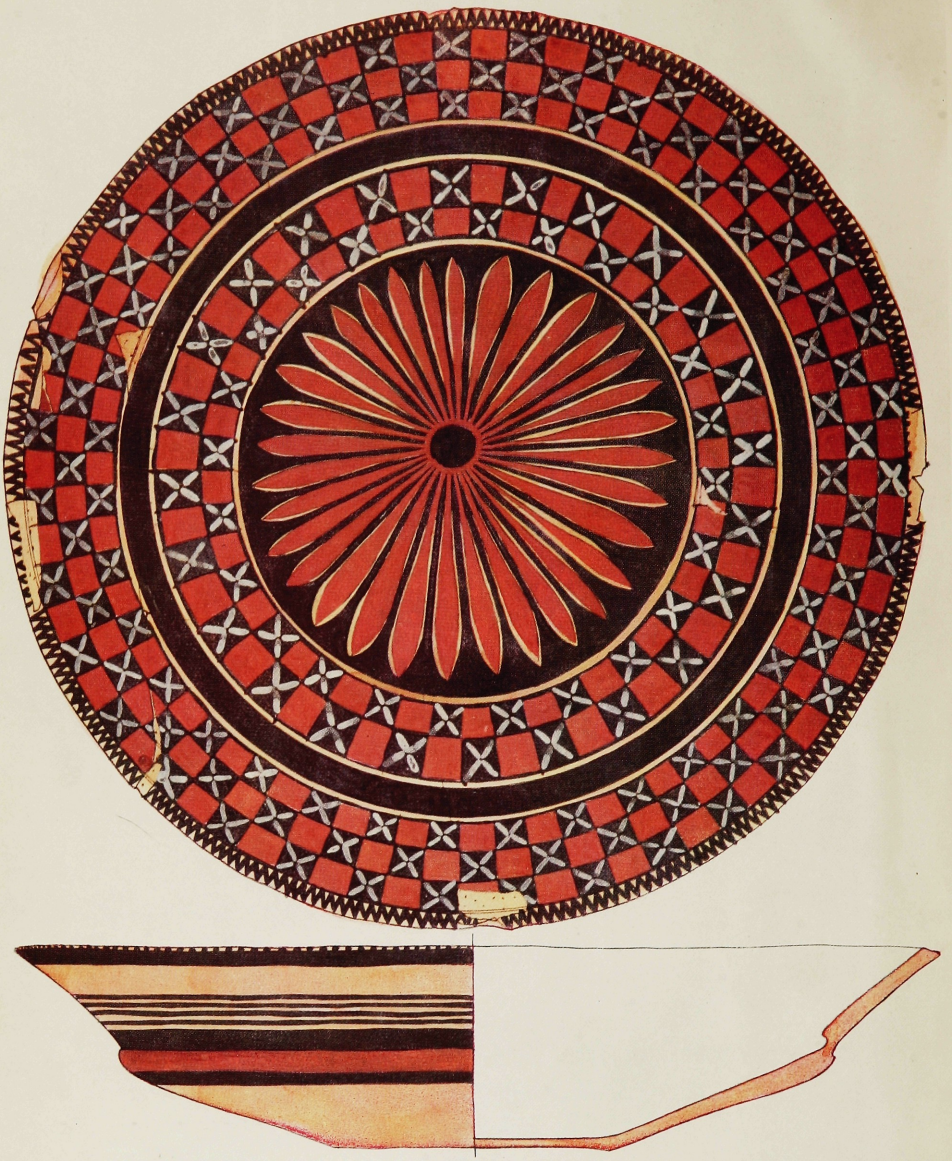
PREHISTORIC ASSYRIA

THE EXCAVATIONS AT TALL ARPACHIYAH 1933

BY
M. E. L. MALLOWAN
AND
J. CRUIKSHANK ROSE



A 748 (B)

Scale $\frac{1}{2}$

POLYCHROME PLATE OF THE TALL ḤALAF PERIOD

TT 6

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N.B. The following points should be observed with reference to the catalogue of objects.

(B.) after any object indicates that it is in the Iraq Museum, Baghdad; any object not so marked was allotted to the Expedition.

The last figure indicates the depth below the surface at which an object was found, e.g. at −1·5 m. stands for 1·5 m. below the surface, and this means that the object in question was found in the flats surrounding the Mound or Tepe.

Wherever possible the period to which an object belongs is indicated by TT followed by a number, e.g. TT 6, and this indicates the particular stratum in the Tepe, in which the object was found. Cf. the table of levels in Chapter 2.

The particular square in which an object was found is sometimes given, e.g. Fb V. 1: the square can be identified by reference to Fig. 3.

G followed by a number indicates the grave in which an object was found, e.g. G 10 stands for grave 10, and a detailed reference to the grave will be found in Chapter 3 under the catalogue of graves.

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Plate V. Terra-cotta Figurines, Stone Vases, Painted Pottery.
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(*a*) *Top row.* All steatite except 23, grey limestone.
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3rd row. All steatite.
(*b*) *Top row.* All steatite.
2nd row. All steatite except 867, milky white stone.
3rd and 4th rows. All steatite.
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2nd row. All steatite except 570, white limestone; 574, cream limestone; 572, grey limestone; 20, glazed frit.
3rd row. All steatite except 22, white limestone; 577, greenish stone; 565, calcite (?).
4th row. All steatite except 579, amethystine quartz; 35, greenish grey limestone; 581, greenish grey limestone.
(*b*) *Top row.* All steatite except 883, limestone (?); 25, obsidian.
2nd row. All steatite except H 150, terra-cotta; H 200, shale; F 140, bone.
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3rd row. All steatite except 552, mottled iron-stained limestone; 13, grey limestone.
4th row. All steatite except 3, mottled limestone; 554, greenish grey limestone; 557, quartzite.
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3. A 261. Drab clay, red paint turned black. Ht. 0·115 m. G 43. (B.)
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2. A 197. Light buff clay, black paint. Ht. 0·06 m. G 23. (B.)
3. —— Cream clay, greenish black paint. Smooth surface. Potter's mark on inside. Ht. 0·09 m. Sub-surface.

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5. A 143. Drab clay, red paint. Ht. 0·085 m. TT.
6. A 267. Buff clay, greenish black paint. Ht. 0·06 m. At −2·4 m.
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3. A 190. Buff clay, black paint. Ht. 0·097 m. Type 2. At −1·5 m. (B.)
4. A 173. Whitish buff clay, greenish black paint. Ht. 0·077 m. Type 1. G 11. (B.)
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3. A 137. Light greenish buff clay, black paint. Ht. 0·10 m. Sub-surface.
4. A 139. Light buff clay, greenish black paint. Ht. 0·085 m. G 44. (B.)
5. A 176. Greenish buff slip, black paint. Ht. 0·146 m. G 11.
6. A 188. Drab clay, black paint. Ht. 0·10 m. At −1·5 m. (B.)
7. A 294. Drab clay, dark greenish black paint. Ht. 0·12 m. Sub-surface.
8. A 195. Drab clay, black paint. Ht. 0·12 m. Sub-surface. (B.)

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3. A 184. Buff clay, green paint. Ht. 0·11 m. G 44.
4. A 298. Buff clay, smooth surface, Vandyke brown paint with a purple tinge. Ht. 0·108 m. Sub-surface. (B.)

FIG. 33. PAINTED POTTERY OF THE AL 'UBAID PERIOD 54
1. A 118. Buff clay, greenish black paint. Ht. 0·08 m. Type 5. At top metre. (B.)
2. A 113. Buff clay, red paint. Ht. 0·097 m. Type 5. At top metre. (B.)
3. A 110. Light buff clay, black paint. Ht. 0·085 m. Type 5. At top metre. (B.)
4. A 109. Buff clay, black paint. Ht. 0·092 m. Type 5. At top metre.
5. A 273. Pinkish buff clay, black paint. Ht. 0·092 m. Type 6. At top metre.
6. A 162. Buff clay, black paint. Ht. 0·105 m. Type 5. At −1·8 m.
7. A 266. Pinkish buff clay, greenish black paint. Ht. 0·10 m. Type 5. At −1·7 m. (B.)
8. A 191. Buff clay, black paint. Ht. 0·087 m. Type 8 (*b*). At −1·5 m. (B.)
9. A 280. Buff clay, greenish black paint. Ht. 0·095 m. Type 6. Sub-surface. (B.)
10. A 513. Light green clay, greenish black paint, coarse finish. Ht. 0·131 m. Type 11. Sub-surface. (B.)

FIG. 34. PAINTED POTTERY OF THE AL 'UBAID PERIOD 55
1. A 270. Buff clay, cream slip, brownish paint. Ht. 0·072 m. Type 7. G 45. (B.)
2. A 127. Light drab clay, black paint. Ht. 0·093 m. Type 5. Sub-surface. (B.)
3. A 135. Light buff clay, greenish black paint. Ht. 0·08 m. Type 6. Sub-surface.
4. A 171. Light buff clay, greenish black paint unevenly fixed. Ht. 0·107 m. Type 5. G 9. (B.)
5. A 291. Cream clay, reddish brown paint. Ht. 0·123 m. Type 7. Sub-surface. (B.)
6. A 136. Light buff clay, greenish black paint. Ht. 0·132 m. Type 7. Sub-surface. (B.)

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7. —— Pinkish clay, gritty black paint, smooth surface. Ht. 0·10 m. Type 1. At −2·1 m.

FIG. 35. PAINTED POTTERY OF THE AL 'UBAID PERIOD 56
1. A 194. Drab clay, brownish paint. Ht. 0·129 m. Type 8 (*a*). At −3·2 m.
2. —— Buff clay, black paint. Ht. 0·088 m. Type 8 (*a*). G 33.
3. A 164. Drab clay, black paint turned green. Ht. 0·085 m. Type 8 (*b*). G 2.
4. A 200. Light buff clay, greenish black paint. Ht. 0·125 m. Type 8 (*b*). At −2·8 m.
5. A 281. Creamy clay, carbonized plum-red paint. Ht. 0·01 m. Type 5. TT 5.
6. A 181. Buff clay, greenish black paint. Ht. 0·12 m. Type 8 (*b*). G 34. (B.)
7. A 192. Whitish buff clay, black paint. Ht. 0·122 m. Type 8 (*a*). At −2·2 m.
8. A 167. Light buff clay, greenish black paint. At. 0·106 m. Type 8 (*a*). G 8.
9. A 199. Drab clay, greenish black paint. Ht. 0·125 m. Type 8 (*a*). G 36 (B.)
10. A 180. Buff clay, greenish black paint. Ht. 0·132 m. Type 8 (*a*). G 21.

FIG. 36. PAINTED POTTERY OF THE AL 'UBAID PERIOD 57
1. A 290. Creamy clay, carbonized black paint. Ht. 0·073 m. Type 2. Sub-surface. (B.)
2. A 179. Cream slip, black paint. Ht. 0·09 m. Type 2. G 18. (B.)
3. A 276. Cream slip, dull greenish brown paint. Ht. 0·127 m. Type 9. At −1·5 m. (B.)
4. A 773. Light drab clay, purplish brown paint. Ht. 0·155 m. Type 8 (*b*). Sub-surface. (B.)
5. A 189. Drab clay, greenish black paint. Ht. 0·155 m. Type 8 (*b*). Sub-surface.
6. A 269. Pinkish buff clay, red paint. Ht. 0·083 m. Type 9. Sub-surface. (B.)
7. A 275. Greenish buff clay, greenish brown paint, smooth surface. Ht. 0·10 m. Type 9. Sub-surface.
8. A 178. Pink slip, black paint, turned to a Vandyke brown. Ht. 0·082 m. Type 9. G 18.

FIG. 37. PAINTED POTTERY OF THE AL 'UBAID PERIOD. (Type 10.). . . . 58
1. A 299. Reddish clay, cream slip, black paint. Ht. 0·132 m. G 27.
2. A 277. Cream clay, greenish black paint. Ht. 0·138 m. G 45. (B.)
3. A 265. Whitish buff clay, greenish black paint. Ht. 0·12 m. G 49.
4. A 774. Cream clay, plum-red paint on body, black paint on neck (red paint ill fixed). Ht. 0·126 m. G 21.
5. A 510. Buff clay, brownish purple paint (ill fixed). Ht. 0·177. Sub-surface. (B.)

FIG. 38. PAINTED POTTERY OF THE AL 'UBAID PERIOD 59
1. A 145. Buff clay, greenish black paint. Rim of *Nin. 3* type. Ht. 0·227 m. Type 12 at top metre. (B.)
2. A 264. Light buff clay, carbonized black paint, smooth surface. Ht. 0·087. Type 13. G 49. (B.)

FIG. 39. UNPAINTED POTTERY OF THE AL 'UBAID PERIOD. (Drab clay.) . . . 60
1. A 781. Ht. 0·052 m. Sub-surface.
2. A 803. Ht. 0·069 m. G 45.
3. A 792. Ht. 0·095 m. G 45.
4. A 162 (*b*). Ht. 0·127 m. G 1. (B.)
5. A 779. Ht. 0·07 m. TT 4.
6. A 800. Ht. 0·073 mm. TT 4. (B.)
7. A 778. Ht. 0·057 m. Sub-surface.
8. A 798. Ht. 0·077 m. At −1·2 m. (B.)
9. A 795. Ht. 0·105 m. G 33.
10. A 780. Ht. 0·09 m. G 36.
11. A 174. Ht. 0·176 m. G 11.

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FIG. 40. UNPAINTED POTTERY OF THE AL 'UBAID PERIOD. (Drab clay, unless otherwise stated.) 61

1. A 791. Ht. 0·114 m. Sub-surface.
2. A 787. Ht. 0·115 m. G 23. (B.)
3. A 786. Reddish clay. Ht. 0·112 m. TT 4.
4. A 783. Ht. 0·187 m. G 24.
5. —— Grey burnished ware of *Nin. 3* type. Ht. 0·202 m. TT 3.
6. A 777. Ht. 0·197 m. G 43.
7. A 796. Ht. 0·178 m. Sub-surface.

FIG. 41. UNPAINTED POTTERY. (Drab clay unless otherwise stated.) . . . 73

1. A 457. Reddish yellow clay. Ht. 0·028 m. T. Ḫalaf level.
2. A 456. Light red clay. Ht. 0·026 m. T. Ḫalaf level.
3. A 460. Red clay. Ht. 0·034 m. Sub-surface. (B.)
4. A 488. Ht. 0·028 m. TT 5.
5. A 461. Carbonized clay. Ht. 0·036 m.
6. A 486. Yellowish clay. Ht. 0·061 m. At −1–2 m.
7. A 494. Ht. 0·044 m. At −1·2 m. (B.)
8. A 175. Ht. 0·055 m. G 11.
9. —— Reddish buff clay. Ht. 0·041 m. T. Ḫalaf level.
10. A 487. Ht. 0·048 m. TT 6. (B.)
11. A 470. Black carbonized clay. Ht. 0·035 m. T. Ḫalaf level.
12. A 799. Ht. 0·09 m. Al 'Ubaid period. At −1·5 m.
13. A 797. Ht. 0·076 m. Al 'Ubaid period. At −0·6 m.
14. A 788. Ht. 0·068 m. Al 'Ubaid period. At −1·6 m.
15. A 484. Ht. 0·051 m. G 23. (B.)
16. A 477. Ht. 0·046 m. T. Ḫalaf level. (B.)
17. A 789. Ht. 0·126 m. Al 'Ubaid period. Sub-surface. (B.)
18. A 776. Pinkish buff clay. Ht. 0·177 m. At top metre. Sq. Fe V. 2. (B.)
19. A 784. Ht. 0·098 m. G 32.
20. A 793. Ht. 0·019 m. G 12.

FIG. 42. MINIATURE POTTERY, PAINTED 74

1. A 506. Reddish cream clay, black paint. Ht. 0·026 m. Al 'Ubaid level. (B.)
2. A 501. Buff clay, dark brown paint. Ht. 0·019 m. Al 'Ubaid level. (B.)
3. A 504. Drab clay, black paint. Ht. 0·031 m. T. Ḫalaf level. At −2·0 m.
4. A 453. Greenish clay, black paint. Ht. 0·057 m. Al 'Ubaid level. At top metre.
5. A 505. Buff clay, brown paint. Ht. 0·061 m. T. Ḫalaf level. At top metre. (B.)
6. A 507. Drab clay, black paint. Ht. 0·021 m. T. Ḫalaf level. At −1·2 m. (B.)
7. A 509. Cream clay, dark green paint. Ht. 0·013 m. Al 'Ubaid level.
8. A 510 (*a*). Drab clay, black paint. Ht. 0·045 m. T. Ḫalaf level. At −2·3 m. (B.)
9. A 508. Reddish clay, reddish brown paint. Ht. 0·022 m. T. Ḫalaf level. At −3·0 m.
10. A 503. Light green clay, black paint. Ht. 0·082 m. T. Ḫalaf level. At −2·2 m.
11. A 491. Brownish clay, red paint. Ht. 0·047 m. TT 6.
12. A 505. Light red clay, red paint. Ht. 0·052 m. TT 6. (B.)
13. A 502. Cream slip, brownish black paint. Ht. 0·048 m. T. Ḫalaf level. (B.)
14. A 468. Light green clay, black paint. Ht. 0·054 m. T. Ḫalaf level. (B.)

FIG. 43. MINIATURE POTTERY, UNPAINTED. (Drab clay, unless otherwise stated.) . 77

1. A 483. Ht. 0·027 m. T. Ḫalaf level. Sub-surface. (B.)
2. A 480. Cream clay. Ht. 0·017 m. T. Ḫalaf level. At −1·5 m.
3. A 478. Red clay. Ht. 0·03 m. T. Ḫalaf level. At −2·8 m.
4. A 466. Light red clay. Ht. 0·027 m. T. Ḫalaf level. At −2·0 m.

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5. A 463. Well levigated cream clay blackened by fire. Ht. 0·017 m. T. Ḫalaf level. (B.)
6. A 482. Ht. 0·022 m. T. Ḫalaf level. At −2·0 m. (B.)
7. A 467. Carbonized clay. Ht. 0·022 m. TT 4.
8. A 452. Light green clay. Ht. 0·044 m. T. Ḫalaf level. (B.)
9. A 472. Ht. 0·051 m. T. Ḫalaf level. At. −1·0 m. (B.)
10. A 493. Carbonized clay. Ht. 0·045 m. TT 6. (B.)
11. A 471. Reddish clay, cream slip. Ht. 0·043 m. T. Ḫalaf level. At −1·0 m.
12. A 492. Smooth buff clay. Ht. 0·065 m. TT 6.
13. A 485. Ht. 0·054 m. T. Ḫalaf level. At −3·5 m. (B.)
14. A 494. Black carbonized clay, incised decoration. Ht. 0·035 m. G 58. (B.)
15. A 454. Ht. 0·037 m. T. Ḫalaf level. At −1·9 m. (B.)
16. A 479. Carbonized clay. Ht. 0·027 m. T. Ḫalaf level. At −2·8 m. (B.)
17. A 489. Drab burnished clay. Ht. 0·032 m. T. Ḫalaf level. At −1·8 m.
18. A 465. Red clay. Ht. 0·021 m. T. Ḫalaf level. (B.)
19. A 464. Cream clay, smooth surface. Ht. 0·018 m. T. Ḫalaf level. At −1·5 m. (B.)
20. A 459. Ht. 0·047 m. T. Ḫalaf level. At −1·5 m. (B.)
21. A 493. Red clay. Ht. 0·046 m. G 58. (B.)
22. A 462. Ht. 0·032 m. T. Ḫalaf level. At −2·2 m.
23. A 455. Ht. 0·026 m. T. Ḫalaf level. At −2·0 m. (B.)
24. A 458. Greenish cream clay, smooth surface. Ht. 0·037 m. T. Ḫalaf level. At −1·5 m.
25. A 490. Fine yellow clay. Ht. 0·038 m. T. Ḫalaf level. At −4·0 m. (B.)
26. A 481. Black carbonized clay. Ht. 0·022 m. T. Ḫalaf level. At −1·0 m.
27. A 495. Ht. 0·013 m. G 58.

FIG. 44. STONE VASES. 78
1. A 414. Veined calcite. Ht. 0·024 m. TT 6.
2. A 413. Yellowish calcite. Ht. 0·024 m. TT 6.
3. A 415. Dark grey limestone. Ht. 0·026 m. TT 6. (B.)
4. A 402. Black serpentine, rectangular trough bowl. Ht. 0·021 m. T. Ḫalaf level. Sub-surface.
5. A 404. Blackish brown limestone (?). Ht. 0·02 m. T. Ḫalaf level. At −1·0 m. (B.)
6. A 420. Black steatite. Ht. 0·017 m. TT 6.
7. —— Yellowish calcite. Ht. 0·044 m. T. Ḫalaf level? (B.)
8. A 419. Grey limestone. Ht. 0·039 m. TT 5–6.
9. A 418. White limestone. Ht. 0·031 m. TT.
10. A 416. Creamy mottled limestone. Ht. 0·031 m. Sub-surface. (B.)
11. A 417. Pinkish yellow limestone. Ht. 0·031 m. T. Ḫalaf level. At −3·5 m. (B.)
12. A 410. Pink limestone. Ht. 0·063 m. T. Ḫalaf level.
13. A 412. Black and white diorite. Ht. 0·057 m. TT 6.
14. A 403. Mottled pink limestone, rectangular trough bowl. Ht. 0·045 m. T. Ḫalaf level. Sub-surface.
15. A 411. Obsidian, outside surface left rough. Ht. 0·16 m. TT 6. (B.) (Cf. also photograph on Plate V (*c*).)
16. A 409. Pink and white mottled limestone. Ht. 0·118 m. T. Ḫalaf level. Top metre. (B.)
17. A 401. Grey veined limestone. Ht. 0·038 m. T. Ḫalaf level. Top metre.
18. A 408. Brecciated grey limestone. Ht. 0·041 m. G 27. (B.)

FIG. 45. TERRA-COTTA AND SUN-DRIED CLAY FIGURINES. 'MOTHER GODDESS' TYPE. (All examples are of terra-cotta unless otherwise stated.) . . . 83

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1. A 85. Red paint. Sub-surface. (B.)
2. A 79. Red paint. Sub-surface. TT. (B.)
3. A 78. Red paint. Sub-surface. TT.
4. A 83. Greenish black paint. Sub-surface.
5. A 84. Black paint. Sub-surface.
6. A 75 and A 80 (found in 2 pieces). Sun-dried clay. T. Ḫalaf level. Top metre.
7. A 100. Sun-dried clay. T. Ḫalaf level.
8. A 81. In filling of Tholos in sq. Fc V. 1.
9. A 944. Hollow, with oval opening in back. T. Ḫalaf level.
10. A 917. Light drab clay, red paint, hollow, Maltese cross on shoulder. Top smoothed down like rim of cup. TT 6.
11. A 936. Traces of red paint on back. T. Ḫalaf level. At 1·5 m.
12. A 76. Hollow top smoothed down like rim of cup. Sub-surface.
13. —— Sun-dried clay. T. Ḫalaf level.
14. A 928. Sun-dried clay. Loose in soil. TT.
15. —— Sun-dried clay. T. Ḫalaf level. (B.)
16. A 940. Black sun-dried clay. TT 5.

FIG. 46. PAINTED AND UNPAINTED TERRA-COTTA FIGURINES. DOVES AND 'MOTHER GODDESS' TYPE 84
1. A 87. Dove. Black paint turned to reddish brown. Al 'Ubaid level. At −1·2 m.
2. A 95. Bird's head with long beak associated with Al 'Ubaid pottery. TT. At −1·2 m.
3. A 941. Dove. Black paint. Pedestal base. TT 6.
4. A 932. Mother goddess, red paint. Loose in soil. TT.
5. A 82. Mother goddess. Long peg-shaped head, early T. Ḫalaf level. At −1·5 m.
6. A 96. Mother goddess, red paint, figure cut down in antiquity. T. Ḫalaf level. At −1·6 m.
7. A 939. Mother goddess. TT 2.
8. A 933. Mother goddess, red paint. TT 4.
9. A 932. Mother goddess, red paint, loose in soil. TT.

FIG. 47. SUN-DRIED CLAY FIGURINES. 'MOTHER GODDESS' TYPE 85
1. A 935. Pregnant (?) type. T. Ḫalaf level. At −2 m.
2. A 97. Pregnant (?) squatting type. T. Ḫalaf level.
3. A 77. Pregnant (?) squatting type. T. Ḫalaf level in rubbish from Tholos in Fc V. 1.
4. A 945. Pregnant (?) type. T. Ḫalaf level.
5–7. A 92. Conventionalized squatting type. Sub-surface. (1 to B.)
8, 9. A 934. Conventionalized squatting type. At −1 m. TT. (1 to B.)
10, 11. A 92. Conventionalized squatting type. Sub-surface. (1 to B.)
12. —— Conventionalized squatting type. T. Ḫalaf level.
13–15. A 59. *Appliqué* bands affixed to the figure. Sub-surface. (2 to B.)
16. A 91. T. Ḫalaf level. In rubbish from Tholos in Fc V. 1.
17. —— T. Ḫalaf level.
18. A 94. TT. At −1 m.
19. —— T. Ḫalaf level.
20. A 945. Loose in soil.
21. A 927. Loose in soil.
22. A 938. T. Ḫalaf level. TT.
23. A 90. T. Ḫalaf level. At −1·4 m.
24. A 942. Loose in soil.

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FIG. 48. FIGURINES OF ANIMALS, IN TERRA-COTTA AND SUN-DRIED CLAY. (The material is sun-dried clay unless otherwise stated.) 86

1–5. A 69. Bukrania. Mostly from T. Ḫalaf levels. (2 to B.)
6. A 73. Pig, loose in soil. TT.
7. A 73. Pig (?). T. Ḫalaf level. At −1·2 m.
8–9. A 71. Sheep. Al 'Ubaid levels. (B.)
10. A 67. Sheep recumbent, on a potsherd; perhaps originally part of a pot decorated with clay figurines in full relief. Al 'Ubaid level. Top metre.
11. A 66. Terra-cotta sheep's head. Sub-surface.
12. A 72. Boar. Loose in soil. TT.
13. A 74. Humped ox. Al 'Ubaid period (?). Loose in soil.
14. A 65. Terra-cotta sheep. Base perforated, perhaps indicating that it was attached to wheels or to a stand. Al 'Ubaid level. At −1 m.

