard Tlaili (Lower)	K-1432–34: c. 4890	c. 5700
N <sup>5</sup>	Neolithic	Tall Ard Tlaili (Upper)	K-1431: c. 4710	c. 5500
$N^4$		Byblos Early Neolithic (Upper)	W-627: c. 4600	c. 5400
N <sup>3</sup>	Late	Byblos Middle Neolithic (Lower)		c. 5300?
N <sup>2</sup>	Local	Byblos Midule Reolitine (Lower)		
N1	Neolithic	Rās Šamra IV	P-389: c. 4184	c. 5050
	HIATUS			c. 4900
М	Local Chalcolithic	Tall Sūkās 58	K-936: c. 3960	c. 4800

Fig. 221. Chronological chart.

The basic elements of the local Neolithic culture remained the same throughout the eleven phases (see the table of percentages, fig. 222). The flint industry utilizing raw material from the Gabla Plain was a debased provincial variety of what is known from Rās Šamra and 'Amq. Obsidian of probably Anatolian origin was from the beginning regularly imported in small quantities and worked on the spot. Spindlewhorls of stone and pottery found in deposits from N<sup>10</sup>, N<sup>8</sup> and N<sup>6</sup> betray some textile industry, and occasionally we could register attempts at producing a plastic art, viz. in N<sup>7</sup> and N<sup>3</sup>. If we disregard the feeble evidence of adobe as a building material in  $N^{11}$ , the first thin clay walls on a foundation of field stones belonged to  $N^{10}$ , similar and somewhat thicker ones appeared in N<sup>8</sup> and N<sup>6</sup>, but heavier stone walls or foundations for walls did not occur till N<sup>6</sup> and N<sup>2</sup>. The Dark-Faced Burnished Ware attained its maximum by N<sup>7</sup> and grew gradually less frequent from N<sup>5</sup>, whereas the Dark-Faced Unburnished Ware had a marked increase from N<sup>3</sup> to N<sup>1</sup>. In N<sup>11</sup> pottery and White Ware were represented in proportions of nearly 2:1, with pottery counting as one quarter of all the finds; but in N<sup>6</sup> the situation had been more or less reversed with White Ware comprising a quarter of the finds and the ratio of White Ware to pottery being roughly 4:3. From N<sup>4</sup> onwards there was a rapid decrease in the production of White Ware. It should finally be noticed that wild game became rarer after N<sup>8</sup>, and that the dog and an equid (the donkey?) appeared in N<sup>2</sup>.

It will be clear from the above not only that  $S\bar{u}k\bar{a}s$  was founded later than  $R\bar{a}s$ Šamra, but also that its local culture developed at a slower pace, although not so belatedly as in Byblos. In its early stages (N<sup>11-9</sup>, c. 6500–6000 B.C.?) and still in

86										Nr.	. 2	
PERIODS		N <sup>11</sup>	N <sup>10</sup>	$N^9$	$N^8$	$N^7$	$N^6$	$N^5$	$N^4$	$N^3$	$N^2$	$\mathbb{N}^1$
Items	5524	897	413	179	329	215	85	79	137	1183	1522	485
		Р	E	R	С	Е	Ν	Т	Α	G	E	S
Chipped flint												
Biface secondarily used as a percussion stone	1	0.1										
Core with percussion marks	1	0.1										
Flaked axe	2							1.3		0.1		
Projectile points	23	0.1			1.5	0.9	2.4			0.3	0.5	0.2
Burin	1	0.1										
Scrapers	13	0.3	0.5	0.6						0.2	0.3	0.2
Sickle-blades	15	0.7	2.2									
Retouched blades	69	1.0	4.4		0.3	1.4		3.8		0.8	0.1	1.7
Blades and flakes without retouche	122	1.5	2.4		0.9		4.7			1.4	2.9	6.6
Irregular blades	236	5.0	2.9	8.9	8.2	7.9	8.2	7.6	8.0	4.4	2.8	0.2
Microblades	2							2.5				
Pieces with rudimentary chipping	2				0.6							
Ginpottition	1853		33.7	25.7	29.5	27.4	24.7	17.7	29.2	32.8	46.6	38.1
Total	2340	26.2	46.0	35.2	41.0	37.7	40.0	32.9	37.2	39.9	54.2	47.0
Other stones												
Raw flint	2						2.4					
Raw basalt	22				1.2	1.4	5.9	12.7				
Percussion stones (see also above: biface and core)	4	0.3									0.1	
Slate blade	1	0.1										
Obsidian blades	13	0.5	0.7		0.3					0.2	0.1	0.2
Obsidian chips	9	0.1		0.6		0.9	1.2				0.2	0.2
Ground axes	2	0.2										
Polishing stone	1	0.1										
Rubbing stone	1										0.1	
Bowls	3	0.1								0.1		0.2
Pestle	1											0.2
Spindle-whorl	1					0.5						
Basalt quern fragments	10	0.5		0.6			1.2	1.3		0.1		0.4
Basalt chips	2	0.1						1.3				
Burnt limestone	1				0.3							
Total	73	2.0	0.7	1.1	1.8	2.8	10.6	15.2		0.3	0.5	1.2
Pottery, etc.	600	94.0	1.0	6 1	15 5	95.4	15.9	21 7	11.7	0.2	1.0	9.5
Simple Dark-Faced Burnished Ware		24.0	4.6	6.1	15.5	35.4	15.3	31.7	11.7	9.3	4.9	3.5
Impressed Dark-Faced Burnished Ware	1	0.1									0.0	0.0
Incised Dark-Faced Burnished Ware	5	0.4									0.3	0.2
Dark-Faced Pattern-Burnished Ware	1	0.1	0.0	0.0			1.0			0.0	9.0	17.0
Simple Dark-Faced Unburnished Ware	132		0.2	0.6			1.2			0.2	2.6	17.9
Impressed Dark-Faced Unburnished Ware	2									0.2	0.0	
Incised Dark-Faced Unburnished Ware	6	0.4								0.3	0.2	
Painted Dark-Faced Unburnished Ware	1	0.1					1.0			0.0	0.0	1.0
Plaster-Coated Ware	17						1.2			0.2	0.6	1.0
Light-Faced Ware	4					0 -				0.1	0.1	0.2
Figurine or amulet	2	24.2		0.5		0.5	1.00			0.1	0.7	00.0
Total	799	24.3	4.8	6.7	15.5	35.8	17.7	31.7	11.7	10.3	8.7	22.9