FIG. 49. SMALL OBJECTS OF SUN-DRIED CLAY AND TERRA-COTTA. (Nos. 1–7 sun-dried clay. Nos. 8–12 terra-cotta. 13 ff. material specified under each number.) 89

1. —— Cult object (?). T. Ḫalaf level.
2. —— Hand-shaped object. Possibly model of winnowing fan (?). T. Ḫalaf level. (B.)
3. A 930. Cult object (?). Two-armed figure. Al 'Ubaid level. TT.
4. A 947. Cult object (?). Two-armed figure. Loose in soil. (B.)
5. A 61. Object decorated with nicks. Loose in soil. (B.)
6. A 62. Cushion-shaped object with grooved ends. Rubbish of Tholos in Fc V. 1. (B.)
7. A 56. Cylindrical lump decorated with nicks. Loose in soil. (B.)
8. A 54. Terra-cotta 'bent nail'. Many examples from Al 'Ubaid levels. TT 1–4 (B.)
9. A 86. Fragment of cone, black paint. Al 'Ubaid level. TT.
10. A 943. Cone, red paint. Loose in soil. (B.)
11. A 93. Bright red paint. Loose in soil. (B.)
12. A 86. Pot handle, buff clay, greenish black paint. Al 'Ubaid period. Loose in soil. (B.)
13–14. A 51. Sun-dried clay and terra-cotta conical gaming pieces (?) or weights (?). Various levels. (4 to B.)
15–16. A 52. Sun-dried clay and terra-cotta spindle whorls. All periods, various levels. (16 to B.)
17–18. A 88. Sun-dried clay and terra-cotta legs. Loose in soil. (17 to B.)
19. A 58. Sun-dried clay stamp. (B.)
20. A 60. Sun-dried clay object. Loose in soil. (B.)
21. —— Terra-cotta pot lid. Loose in soil.
22. —— Terra-cotta disk, perforated through middle, and jar lid. Method of attachment shown in:
23. —— Where the lid adheres to the mouth of the pot with bitumen. The hole in the lid could take string.

FIG. 50. STONE AMULETS AND SEAL PENDANTS 93

1. A 6. Black steatite from sub-surface.
2. A 5. Black steatite from sub-surface. T. Ḫalaf level. At −2·5 m.
3. A 4. Mottled limestone (?). T. Ḫalaf level.
4. A 10. Grey steatite. Sub-surface. (B.)
5. A 23. Grey steatite (?). (B.)
6. A 47. Mottled limestone.
7. A 1. Black steatite. (B.)
8. A 2. Black steatite. T. Ḫalaf level. At −3·0 m.

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9. A 3. Mottled stone. T. Ḫalaf level.
10. A 581. Grey limestone. TT 7.
11. A 37. Terra-cotta. T. Ḫalaf level. At −3·0 m.
12. A 43. Terra-cotta. TT 6.
13. A 22. White marble (?). T. Ḫalaf level outside Tholos in sq. Fc V. 1. (B.)
14. A 8. Black steatite. (B.)
15. A 18. Black steatite. On T. Ḫalaf road. (B.)
16. A 26. Grey calcite (?). (B.)
17. A 36. Black steatite.
18. A 19. Black steatite. T. Ḫalaf level. At −3·0 m. (B.)
19. A 20. Glazed frit. T. Ḫalaf level. At −2·5 m. (B.)
20. A 34. Black steatite.
21. A 15. Black steatite.
22. A 14. Black steatite.
23. A 584. Black steatite. Outside the Tholos in TT 6.
24. A 21. Red stone. T. Ḫalaf level. At −2·5 m.
25. A 16. Black steatite. T. Ḫalaf level. At −1·5 m. (B.)
26. A 881. Black steatite. TT 5.
27. A 882. Black steatite. Sub-surface.

FIG. 51. STONE AMULETS, SEAL PENDANTS, TERRA-COTTA STAMPS AND SMALL OBJECTS. (Objects found loose in soil unless otherwise stated.) . . . 94

1. A 9. Black steatite. Hand-shaped amulet, a model winnowing fan (?). (B.)
2. A 39. Black steatite. Model winnowing fan (?). T. Ḫalaf level. At −2·5 m.
3. A 12. Black steatite. Shaped like Maltese cross. (B.)
4. A 11. Black steatite. Model of a gabled house (?).
5. A 861. Black steatite. Model double axe. Top perforated horizontally for suspension. Burnt house. TT 6.
6. A 17. Brownish limestone. Bull's hoof. T. Ḫalaf level. At −1·8 m.
7. A 870. Black steatite duck bead. Burnt house. TT 6. (B.)
8. A 873. Black steatite duck bead. Burnt house. TT 6. (B.)
9. A 887. Black steatite boar's (?) head. Gögjali.
10. A 13. Grey stone. T. Ḫalaf level. At −1·2 m. (B.)
11. A 867. White marble (?). TT 6.
12. A 874. Brownish grey limestone. TT 6.
13. A 25. Obsidian. On a T. Ḫalaf road. (B.)
14. A 7. Black steatite.
15. A 35. Greenish grey limestone (?). (B.)
16. A 24. Black steatite. (B.)
17. A 29. Terra-cotta stamp. TT 1. (B.)
18. A 38. Mottled grey limestone (?). Ear stud.
19. A 875. Black steatite bead. Burnt house. TT 6.
20. A 31. Terra-cotta stamp. T. Ḫalaf level. At −2·0 m.
21. A 32. Calcite bobbin. T. Ḫalaf level. At −2·0 m. (B.)
22. A 33. Terra-cotta stamp (?). T. Ḫalaf level. At −3·5 m.
23. A 27. Terra-cotta stamp (?). (B.)
24. A 28. Terra-cotta stamp (?). On T. Ḫalaf road.
25. A 30. Terra-cotta stamp (?). Sub-surface.

FIG. 52. CULT OBJECTS, PAINTER'S PALETTE, STONE CELTS, FLINT AND OBSIDIAN IMPLEMENTS. (Objects found loose in soil unless otherwise stated.) . 101

1. A 922. Model finger bone, white stone. TT 6. (B.)
2. A 922. Model finger bone, white stone. TT 6.
3. A 920. Mother goddess figurine. Grey limestone. TT 6.

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4. A 901. Painter's palette (fragment restored, other examples in T. Ḥalaf levels). TT 6.
5. A 315. Celt. Black stone.
6. A 307. Celt. Black stone. T. Ḥalaf level. At −2·0 m.
7. A 303. Celt. Black stone. T. Ḥalaf level. At −2·0 m.
8. A 302. Celt. Black stone.
9. A 329. Celt. Black stone. T. Ḥalaf level. At −4·5 m.
10. A 331. Celt. Black stone. T. Ḥalaf level. At −1·8 m.
11. A 332. Celt. Black stone. T. Ḥalaf level. At −1·8 m.
12. Drawing showing method of hafting celts.
13–17. Typical flint borers and knives. All periods.
18–19. Two flakes of translucent obsidian. T. Ḥalaf levels. (1 to B.)
20–1. Two obsidian knives. T. Ḥalaf levels.
22–5. Four flint borers, found at all periods.

FIG. 53. PAINTED POTTERY OF THE TALL ḤALAF PERIOD. TT 6, 7 109
1. A 747 (B.) TT 6. Cf. text, pp. 108–111.
2. A 734. G 53. TT 7. Cf. text, pp. 126 and 129.

FIG. 54. PAINTED POTTERY OF THE TALL ḤALAF PERIOD 110
1. A 128 (B.) Cf. text, p. 150.
2. A 147. ,, p. 150.
3. —— ,, p. 150.
4. A 749. TT 6. ,, p. 111.

FIG. 55. PAINTED PLATE OF THE TALL ḤALAF PERIOD. TT 6 115
A 754 (B.) Inside: cruciform design. Outside: impaled *bukranium*. Cf. text, pp. 114 and 158

FIG. 56. PAINTED POTTERY OF THE TALL ḤALAF PERIOD WITH *BUKRANIUM* DESIGNS . 116
1. A 728 (B.) Before TT 10. Cf. text, p. 114.
2. A 515. TT 6. Cf. text, p. 114.

FIG. 57. PAINTED POTTERY OF THE TALL ḤALAF PERIOD 119
1. A 742. TT 6. Cf. text, p. 117.
2. A 101. Cf. text, p. 152.

FIG. 58. PAINTED POTTERY OF THE TALL ḤALAF PERIOD 120
1. A 763. TT 6. (B.) Cf. text, p. 118.
2. A 521 TT 6. (B.) ,, p. 118.
3. A 770. ,, p. 150.
4. A 729 (B.) ,, p. 150.

FIG. 59. PAINTED POTTERY OF THE TALL ḤALAF PERIOD 123
1. A 768. TT 6. Cf. text, p. 121.
2. A 731. G 51. ,, pp. 126–7.
3. A 285 (B.) ,, pp. 136 and 143.
4. A 103. ,, pp. 136 and 140–3.
5. A 516. ,, p. 121.
6. A 120 (B.) ,, p. 143.
7. A 106. ,, pp. 140, 143–4.

FIG. 60. PAINTED POTTERY OF THE TALL ḤALAF PERIOD. TT 6 124
1. A 737 (B.) associated with 2. A 738 in a votive deposit. Cf. text, p. 126.
2. A 738. Cf. text, p. 126.
3. A 741 (B.) ,, pp. 121–2.
4. A 769. ,, p. 122.
5. A 740. ,, p. 122.
6. A 733. G 51 (B.) ,, p. 126.

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FIG. 61. PAINTED SAUCERS OF THE TALL ḤALAF PERIOD 125
1. A 116. TT 8. Cf. text, p. 128.
2. A 732. G 51. (B.) Cf. text, pp. 117 and 126–8.

FIG. 62. PAINTED POTTERY OF THE TALL ḤALAF PERIOD. 'THE ARPACHIYAH CREAM BOWL.' 133
1. A 762 (B.) Cf. text, p. 131.
2. A 772. ,, p. 131.
3. A 767 (B.) ,, p. 132.
4. A 764 (B.) ,, p. 132.
5. A 771 (B.) ,, p. 132.

FIG. 63. PAINTED POTTERY OF THE TALL ḤALAF PERIOD. 'THE ARPACHIYAH CREAM BOWL.' 134
1. A 153. Cf. text, p. 132.
2. A 154. ,, p. 132.
3. A 726. ,, p. 132.

FIG. 64. PAINTED POTTERY OF THE TALL ḤALAF PERIOD 137
1. A 761 (B.) Cf. text, p. 140.
2. A 744. TT 6 (B.) ,, p. 121.
3. A 268. ,, pp. 136 and 149.
4. A 517. TT 6. ,, p. 121.
5. A 124 (B.) ,, p. 139.
6. A 286 (B.) ,, pp. 136–9.
7. A 736. ,, p. 136.
8. A 115. ,, p. 139.
9. A 735 (B.) ,, p. 136.
10. A 146 (B.) ,, p. 136.

FIG. 65. PAINTED POTTERY OF THE TALL ḤALAF PERIOD. BEFORE TT 6 . . . 138
1. A 519 (B.) Cf. text, p. 139.
2. A 520 (B.) ,, p. 139.
3. A 160. ,, pp. 136–9.
4. A 730 (B.) ,, p. 135.

FIG. 66. PAINTED POTTERY OF THE TALL ḤALAF PERIOD 141
1. A 102. Cf. text, p. 143.
2. A 125. ,, p. 150.
3. A 134. ,, p. 144.
4. A 158 (B.) ,, p. 144.
5. A 148 (B.) ,, p. 140.
6. A 140. ,, p. 140.
7. A 104. (B.) ,, p. 139.

FIG. 67. PAINTED POTTERY OF THE TALL ḤALAF PERIOD. BEFORE TT 10 . . 142
1. A 144 (B.) Cf. text, pp. 140, 143.
2. A 117 (B.) ,, p. 151.

FIG. 68. PAINTED POTTERY OF THE TALL ḤALAF PERIOD 145
1. A 292. From grain silo. Cf. text, p. 151.
2. A 725. ,, pp. 158–163.
3. A 297. ,, p. 169.
4. A 760. ,, pp. 150–1.

FIG. 69. PAINTED BOWLS OF THE TALL ḤALAF PERIOD 146
1. A 108 (B.) Cf. text, p. 153.
2. A 283 (B.) ,, p. 152.
3. A 263. ,, p. 152.

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4. A 295 (B.) Cf. text, p. 152.
5. A 289. TT 6. ,, p. 151.
6. A 296 (B.) ,, p. 152.

FIG. 70. PAINTED BOWLS OF THE TALL ḤALAF PERIOD 147
1. A 119 (B.) Cf. text, p. 152.
2. A 105 (B.) ,, p. 153.
3. A 107. G 54. ,, p. 153.
4. A 287 (B.) ,, p. 152.
5. A 123 (B.) ,, p. 153.
6. A 114. ,, p. 152.

FIG. 71. PAINTED POTTERY OF THE TALL ḤALAF PERIOD 148
1. A 518 (B.) Cf. text, p. 111.
2. A 765 (B.) ,, pp. 152–3.
3. A 758. ,, p. 153.
4. A 284. ,, p. 152.
5. A 759 (B.) ,, p. 153.
6. A 279 (B.) ,, p. 152.
7. A 150 (B.) ,, p. 154.
8. A 288 (B.) ,, p. 154.
9. A 262. ,, p. 154.
10. A 766. ,, p. 144.

FIG. 72. PAINTED BOWLS OF THE TALL ḤALAF PERIOD. BEFORE TT 10 . . . 149
1. A 111. G 54. Cf. text, p. 153.
2. A 112 (B.) ,, p. 154.
3. A 756 (B.) ,, p. 154.
4. A 133. ,, p. 154.
5. A 141 (B.) ,, p. 154.

FIG. 73. *BUKRANIUM* DESIGN, EARLIEST STAGE 154

FIG. 74. *BUKRANIUM* DESIGNS ON POTTERY OF THE TALL ḤALAF PERIOD . . 159

FIG. 75. *BUKRANIUM* AND ALLIED DESIGNS ON POTTERY OF THE TALL ḤALAF PERIOD . 160

FIG. 76. *BUKRANIUM* DESIGNS ON POTTERY OF THE TALL ḤALAF PERIOD . . 161
1. A 155 (B.) Cf. text, p. 144.
2. A 166 (B.) ,, p. 140.
3. A 727. ,, pp. 132–3 and 140.
4. A 151. ,, p. 140.
5. A 130 (B.) ,, p. 157.

FIG. 77. DESIGNS ILLUSTRATING EARLY TALL ḤALAF, AL 'UBAID, AND SAMARRA WARE . 162

FIG. 78. DESIGNS ILLUSTRATING TALL ḤALAF WARE, MOSTLY LATER PERIOD . . 166

FIG. 79. UNPAINTED POTTERY OF THE TALL ḤALAF PERIOD 173

EXCAVATIONS AT TALL ARPACHIYAH, 1933

By M. E. L. MALLOWAN *and* J. CRUIKSHANK ROSE

INTRODUCTION

IN 1932 the British School of Archaeology in Iraq made a grant of £600 towards an expedition to Arpachiyah, this being the first donation of the Gertrude Bell Memorial Fund to an archaeological expedition. The Trustees of the Percy Sladen Memorial (Linnean Society) also made a generous award of £400, and there were further munificent grants of £100 from Sir Charles Marston, £500 from an anonymous donor, and from many private subscribers. The Trustees of the British Museum undertook the scientific responsibility for the expedition.

To the Trustees and officials of all the institutions concerned, the thanks of the expedition are due for unfailing help and courtesy, and in particular to Sir George Hill, Director of the British Museum, and to Sir Edgar Bonham Carter, Chairman of the British School of Archaeology in Iraq. Mr. Keeling, Hon. Secretary of the British School of Archaeology in Iraq, was also an unfailing worker in the interests of the expedition, and was of great assistance to us in Baghdad, when the expedition was making final preparations for moving to Mosul. Thanks are also due to Mr. S. Savage, Secretary of the Percy Sladen Memorial. Mr. James R. Ogden, F.S.A., a warm friend to all archaeologists, did generous work in enlisting support for the expedition. We are indebted to Dr. Alexander Scott, F.R.S., for allowing us the use of the British Museum laboratories during the time that we were preparing our exhibition of antiquities, and for giving us technical advice. Dr. H. J. Plenderleith helped us in very many ways, and Mrs. Plenderleith generously volunteered to take part in mending the pottery.

The personnel of the expedition consisted of Mr. M. E. L. Mallowan, M.A., F.S.A., Director, and Mr. J. Cruikshank Rose, A.R.I.B.A., architect, who was entirely responsible for the planning and surveying, the drawing of the objects, and shared in all the field-work. Mr. Rose also wrote a part of Chapter 2 on the construction of the tholoi: in working out our results I was fortunate in having his close co-operation and advice, but I must accept the responsibility for the written account. My wife undertook the developing and printing of the photographs, and helped us in the difficult task of reconstructing the pottery. To the loyal co-operation of my colleagues the expedition owes a large measure of its success.

The expedition was fortunate in having the services of Abd ul Aḥad and Ya'qub, experienced and trusted foremen who had previously well served Dr. Campbell Thompson for many seasons at Quyunjiq. In addition, two younger men, Na'aifi and Bakīr, were engaged, and proved capable and energetic: with further training they too should become first-class overseers.

The workmen all came from villages in the neighbourhood; the maximum number employed was 180. Some of them had previously been employed at Nineveh, the majority were untrained; but by the end of the season we had an excellent gang of strong and intelligent men with whom it was always a pleasure to work. With Abd ur Raḥman, our landowner, we were on the best of terms, and, last but not least, we received all manner of help from Majid Shaiya of Mosul, who proved a loyal friend to the expedition. I wish also to record our gratitude to our driver, W. H. Gallagher, who gave us indefatigable and valued service.

From friends in Mosul we received much kindness and hospitality. In particular, the Mutasarrif Taḥsīn Beg gave us every possible aid from the outset, and every expedition in the neighbourhood of Mosul has good reason to be grateful to Major and Mrs. Wilson. No. 30 Squadron of the Royal Air Force took a number of air photographs of the site and helped us in many other ways.

Dr. J. Jordan, Director of Antiquities, showed us his usual friendliness and courtesy, and always had the scientific interests of the expedition at heart: it was certainly not owing to him that there occurred the deplorable delay of five months, during which the legitimate share of the expedition's finds was unwarrantably detained in Baghdad.

ASHFIELD, TORQUAY. M. E. L. M.
June, 1934.

Chapter I

EXPEDITION TO TALL ARPACHIYAH

Excavations at Arpachiyah subsequent to work at Nineveh.

Arpachiyah is a prehistoric mound of the Chalcolithic Age, in the Mosul district of N. Iraq, lying less than four miles from the Tigris river and the ancient city of Nineveh, with which it must have been closely connected in antiquity. It was, indeed, as a direct result of the excavations at Quyunjiq, the acropolis of Nineveh, that Arpachiyah came to be excavated.

In 1932 the British Museum expedition to Nineveh, under the direction of Dr. R. Campbell Thompson, sunk a deep shaft from the highest point on Quyunjiq, through 90 feet of ancient debris, down to virgin soil. As a result of these soundings it became possible, for the first time, to co-ordinate the main prehistoric and early historic periods of Babylonia and Assyria. Moreover, the discovery of fragments of the remarkable painted ware of Tall Ḥalaf and Samarra in the lowest levels of Quyunjiq made it probable that these finely painted wares, characteristic of the north, were at least as old as the Al 'Ubaid ware, the earliest known painted pottery of the south.

The evidence obtained from a single pit at Quyunjiq,[1] based as it was for the most part on potsherds from destroyed houses, was necessarily inconclusive, and called for work on a larger scale. But the task of looking for these early remains beneath the enormous mass of debris at Quyunjiq was bound to be both prolonged and expensive. It therefore seemed desirable to look for a smaller mound where one might hope to have easier access to the earliest prehistoric settlements of Assyria.

To Dr. Campbell Thompson is due the credit of being the first to call attention to the ancient Tepe at Arpachiyah: in 1928 he had observed that fragments of a finely painted pottery littered the slopes of this mound. But it was not till the completion of the deep pit at Quyunjiq in 1932 that the very early context of these sherds became apparent, and from that year dates the project of excavating this site.

The unobtrusive nature of the mound is shown by the fact that Commander Felix Jones[2] who, in the course of his survey of Assyria in 1848, established a bench mark in the modern village of Arpachiyah, yet failed to comment on the ancient Tepe which lies no more than a quarter of a mile to the east of the village.

Situation, Climate, Population, Natural Resources, Commercial and Artistic Activities. (See Map, Fig. 1.)

Arpachiyah lies in a gently undulating downland, treeless since the days of Turkish deforestation, with reasonable access to water: it has good pasture

[1] *Annals of Archaeology and Anthropology* (University Press, Liverpool), xx: henceforth cited as *A.A.A.*

[2] *J.R.A.S.* (Old Series, 1854).

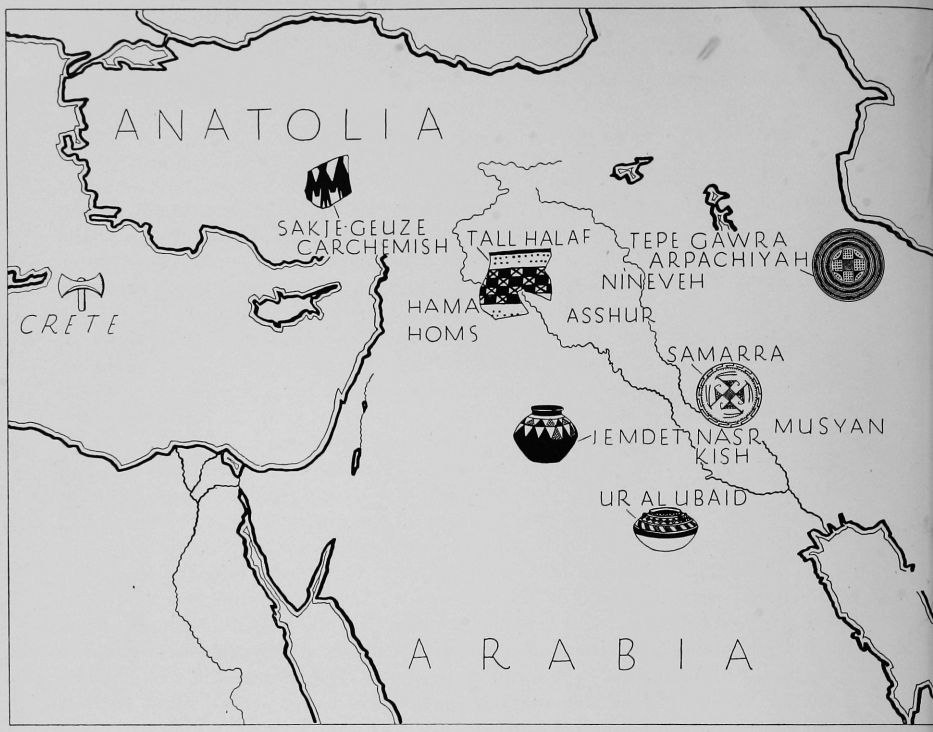


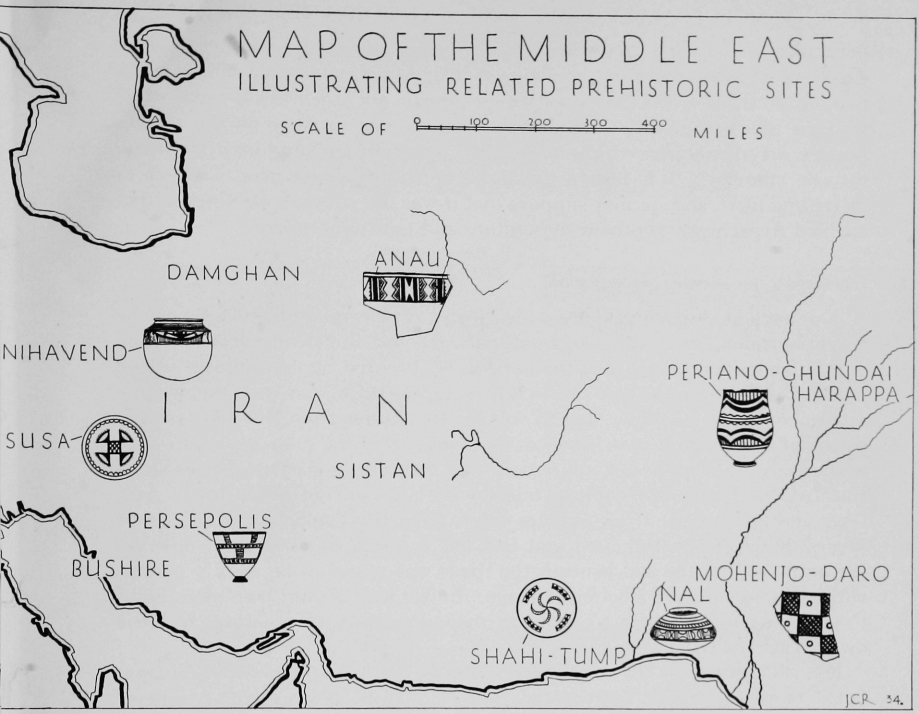
FIG. 1

in rainy seasons, though drought is always liable to endanger flocks: its greatest wealth lies in the richness of its soil with its splendid harvests of grain.

At intervals of every few miles are small villages whose inhabitants are engaged in agriculture, pasture, and the growing of fruit. These villages, which lie close to one another in the neighbourhood of Mosul and Nineveh, become less frequent as one approaches the foot-hills of the Jabal Maqlub on the east.

The inhabitants are often polyglot; Arabic and Turkish are the principal languages spoken, and Kurdish and Yezidi may also be heard in this neighbourhood.

The natural resources are all that a simple community may require. Outcrops of limestone, sandstone, and conglomerate are common, gypsum is always available for cement, finer limestone is quarried in the foot-hills, and the ever ready clay for mud-brick lies underfoot. Wood, principally oak, is plentiful in the hills, and it is probable that in antiquity forestation was richer.



The climate of Assyria is generally more temperate than that of Babylonia, and man here does not have the same desperate struggle for existence that besets the nomad Arab of the barren desert. Here, then, different races speaking different languages have entered through the mountain passes and have marched down the river valleys and settled in the plain.[1]

The pursuit of agriculture and a pastoral life allowed these communities leisure, if they wished, for the cultivation of the minor arts; and that natural love of colour which seems so often to be associated with a mixture of mountain blood must have found an outlet in the production of woven fabrics, leather, and fancy basketry, and, as we know for certain, in the output of painted pottery. In the painting of pottery the inhabitants of Arpachiyah excelled, and their finest ware bears comparison with any other pottery of the ancient world. The discovery of kilns proves that much of the pottery was manufactured on the site. Further, we must infer that pottery was an important trade commodity, and that it was made for export to Nineveh in

[1] Cf. SIDNEY SMITH, *Early History of Assyria*, 1–9, for a general account of the prehistoric period in Assyria.

particular and traded to villages in the neighbourhood. We may see an excellent parallel to-day in the village of Tall Asquf, which specializes in the making of the large water-jars used in Mosul and the Mosul area, while wooden pipe-stems with scratched designs similar to those on the ancient pottery are manufactured in the Kurdish foot-hills and imported to Mosul for sale. Similarly, it is certain that Arpachiyah must have used Nineveh as its trading mart, and we may suppose that it was the strength of Nineveh that enabled Arpachiyah to pursue agriculture and potting in peace.

Defenceless position of Arpachiyah.

The ancient Arpachiyah resembles many of the modern villages of the neighbourhood in that it lies in a naturally exposed and defenceless position. To the north and to the west the horizon is obscured by two hillocks which overlook the site, to the east and to the south lies the open plain: the original settlement lay in a hollow, and in wet weather water from the high ground must have drained on to it. Indeed, the poorness of the drainage on the site is shown by the number of stone roads that had to be constructed because of the sticky soil underfoot. These tracks were as a rule not more than 1·2 m. wide and were made from pebbles taken from the banks of the Tigris or Ḫusr; they were packed hard and had flat surfaces suitable for pedestrian and mule traffic: the soil beneath the roads was found to be thickly packed with potsherds to give a better drainage. In wet weather our own men found these tracks much easier to walk on than the sticky clay subsoil of their own village. (Plate I (*b*).)

But in addition to the unstrategic position of the settlement, excavation failed to reveal the presence of any adequate town defences, and military weapons were conspicuous by their absence. Only in the lower levels the thick-walled circular buildings in the centre of the mound could have served as a sanctuary for a small number of people. All the available evidence tends to show that at Arpachiyah there lived a peaceful community of peasants and potters, who tilled their lands and bred their cattle, and baked and painted their pottery for their own delight and profit: in times of stress, like the village dwellers of ancient Greece, they could seek the protection of the walls of their parent city and take refuge behind the barriers of Nineveh.

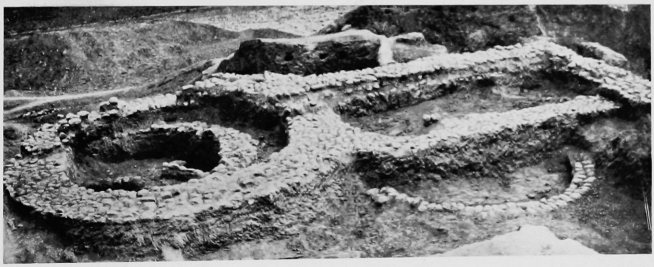
Topography.

Plate I (*a*). Perhaps the outstanding characteristic of the ancient mound is its smallness and compactness. Its most obvious natural feature before excavation was a low mound in the form of a hillock, rising $5\frac{1}{2}$ m. (20 ft.) above the level of the modern mule track. This hillock, known locally and marked on certain maps as Rashwa Tepe, has at its base a maximum diameter of 67 m. (see section, Fig. 4), and to the south-west has a gentle slope of approximately ten degrees, while on the other three sides, and particularly on the north-west, there is a sharper slope due to denudation and erosion, caused

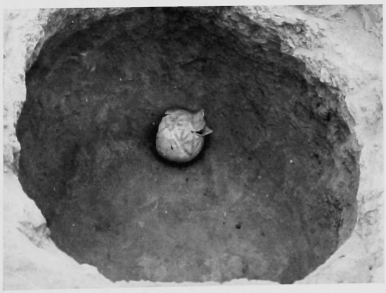
(*a*) The Tepe at Arpachiyah before excavation

(*b*) Stone roads of Tall Ḥalaf period in the Tepe

(*c*) Mud houses of Al 'Ubaid period. TT 4



(*d*) Stone foundations of the tholoi, TT 7–10, in the Tepe. The upper buildings, TT 7–8, have tholos and antechamber



(*e*) Painted pot of Tall Ḥalaf period lying in a circular grain pit. The pot contained grains of emmer wheat.

not only by wind and rain but also by man, who had doubtless plundered the topmost levels.

Surface debris lay thickest on the lower slopes of the Tepe, and became scarcer in proportion as the sides of the mound approached the flat levels of the surrounding barley fields. The principal surface debris was in fact concentrated within an area roughly 100 m. square. The maximum diameter of the total area over which excavations were conducted was approximately 125 m., and though this distance did not reach the limits of the site, it was obvious that the extreme outskirts of the settlement lay at no great distance beyond. The dimensions of the ancient village were approximately those of the average modern village in the neighbourhood, and we may not be altogether rash in hazarding a guess that in most periods the settlement would have had no more than two hundred houses in all. (Fig. 2.)

Surface Indications.

The debris on the surface which had induced us to investigate the site consisted of flint and obsidian knives and scrapers, fragments of stone vases, and painted potsherds of such fineness that we considered that if fortune favoured us with only a few intact vessels the site would have justified the excavation. In this our most sanguine hopes were exceeded, for at the end of eight weeks' work we had secured a collection of painted pottery richer than any other yet recovered from Mesopotamia, and in addition some eight hundred other objects, of varying importance and interest; the majority well stratified, on distinct house floors, or in graves, so that we could assign all the main categories of our material to distinct periods of development.

Poor Preservation of Buildings.

Perhaps the most disappointing feature of the site were the buildings, which were for the most part in a very poor state of preservation. The reason is not far to seek: houses were at the best of times poor erections, and their meagre walls could hardly have survived for any great length of time. In the later buildings, walls were made of a single thickness of mud-brick, and in earlier periods, of basket-loads of stiff clay or *pisé*. (Cf. Plate I (*c*).)

Unobtrusive nature of the site a protection to the objects within it.

Many of these houses might have been counted fortunate if they had survived fifty winters, assuming that they had only to reckon with the wear and tear of wind and rain, apart from the ravages of man. And yet were it not for the insignificance of the buildings, this site would surely have suffered more from the hands of plunderers: it is just that unobtrusiveness that has enabled Arpachiyah to keep her treasures intact through a period of some six thousand years since the days of its final abandonment.

Order of Excavations. (Cf. Plate II.)

The main objective of the excavations was the mound known as Tepe Rashwa. But before attempting to investigate what was obviously the core

of the site, it was deemed advisable to test the surrounding soil on the flats all around in order to gain some knowledge of the general stratification and sequence of periods; and further to enable the men, at least half of whom had not been employed on excavations before, to obtain some initial training. As a result we were able to excavate the most important portion of the site with some knowledge of local conditions.

This method of approach was in all these respects most satisfactory; it is only to be regretted that it was impossible in one short season to excavate the Tepe itself down to virgin soil.

The Cemetery.

Fig. 3. The main importance of the excavations on the outskirts of the mound was the discovery, on the west side, of the cemetery belonging to the latest occupants on the site. Forty-five graves in all were excavated in this cemetery: they consisted of inhumation burials, mostly oriented E. by W., and of a number of fractional or partial burials with incomplete skeletons. Associated with them were painted pots, clearly related in style to the Al 'Ubaid ware of southern Babylonia.

These graves need have covered no long period of time, for in no case did they overlap, nor was there any sign of a subsequent inhumation disturbing one that was older, as is invariably the case when a cemetery remains in use for a very long period. Not that our excavations exhausted the cemetery of this period: on the contrary it is certain that there are many more graves still to be dug; but the graves discovered could easily be fitted within the span of two, or at the outside three, generations, and, as the excavated house remains show, the Al 'Ubaid period can only have covered the latest and shortest portion of the total length of time during which Arpachiyah was inhabited.

In the cemetery, the normal depth to which a grave was dug varied from 2 to 3 m.; and a number of deposits lying within the top metre were to be assigned to the extreme end of the Al 'Ubaid period. All these graves had been dug into, and had destroyed, house remains of an earlier period, and wherever excavations were made the same sequence invariably occurred.

Remains underlying the Cemetery.

The remains underlying and disturbed by those of the Al 'Ubaid period were mostly Western in their affinities, and the vast majority of the pottery belonged to the group known as Tall Ḥalaf ware, from its first discovery at Tall Ḥalaf, on the river Ḥabur in Syria.[1] Associated with it, though in a very small proportion, were examples of Samarra ware. We may therefore divide the majority of the finds at Arpachiyah into two main groups: the latest belongs to the Al 'Ubaid period of southern Babylonia; and, rigidly separated from it, the earlier group belongs to the Tall Ḥalaf-Samarra complex, though even here Iranian influence, as we shall see, was ever present. It is the earlier, Tall

[1] Von Oppenheim, *Der Tell Halaf* (Leipzig, 1931).

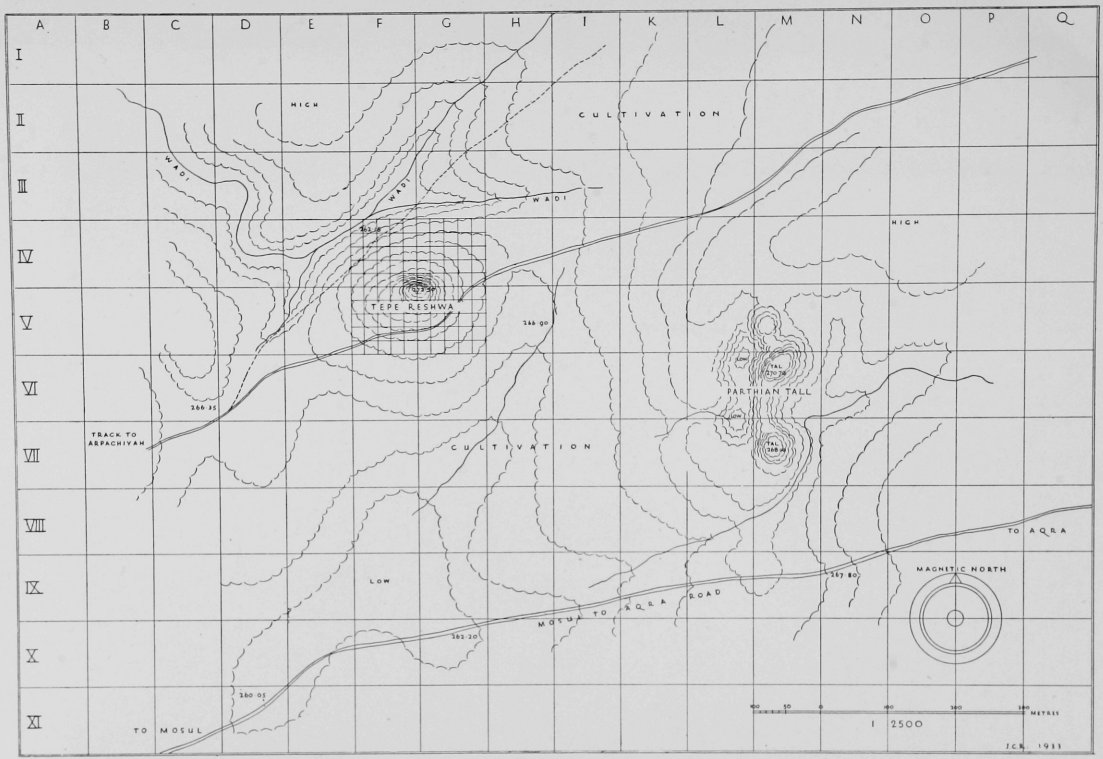


FIG. 2. Map of Arpachiyah and neighbourhood showing Rashwa, the centre of the excavations

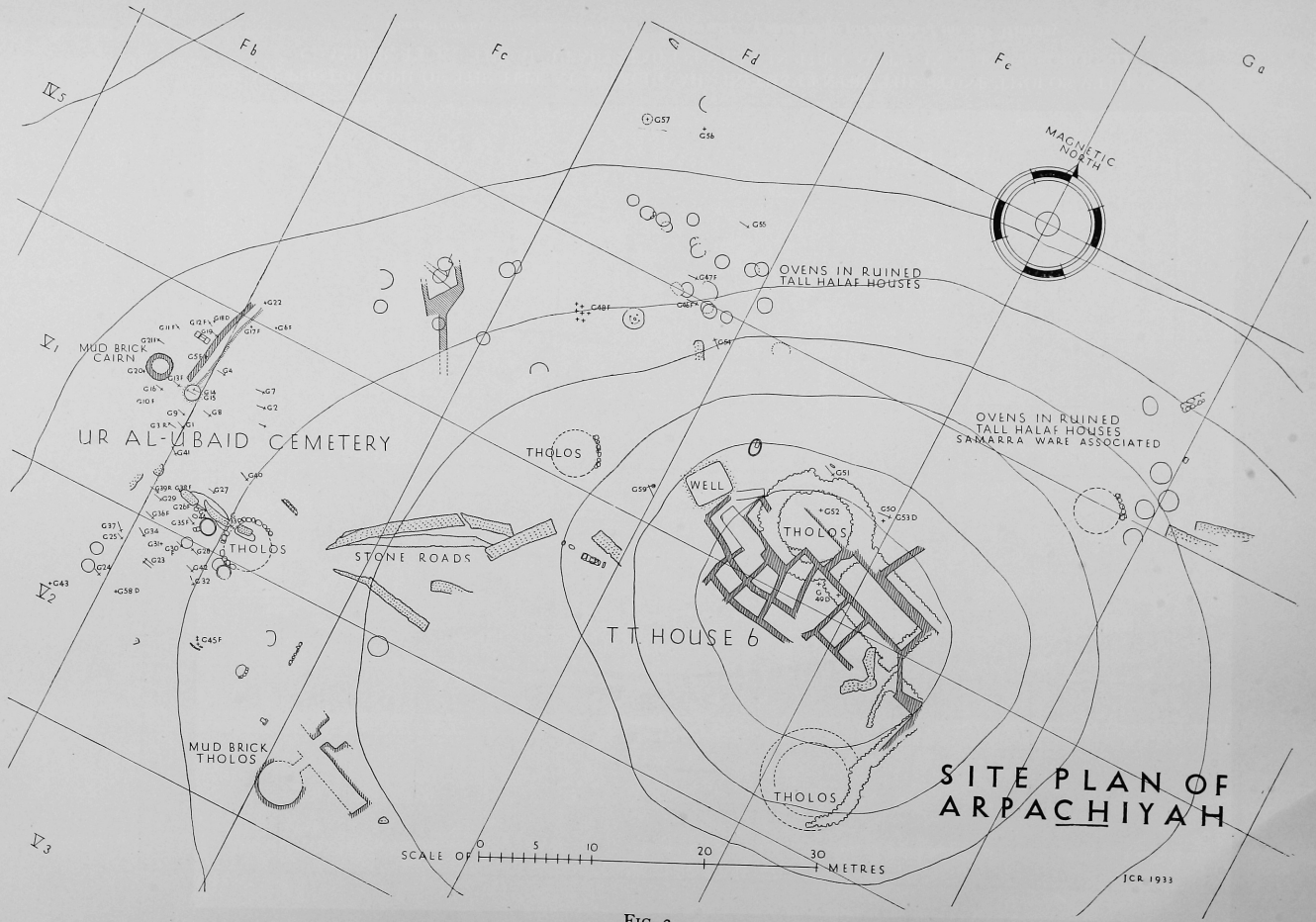

Fb
Fc
Fd
Fe
Ga
MAGNETIC NORTH
OVENS IN RUINED TALL HALAF HOUSES
OVENS IN RUINED TALL HALAF HOUSES SAMARRA WARE ASSOCIATED
MUD BRICK CAIRN
UR AL-UBAID CEMETERY
THOLOS
STONE ROADS
WELL
THOLOS
TT HOUSE 6
THOLOS
MUD BRICK THOLOS
SITE PLAN OF ARPACHIYAH
SCALE OF METRES
0 5 10 20 30
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Fig. 3

AIR PHOTOGRAPH OF THE TEPE AT ARPACHIYAH. IN THE CENTRE THE STONE THOLOS WITH ANTE-CHAMBER, TT 10. THE AL 'UBAID CEMETERY LAY IN THE CAVITY, IN THE FOREGROUND

Photograph by 30th Squadron R.A.F. Copyright. Published by permission of the Air Ministry

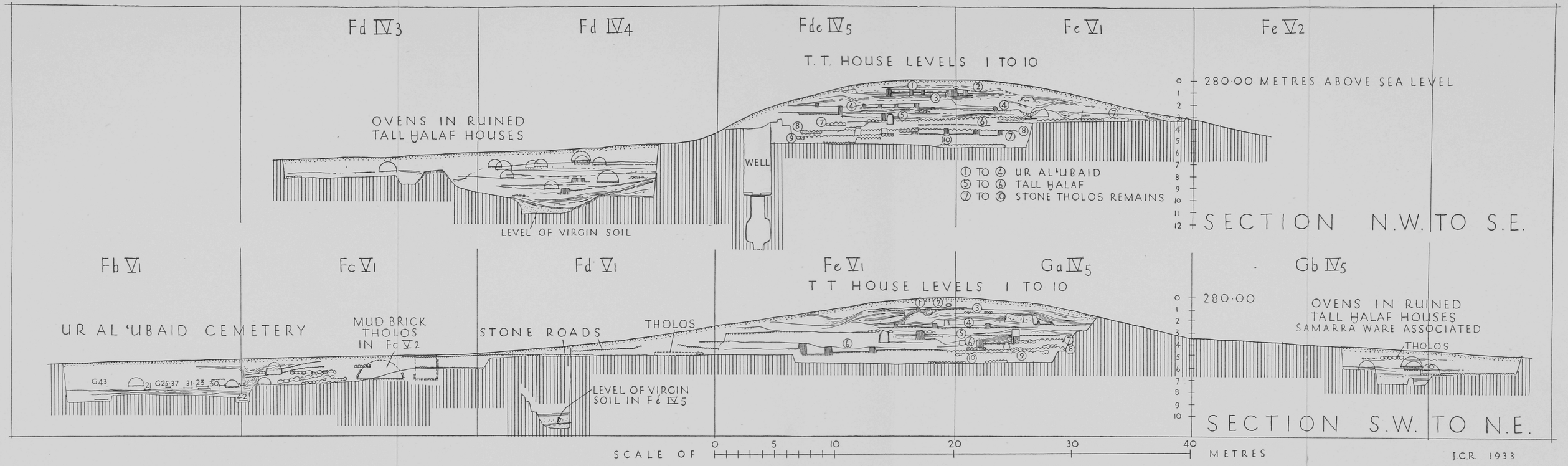


FIG. 4. SECTIONS THROUGH THE MOUND OF ARPACHIYAH

Ḫalaf, group, that contains by far the most important material on the site and covers the main length of its occupation.

Excavation of the Tepe.

The second half of the season, which was devoted to the excavation of the Tepe itself, definitely confirmed and elucidated the results obtained from the more damaged levels on the outskirts of the mound.

The total height of the Tepe above virgin soil was 10½ m. (34 ft.). From the section (Fig. 4) it will be seen that our excavations were conducted to a depth of 5½ m., that is to say, that the excavated buildings in the mound represent just over half the total accumulation of debris.

In the Tepe, ten superimposed building levels were excavated: the top five levels were poorly built mud-brick houses of the Al 'Ubaid period; the fifth level had its foundations resting directly upon buildings of the Tall Ḫalaf period, and it was therefore not surprising that the remains were here mixed and contained Tall Ḫalaf as well as Al 'Ubaid ware.

The sixth and subsequent levels contained no traces of the Al 'Ubaid pottery whatsoever, and were exceedingly rich in material of the Tall Ḫalaf group.

As the mound is still only partially excavated, house levels are numbered from top to bottom, and for convenience will be referred to as TT 1–10; TT 1 representing the latest period of occupation on the site, and TT 10 the earliest building level discovered up to date on the Tepe. We may now briefly summarize the characteristics of the main levels on the site, and we shall then be in a position to draw up a preliminary table showing the relation of the main periods at Arpachiyah to those already known in Mesopotamia and Syria.

Building levels in the Tepe.

TT 1–4. See section, Fig. 4, and plan, Fig. 5 (*a*), (*b*). These four house levels covered a depth of 2½ m. from the surface of the mound. Houses were very poorly built, sometimes of mud-brick, sometimes of lumps of stiff clay or *pisé*. Walls were never more than one brick thick, floors were of beaten clay, roofs of reeds and matting. In no case did walls of this period stand more than a few inches in height, and often they were totally destroyed, so that it was impossible to extract a coherent ground plan. The most that we may infer is that these can only have been dwellings of very humble peasants: houses were closely huddled together, there were a few miserable alleys between them, rooms were sometimes no more than 2 m. in width, and the whole bore a suspicious resemblance to a slum (Plate 1 (*c*)). These miserable dwellings could hardly have been in existence for any great length of time, and we may reasonably guess that TT 1–4 can easily be fitted into the span of one hundred years, and may not have endured for more than half that time.

These levels all contained remains characteristic of the Al 'Ubaid period;

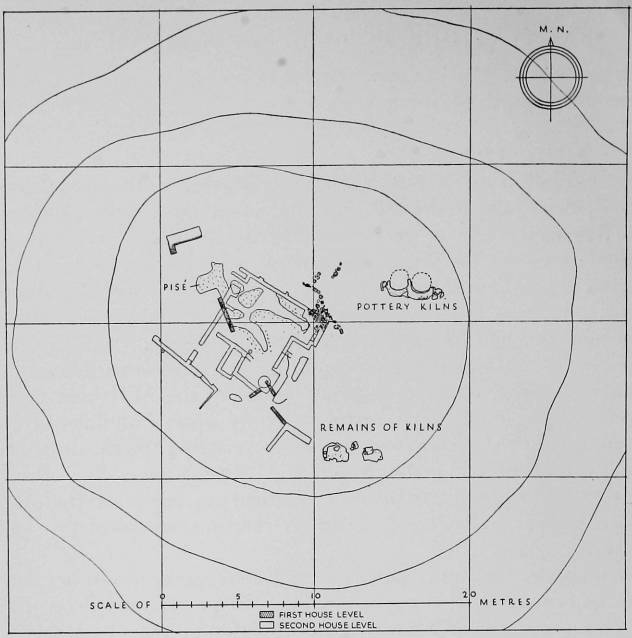


FIG. 5 (*a*). First and Second House Levels in the Tepe

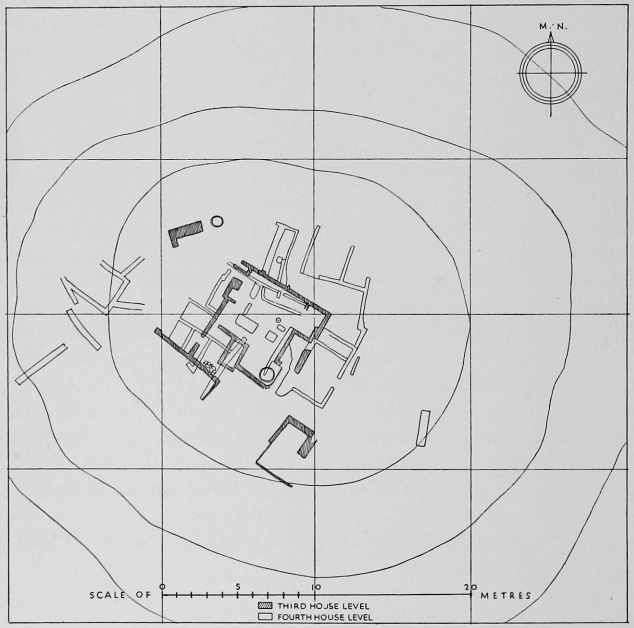


FIG. 5 (*b*). Third and Fourth House Levels in the Tepe

but the large mass of pottery belonging to this stage of habitation was found not in the houses but in the cemetery on the west side of the Tepe. The forty-five graves excavated must have contained the bodies of peasants who had lived in these houses, and the funerary offerings that accompanied the skeletons illustrated the handiwork of this period far more fully than the scanty material found in the houses themselves.

TT 5. Fig. 5 (*c*). At 3 m. below the surface of the Tepe the houses

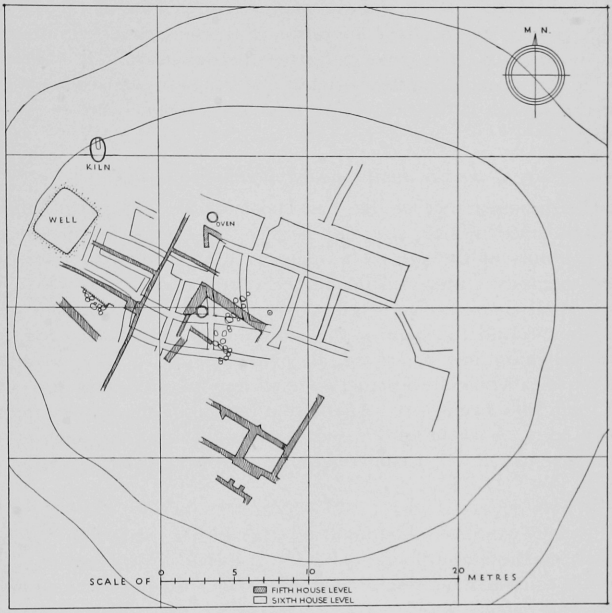


FIG. 5 (*c*). Fifth and Sixth House Levels in the Tepe

changed in character, and were altogether better built and more spacious in plan, and the walls were built of *pisé*. The rooms excavated were evidently part of a larger complex, possibly a single unit, the extremities of which had been lost for ever by the denudation of the mound and the cutting away of the sides of the Tepe.

The more spacious rooms of TT 5 indicate that it is the work of Tall Ḫalaf builders: that the two stocks did not live together in harmony is shown by the complete change of material in TT 1–4, where all traces of the older elements had vanished. Nor did any of the burials suggest an overlap between graves of the Al 'Ubaid and Tall Ḫalaf period: on the contrary, there was evidence that in the Al 'Ubaid cemetery grave-diggers of the Al 'Ubaid period had deliberately destroyed Tall Ḫalaf house remains.

Tall Ḫalaf Peoples supplanted by the Al 'Ubaid.