PERIODS		$N^{11}$	N <sup>10</sup>	N <sup>9</sup>	$N^8$	N <sup>7</sup>	$N^6$	$N^5$	$N^4$	$N^3$	$N^2$	$N^1$
	Items	Р	Е	R	С	E	Ν	Т	А	G	Е	S
White Ware	374	13.4	6.3	7.3	10.0	9.3	24.7	10.1	19.7	5.8	1.8	1.9
Wall Stucco	7	0.8										
Bitumen	72	3.0	3.9	3.4	0.6	0.9	5.9		1.5	0.2	0.5	0.4
Bones												
Dog	1										0.1	
Donkey?	1										0.1	
Pig	187	4.9	1.9	8.9	1.8	0.9		1.3	2.9	2.5	4.4	1.9
Cattle (and bovidae)	62	0.2			0.9				2.9	2.9	1.0	1.0
Sheep	123	2.6	1.0	2.2	3.3	2.8		2.5	2.2	2.7	2.0	1.7
Goat	7	0.1								4.2	0.1	
Game	10	0.3	0.9		0.6						0.1	
Shark	1			0.6								
Turtle	1											0.2
Indeterminable	1412	20.3	33.4	33.5	24.3	6.5		6.3	21.9	34.4	26.5	19.0
Total	1805	28.4	37.3	45.3	31.0	10.2		10.1	29.9	42.9	34.1	23.7
Shells, etc.												
Scaphopoda	14	1.1	0.7							0.1		
Prosobranchia	7	0.1	0.2	0.6						0.2	0.1	0.2
Pulmonata	28	0.5				3.3				0.3	0.1	2.5
Bivalvia	2	0.2										
Coral	1			0.6								
Indeterminable	2						1.2					0.2
Total	54	1.9	1.0	1.1		3.3	1.2			0.5	0.2	2.9
Total	5524	100.0	100.0	100.0	99.9	100.0	100.1	100.0	100.0	99.9	100.1	100.0

87

Nr. 2

nal... 3524 100.0 100.0 100.0 99.9 100.0

Fig. 222. Table of percentages of finds.

the Middle Sūkās Neolithic (N<sup>8-4</sup>, c. 6000–5300 B.C.?) the settlement evidently belonged to the northern province of the so-called "Coastal Culture", as we know it particularly from the 'Amq region and from Rās Šamra; but the material from the late phases (N<sup>3-1</sup>, c. 5300–4900 B.C.) tells of a beginning closer contact with the same culture's middle, i.e. Lebanese area. In this respect, however, Neolithic Sūkās was apparently less strongly influenced than Basal Țabbāt al-Ḥammām, which, of course, cannot cause surprise as the latter place is situated about half the distance from Sūkās to Byblos.