It is more than probable that the Tall Ḫalaf peoples abandoned the site on the arrival of the new-comers from Babylonia; and with the disappearance of the old element the prosperity of the site rapidly declined; for, although the new-comers were apparently strong enough to eject the older inhabitants, yet they appear to have been a poor community, already degenerate: their houses were poorly built and meanly planned, their streets no longer cobbled as in the Tall Ḫalaf period, and the general appearance of their settlement dirty and poverty stricken in comparison with the cleaner buildings of the healthier northern peoples who were their predecessors. In addition, their pottery was often coarse, carelessly made, and baked in inferior kilns, and they had lost the source of the fine ferruginous clays which were in use in Tall Ḫalaf times.

Peculiar contours of the site due to sudden diminution in size.

With the disappearance of the Tall Ḫalaf stocks, Arpachiyah must have greatly diminished in size, and it is largely this that is responsible for the peculiar contours of the site. The majority of the Al 'Ubaid settlers concentrated themselves into a camp on the centre of the site, which in consequence rapidly increased in height. It is probable that there was some sort of occupation round the base of the mound, but denudation and constant modern ploughing has destroyed all evidence of it. The invaders had evidently made a wholesale destruction of all standing buildings and converted some of them into a cemetery. Apart from potsherds these houses contained very few objects. A few limestone door-sockets indicated the position of doorways, and a house in TT 3 contained a bread oven (cf. Fig. 5 (*b*)).

Bread ovens.

Bread ovens were very common in the earlier period at Arpachiyah, particularly on the house floors in Fd IV. 4 and Fe IV. 4 (see Fig. 3). The bread oven consisted of a sun-dried clay dome varying in diameter from 1 to 2 m. and usually about 0·3 m. thick, with a floor of hard baked terracotta (cf. the reconstruction in Fig. 6). Traces of ash are associated with these ovens and the interior surface of the dome where preserved was lightly fired, showing that the ovens were probably used in the same manner as the modern Arab ovens, in which a fire is lit and the flaps of dough cooked against the wall of the dome. Similar ovens have been found on the neighbouring prehistoric site of Tepe Gawrah, and also at Alishar Hüyük in Asia Minor.[1] The beehive-shaped bread oven is still used around Mosul to-day. From the same houses come querns, grinders, pestles, and circular rubbers; all typical primitive agricultural implements, mostly in basalt.

Cereals.

Most interesting was the discovery of numerous grains of wheat and

[1] E. F. Schmidt, *The Alishar Hüyük.*

barley. Many of the specimens came from TT 4, 5, and a number were also discovered in a circular silo or granary of the Tall Ḥalaf period in square Ga IV. 4 (cf. photo, Plate I (*e*), where a pot of the Tall Ḥalaf period is shown as found, containing grains of wheat). The specimens from various levels were examined by Professor Percival, who kindly supplied the following note: 'The samples from TT 5 consist of the naked unhusked grain of emmer wheat (*Triticum dicoccum*) together with grains of barley: there is a preponderance of the emmer grain. The samples from the well in TT 4 consist almost entirely of barley.' Grains of wheat and barley were in fact forthcoming from every level, and those found in the Tall Ḥalaf houses are certainly the earliest specimens of any cereal hitherto discovered in Mesopotamia.[1]

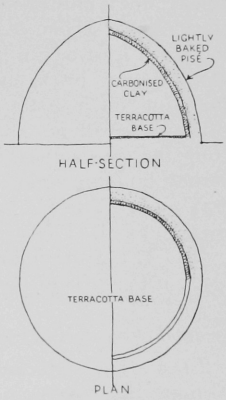


FIG. 6. Restored Bread Oven

Well in the Tepe.

Another discovery of interest in connexion with the houses was a finely built well, apparently disused about the time that TT 4 was built, and at that time turned into a rubbish pit, and later into a granary, as it was filled with a mass of rubbish consisting of bones, sherds, charred wood, straw, and barley.

The three main sections of the well probably correspond to three main periods at which the well-head was raised with the rise of houses in the Tepe: they may be summarized as follows (cf. Fig. 4, sq. Fe IV. 5):

(1) The bottom section containing the original well-head which rests directly on virgin soil (a gypsum-flecked clay turning to shale). This, the first well-head, lies at 7·7 m. below the present well top, and consists of a square shaft 2·25 m. wide, narrowing at the very bottom to a circular shaft only 0·75 m. wide.

(2) The middle section, with a wide platform at the top, 5·8 m. below the present well-head; the shaft is now circular and only 1·3 m. wide. This well-head would correspond to some settlement earlier than TT 10, but later than the earliest settlement.

(3) The top section, which rises to the level of TT 6; the shaft is now square and is 2·25 m. wide.

Probably this well was the main water-supply for the houses on the Tepe throughout the Tall Ḥalaf period; but at some time in the Al 'Ubaid occupation it was abandoned as a water-supply and apparently used as a granary; the quantity of wood found within it suggests that the sides may

[1] For a discussion on early cereals in the Middle East cf. PEAKE and FLEURE, *The Corridors of Time*, Clarendon Press; and GORDON CHILDE, *New Light on the Most Ancient East*, Kegan Paul, 1934 (2nd. ed.).

have been wood-lined: analogous are certain ancient predynastic Egyptian silos, which appear to have been lined with straw matting.[1]

Plano-convex and pisé brickwork.

The only remaining feature of material interest in the five top settlements was the brickwork. In TT 1–2 there were a few roughly shaped *plano-convex* bricks: it was only possible to recover two sizes: one was 0·16 m. sq. ×0·07 m. thick, and a second 0·25 (?) ×0·16 ×0·06 m. There was a thick green clay mortar at least 0·02 m. thick. It is becoming increasingly apparent that the plano-convex brick goes back to a very early period; one example was found in Nin. 3–4 stratum. At Arpachiyah the plano-convex brick was used side by side with *pisé*; it is quite possible that the plano-convex brick originated from the constant use of the pudding-shaped *pisé* lumps employed in the earliest building periods.[2] In TT 4, 5 the following *pisé* sizes were recovered: 0·43 ×0·41 ×0·10 m.; 0·375 ×0·21 ×0·08 m.; 0·39×0·205×0·09 m.; 0·46 × 0·42 ×0·11 m. The sizes were all irregular.

In TT 1–2 the following burnt-brick sizes were recovered from a kiln: 0·30 ×0·15 ×0·08 m.; 0·30× 0·22 ×0·10 m.; 0·28 ×0·15× 0·10 m.

General characteristics of houses of the Tall Ḫalaf period.

TT 6. The sixth and richest settlement lay at 4 m. below the surface. Nothing that was found at this level could be ascribed to the Al 'Ubaid period. Everything associated with the buildings belonged to the fullest phase of development of the Tall Ḫalaf period. The most important building was a spacious house, standing in the centre of the Tepe (cf. Fig. 5 (*c*)): as in the fifth settlement, the ends of the house had been destroyed with the denudation of the mound. This was the largest house discovered on the site. The rooms appear to have been long in proportion to their breadth: there was no trace of a central court, and in this respect all the houses at Arpachiyah show a marked difference from the south Babylonian houses with their rooms grouped about an open courtyard. The house walls and floors were of beaten clay or *pisé*, the roof of beaten clay, wood, and matting. Walls were more solid structures than those of the later settlements; some of them were nearly half a metre thick and had been faced with a solid mud plaster which had been burnt to terra-cotta in the subsequent destruction of the house by fire.

The Workshop.

This house, which alike by its situation and size was clearly the property of one of the headmen of the village, proved to have been the workshop of a potter and a maker of stone vases and of flint and obsidian tools.

[1] Gordon Childe, op. cit. 56.

[2] For a different theory as to the origin of plano-convex bricks cf. de Lougaz, *Plano-convex Bricks* (Oriental Institute Studies, No. 7). For the plano-convex brick at Nineveh cf. *A.A.A.* xx. 149.

Hoard of objects discovered in the burnt house.

The workshop contained in all more than 150 objects, the stock-in-trade of the potter and stone worker. Polychrome pottery, stone vases, jewellery, cult figurines and amulets, flint and obsidian tools were lying in confusion in a single room, and there were in addition thousands of cores and chips characteristic of the debris in a stone-carver's shop. Many of these objects, in particular the pottery and the jewellery, lay close to the walls of the room, on carbonized wood, suggesting that they had originally rested on shelves, or more probably, tables.

That the occupant was a potter and not merely a collector is proved by the discovery of a large lump of red ochre and of painters' palettes lying on the floor associated with the pottery.

These remarkable finds had been preserved for us by the fortunes of war: this house had been sacked and burned by an invader, presumably the Al 'Ubaid inhabitants of the subsequent settlement. Fortunately the enemy had been content to destroy and had not bothered to remove the objects, which were found in a rich hoard lying under the roof which had fallen in the fire. The exact circumstances of their discovery will be described in detail in Chapter 9.

Polychrome pottery common in TT 6.

The most important characteristic that distinguished the ware of TT 6 from that of all previous or subsequent periods was the frequent use of polychromy, much of the pottery being trichrome. This ware represents the climax of the Tall Ḥalaf period, and in technique is unsurpassed by any other painted prehistoric pottery in Mesopotamia.

TT 7–10. Figs 4, 13. The foundations of the potter's shop rested directly upon those of the older level of destroyed buildings in TT 7. Here we came upon a style of architecture not previously discovered in Mesopotamia. The plan consisted of a circular room, or tholos, approached by a long rectangular chamber on the major axis. Foundations were of stone, and the superstructure was of beaten clay or *pisé*. These buildings will be described in detail in Chapter 2. In the Tepe they occur at four distinct levels, and show a distinct development in type; in the lower levels they are simpler in plan and smaller in dimensions and there is no ante-chamber.

Excavations down to virgin soil outside the Tepe.

Although TT 10 was the lowest level to which excavations were conducted in the centre of the mound, on the outskirts excavations were made over a fairly wide area down to virgin soil, so that we may claim to have uncovered all the main occupation levels on the site. The cross-section through the mound on to outlying areas of excavation would indicate that we may expect below TT 10 at least five more occupation levels, though it is difficult to forecast this with certainty. On the outskirts of the mound houses were of more

flimsy material; in many cases they appear only to have been of wood, and were indeed huts rather than houses, so that levels are far less rigid than on the centre of the mound.

General correlation of levels.

It is necessary to bear in mind several points of difference in correlating the levels of the Tepe with those outside it. In the first place, as will be seen from the section, general stratification shows a decided slope of accumulated rubbish running down from the Tepe on to the surrounding flats: one of the stone roads on the west side of the Tepe is climbing the hill at a slight gradient (see section, Fig. 4, squares Fc V. 1, Fd V. 1), and it is therefore obvious that a line which connects a level on the Tepe with a contemporary level on the flats must rise with the slope of the ground.

Poorness of houses outside the Tepe.

Another point worthy of note is that dwellings outside the Tepe are likely to have survived for a shorter period and accumulated and discharged rubbish more quickly than the more solid and important buildings in the heart of the village. It is therefore probable that a number of superimposed houses on the outskirts may correspond to a single level of habitation in the better preserved dwellings of the Tepe, and it is equally probable that whole levels may have left hardly any trace whatsoever in this outlying neighbourhood. It therefore becomes clear that we cannot expect to make rigid correlations with a single level on the Tepe and a single level outside it, but must be content at best to indicate certain general correspondences.

Criteria for connecting levels in the Tepe with those outside it.

Outside the Tepe we have three important criteria which may enable us in a general way to relate the different levels on the low-lying ground with those in the interior of the mound. In the first place we have pottery of the Al 'Ubaid period, and secondly there are the stone roads, thirdly the circular tholoi constructions.

Al 'Ubaid levels outside the Tepe. With the exception of the graves which are deliberately dug deep into the soil to allow of a good surface protection, Al 'Ubaid pottery is never found below the top metre outside the Tepe. We have already shown that in the Tepe, Al 'Ubaid ware is never found below the top five settlements TT 1–5. It is therefore certain that everything below the top metre outside the Tepe antedates TT 5, and the latest levels in the second metre may therefore be presumed to correspond to TT 6.

TT 6–7 and corresponding levels (cf. Fig. 4). With TT 6–7 we may associate two distinctive features: first, the highest of the stone roads, and second, the use of a polychrome pottery with a peculiar white stippling. Outside TT 6–7 this pottery, or fragments of it, are found in two places, in squares Fc V. 2 and Fd IV. 4, at a maximum depth of 2 m. below the surface. This

would seem to be the very lowest level of correspondence with TT 6–7 outside the Tepe, and actually in the outlying areas material corresponding with TT 6–7 is rarely found lower than 1·5 m. below the surface.

The latest stone roads or tracks outside the Tepe occur almost immediately below the surface: in no case has Al 'Ubaid pottery been found beneath them, and it is therefore certain, when we consider also their occurrence in the Tepe itself, that none of the roads can have been built later than TT 5 or 6.

TT 8–10, and corresponding levels. The main architectural feature of these levels in the Tepe has been shown to be the buildings with circular rooms or tholoi. Outside the Tepe four more of these buildings occur, none of them at a depth greater than 2 m. below the surface, so that the earliest of them is not likely to be older than TT 10. In square Fd V. 2 the tholos (Fig. 14) lies at 2 m., fairly deep below the surface; but as will be shown in Chapter 2, this building was partially underground, and its foundations correspond to an occupation level which must have been at least a metre higher. Further, this tholos is of the developed type with antechamber, and we may therefore correlate it with the earliest of the developed tholoi in the Tepe TT 8. The three remaining tholoi outside the Tepe are all of the undeveloped type with comparatively thin walls consisting of not more than two stones in thickness, and they may therefore be connected with the more primitive type of tholos in TT 9–10. In square Fd IV. 5 a slight gradient connects this building with TT 9, and in square Ga IV. 4 the tholos lying close to the surface may also be connected with TT 9. The tholos in square Fc V. 1 is also of the simple type, and as it lies 2 m. below the surface may be as early as TT 10, though it is certainly not earlier.

From this evidence, then, we may accept two important conclusions which will enable us to correlate material found in the outlying areas with material found in the Tepe: it seems evident

1. That any objects found directly below the level of the stone roads cannot be later than TT 6.
2. That any objects found beneath the level of the tholoi in the outlying areas cannot be later than TT 9.

A detailed comparison of all the outlying levels beyond the Tepe shows that there are approximately five main building levels between the surface and virgin soil (cf. especially the section, Fig. 4, sq. Fd IV. 4, where the bread ovens indicate the main floor levels).

As levels outside the Tepe are by no means entirely uniform, we cannot make rigid generalizations as to the position of an object in the time series by its depth below the surface; but as an approximation it is as a rule safe to conclude that the top $2\frac{1}{2}$ m. of the low-lying area correspond to TT 6–10 in the Tepe; and that everything below this level is earlier than TT 10, the oldest settlement yet unearthed in the Tepe.

Of the five main house levels discovered outside the Tepe, three occur

in the top $2\frac{1}{2}$ m. and for these three we must allow at least two sub-periods of reconstruction.

Again, outside the Tepe there are two house levels which occur at a fairly constant depth of 3 and 5 m. below the surface; everything in these levels must be older than TT 10. The considerable accumulation of rubbish associated with these two levels shows that they must have continued in existence for a fairly long period, and further that they suffered considerable reconstruction, and we may here allow for at least three sub-periods and possibly more. This is in agreement with our estimate that there are at least five settlements below TT 10 in the Tepe awaiting excavation.

Material below the 3-metre level outside the Tepe is earlier than TT 10.

We have already insisted that it is impossible to make rigid correlations, owing to the hopeless condition of houses outside the Tepe; but as regards the deep levels, the one fact of importance beyond dispute is that everything below 3 m., in the area outside the Tepe, is definitely earlier than TT 10; and this is proved both by the section through the site illustrating the comparative height of buildings in the Tepe with those outside it, and by the more primitive material remains and the inferior firing of the pottery in all the deep outlying areas below the three-metre mark.

We may now (see p. 21) show the main correlations on the site between the Tepe and the outlying areas in tabular form.

External relations with Arpachiyah.

Now that we have reviewed the stratification and time sequence on the site itself, we may consider what are the principal external relations with other prehistoric sites which have been excavated in Iraq and Syria. First of all it is important to stress the main grounds for establishing contacts with the three important prehistoric cultures which differentiate our main sequences at Arpachiyah. In the latest period we have the evidence of Al 'Ubaid, and in the earlier periods of Tall Ḥalaf together with an admixture of Samarra.

Al 'Ubaid Period. (Cf. Figs. 25–40.)

Al 'Ubaid Pottery at Arpachiyah. One would be disinclined, perhaps, to equate the last period of occupation at Arpachiyah with that of Al 'Ubaid on the evidence of pottery alone: for the pottery of this group is essentially a black on buff ware, with many variations both in shape and in decoration; the ware varies considerably even on neighbouring sites in south Babylonia itself, and obviously is still more likely to show greater differences when it comes to Assyria, so far from its main centre of distribution. Generally speaking, the ware of this period at Arpachiyah seems, as we might expect, to be a degeneration of the south Babylonian species. The variety of shape and design is more restricted than in the south, and the absence of ring bases, the poor quality of clay, and inferior firing, together with certain types which

seem to be related to pottery of the Uruk-Jamdat Nasr type are all indications that this pottery comes late in the series. But it is important to observe that some of the types are closely similar to the best material of the early Al 'Ubaid, and it would seem, therefore, that the best traditions of the period were still in the potter's memory. The following examples are most strikingly

Tepe	*Low Ground around the Tepe*
TT 1–4. Al 'Ubaid levels. Top 2½ m.	Al 'Ubaid buildings non-existent. Deposits in top metre of Al 'Ubaid pottery. No Al 'Ubaid occupation below that depth except for intrusive graves.
TT 5. Al 'Ubaid and Tall Ḥalaf pottery intermixed, but the building is of Tall Ḥalaf period. Three metres below surface.	Below top metre.
TT 6. Tall Ḥalaf, climax of the period. Polychrome ware.	Corresponding remains do not as a rule go below 1·5 m. beneath the surface. Highest level of stone roads.
TT 7. Developed type of tholos with antechamber. Cf. Fig. 13. Earliest appearance of polychrome pottery with white stippling.	Corresponding remains do not go below 2 m. beneath the surface, the lowest level at which polychrome pottery with white stippling occurs. Lower level of stone roads.
TT 8. Earliest example of developed form of tholos with antechamber.	*Pisé* tholos with antechamber in sq. Fd V. 2. Cf. site plan, Fig. 3.
TT 9. Tholos without antechamber, simplest form and of small dimensions.	Tholoi on stone foundations without antechambers in squares Fd IV. 5, and Ga IV. 4.
TT 10. Earliest tholos discovered in the Tepe.	Tholos stone foundations, without antechamber in Fc V. 1. Corresponding house levels not more than 2½ m. below the surface.
Below TT 10. Soil not yet excavated. Taking average depth of accumulation there cannot be less than five main levels underlying TT 10, and there are probably more.	Below 3 m., two main levels both rich in debris, particularly the lowest level on virgin soil. Several periods of reconstruction probably covering a long occupation. Pottery still of Tall Ḥalaf type, rich in form and painted design but showing inferior baking.

reminiscent of the southern ware: Fig. 34, Nos. 1, 3, 4, 6; Fig. 37, No. 4; Fig. 28, No. 2. In particular we may note the application of the solid running lozenge pattern, the lanceolate leaf pattern, and of squat, bulbous handles horizontally perforated on the shoulders of certain vessels (*cratères à oreillettes*), while the use of painted handles and double spectacle vases (Fig. 41, No. 18) is again highly characteristic. Even with these resemblances certain critics might yet not be satisfied, but there are two further distinctive criteria of great importance.

Links with the Al 'Ubaid period, other than pottery. The first outstanding link is the terra-cotta bent nail which in the south constantly occurs in the Al 'Ubaid period: this is still commonly supposed to be a wall decoration for want of a better explanation, but whatever its purpose the bent nail (Fig. 49, No. 8) is associated with the latest pottery of TT 1–4, and as such is a further confirmation of the theory that the pottery belongs to the Al 'Ubaid period. Lastly, there is a peculiar type of terra-cotta bead (Plate VII (*b*), No. 893, bottom row), a ribbed flattened double conoid, made both in terra-cotta and in sun-dried clay, decorated with peculiar incisions and stamped wedge ends: this bead type is found both at Al 'Ubaid and at Talloh and gives us another link with this early ware of the south.

Samarra ware at Arpachiyah.

Unfortunately Samarra ware is rare and represented by a few importations only, most of them are sherds, and there is actually only one complete vessel (see Chapter 11); but the clay, and certain designs such as the scorpion goddess, the three-footed peg or festoon pattern, the palm design, and the globular-bodied vessel with a high neck (the 'Flaschen mit hohem Hals' class of Herzfeld),[1] and sherds with combined incised and painted decoration leave no doubt of the identification of this ware at Arpachiyah. The majority of the Samarra ware was concentrated in one portion of the lower lying levels (cf. section, Fig. 4, sq. Ga IV. 4), and would seem to be not later than TT 6, while some of it undoubtedly was used earlier.

Absence of Samarra ware in the bottom levels. On the other hand, no examples of Samarra ware were found in the lowest levels which antedate TT 10. Samarra ware, therefore, is at Arpachiyah earlier than Al 'Ubaid and contemporary with the developed Tall Ḫalaf periods, but does not occur in the bottom levels of the mound. As the Samarra pottery is all imported, this does not imply that it is later than the beginnings of Tall Ḫalaf; at Nineveh it appears in the bottom levels of the mound.

Tall Ḫalaf Period.

Tall Ḫalaf ware a homogeneous series. Identifications here are so numerous that it is unnecessary at this stage to mention details. This period begins with the first settlement on virgin soil and continues into TT 6. The pottery is in use for at least ten main building periods, and probably more: it covers by far the longest period of occupation on the site. It is important to observe that it is an entirely homogeneous ceramic series. In the beginning its outstanding characteristics are naturalistic animal designs, such as leopards, birds, fish, and snakes, but the characteristic stippled decoration, the use of a slip, and the highly distinctive Arpachiyah bowl type with bevelled base are also present.

Distinction in style and baking between the early and the fully developed Tall

[1] E. Herzfeld, *Ausgrabungen von Samarra*, Chapter viii.

Ḥalaf ware. Only in the earliest period are designs and shapes restricted, and the baking and clay inferior. Gradually this pottery develops, and we find the finest examples of the potter's skill in TT 6, where we have polychromy, including trichrome decoration, and an enormous variety of stylized abstract designs, without any of the traces of naturalistic animal drawing that characterize the earliest series.

Chronology.[1]

Discrepancies between different chronological systems. The earliest historic period in Mesopotamia on which there is any approximate measure of agreement as regards date is the first dynasty of Ur. Several authorities suppose that this dynasty begins about 3100 B.C., and there is now little doubt that we may accept this as a reasonable date for the period. But in proportion as we attempt to measure the date of periods before this, the greater is the degree of discrepancy between the different systems of chronology, and by the time that we have left the early historic periods, and are confronted by the material of prehistory, dating becomes a matter of pure speculation. We may, however, at least observe this: that on all the principal Mesopotamian sites where prehistoric levels have been tapped, the accumulation of debris between the lowest settlements and the level which represents 3000 B.C. is as a rule approximately twice as great as that between 3000 B.C. and the Achaemenid period *c.* 500 B.C. That does not imply that we must assign twice that length of time, or twice 2500 years, to the periods preceding 3100 B.C. because the less substantial buildings of prehistory are more easily destroyed and accumulate their debris more quickly than those of historic times. On the other hand, many of the buildings of prehistory are formidable constructions and, even allowing for wars, must have survived individually for considerable lengths of time. Moreover, the actual number of building levels in these early periods is very great, and often, as in the Uruk period, levels which are poorly represented on one site, such as Ur, show considerable accumulations on other sites, such as Uruk and Nineveh. In addition, the stylistic development of every variety of material during that time is considerable: we have to allow for the transition from a chalcolithic period, in which metal was a great rarity, to the golden era of the royal tombs of Ur, where a very high degree of metallurgical skill has been attained, and metal is now the common property even of the poorest. We may observe long phases of ceramic development, and eventually the extinction of painted pottery in the south; the superseding of the stamp seal by the cylinder seal; a long evolution in the type of bricks from *pisé* through *Riemchen* to plano-convex, and, lastly, the invention and development of writing. To assign a thousand years for all these changes is at least not unreasonable. For these reasons, then, we believe that the earliest painted pottery periods of the north and the south may be a thousand years earlier than the first dynasty at Ur, and speculative though the argument be,

[1] Cf. CONTENAU, *Manuel d'Archéologie Oriental*, III, 1616, Tableau I, for a comparative table.

we may assign the last period of occupation at Arpachiyah to the upper half of the fourth millennium B.C., while the beginnings of Arpachiyah may on this reckoning go back to before 4000 B.C.

In addition to the positive evidence of painted pottery, beads, and bent clay nails, which enable us to correlate TT 1–4 with the Al 'Ubaid period, there is some important negative evidence which enables us to establish an approximate *terminus ad quem* for the latest period of occupation at Arpachiyah.

Negative evidence suggesting a terminus ad quem for Arpachiyah. Although there were nearly a thousand objects worthy of individual record discovered on the excavations, no single example of writing and no cylinder seals occurred. In addition, metal, though not unknown, was a very great rarity, only five pieces in all being found on the excavations, the one intact example a cast copper chisel of Susa 1 type, from the top levels. Now the advent of the cylinder seal and of writing occurs in south Babylonia at the beginning of the Uruk period, and both become common in that of Jamdat Nasr. It is the Jamdat Nasr period, too, that shows the first marked development in the use of metal; before that period metal is a rarity. We may therefore confidently assert that TT 1–4 antedates the Uruk and Jamdat Nasr period proper, though there are indications that it may just overlap with the beginnings of this period. A single pot (Fig. 37, No. 4) from the Arpachiyah cemetery has obvious affinities with Uruk ware, and contemporaneous with the Al 'Ubaid ware we have the burnished grey ware which also appears in south Babylonia with the red slip ware of Uruk.

Prehistoric material from Nineveh compared with that from Arpachiyah. But the exact position in the time series of TT 1–4 is best shown by a comparison with the prehistoric material at Nineveh.[1] In the prehistoric pit at Nineveh the red slip ware of Uruk was common, and was there referred to as Ninevite 4. Underneath Ninevite 4 came the stratum known as Ninevite 3, in which grey ware was common. Curiously enough, Al 'Ubaid ware was not found at Nineveh, but we know from TT 1–4 at Arpachiyah that the grey ware and that of Al 'Ubaid are roughly contemporaneous: it is possible that the grey ware out-lived the Al 'Ubaid ware and superseded it, as it did in Babylonia.

TT 1–4 correlated with Al 'Ubaid 3. At all events the occurrence of grey ware at Arpachiyah, the admixture of two or three painted pot types that suggest relations with Uruk and Jamdat Nasr, and the generally debased forms of the Al 'Ubaid pottery at Arpachiyah, all tend to show that TT 1–4, the latest period of occupation on the site, probably coincides with the end of the Al 'Ubaid period, i.e. Al 'Ubaid 3, which, as we know from the south, actually overlaps the beginnings of the Uruk period. We may therefore now draw a comparative table of relations between the main periods at Arpachiyah and those on the best known foreign sites both within and without Mesopotamia.

[1] *A.A.A.* xx.

Comparative Table of Correspondences on Different Prehistoric Sites

Arpachiyah	*Nineveh*[1]	*Tall Ḫalaf*[2]	*Ur*[3]	*Uruk*[4]	*Susa*[5]
TT 1–4. Al 'Ubaid and grey ware	Nin. 3. Grey ware	A few painted bowls, contemp. with Al 'Ubaid	'Ubaid 3	Stratum 14, and below	Post-Susa 1
TT 5. Transitional period	Nin. 3, early	Late Tall Ḫalaf	'Ubaid 2–3	Below st. 14	End of Susa 1
TT 6. Climax of Tall Ḫalaf ware. Polychrome pottery	Nin. 2 (*c*)	Finest polychrome	'Ubaid (2?)	Below st. 14	Susa 1 (?)
TT 7–10. Developed T. Ḫalaf and Samarra. Stone buildings; tholoi	Nin. 2 (*a*) and (*b*)	Main early strata	'Ubaid (1?)	Lowest strata	Pre-Susa 1. Persepolis (?)[6]
Below TT 10. Linear incised steatite amulets. Painted pottery of the earliest period	Nin. 1	Earliest painted and plain pottery	'Ubaid 1 or earlier	Bottom strata (?)	Neolithic Iran

CHAPTER 2

THE THOLOI

The most interesting architectural features at Arpachiyah are the tholoi, or buildings with a circular ground plan: all of them belong to the Tall Ḫalaf period, and they suggest far-reaching connexions, extending into the Mediterranean.

Ten buildings of this type were discovered; six of them were found in levels TT 7–10 in the Tepe, and four were found in the outlying areas (cf. Fig. 3, sq. Fc V. 1.; Fd V. 2; Fd IV. 5; Ga IV. 4).

TT 7–10. Fig. 13 and Plate 1 (*d*). All the tholoi in the Tepe rested on stone foundations, having a superstructure of *pisé* or beaten clay. The series shows a development in plan form; the earlier buildings in TT 9–10 consisting only of a simple circular building, and the later buildings in TT 7–8 having, besides a general increase in dimensions, a rectangular room added to the circular chamber. The earlier plan appears to be the prototype out of which the two-roomed plan was evolved.

TT 7. This level contained two separate buildings of the developed type, with antechambers at right angles to each other and forming, with their end walls, two sides of a courtyard. The main axes ran nearly N. by S. and E. by W. respectively. The north building was a reconstruction of an earlier tholos in TT 8, the foundations being laid directly on the stones of the earlier

[1] *A.A.A.* XX, pl. 73, for the prehistoric section, and 127–75.

[2] VON OPPENHEIM, *Der Tell Halaf.*

[3] WOOLLEY, *Excavations at Ur* 1929–30 (*A.J.* X, No. 4).

[4] JORDAN, *Dritter vorläufiger Bericht über die von der Notgemeinschaft der deutschen Wissenschaft in Uruk unternommenen Ausgrabungen* (*Abhandlungen der Preussischen Akademie der Wissenschaften*, 1932), hereafter cited as JORDAN, *Uruk*, 1932.

[5] *D.P.M.*, tomes 12, 13, 15, 20.

[6] HERZFELD, *Iranische Denkmäler*, Lieferung, 1, Reihe 1.

building and reproducing its plan. The southern building was only partially excavated at the end of the season, and may overlie similar earlier buildings. The total length of the northern building was 19 m., with an external diameter of 10 m. in the tholos. The southern building was slightly smaller, having a total length of 16·5 m. and a diameter of 9 m. In the antechamber of the southern building there were traces of a flimsy wall which may have been an internal partition wall during a later period of use. The foundations of both buildings consisted of large river boulder pebbles, with an admixture of conglomerate and sandstone. The stones in all the tholoi were set in a mud mortar.

TT 8. The building in this level lay 0·35 m. below the northern building in TT 7, and was exactly similar in plan to it. It was the best preserved of the series, and apart from several intrusive Al 'Ubaid graves and pits which had damaged the foundations, the ground plan was intact. This makes the reconstruction in TT 7 difficult to explain (see below). The walls of the tholos were 1·65 m. wide and of the antechamber 1·35 m., the total length as in TT 7 was 19 m. and the diameter of the tholos 10 m. Pebble boulders and a small proportion of conglomerate were used for the foundations; there was no sandstone. The walls of *pisé* appear to have been stamped down to form the floor of the later building, although no distinct floor levels were apparent.

TT 9. The building in this level was the latest of the simpler type without antechamber and lay directly under the level of TT 8 and a little to the west of it. The walls were thinner (1 m. thick) and the diameter of the tholos only 5·5 m. The foundations were of rough sandstone with one or two pebbles.

TT 10. This, the lowest level so far excavated in the Tepe, contained two buildings smaller and with thinner walls again than in TT 9. One building lay partially under the antechamber of the northern building in TT 8; part of the foundations had been removed in this period and the material presumably incorporated in the later building. A fragment of a second building was found inside the tholos in TT 9, but as excavations were not carried farther west at this point, more of it may still exist. The diameter of each tholos was 7 m. and the walls were 0·7 m. thick. Foundations were of pebble boulders with some sandstone. A mud plaster face discovered inside one of the tholoi seemed to indicate the presence of another tholos lying at a deeper level still.

With one exception in TT 10 each rebuilding was accompanied by the importation of a fresh supply of stones for the foundations, the older foundations being left intact. This may indicate that some special sanctity attached to these buildings, but whatever the reason, it has presented us, in a comparatively small depth, with a most interesting series of plans, well preserved. The smallest and simplest type is found at the bottom, and in succeeding periods the tholos increases in dimensions, culminating in the fine two-chambered buildings in TT 7–8.

Tholoi in the outlying areas.

Four buildings of this type were found in the outlying areas; they probably cover periods 8–10 in the Tepe and may be summarized as follows:

(*a*) Sq. Fd V. 2. A tholos of the developed type with antechamber (cf. Fig. 14). Internal diameter of tholos 4·25 m.; internal width of antechamber 1·7 m.

The main axis of the building lay nearly N. by S. like the smaller of the two tholoi in TT 7; but unlike all the other tholoi of developed type the antechamber lies not on the major axis but at right angles to it; only the entrance is on the major axis.

This building has several points of interest: in the first place it is the only tholos constructed entirely of *pisé* without the use of stone foundations; and secondly, it was partially underground, unlike the other tholoi, all of which undoubtedly stood above ground. Both antechamber and tholos had been constructed by digging into the natural clay beneath the existing ground level, and the recessed entrance to the antechamber was probably approached by a ramp, or inclined dromos on the major axis. The cut faces of the tholos and antechamber had been smoothed over with a white lime plaster.

Of great importance was the discovery of part of the springing of the dome in the circular chamber (a portion 0·85 m. high), suggesting what in any case might have been inferred from the other buildings, that the tholoi were all domed. The dome was evidently a very low one, as the inspringing was very sharp, and actually began at floor level. The internal height of the chamber cannot have been more than 1½ m.

The long antechamber has been restored with a gabled roof. It is possible that, although the chambers were actually below ground level, the roofs stood above ground: there is an interesting analogy for this in a granary of the modern village of Arpachiyah existing to-day; this granary is partially underground and has a gabled roof (cf. Fig. 16). It is presumed that the roofs would have been of timber, plastered with *pisé*.

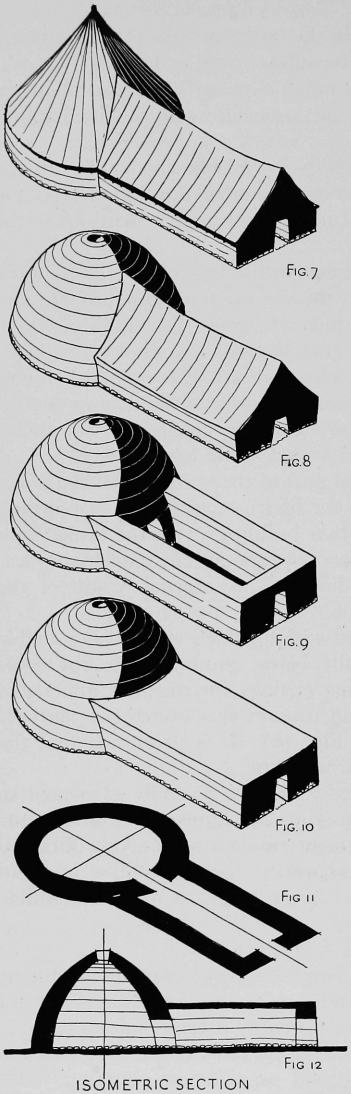
This building had been badly destroyed and even partially excavated in antiquity for loot; we may suspect that numerous cult figurines and fragments of fine Tall Halaf pottery found in the adjacent rubbish were spoils obtained from the tholos. After destruction both chambers had been filled up solid with *pisé*, in order to raise the ground level to the height at which the buildings of the subsequent period stood.

This tholos probably corresponds to TT 8 in the Tepe.

(*b*) Sq. Fd IV. 5, Fig. 3. A tholos of the simpler type without antechamber, on limestone foundations. Internal diameter 4 m., wall thickness 0·4 m. This is a building of the simpler type, and probably corresponds to TT 9.

(*c*) Sq. Ga IV. 4, Fig. 3. A small portion of a tholos of the simpler type was discovered in this area: the building had been almost completely destroyed; it probably corresponds to TT 9.

(*d*) Sq. Fc V. 1, Fig. 3. A tholos of the simpler type, without antechamber, on stone foundations. Internal diameter of tholos 4 m., wall thickness 0·5 m.



Reconstructions of Tholoi on Stone Foundations in TT 7–8

This building, which lay at over 2 m. below the surface, and was well below the level of a number of stone roads in the neighbourhood, was probably the earliest of all the tholoi in the outlying areas and would correspond to TT 10.

It will be observed that all the tholoi outside the Tepe are on a smaller scale than those in the Tepe, indicating that the most important buildings were in the centre of the site.

Reconstruction of the Tholoi.

Owing to the complete destruction of the superstructure of these tholoi, an exact restoration is at present impossible, and there can be no complete analogy for a building which antedates any other structure by so great a length of time; one can hope that in the future similar buildings of this period may be uncovered in a better state of preservation, but until this unlikely event occurs a general restoration is suggested, based partly on the evidence from the tholos of *pisé* in Fd V. 2, and partly on grounds of probability and subsequent development. But there is one point of cardinal importance that must influence any reconstruction, namely, the existence of part of the springing of the dome in the *pisé* tholos. In this example the sharp angle of the springing showed that the dome must have been very shallow, but, remembering that the building stood partially underground and did not conform in any way to the usual plan, the proportion of height to diameter would probably bear no relation to the free standing buildings in the Tepe. The apparently natural shape for a dome constructed of mud is much higher in proportion to its diameter than in our underground building, as is seen in the egg-shaped bee-hive huts around Aleppo; and in Figs. 8, 9, and 10 the

circular room has been restored with an egg-shaped dome, with approximate equality in height and diameter, as obtained later at Mycenae. It is impossible to tell whether the Arpachiyah builders constructed their domes logically with radiating courses, or whether they were corbelled, or even formless

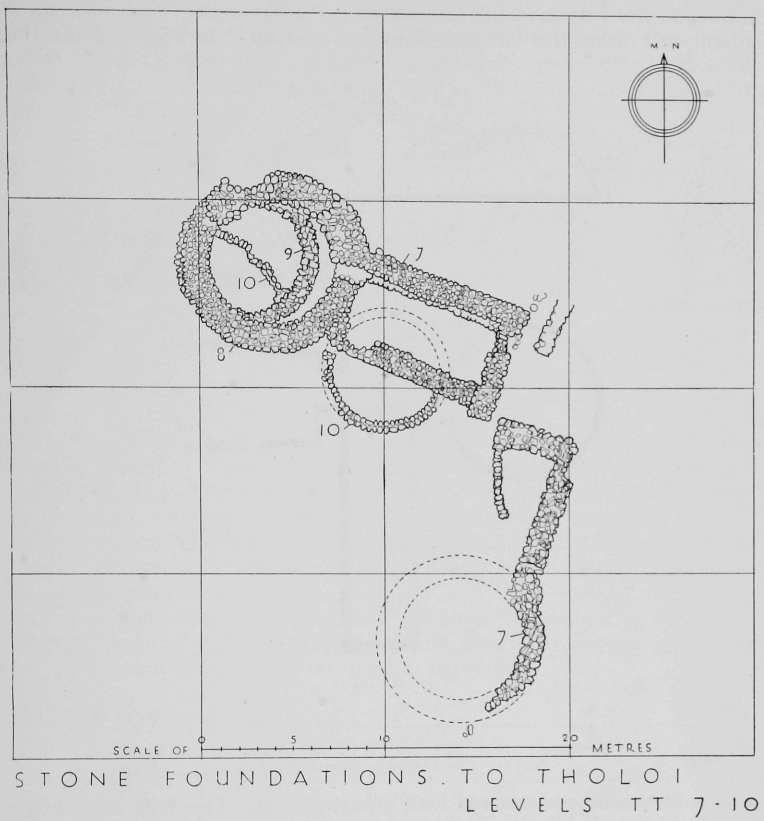


FIG. 13

shapes of *pisé* only approximately domed, but the unusual width of the stone foundations indicates that the truer form of construction may have been in use. In the diagram section (Fig. 12) it will be observed that an opening has been suggested in the top of the dome of the tholos; with this we might compare the curious finials on the tops of the Assyrian domes of Fig. 22.

The most interesting problem is perhaps in the roofing of the antechamber; for with the possible exception in Fig. 7, where the tholos has been restored

with a Yezidi conical roof (cf. Fig. 18), a dome of some sort for the circular room seems almost inevitable. The antechamber, however, presents several possibilities. Either it was roofed and was in fact a chamber, or it was left open as a courtyard, or even as an approach to the circular room in the same manner as the dromos in the Mycenaean bee-hive tombs. The existence of an end wall makes this last suggestion less probable. In Figs. 7 and 8 the

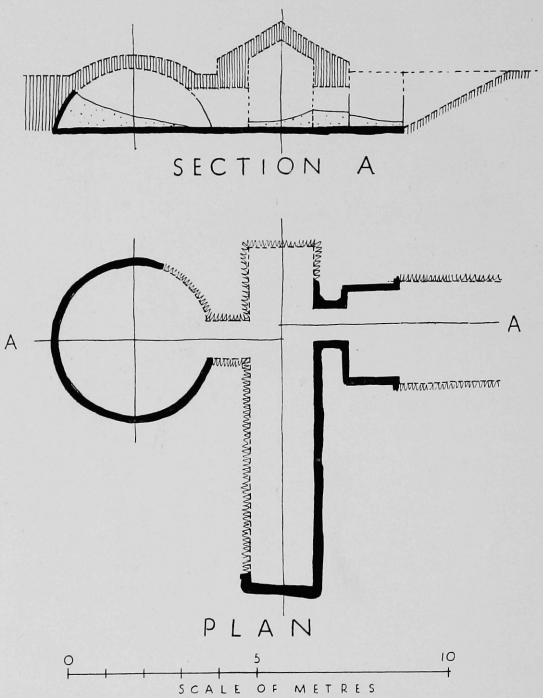


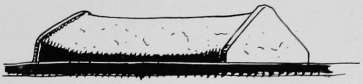
FIG. 14. *Pisé* Tholos in Square Fd V. 2.

antechamber has been restored with a pitched roof. This type of roof is a common form in Mesopotamia to-day, and we know that many of the primitive building traditions still survive in the country; in the modern village of Arpachiyah there is a gabled granary (cf. Fig. 16), referred to above, with a long chamber partially underground not unlike the antechamber of the tholos in Fig. 14. In antiquity the pitched roof is depicted in a painted terra-cotta from Al 'Ubaid, now in the British Museum (Fig. 17); this is some confirmation of our interpretation of a curious steatite amulet (Fig. 15, A 11) of the Tall Ḫalaf period, which seems to represent a gabled roof with a bending roof pole. Finally the pitched roof is still to be seen around Mosul and

in the foot-hills, and often the ridge sags with the weight of mud and reed matting, exactly as our amulet is depicting.

The only other alternative illustrated is the ubiquitous flat roof formed with beams, matting, and mud (Fig. 10). It is interesting to note that the addition of the rectangular antechamber immediately gave rise to the problem of the junction between the dome and the adjoining roof. The dome is essentially a free standing building form and there is no satisfactory method of abutting another roof, of whatever form, to it. The junction is always clumsy and,

15. Steatite amulet of Tall Ḥalaf period, in form of Gabled House



16. Modern Gabled Granary in the village of Arpachiyah

17. Painted Terracotta in form of Gabled House, from Al 'Ubaid

18. Yezidi Shrine

FIGS. 15–18

moreover, difficult to build. This fact may possibly account for the disappearance of the circular ground plan in Mesopotamian architecture in later periods, for the problem does not arise where the dome grows out of a square plan, and generally springs above the level of surrounding roofs.

One other possible form of roof for the antechamber, not illustrated, is the barrel vault, for one can assume with a knowledge of the dome a corresponding acquaintance with the vault.

Of the building materials used, only the stone foundations and a mass of fallen *pisé* were recovered. Occasional traces of carbonized wood lying in the *pisé* suggest that some timber was used in the roofing.

The Dome in Mesopotamia.

The outstanding importance of the Arpachiyah tholoi is that they are the earliest known examples of domical construction in Mesopotamia, going back as they do to the early part of the Tall Ḥalaf period. Fragments of reed huts with rounded roofs were found by Mr. Woolley at the bottom of the Flood pit at Ur, and a reed hut of arched shape, of the Jamdat Nasr period, is depicted on an archaic stone trough from Uruk in the British Museum (cf. Fig. 19), B.M. 120,000. It should be observed also that what appear to be vaulted reed huts are drawn on a number of Samarra ware sherds from Arpachiyah (Fig. 20). But the true dome is not found till we reach the period of the Royal Cemetery of Ur, *c.* 3300 B.C. (cf. Fig. 21 illustrating a section through P.G. 1054); here, however, the dome is set on a rectangular chamber and rough pendentives are used to turn the rectangle of the chamber into a

circle.[1] After this we have to pass through another millennium to discover a building which may have been domed. In the Larsa period, *c.* 2000 B.C., the building *E-dublal maḫ* at Ur appears to have been domed, though here again the ground plan was rectangular. It is probable that a number of

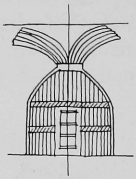


FIG. 19. Vaulted Reed Hut from a bas-relief on a stone trough of the Jamdat Nasr period. B.M. No. 120,000.

FIG. 20. Painted Huts on a sherd of the Samarra period from Arpachiyah

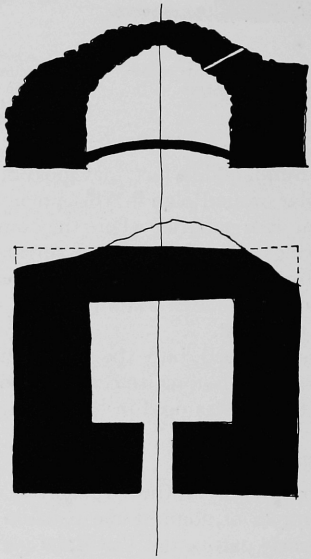


FIG. 21. Section through Domed Tomb. P.G. 1054, Ur Royal Cemetery

buildings of the Kassite period were domed, and later, in the Assyrian period, we have bas-reliefs from Quyunjiq depicting domes (Fig. 22). Finally, we have the dome on buildings of the Mohammedan period, though here the construction probably follows on Byzantine traditions and is no longer connected with a form of construction which in Mesopotamia had probably long been forgotten on buildings of any considerable size.

[1] Cf. WOOLLEY, *Ur Excavations, The Royal Cemetery*, II, 106.

Probably the closest link of all with the traditions of archaic Mesopotamia is to be found in the numerous bee-hive-shaped houses so common around Aleppo (cf. Fig. 23). Here the plan is often circular: it is more than probable that this humble house type is a modern descendant of what we now know to be one of the earliest forms of Mesopotamian building.

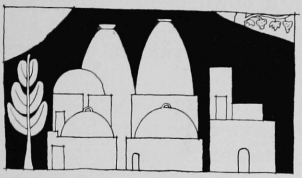


FIG. 22. Bas-relief of the Assyrian period from Quyunjiq, showing Domed Buildings.

FIG. 23. Modern Bee-hive Houses, near Aleppo

Foreign relations.

Perhaps the most striking analogy suggested by the Arpachiyah tholoi is the bee-hive form of tomb construction used at Mycenae (cf. Fig. 24). But

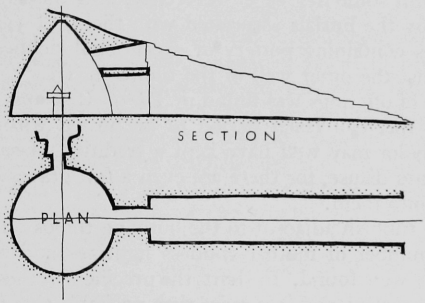


FIG. 24. Section through Tholos and Dromos at Mycenae

it must be remembered that there is one very important distinction between the stone tholoi at Arpachiyah and those at Mycenae—that whereas the Mycenaean buildings stood underground, those at Arpachiyah, with the solitary exception of Fig. 14, stood above ground. Earlier than this we may seek connexions in the Early Minoan periods in the Mesara plain and at Kumasa in Crete,[1] and there are a number of very early Libyan tholoi. Finally, we might be tempted to move much farther west and to seek analogies in the *nuraghi* of the Sardinian bronze age.[2] The subject is indeed too wide for

[1] Cf. ARTHUR EVANS, *Knossos*, II, 35–44, and fig. 17, p. 38, for a useful summary of early tholoi, and PEET, *Rough Stone Monuments and their Builders*, Harper, 1912.

[2] Cf. also ZAMMIT, *Prehistoric Malta*, 31, for evidence of a domed apse in the neolithic Tarxien temple.

discussion here, but we may at least suggest that the tholos which is spread through the Mediterranean area may ultimately be derived from our early Mesopotamian examples.

Purpose of the tholoi at Arpachiyah.

Unfortunately, as all the tholoi were ruined down to foundation level, and as they were completely stripped of their original contents, we know little about their function as buildings. But there is evidence which may help us to draw some inference on the subject.

In the first place, it has been observed that all the largest examples stand in the very centre of the mound, and it may therefore be taken for granted that they were buildings of outstanding importance. Secondly, their walls are always of great thickness, and no other building on the site could compare with them for strength. As there were no town walls, we may presume that they could serve as strongholds in times of stress. Thirdly, there is the important fact that in the successive rebuildings the stone foundations appear to have been the object of some piety and were left undisturbed, fresh supplies of stone being imported for each new building and laid immediately over the older foundations. From this we might argue that the buildings were regarded with some degree of reverence, and this is borne out in an impressive way by the burials associated with them, G 51, 53. These two Tall Ḫalaf graves containing pottery of exceptional richness and brilliance were found against the outer wall of the tholos in TT 7. Again, an infant burial plundered of offerings was found in TT 9. It seems, therefore, that it was desirable in the Tall Ḫalaf period to be buried within the precincts. Moreover, the tholoi may well have kept a tradition of sanctity long after they had fallen into disuse, for there are even a few graves of the Al 'Ubaid period intrusive into them.

Finally, in the rubbish adjacent to the outlying tholos on square Fd V. 2, Fig. 2, a large number of mother-goddess figurines and fragments of fine Tall Ḫalaf pottery were found. In short, the precincts of these buildings seem to have a special sanctity, and it is more than probable that they were shrines —perhaps connected with the cult of the 'mother goddess'; for as we shall see in our examination of the cult figurines, 'mother-goddess' worship must have taken a prominent if not a pre-eminent place in the ritual of the earliest inhabitants of Arpachiyah.

Chapter 3

THE CEMETERY OF THE AL 'UBAID PERIOD

The vast majority of the painted ware of the Al 'Ubaid period was found in the cemetery in squares Fb V. 1 and Fc V. 1, and on the low-lying ground on the west side of the Tepe. Most of the burials had votive offerings in the shape of painted vessels, of which more than sixty examples were found associated with the bodies.

The total number of Al 'Ubaid graves discovered on the site was fifty, of which forty-five were found in the cemetery, and the remainder in various isolated patches of ground outside it. In addition, there were a number of Al 'Ubaid deposits lying within 1 m. of the surface; some of these had belonged to fractional burials, others were from disturbed or plundered burials, and a few probably represented the contents of hut dwellings. The importance of these surface burials is that they enable us, as we shall see in the succeeding chapter, to detect a difference in style within the Al 'Ubaid period itself.

A comparison of the pottery found in the Al 'Ubaid cemetery with examples found in the houses on the Tepe makes it certain that this cemetery was used by the peasants who lived in the top five settlements, TT 1–5 in the Tepe.

All the burials, with the exception of two, G 14, 15, which were dug into vaulted pits, with a cairn of mud brick over them, were simple inhumations. The normal depth to which the grave was dug was between 2 and 3 m. from the surface, thus allowing ample covering for bones and deposits. An interesting feature of these burials was that they were generally oriented approximately E. by W., a practice that did not necessarily obtain in the earlier Tall Ḥalaf period. It is only the general line of the body that is E. by W. Heads themselves were sometimes lying at the east, and sometimes at the west end of the grave: this is somewhat surprising in view of the fact that orientation of the body prevailed, for generally, as in predynastic Egypt, where orientation of the body is commonly practised, the head faces west. There are certain indications that the body was laid in a fine matting, but as a rule all traces of this had disappeared, and only a slight film of white powder remained as an indication of the original covering.