The cultural retardation at certain places on the coast is perfectly understandable if we consider the environmental situation (see fig. 223, a map of the vegetation in Syria and Lebanon about 8000 B.C., adapted from W. J. VAN LIERE and H. DE CONTENSON). Rās Šamra, Sūkās, Țabbāt al-Ḥammām and Byblos all lie in separate coastal zones that once were enclaves with a light vegetation, encircled by hills and dense forests. The conditions were quite different east of the mountain range and south of the Lebanon<sup>393</sup>. Traffic along the coast between these enclaves was no doubt extremely difficult before the clearing of the natural barriers by means of burning and cutting the woods, a process that just began in the Neolithic epoch<sup>394</sup>. One may

<sup>&</sup>lt;sup>393</sup> AASyr 14 1964, 125-128, cf. MélBeyr 45 1969, 46.

<sup>&</sup>lt;sup>394</sup> Cf. Byblos IV, 293–296, 332, MélBeyr 45 1969, 97: particularly intensified in the Middle Neolithic period of Byblos and of related sites in the Lebanon.

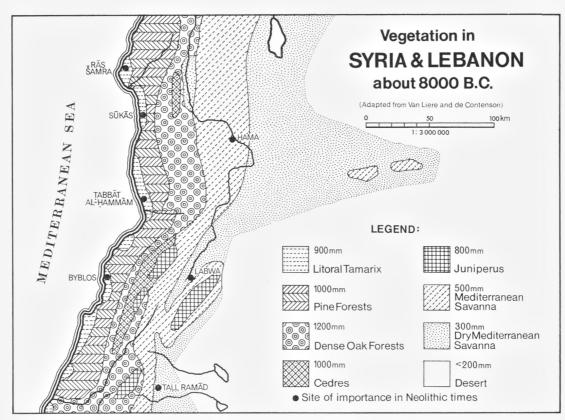


Fig. 223. Map of the vegetation in Syria and Lebanon about 8000 B.C. Adapted from W. J. van Liere and H. de Contenson. 1:3000000.

wonder how the first settlers at Sūkās came there from the north, whether they were able to pass the wooded promontory of Latakia without the help of primitive boats or rafts. Such a cultural situation makes it archaeologically highly precarious to draw too remote parallels. Even settlements such as Hama M on the Middle Orontes, only 70 km away, could hardly be reached directly as in later times<sup>395</sup>, if we consider the altitudes and the character of the vegetation in the mountainous country separating the Ğabla Plain and the Orontes Valley<sup>396</sup>. Therefore, typological comparisons with excavation material from regions other than the closest lying parts of the Levant cannot be of great chronological importance; consequently they have only been undertaken in this book sparingly.

<sup>395</sup> Sūkās I, 156, 161 fig. 56. It seems that there were seven Neolithic periods at Hama, the lower four  $M^{7-4}$  corresponding to 'Amq A and the upper three M<sup>3-1</sup> to 'Amq B. The virgin soil was hit at level 279.06, the transition from M<sup>4</sup> to M<sup>3</sup> lay at c. 281.96 and the horizon separating M<sup>1</sup> and L<sup>6</sup> at c. 204.56, cf. H. Ingholt, Rapport préliminaire sur sept campagnes de fouilles à Hama en Syrie (Ark. Kunsth. Medd. Dan. Vid. Selsk. 3,1) 1940 pl. 2, E. Fugmann, Hama II 1, 1958 pl. 9.

<sup>396</sup> Perhaps it is feasible to regard the isolated instances of early finds near the present mountain passes, MélBeyr 45 1969, 92, as the results of occasional penetration into the forests, rather than as a real and regular use of the passes; the author of the article cited nevertheless rightly wrote that "such a conclusion will be premature until more exploration is done, for new discoveries could change this picture", ibid. 93. PLATES



Tall Sūkās, Dark-Faced Burnished Ware. – A: TS 4139. – B: TS 4138. – C: TS 4140. – D: TS 4141. – All from Period N<sup>11</sup>. – Ca. 1:2.



Tall Sūkās. – A: Dark-Faced Unburnished Ware, 3952/2. Period N<sup>1</sup>. – B: Plaster-Coated Ware, TS 6023. Period N<sup>2</sup>. – C: Light-Faced Ware, 3943/1. Period N<sup>1</sup>. – D: Light-Faced Ware, TS 6027. Period N<sup>2</sup>. – E: Plaster-Coated Ware, TS 6023. Period N<sup>2</sup>. – Ca. 1:2.





Tall Sūkās. – A: Dark-Faced Burnished Ware, TS 4150. Period N<sup>11</sup>. – B: Dark-Faced Burnished Ware, TS 4117. Period N<sup>11</sup>. – C: Dark-Faced Burnished Ware, TS 6003. Period N<sup>8</sup>. – D: Fragment of clay figurine, TS 4304. Period N<sup>7</sup>. – E: Dark-Faced Unburnished Ware, TS 6022. Period N<sup>3</sup>. – F: Clay amulet, TS 4041. Period N<sup>3</sup>. – G: Dark-Faced Unburnished Ware, TS 6004. Period N<sup>2</sup>. – Ca. 2:3.

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