The objects placed in the grave with the body usually lay at the head or at the feet, but there were examples of deposits lying in all parts of the grave. The majority of the deposits consisted of painted pottery, but there were in addition a number of plain vessels and beads; and occasionally stone celts were found as well.

One of the most interesting features of the cemetery was the *fractional* burials, in which parts only of the skeleton were buried. Sometimes the head, sometimes the arms, legs, or ribs were missing, but wherever a sufficiency of these bodies remained, the general line of orientation was E. by W., as with the normal inhumations. Generally the votive deposits associated with the fractional burials could not be distinguished stylistically from those of the normal inhumations; but there were a small number of fractional burials in the sub-surface (cf. G 45, 46), where the pottery was more developed, and indicated a certain change in fashion. This small group of sub-surface fractional burials may therefore be assigned to the very end of the Al 'Ubaid period, though it is not necessary to postulate any great gap in time between them and the earlier Al 'Ubaid graves. The proportion of fractional burials was about one-third of the total discovered: this method of burial was only found in the Al 'Ubaid period and never in the Tall Ḥalaf.

The practice of fractional burial seems to have originated in an Iranian centre and to have spread eastwards through Baluchistan to India, and westwards to Arpachiyah.[1] The practice was first observed by De Morgan at Tepe Moussian[2] in Persia, and subsequently by Hargreaves at Nal in Baluchistan,[3] and by Sir John Marshall at Harappa and at Mohenjo Daro, while at Shahi Tump[4] Sir Aurel Stein discovered large jars containing offerings, but without any bones, all of which are presumed to have been burnt and the ashes scattered to the four winds. In view of the gradually increasing discoveries of fractional, and post-cremation, burials, it is worth while considering the evidence at present available.

Cremation.

On the Indian and Baluchi sites cremation is frequently associated with fractional burial, and is after all fractional burial of a more thoroughgoing type: it is important, therefore, to recall its known contexts.

At Nineveh in the *Nin. 3* stratum, there was some evidence of the Indian type of post-cremation burial.[5] In large urns of grey ware there were bodies of infants associated with ash, and there were traces of burnt soil all around. In view of the scantiness of the evidence, and of the fact that vegetable matter carbonizes with time, and leaves in the soil exactly the effects of burning, the inference of cremation was not stressed. But the discovery of fractional burials at Arpachiyah in a corresponding period, TT 1–4; the discovery of *Nin. 3* grey ware in the same stratum; and the knowledge that in the early archaic periods of India cremation and fractional burials occurred commonly together, leads me to believe that we were correct in identifying cremation burials at Nineveh. Moreover, one grave at Arpachiyah, G 22, which lay only 1·3 m. below the surface and therefore probably belonged to the late group of fractional burials, consisted of an urn burial of grey burnished ware, containing the body of an infant: no signs of cremation were detected, but it is none the less possible that it belongs to the *Nin. 3* cremation group. It seems, therefore, that in Mesopotamia, as on the Baluchi sites of Nal and Shahi Tump, and Periano Ghundai, and on the Indian sites such as Mohenjo Daro and Harappa, all different forms of burial obtained at a single period. Incidentally, partial cremation was discovered at Fara, and at Ur during the period of the first dynasty by Mr. Woolley, who considers that they were the burials of a low caste or slave population, foreign to south Mesopotamia.[6]

Fractional burial.

Very few burials of any kind have been discovered at Mohenjo Daro, but fractional burials are numbered among them, and considered to be late and

[1] Cf. Sir John Marshall, *Mohenjo Daro and the Indus Civilisation*, I, Ch. VI, for a summary of the evidence; also H. Frankfort, *Archaeology and the Sumerian Problem*, 27.

[2] *D.P.M.* tome 8, 76.

[3] *Memoirs of the Archaeological Survey of India*, No. 35.

[4] Ibid., No. 43.

[5] Cf. *A.A.A.* XX, 163, footnote 2.

[6] Woolley, *Ur Excavations, The Royal Cemetery*, II, 407–8.

intrusive, indicating the presence of a foreign element. At Harappa, where a hundred fractional burials were discovered, a certain number were burials in the soil, but the large majority were bones placed inside urns, and not of the earliest period. The closest parallels occur at Nal in Baluchistan, where portions of the skeletons were frequently discovered lying in the soil, with pottery deposits around. But unlike the Arpachiyah fractional burials, the bodies were not oriented. The painted pottery associated with the Nal burials is considered by Sir John Marshall to be Iranian rather than Indian in style,[1] even though certain examples have designs which in my opinion show an exuberance of form more natural to Indian art: this, however, is to be expected on a Baluchi site, and undoubtedly some of the pottery associated with the Baluchi burials is Iranian rather than Indian in character.[2] Fractional burials on these sites are, as at Arpachiyah, associated with complete skeletons. Indian excavators refer also to the evidence from Tepe Moussian, where De Morgan speaks of fractional burials lying in brick-vaulted tombs; but it must be remembered that partial burials in tombs are more likely to be displaced burials, or re-burials occasioned by a family transferring its abode and collecting—as a rule carelessly—ancient remains from some family vault: with the best of intentions it was easy to lose something in the process, and as likely as not, parts of the skeleton would have decayed and hardly bear removal: evidence of this type is common in the tombs of the Larsa period, *c.* 2000 B.C. at Ur.

In conclusion, we must stress the one novel feature of the fractional burials at Arpachiyah—the persistent practice of orienting the body in spite of the fact that parts are missing, though there are actually three or four exceptions to this rule.

Reference to the plan of the cemetery on Fig. 3 will make it clear that not one single Al 'Ubaid grave overlaps another: clearly, therefore, these graves contained the bodies of persons all of whom may have been within living memory of one another. The only signs of stylistic development in the deposits occur in a group of fractional burials near the surface already mentioned, and it is, therefore, not unlikely that all these graves, together with their associated pottery, may have been dug within the limits of one hundred years.

It is unnecessary to give a detailed description of each individual grave: the disposition of the dead is monotonously similar. The body lies, almost invariably, approximately E. by W., the head either to the east or to the west. Again, the body may be on its left or its right side, as a rule the knees are slightly drawn up in the flexed position as in sleep, sometimes they are fairly well drawn up. It is interesting to notice this fact in view of the knowledge that, in the later Jamdat Nasr period at Ur, the bodies are often nearly crouched.[3] The position of the head and direction may be ascertained by

[1] MARSHALL, *Mohenjo Daro and the Indus Civilisation*, I. 100.

[2] Cf. especially the funerary pottery on the sites of Periano Ghundai and Shahi Tump, *Memoirs of the Archaeological Survey of India*, 37, 43.

[3] *A.J.* X, 327, 328.

consulting the cemetery plan. Only the fractional burials are described in detail, as we require all possible evidence on this still little-known custom. More important graves are fully described, and any deviations from the normal that may occur. Otherwise rational economy insists that a mention of the depth and of the objects associated within any grave should be sufficient for all scientific purposes.

CATALOGUE OF GRAVES IN THE MAIN CEMETERY

Squares Fb V. 1, and Fc V. 1. See Fig. 3 for plan, and Fig. 4 for section. N.B. The first figures indicate the depth of the grave below the surface.

G 1. At 2·1 m. Objects: one unpainted pot, A 162, Fig. 39, No. 4; one painted pot, A 163, Fig. 26, No. 1.

G 2. At 2·2 m., probably contemporary with G 7, which was close and at same level. Objects: two painted pots, A 164, Fig. 35, No. 3; A 165, Fig. 29, No. 1. Delicate ware, broken but complete.

G 3. At 2·5 m. Body E. by W. Head W. Possibly a re-burial, the skull being found 0·9 m. away from the neck and 0·4 m. below the level of the body. The head may have been buried first and covered over with earth, the body carefully oriented but placed farther from the skull than was intended. At the feet the skull of a ram or a goat. Objects: on the animal's skull an unpainted pot.

G 4. At 2·7 m. Objects: necklace of black and white minute glazed steatite ring beads. Above knee, glazed black steatite ring beads.

G 5. At 2·7 m. FRACTIONAL BURIAL. Only the skull and finger-bones remained. No objects. Bones lay on hard-beaten soil.

G 6. At 2·7 m. FRACTIONAL BURIAL. Smashed skull and one arm-bone only remained. No objects.

G 7. At 2·2 m., next to G 2 and contemporary with it. Body seems to have slipped from a sitting position as the hands were farther apart than usual, and the backbone was twisted to the side. Hands were as usual towards the mouth, and the fingers overlapped the back of the head. Associated with G 2 and G 7 were two fractional burials. The skull of a child lay at the feet of G 7, and the skull of an adult between the feet of G 2 and G 7. Objects: at the feet of G 7 a broken painted pot.

G 8. At 2·5 m. Bones much decayed. Objects: at feet three painted pots, A 167, Fig. 35, No. 8; A 168, Fig. 27, No. 4; and one fragment.

G 9. At 3·0 m. Objects: at head a broken pot unpainted. At feet, two painted pots, A 169, Fig. 27, No. 1; A 171, Fig. 34, No. 4. At side of body a fragment of a large unpainted bowl, rim 0·35 m., and inside it portion of an infant's skull: complete and fractional burial thus associated.

G 10. At 2·6 m. FRACTIONAL BURIAL. A few broken bones lying E. by W. Objects: three painted pots, A 172, Fig. 26, No. 2; and type on Fig. 29, No. 5.

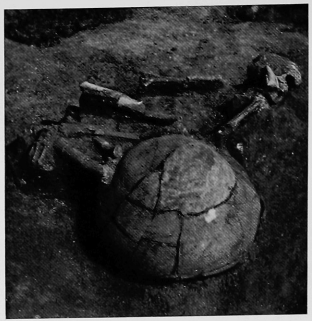
G 11. At 2·75 m. FRACTIONAL BURIAL. Fragments of legs and feet only. Objects: unpainted pot, A 174, Fig. 39, No. 11. Two painted pots, A 173, Fig. 30, No. 4; A 176, Fig. 31, No. 5. Inside the latter an unpainted bowl miniature, A 175, Fig. 41, No. 8.

G 12. At 2·6 m. FRACTIONAL BURIAL. Body NW. by SE. Head NW. Fragments of skull and backbone only. Objects: unpainted pot, A 793, Fig. 41, No. 20; painted bowl, A 177, Fig. 30, No. 1.

G 13. At 2·6 m. FRACTIONAL BURIAL. Body E. by W. Head E. Body on right side, flexed, hands to mouth. Parts of backbone and feet missing. No objects.

G 14 and 15. At 3·3 m. A circular pit, 2·1 m. deep and 1·6 m. in diameter. At the bottom of the pit lay two skeletons in the crouched or embryonic position: lack of space would in any case have prevented the bodies from being in a more extended position. The

(*a*) Flexed burial of Al 'Ubaid period, showing votive offerings at feet. G 19



(*b*) Fractional burial of Al 'Ubaid period. Note sheep's jaw overlying human jaw. G 47

(*c*) Flexed burial of Tall Ḥalaf period, showing votive offerings behind head. Note stone stele at foot of grave. G 51

(*d*) Fractional burial of Al 'Ubaid period, intrusive into foundations of tholos in square Fc V 1. G 33

bones were very well preserved and the skulls were entirely free from dirt and in no way crushed. The bodies therefore cannot have borne any heavy superincumbent soil. One of the bodies had the right hand resting directly on top of the pelvis. The stratification of the pit was peculiar. From the top of the pit down to 1·4 m. the soil might be described as virgin, reddish clay, gypsum-flecked, and clear of debris. Sides of the pit sloped inwards to the bottom of this layer. From 1·4 m. to 2·1 m., the bottom of the pit, the soil was entirely different in character. Soil here was soft and contained chopped straw, grey ash, and wasters typical of kiln debris, and unpainted sherds of *Nin. 3* type, also one sherd with red hatching on a yellowish clay. The superposition of virgin soil over soft kiln debris suggests that the pit was an underground gallery or catacomb, and that the two bodies were covered with light soil containing kiln debris. Further excavation is required to explain the subterranean ramifications of this pit. No objects with the bodies. Two important features must be connected with the catacomb: (*a*) a trench, 0·7 m. deep, that led directly up to the mouth of the pit and ran away from it at a gentle slope; (*b*) a second pit, similar to the first, but above it there was a cairn consisting of mud bricks. This cairn was oval in plan, and the lower course of mud bricks rested on a layer of *pisé* 0·8 m. thick. There were three courses of mud bricks over the *pisé*, all on edge. Total height of the cairn was 2·25 m. Base dimensions: 2·2m.×0·85 m. Dimensions of the mud bricks: 0·20×0·18×0·085 m. and 0·35×?×0·85 m. and 0·25?×0·22×0·10 m. and 0·21×0·14×0·07 m., all roughly made, different shapes and sizes. (*c*) Possibly to be connected with the two pits, a platform consisting of a single course of large mud bricks, with mud mortar in between them. The platform lay 1·2 m. above the level of the pits. Dimensions: 1·6×0·5 m. Dimensions of mud bricks in the platform: 0·47×0·25×0·11 m. No objects were associated with the burials.

G 16. At 2·6 m. Close to G 14. No objects.

G 17. At 2·0 m. FRACTIONAL BURIAL. Skull only, no body. No objects.

G 18. At 3·0 m. Disturbed burial, or perhaps a votive deposit. No skull or bones discovered. Objects: two painted pots, A 178, 179, Fig. 36, Nos. 2, 8.

G 19. At 2·6 m. Objects: two unpainted pots, for types cf. Fig. 39, Nos. 4, 10. Cf. Photo, Plate III (*a*), showing body as found.

G 20. At 2·5 m. Body, part of which lay in an undug section of ground, was only partially excavated.

G 21. At 3·0 m. FRACTIONAL BURIAL. Body E. by W. Shoulders W. Skull, part of right arm, and toes missing. Body supine and fully extended, arms extended at the side of the body. This was the only extended burial discovered at Arpachiyah. Cf. the Al 'Ubaid burials in the Flood Pit at Ur. Objects: two painted pots. A 774, Fig. 37, No. 4, an important specimen; a large polychrome pot done in a plum-red and black paint, and decorated with bosses, apparently allied to Jamdat Nasr ware. A 180, Fig. 35, No. 10. Also associated with the grave were some sheep's teeth and animal bones.

G 22. At 1·3 m. An URN BURIAL, possibly allied to *Nin. 3* post-cremation burials. The urn was of grey burnished ware of *Nin. 3* type, and had the remains of an infant's body inside it, also a saucer; for type cf. Fig. 39, No. 1. Both vessels wholly disintegrated.

G 23. At 2·5 m. Two skeletons. Bodies E. by W. Heads W. One was a male and the other probably a female. Male was on the left side, female lying on the right. The two bodies were locked in embrace, hardly flexed at all, trunk of the male was leaning slightly forward. Head of the female rested below the chin of the male. Objects: above knee a frit ring bead. By head of female a painted bowl, A 198, Fig. 29, No. 4. At feet a painted pot, A 197, Fig. 29, No. 2; and unpainted A 787, Fig. 40, No. 2, A 484, Fig. 41, No. 15.

G 24. At 2·4 m. Objects: at backbone spatula. At feet two pots, carelessly deposited, crushed and badly smashed, parts seemed to be missing, A 783, Fig. 40, No. 4, unpainted.

G 25. At 2·2 m. Objects: one glazed steatite ring bead.

G 26. At 2·2 m. FRACTIONAL BURIAL. No objects. Stratification of this grave was interesting because a Tall Ḫalaf pot was found 0·5 m. higher up. This pot had evidently been lying

in a house of Tall Ḥalaf period. This Al 'Ubaid grave had therefore been dug through the floor of an abandoned house of the Tall Ḥalaf period.

G 27. At 2·5 m. Bones much decayed. Ribs had fallen out of position, pelvis collapsed over right leg. Objects: at feet two painted pots smashed but complete, A 299, Fig. 37, No. 1, and Fig. 28, No. 5. (The bowl had been broken and mended with bitumen in antiquity.) On the toes two glazed steatite ring beads.

G 28. At 2·25 m. Objects: against stomach a plain pot. At feet large bowl, for type cf. Fig. 39, No. 10.

G 29. At 2·25 m. No objects.

G 30. At 2·2 m. FRACTIONAL BURIAL. Body E. by W. Head W. Body on left side, flexed. Skeleton crushed flat and in poor condition. Pelvis missing. No objects.

G 31. At 2·2 m. Probably contemporary with G 30. Objects: at neck a small glazed steatite ring bead.

G 32. At 2·2 m. Body NW. by SE. Head SE. Body on left side flexed. One hand to mouth, the other at the side of the body over the waist, under the pelvis a large unpainted potsherd. Feet crossed. Objects: unpainted pot, A 784, Fig. 41, No. 19.

G 33. At 2·2 m. FRACTIONAL BURIAL. Intrusive into a disused stone tholos. Body E. by W. Head E. Body on right side, flexed. Right hand to mouth, left hand grasping the right arm. Body complete down to pelvis, ribs badly smashed. One thigh-bone missing, and both legs, from the knees down. The body actually lay 0·2 m. below the level of the stones, and the gap in the tholos was 0·9 m., a cut large enough to admit the body. Objects: at feet, an unpainted bowl, A 795, Fig. 39, No. 9, and inside the bowl a bottle, cf. Fig. 35, No. 2. Cf. Photo, Plate III (*d*), showing body as found.

G 34. At 3·0 m. Body NW. by SE. Head SE. Bones badly crushed. By the waist an ibex (?) horn. Objects: at feet a painted bottle, A 181, Fig. 35, No. 6; a bowl, A 271, Fig. 29, No. 7. Below the legs a miniature ball of sun-dried clay.

G 35. At 2·5 m. FRACTIONAL BURIAL. Body NW. by SE. Head SE. Body on right side. Only the skull and portions of the arm-bones, legs, and backbones remained. Objects: at feet a plate, unpainted, for type cf. Fig. 39, No. 10. This plate had been broken and carelessly mended in antiquity. The bowl was therefore either broken in transit to the grave and carelessly mended *in situ*, or more probably a household vessel used for burial. With it a second complete pot. This grave came below the level of a stone road of the Tall Ḥalaf period, though not directly under it. Here we have another example of the intrusion of Al 'Ubaid cemetery into Tall Ḥalaf house levels.

G 36. At 3·1 m. FRACTIONAL BURIAL, perhaps a disturbed burial. Only the legs remained, lying flexed E. by W. Objects: at the feet two complete pots, painted, A 199, Fig. 35, No. 9. This was the lowest burial of the series. Unpainted, A 780, Fig. 39, No. 10.

G 37. At 2·5 m. Body NW. by SE. Bones decayed. No objects.

G 38. At 3·0 m. FRACTIONAL BURIAL. Only the skull, an upper arm-bone, and few ribs remained. The lower jaw lay behind the head, the upper jaw in front of it. No attempt at orientation. Undoubtedly this was a collection of bones, perhaps from the battle-field, carelessly deposited. No objects. This was another of the lowest burials.

G 39. At 2·5 m. A re-burial; bones complete. Body E. by W. Head E. Body on left side. Arm-bones had been collected and laid down in front of the body; leg-bones were laid parallel and not flexed. Bones crushed flat and soil stamped over them. No objects.

G 40. At 2·0 m. FRACTIONAL BURIAL. Body on right side, flexed. Arms drawn up and pointing towards the face. Skull missing, but the teeth remained; rest of the body was complete. Objects: at feet, two unpainted pots. For types cf. Fig. 39, No. 9, Fig. 40, No. 4.

G 41. At 3·5 m. FRACTIONAL BURIAL. Body NW. by SE. Head SE. Body on right side, flexed. Hands to mouth, bones in very poor condition, backbones, ribs, and pelvis fragmentary. Objects: at feet two painted pots, including a bowl in a purplish paint on a greenish clay. For type cf. Fig. 27, No. 5, and bottle, Fig. 35, No. 2.

G 42. At 3·5 m. Skull in good condition, preserved. Legs vertical in the ground and covered

by a large stone. Objects: by the head and feet fragments of unpainted pots. *c.* 0·4 m. above the arm, a small unpainted clay box.

G 43. At 3·2 m. Bones decayed, lay directly over an old *pisé* floor of Tall Ḥalaf period. Objects: at back of head an unpainted pot, A 777, Fig. 40, No. 6. At feet a painted pot, A 261, Fig. 28, No. 3.

G 44. At 0·3 m. Body seems to have been in a sitting position and to have fallen backwards. The skull had collapsed backwards; the backbone and legs had fallen to one side as if from a sitting position. Objects: behind head two painted pots, A 184, Fig. 32, No. 3; A 139, Fig. 31, No. 4. Two metres to the east of this grave there were the remains of a second disturbed burial with part of the skeleton leaning against a stone road.

G 45. At 0·3 m. FRACTIONAL BURIALS. Group of at least three, bodies not oriented in any fixed direction, various portions of the skeleton missing: one group of bones sometimes separated from another by a line of pebbles. All these burials seem to have been contemporary, and it is possible that a number of vessels not associated with any bones may have been deposits for bodies whose remains had entirely disappeared. Objects: at least ten painted pots belonged to this group and may be considered to have been deposited contemporaneously. In addition to human remains, there were some animal bones, mostly jaws of sheep and cows.

Important in the painted pottery group is the small *cratère à oreillettes*, A 270, Fig. 34, No. 1. Contemporary with these upper Fractional Burials were a number of surface deposits not directly connected, but found in the vicinity. Pottery: A 803, Fig. 39, No. 2; q.v. cf. Fig. 27, No. 6; Fig. 29, No. 3; Fig. 30, No. 6 (A 186); Fig. 31, No. 8 (A 195); Fig. 32, No. 2 (A 196); Fig. 34, No. 1 (A 270); Fig. 39, No. 3 (A 792); Fig. 36, No. 7 (A 275); Fig. 37, No. 2 (A 277).

Isolated burials of the Al 'Ubaid period, found outside the limits of the Al 'Ubaid cemetery proper.

G 46. At 1·6 m. Sq. Fd IV. 5. FRACTIONAL BURIAL. Skull only, ribs and fragments of arm-bone remained. Skull lay 0·1 m. below the level of the highest of the Tall Ḥalaf bread ovens in the neighbourhood, and post-dated it: this grave was intrusive into the older Tall Ḥalaf house levels. Objects: 0·25 m. away from the skull a plain clay bowl with wide rim, probably an imitation of a stone type related to plain ware of Jamdat Nasr period. The pot lay on carbonized wood.

G 47. At 0·8 m. Sq. Fd IV. 4. FRACTIONAL BURIAL. Body E. by W. Head E. Body on left side, flexed, knees well drawn up. Part of backbone, arms, and lower jaw missing; some of the finger-bones were found behind the head. The body rested on a made floor, with an admixture of whitish sand, and there were faint traces of some textile on which the body had rested. Objects: there was an interesting deposit in the shape of a sheep's jaw, lying over the human jaw, probably intended as a meat offering. Behind the head there were potsherds, two fragments of flint knives, and a disk-shaped clay lid of a pot with a string impression. Against the knees a large baked clay bell-jar, inverted in the soil, plain rim and bulbous handles horizontally perforated, of Jamdat Nasr type. Ht. 0·45 m. Left hand seems to have been resting against the chin. Skull considerably flattened and part of it resting on a potsherd. The burial was dug into an abandoned house level of the Tall Ḥalaf period. Cf. Photo, Plate III (*b*), showing body as found.

G 48. At 0·3 m. Sq. Fd IV. 5. FRACTIONAL BURIALS. Group containing the partial remains of at least seven skeletons. There were four jaws, all scattered, arms, ribs, and pelves all mixed, and one skull actually lay over the end of a leg-bone. There were a few fragments of flint and pottery among the bones, two sherds with Al 'Ubaid painted designs, parallel undulations in black paint below the rim. There was also a plain buff sherd with an interior carinated grooved rim of *Nin. 3* type. Bones rested on a bed of black ash, probably a disused floor. 0·3 m. below the bones, there were traces of a beaten mud floor against a *pisé* wall. About 1 m. to the west the remains of a destroyed road. These burials were all intrusive into the older Tall Ḥalaf house levels. No objects.

Isolated burials of the Al 'Ubaid period intrusive into the house levels in the Tepe. TT.

G 49. Intrusive into the W. corner of the antechamber of TT 7. This grave had been hacked into the corner of the chamber, and had been cut through the floor of burnt house TT 6. Burial apparently disturbed in antiquity; only a few bones remained. Objects: two painted pots, A 264, Fig. 38, No. 2; A 265, Fig. 37, No. 3.

G 50. Intrusive into area on the NE. side of tholos of TT 8. Body E. by W. Head E. This grave had disturbed an older Tall Ḫalaf burial G 53. Objects: one painted pot in hopeless condition.

Graves of the Tall Ḫalaf period.

G 51. Against the outside of the wall of the tholos of TT 8, N. side, perhaps actually contemporary with the tholos TT 7. Body NW. by SE. Head SE. Body on left side, flexed, hands to mouth. At the foot of the grave a rough limestone stele standing vertically in the soil, but buried and not exposed above the surface. Objects: at the back of the head three painted pots, all perfect specimens of Tall Ḫalaf ware. A 733, a bowl, containing inside it A 732, an egg-shell ware saucer with a painted Maltese-cross centre piece; A 731, a painted pot with black cable pattern on a salmon pink slip. Cf. Photo, Plate III (*c*), showing body as found. For pottery, cf. Fig. 60, No. 6; Fig. 61, No. 3; Fig. 59, No. 2.

G 52. At 0·8 m. below the foundations of TT 9. An infant burial. No objects.

G 53. Against outside wall of tholos TT 8, NE. side. Lay only 0·15 m. below the level of G 50, and had been disturbed by it. Objects: a painted saucer, broken and part missing, A 734, Fig. 53, No. 2.

G 54. At 3·2 m. Sq. Fd IV. 5. Body NW. by SE. Head NW. Body on right side. The grave had been dug into about 0·4 m. of red *pisé*, very hard and consistent. After the pit had been dug and the body interred, it was again filled with *pisé* which had been stamped over it so hard that both pots and skull were badly smashed. Over the *pisé* it was possible to discern the sides of the pit made by the grave-diggers. About 1·6 m. above the top of this *pisé* there was a floor-level marked by black and grey ash and bread ovens. It appeared that the body had been buried underneath a Tall Ḫalaf house, and that it rested on another ruined house level of the Tall Ḫalaf period. A stone road of the Tall Ḫalaf period lay at 1 m. above the level of this grave, in the vicinity. Objects: overlying the head two painted bowls, both smashed, A 107, A 111. By the left shoulder an obsidian knife, for type cf. Fig. 52, No. 18, and over the skull two bone awls, A 703, A 704; cf. Plate XII, (*a*), top row. For painted pottery cf. Fig. 70, No. 3; Fig. 72, No. 1.

G 55. At 2·7 m. Sq. Fd IV. 4. Body E. by W. Head E. Bones in a poor state of preservation, body apparently disturbed, lay on matting. Objects: at the neck, shell beads with traces of red paint on them; above and below the body, foundations of destroyed mud brick walls.

G 56. At 3 m. Skeleton of a child. Body NW. by SE. Head SE. Body on left side, face towards the E., in the embryonic position. Body was in hard red *pisé*. Objects: in front of the body a fragment of a flint knife, for type cf. Fig. 52, No. 16. At the same level 1 m. away from the face a painted bowl of the Tall Ḫalaf period, probably not actually to be associated with the grave but of the same period.

G 57. At 3 m. A number of infant bones lying in a pit with concave sides, and straw or decomposed matting against them. No objects.

G 58. At 1·7 m. Sq. Fc V. 2. Body flexed and on right side. Had been disturbed in antiquity. The head was overturned, the lower jaw had fallen away and was lying close to a votive bowl; many of the bones were broken. The soil immediately overlying and surrounding the skull had been stamped down over the bones and was very stiff and compact. Against the head and back of the body were several votive deposits; some of the pottery was smashed and parts were missing. The hard *pisé* over the head might have been the

foundations of a later mud wall, and 0·4 m. above the body there were traces of ash and sand, probably a house floor, in which case the grave would have been disturbed by later Tall Ḥalaf house builders, but the pottery may have been smashed at the time of the interment, cf. G 54, and parallels at Nal,[1] &c., where votive deposits appear often to have been smashed at the grave side. Objects: by the head a painted pot, A 735, Fig. 64, No. 9. Behind the back three miniature vases unpainted, A 493, A 494, A 495, Fig. 43, Nos. 14, 21, 27. Two stone celts, A 669, A 670. An obsidian knife type, Fig. 52, No. 18. White stone amulet with linear markings, A 902. A few grains of barley and some human finger-bones. The finger-bones are a specially interesting form of deposit; they were done in stone in TT 6, and may have some ritual significance. Bone implements included awls and scapulae, A 720, cf. Plate XII, (*a*), for awls. There was also a sherd done with a cable pattern in a lustrous black paint on an apricot ground.

G 59. At 1·8 m. Sq. Fd IV. 5. Lying beneath the threshold of a house an adult burial. Body NW. by SE. Head NW. The only example at Arpachiyah of a burial lying under the threshold of a doorway. No objects.

CHAPTER 4

THE PAINTED POTTERY OF THE AL 'UBAID PERIOD

BURNISHED AND UNPAINTED WARE

We have already observed in the preceding chapter that not one single grave of the Al 'Ubaid period overlaps another, and it therefore seems certain that we are considering the remains of persons all of whom may have been within living memory of one another. Further, the material objects associated with the graves corresponded closely with those found in the top four house levels TT 1–4 on the Tepe, and we have seen that these buildings were so poorly constructed that their existence could easily be covered by the span of one hundred years. But in the absence of inscribed material it is impossible to reach certainty in these matters, and parallels might be found to support a theory that we are dealing with a period which lasted either double or half that length of time. But for the purpose of tracing the development of the pottery, it is of paramount importance to recognize that the Al 'Ubaid ware of Arpachiyah belongs to a homogeneous ceramic period. This implies that we ought eventually to be able to correlate this ware very closely with contemporary material from other sites when eventually this material is forthcoming. At Arpachiyah a very large number of types are actually associated in graves or votive deposits, and we are definitely able to point to many types that must have been made contemporaneously. There are indeed certain important stylistic differences in this pottery, indicating a certain development in style, and it will be shown that we can subdivide this pottery into three groups, Early, Middle, and Late; but there are sufficient links between all three groups to show that the development does not necessarily imply any considerable lapse of time.

[1] *Memoirs of the Archaeological Survey of India*, no. 35.

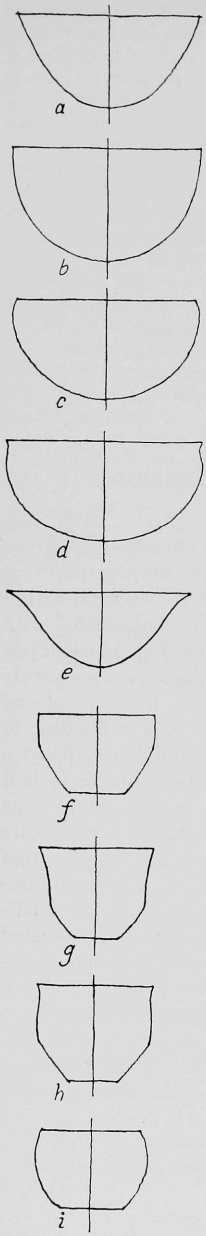


FIG. 25

Shapes.

The painted pottery of this period may be conveniently classified into thirteen basic types according to shape, and many of these types can again be subdivided according to their variants. It will be seen when we come to analyse the types, that the characteristic shapes have likewise their characteristic designs.

Type 1. Bowls with Wide Mouths and Rounded Bases.

Cf. Figs. 26–9, and Fig. 30, Nos. 1, 2, 4. All these examples (with the exception of Fig. 28, Nos. 1–3, and Fig. 30, Nos. 1, 2, 4, deeper bowls) have mouths whose diameter is at least twice the height. The largest of these bowls, Fig. 26, No. 4, has a rim diameter of 0·3 m. and height 0·12 m., and the smallest has a rim diameter of 0·095 m. and height 0·066 m. These two bowls show the extreme dimensions. The walls of the bowls show a considerable variety of curves, cf. Fig. 25 *a*, *b*, *c*, *d*, and *e*.

Fig. 25 *a*: cf. Fig. 27, Nos. 1, 3, and 5.

Fig. 25 *b*: cf. Fig. 26, No. 4; Fig. 28, No. 3; Fig. 29, No. 7.

Fig. 25 *c*: cf. Fig. 26, No. 3; Fig. 27, No. 4; Fig. 28, No. 4.

Fig. 25 *d*: cf. Fig. 29, No. 3; Fig. 34, No. 7.

Fig. 25 *e*: cf. Fig. 29, Nos. 1, 2, 4, all delicate types.

Oval Bowls. Fig. 27, No. 6, is a fine example of an oval sauce-boat type, carefully made, with a smooth surface of well levigated clay, and evenly fired. This important type may be paralleled by a vessel found at Al 'Ubaid.

Rims. Always plain, with the single exception of Fig. 29, No. 7, which has the grooved rim characteristic of the *Nin. 3* period.

Designs. The Curvilinear Pattern is the commonest design on these bowl types. The following variations occur: pendent below one band, Fig. 27, No. 4; below two bands, No. 5; below three bands, No. 2. Normally the pattern is drawn between two plain bands as in Fig. 27, No. 1; cf. also the double curvilinear band in Fig. 28, No. 4, and an exceptional treatment of the design Fig. 30, No. 4.

Cross-hatched Obliques leaving Open Triangles. Fig. 28, Nos. 1–3. A close parallel to these examples occurs

at Talloh in south Babylonia in the Al 'Ubaid period. Cf. a bowl in the Louvre.[1]

Zigzags. In two zones, running round the circumference of the bowl, Fig. 28, No. 5. Zigzags done at intervals, Fig. 29, No. 6.

Solid Triangles pendent from the Rim. Fig. 29, No. 1; Fig. 30, No. 2. This design is common both at Al 'Ubaid and at Samarra.

Oblique Chevrons. In groups, done at intervals, Fig. 29, No. 2.

Plain Bands. Three parallel bands in a red paint, Fig. 29, No. 5.

Type 2. Bowls with Wide Mouths and Flat Bases.

Cf. Fig. 30, Nos. 3, 5; Fig. 31; Fig. 36, Nos. 1, 2. In this type the diameter of the mouth is a little greater than the height; the normal proportion is about 6:5; the base is always less than half the diameter of the rim, but just wide enough to allow the vessel to stand without danger of falling. The largest of these bowls, Fig. 31, No. 5, has a rim diameter of 0·214 m., and a height of 0·146 m.; and the smallest, Fig. 31, No. 2, has a rim diameter of 0·099 m. and a height of 0·066 m. These show the extreme dimensions of the type. As with type 1, the walls of the bowls show a variety of curves; cf. Fig. 25 *f*, *g*, *h*, *i*.

Fig. 25 *f*: cf. Fig. 30, Nos. 3, 5; Fig. 31, Nos. 3, 4.

Fig. 25 *g*: cf. Fig. 31, Nos. 5, 6; Fig. 36, Nos. 1, 2.

Fig. 25 *h*: cf. Fig. 31, Nos. 7, 8.

Fig. 25 *i*: cf. Fig. 30, No. 3; Fig. 31, Nos. 1, 2.

Designs. As with bowl type 1, the commonest form of design is a curvilinear pattern between horizontal bands, Fig. 31, Nos. 3, 4. Note also Fig. 30, No. 5, the double curvilinear band, similar to that on bowl type 1, Fig. 28, No. 4.

Bands, either singly or in pairs below the rim, Fig. 31, Nos. 1, 2, 5, 6.

Oblique bands at intervals, Fig. 30, No. 3.

A pattern formed by covering most of the surface of the bowl with a plain wash of paint, and leaving a reserve of body clay either as a plain band, Fig. 36, No. 1, or as a curvilinear band, Fig. 36, No. 2. This distinctive and effective style of design is also found on types 8, 9, q.v.

Rims, usually plain but sometimes have the groove already observed in type 1. Fig. 31, Nos. 7, 8, as in pottery of the *Nin. 3* period.

Type 3. Spouted Vessels.

Fig. 30, No. 6, shows a single example of this type. This is really a variant of type 2 with the addition of a spout.

Design consists of plain bands, both on the body of the bowl, and on the spout itself; note the way in which the design on the bridge of the spout resembles the loops of a fillet with the ends crossed.

[1] *R.A.* XXIX, Pl. 3, 2.

Type 4. Large Basins with Flat Bases.

Fig. 32 shows four examples of these, the largest painted vessels found at this period.

Designs. A single curvilinear design both on the inside and outside, done in broad sweeping bands, is the characteristic design, invariably applied to this type.

The type is interesting because it is only found either associated with ordinary surface burials as in G 44, or in surface fractional burials, or as a votive deposit without bones. Further, when the vessel was placed in the ground a painted bowl, type 2, Fig. 31, Nos. 3, 4, was as a rule standing in the basin, and these two types must therefore have been made at the same time.

None of the basins were found lower than 0·3 m. below the surface, and the example illustrated in Fig. 32, No. 1, lay directly above the level of G 10, a fractional burial at 2·6 m. below the surface, so that it is possible that this vessel may be a commemoration deposit.

Type 5. Bellied Vases with Short Necks and Rounded Bases.

Fig. 33, Nos. 1–4, 6, 7; Fig. 34, Nos. 2, 4; Fig. 35, No. 5.

Designs. These consist of zigzags, Fig. 33, No. 1; curvilinear band between horizontal bands, Nos. 2, 6, 7; interlaced zigzags forming a guilloche pattern, No. 3; cross-hatching, No. 4; plain hatching, Fig. 35, No. 5; zigzags and oblique chevrons, Fig. 34, No. 2; bands of solid lozenges, No. 4.

Fig. 33, Nos. 1–4, form a single group: No. 1, with its zigzags, is undoubtedly an imitation of basketry work. It may be very closely paralleled both in shape and design by baskets made on the outskirts of Mosul to-day. Similarly, Nos. 2–4 are probably based on basketry prototypes.

Fig. 34, No. 2, is an exceptionally fine vessel of well levigated light drab clay, the design executed with unusual care. The clay, which is evenly fired, and the well-fixed paint exemplify the better technique characteristic of the late Group C, for which see below, p. 69.

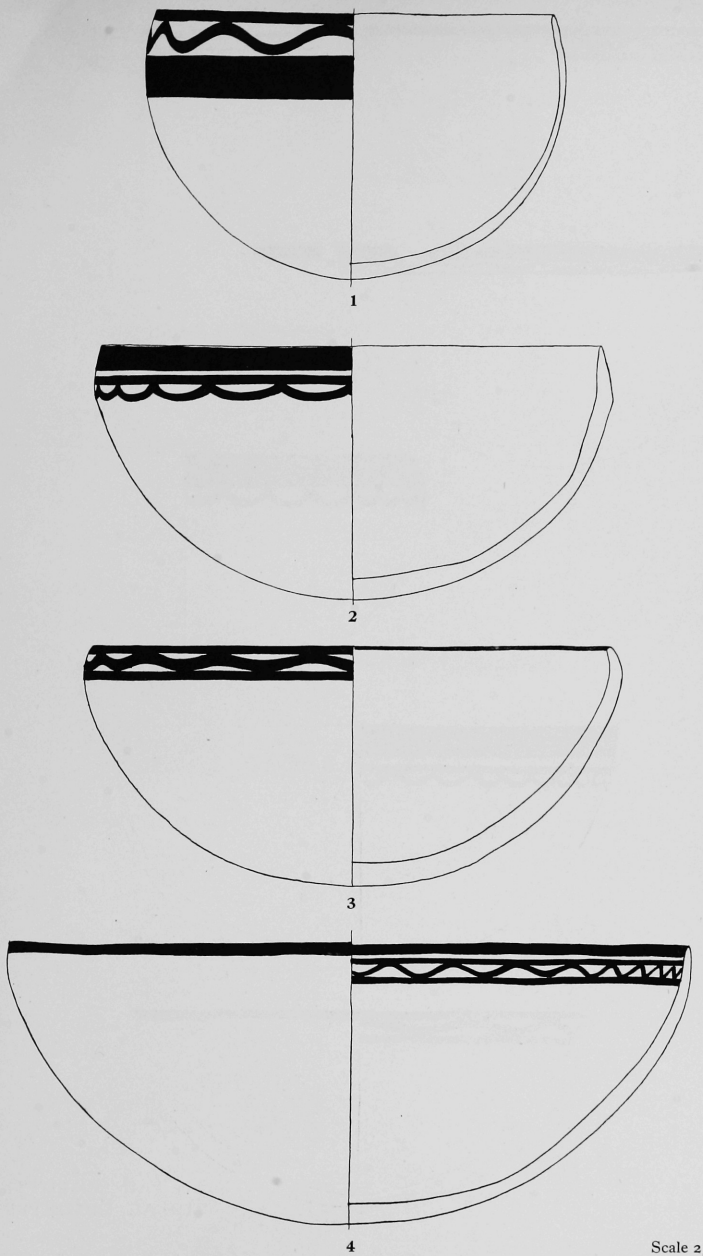
Fig. 34, No. 4, with its bands of solid lozenges shows a design characteristic of the Al 'Ubaid ware of south Babylonia.

Type 6. Vases with High Necks, Pronounced Bellies or Shoulders, and Flat Bases.

Fig. 33, Nos. 5, 9; Fig. 34, No. 3.

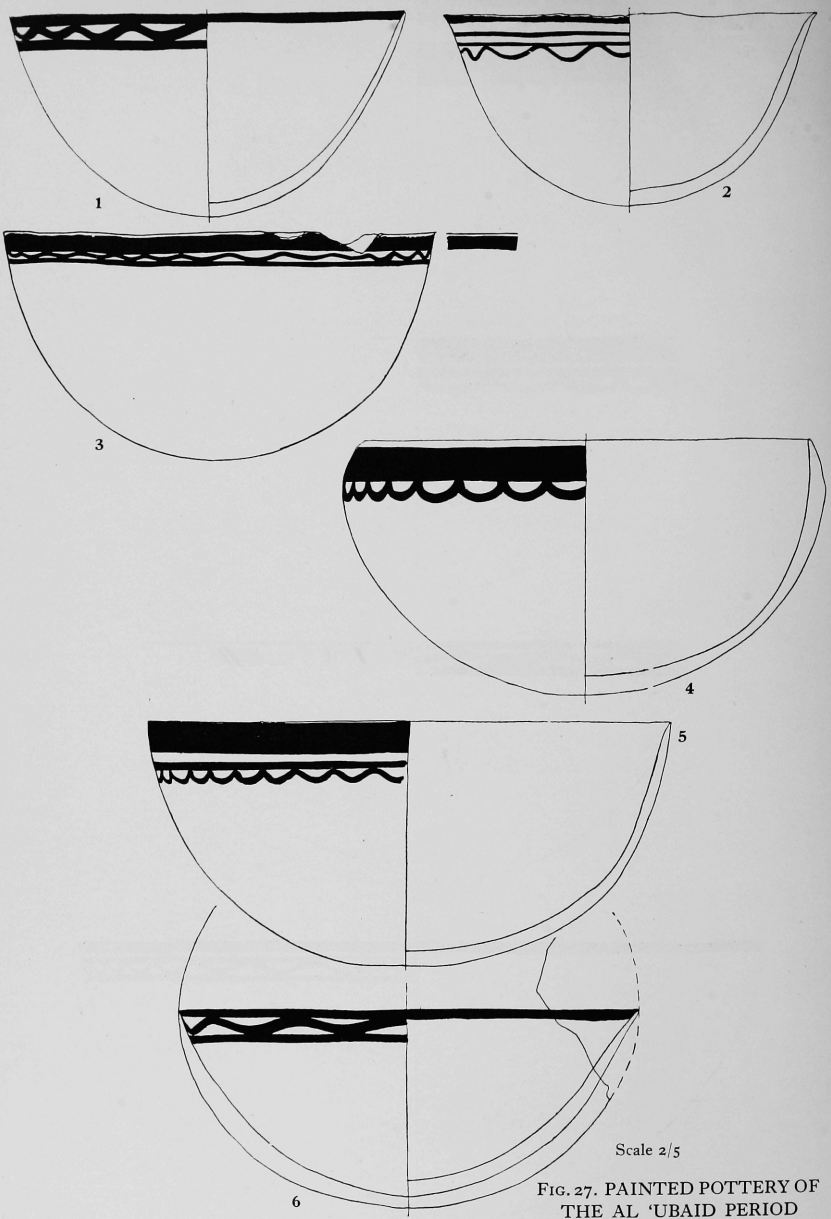
Designs. Fig. 33, Nos. 5, 9, show the curvilinear pattern and the plain band respectively.

Lanceolate Leaf Pattern. Fig. 34, No. 3, a small vase with a high neck, shows an exceptionally interesting design, most effectively applied. The design is perhaps a stylized willow leaf, and may be compared with the design on a vessel of the Al 'Ubaid period at Ur. *A.J.* x, No. 4, pl. 44. Cf. also an unpublished sherd from Talloh in the Louvre.



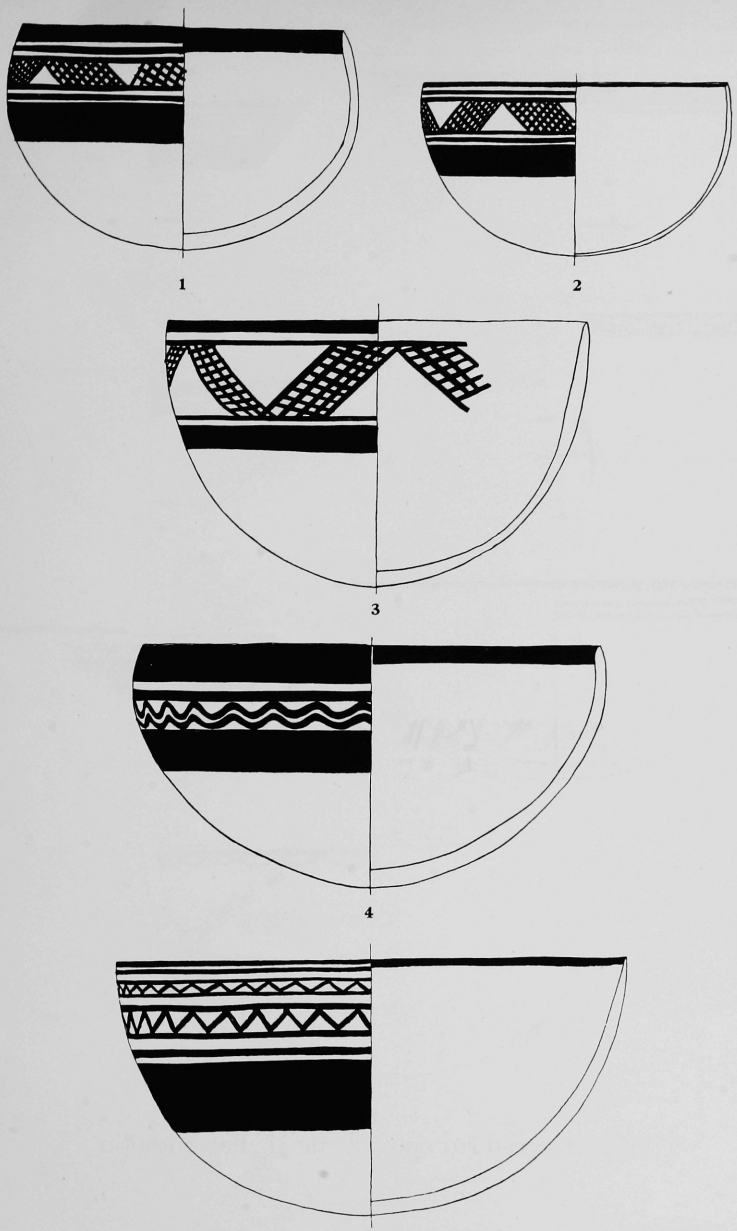
Scale 2/5

FIG. 26. PAINTED POTTERY OF THE AL 'UBAID PERIOD



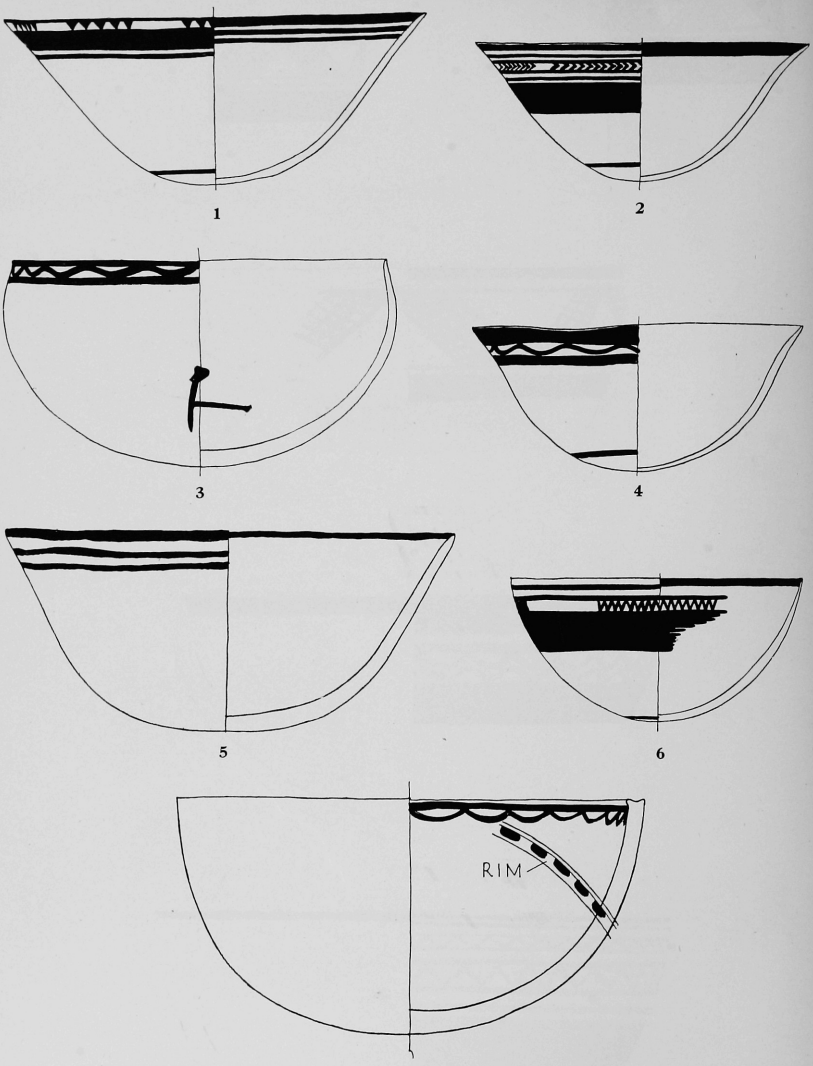
Scale 2/5

FIG. 27. PAINTED POTTERY OF THE AL 'UBAID PERIOD



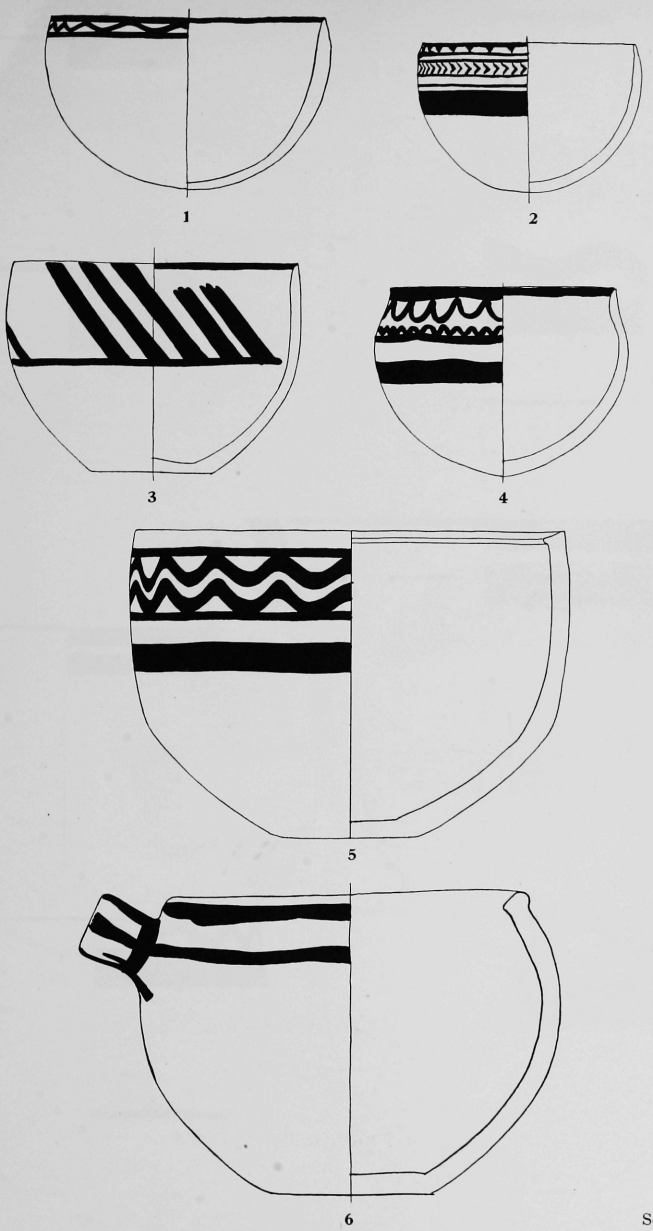
Scale 2/5

FIG. 28. PAINTED POTTERY OF THE AL 'UBAID PERIOD



Scale 2/5

FIG. 29. PAINTED POTTERY OF THE AL 'UBAID PERIOD



Scale 2/5

FIG. 30. PAINTED POTTERY OF THE AL 'UBAID PERIOD

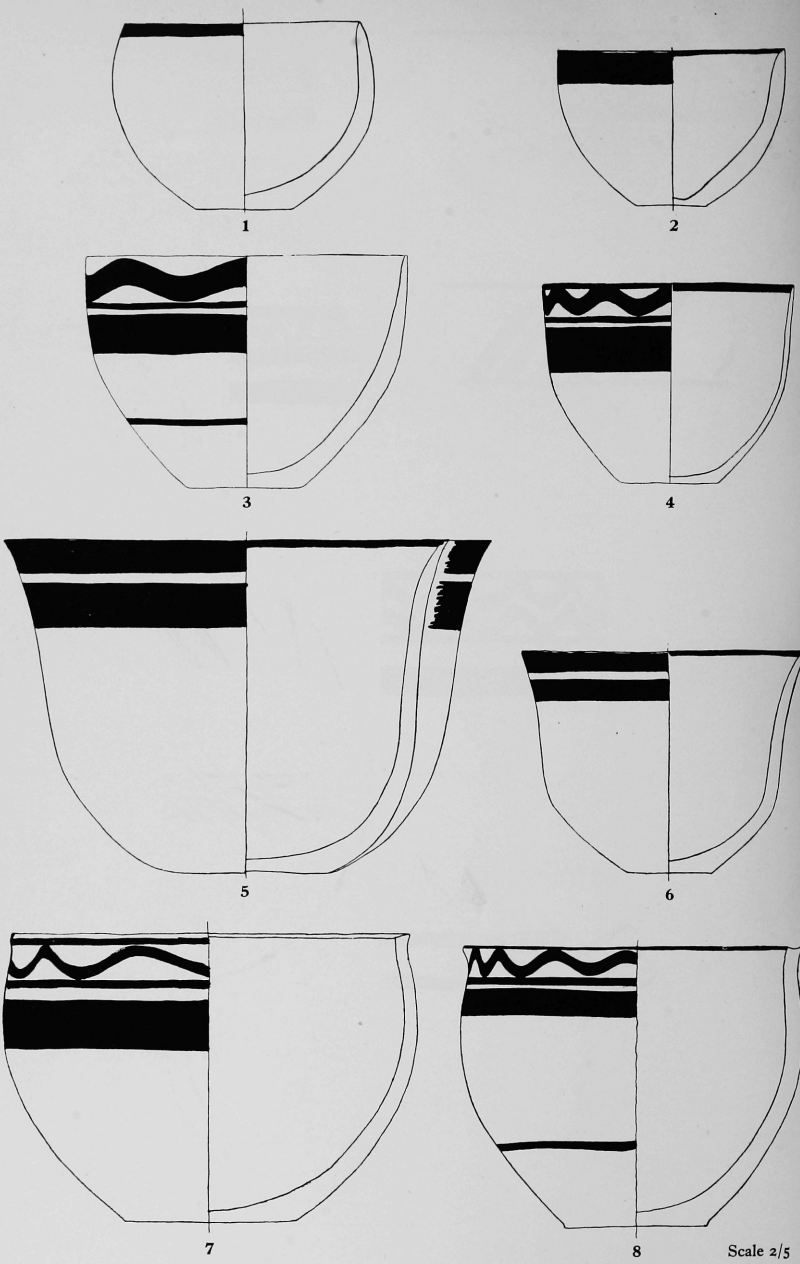


FIG. 31. PAINTED POTTERY OF THE AL 'UBAID PERIOD

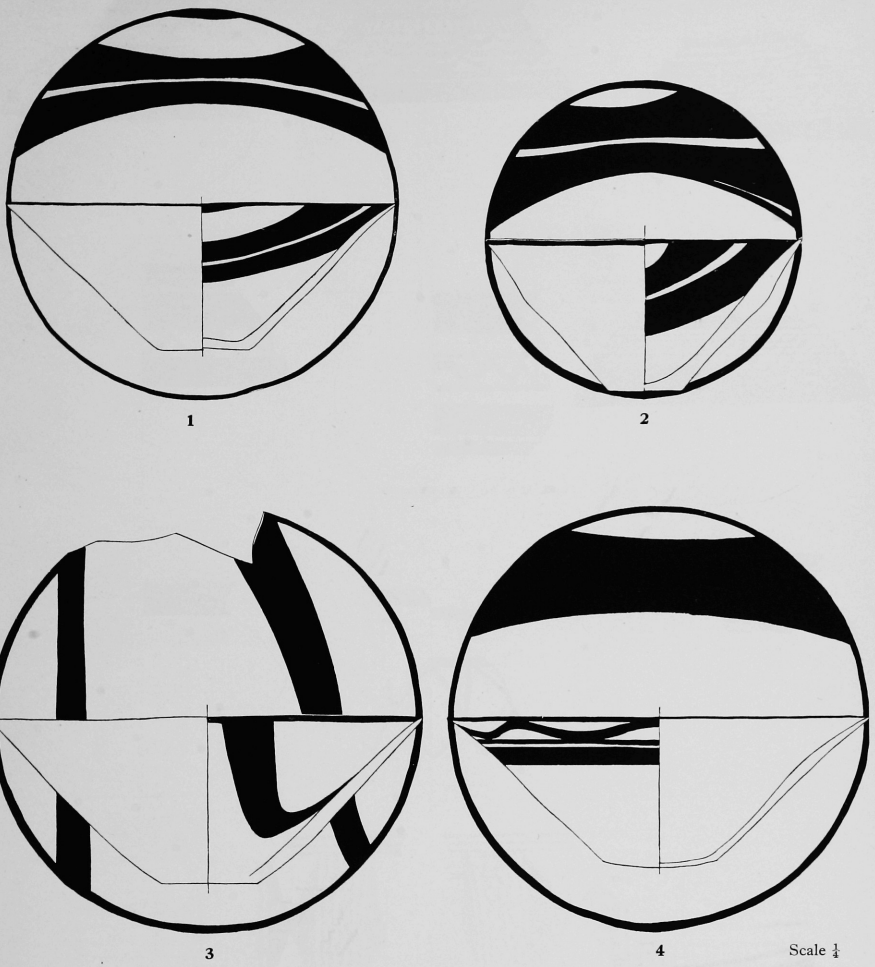


FIG. 32. PAINTED POTTERY OF THE AL 'UBAID PERIOD

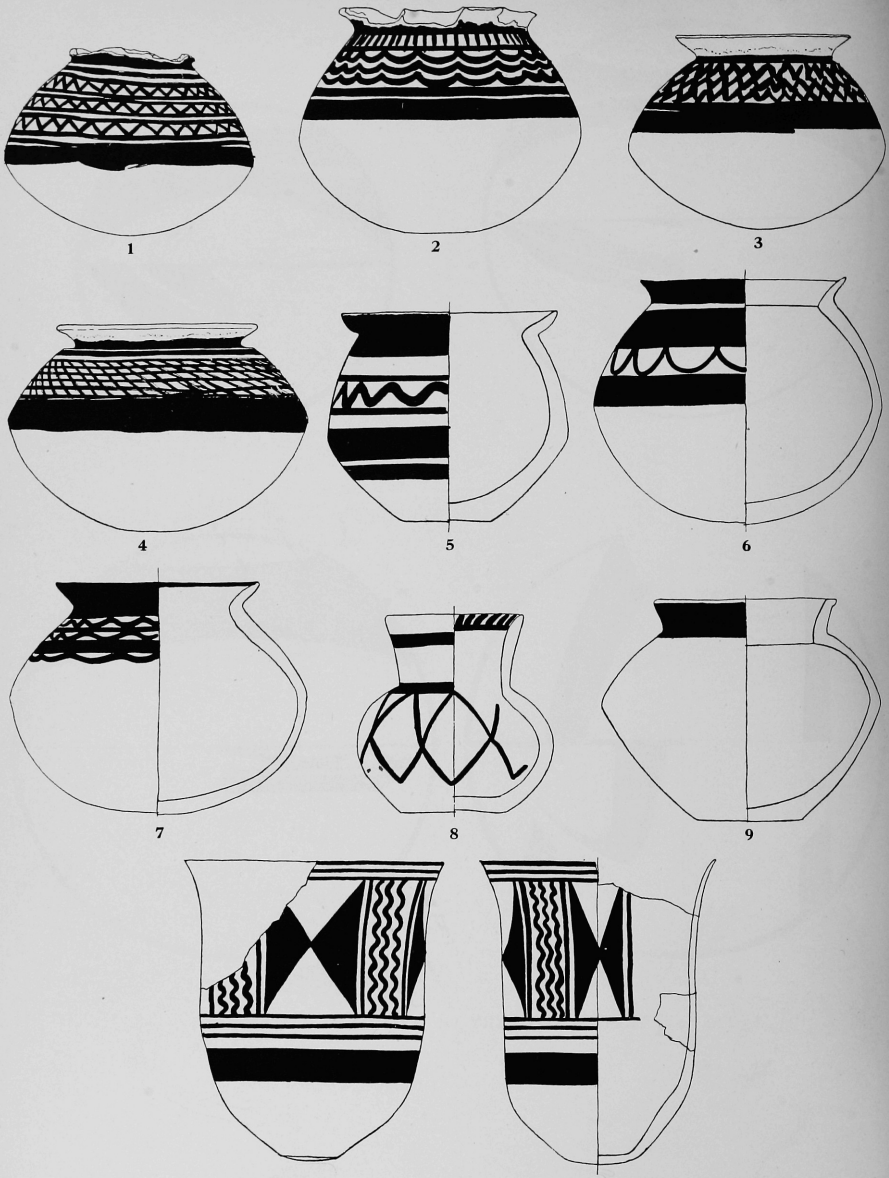


FIG. 33. PAINTED POTTERY OF THE AL 'UBAID PERIOD

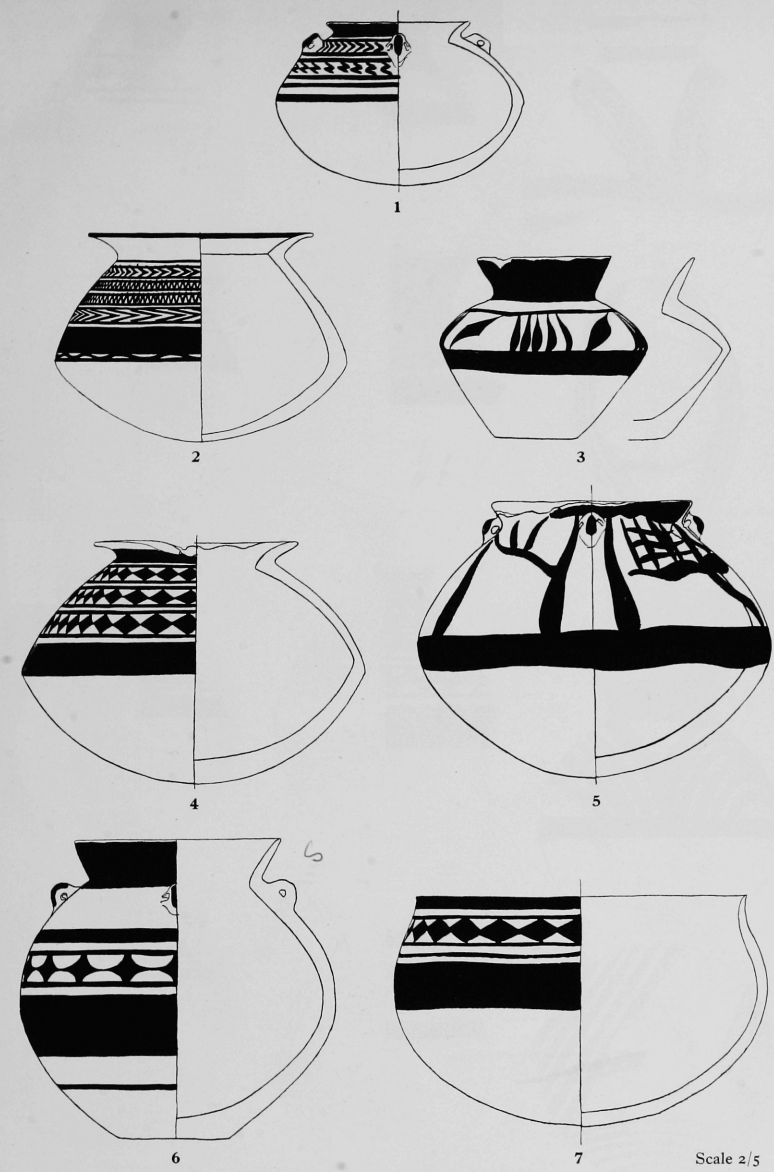


FIG. 34. PAINTED POTTERY OF THE AL 'UBAID PERIOD

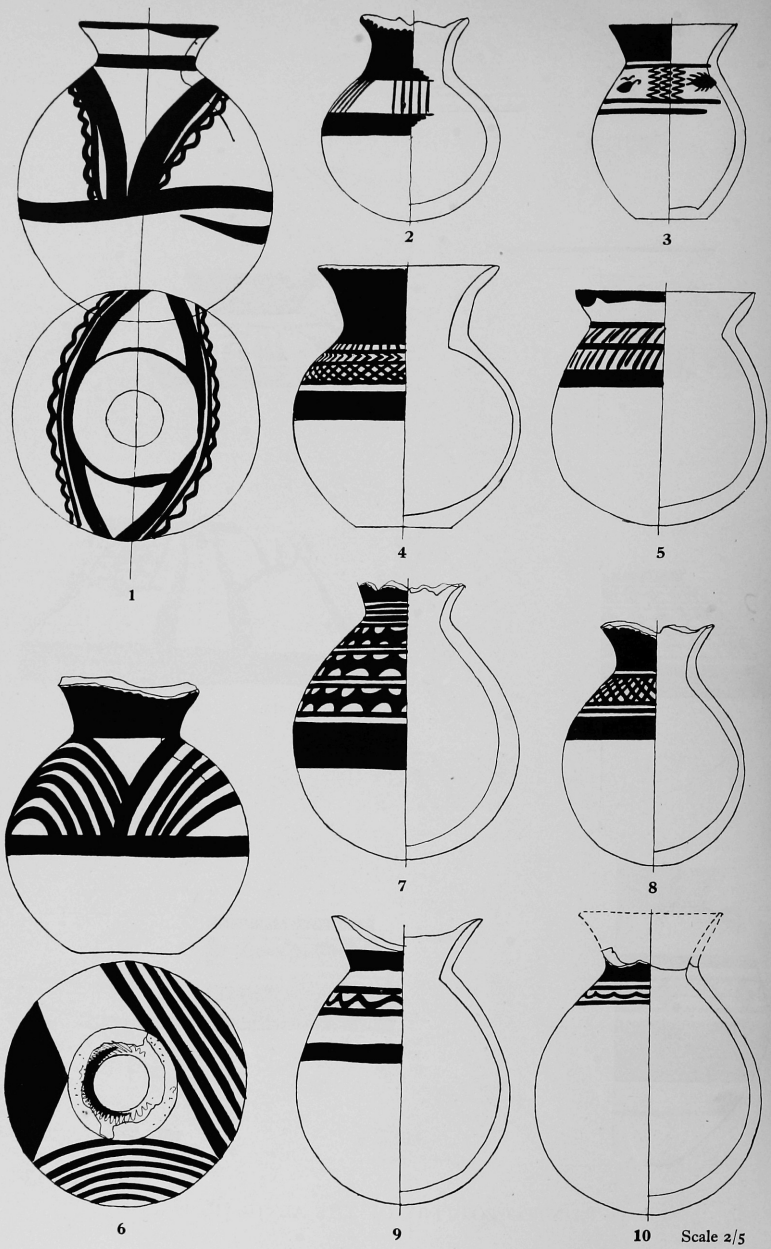


FIG. 35. PAINTED POTTERY OF THE AL 'UBAID PERIOD

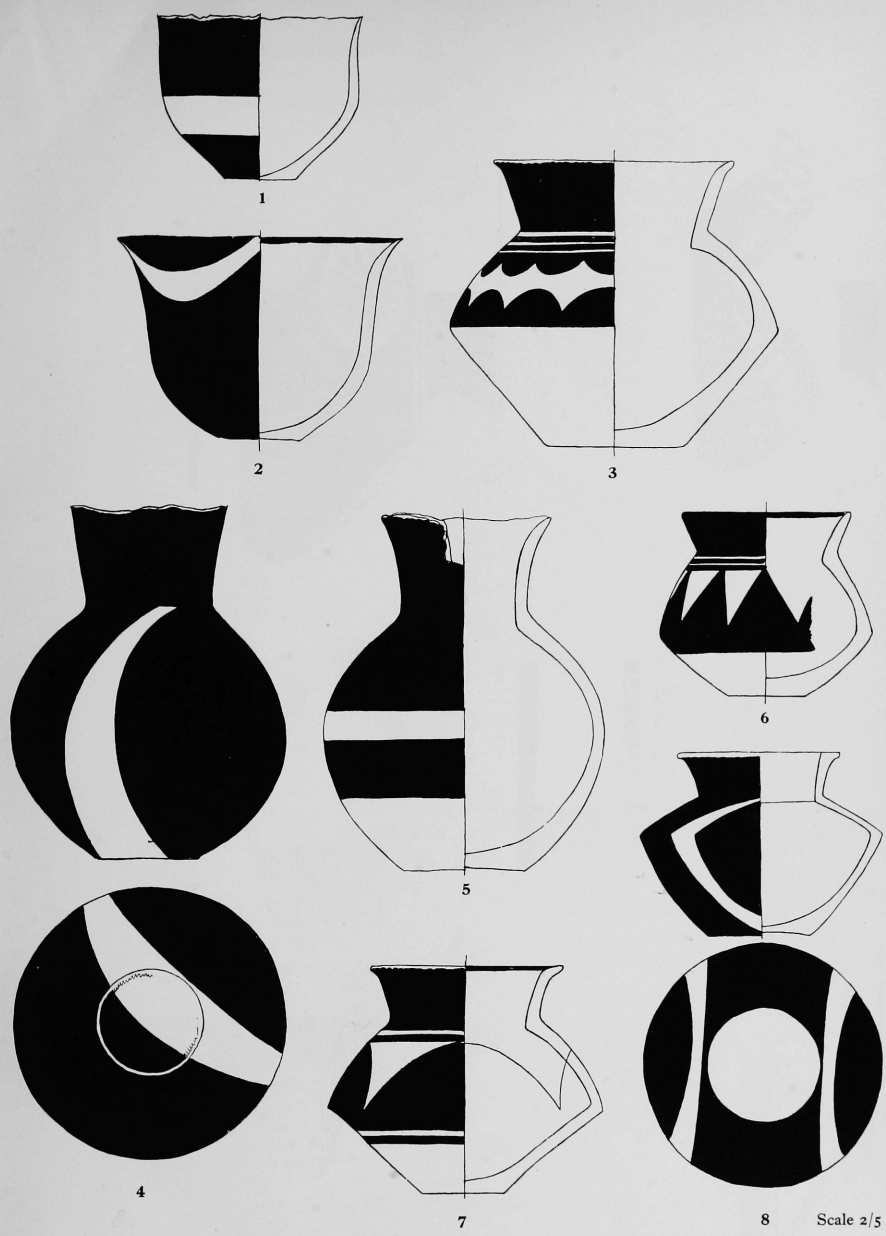


FIG. 36. PAINTED POTTERY OF THE AL 'UBAID PERIOD

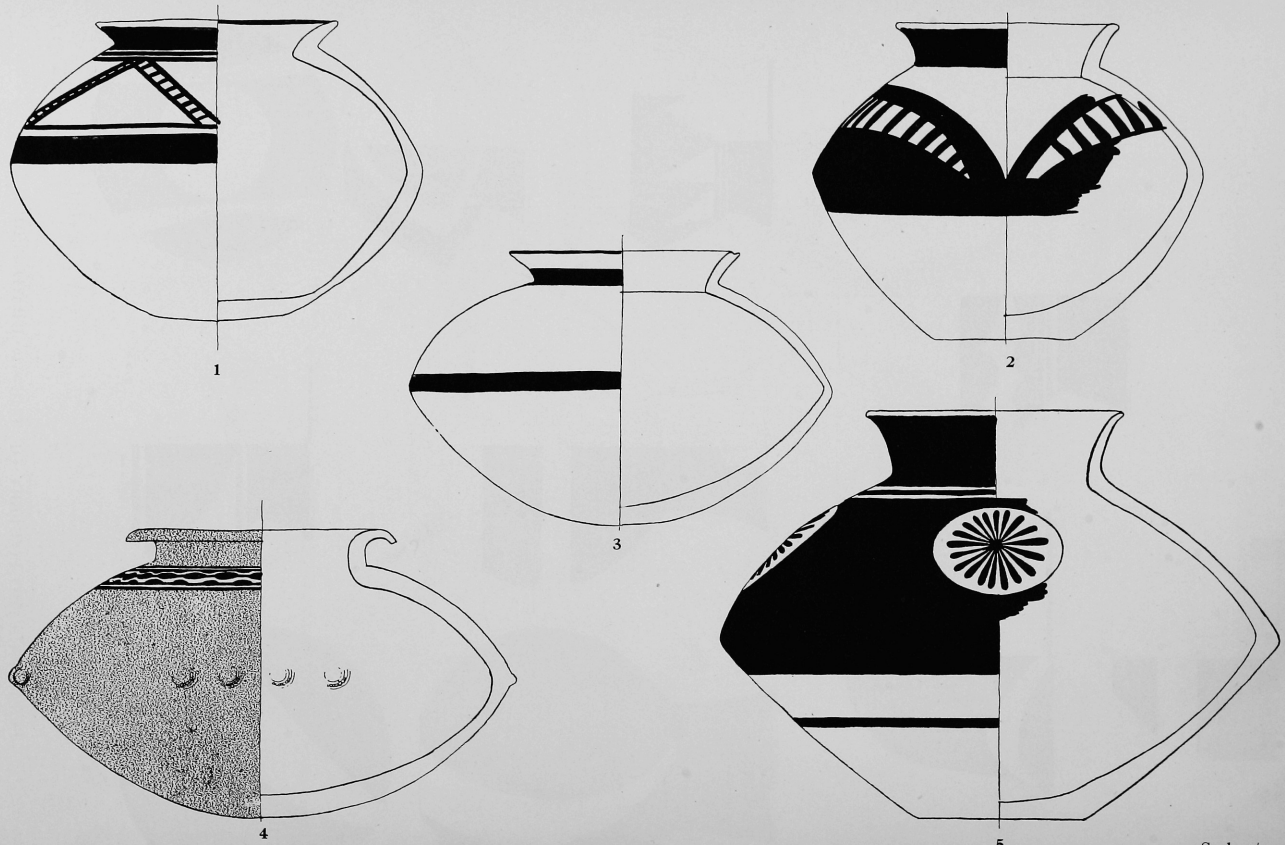
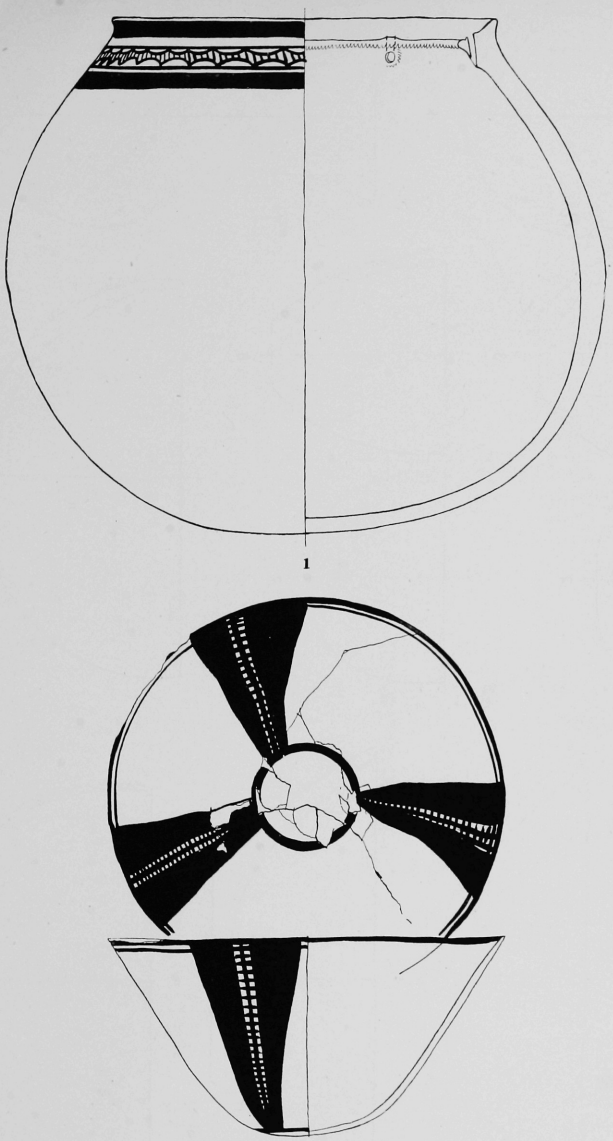


FIG. 37. PAINTED POTTERY OF THE AL 'UBAID PERIOD

Scale 2/5



Scale 2/5

FIG. 38. PAINTED POTTERY OF THE AL 'UBAID PERIOD

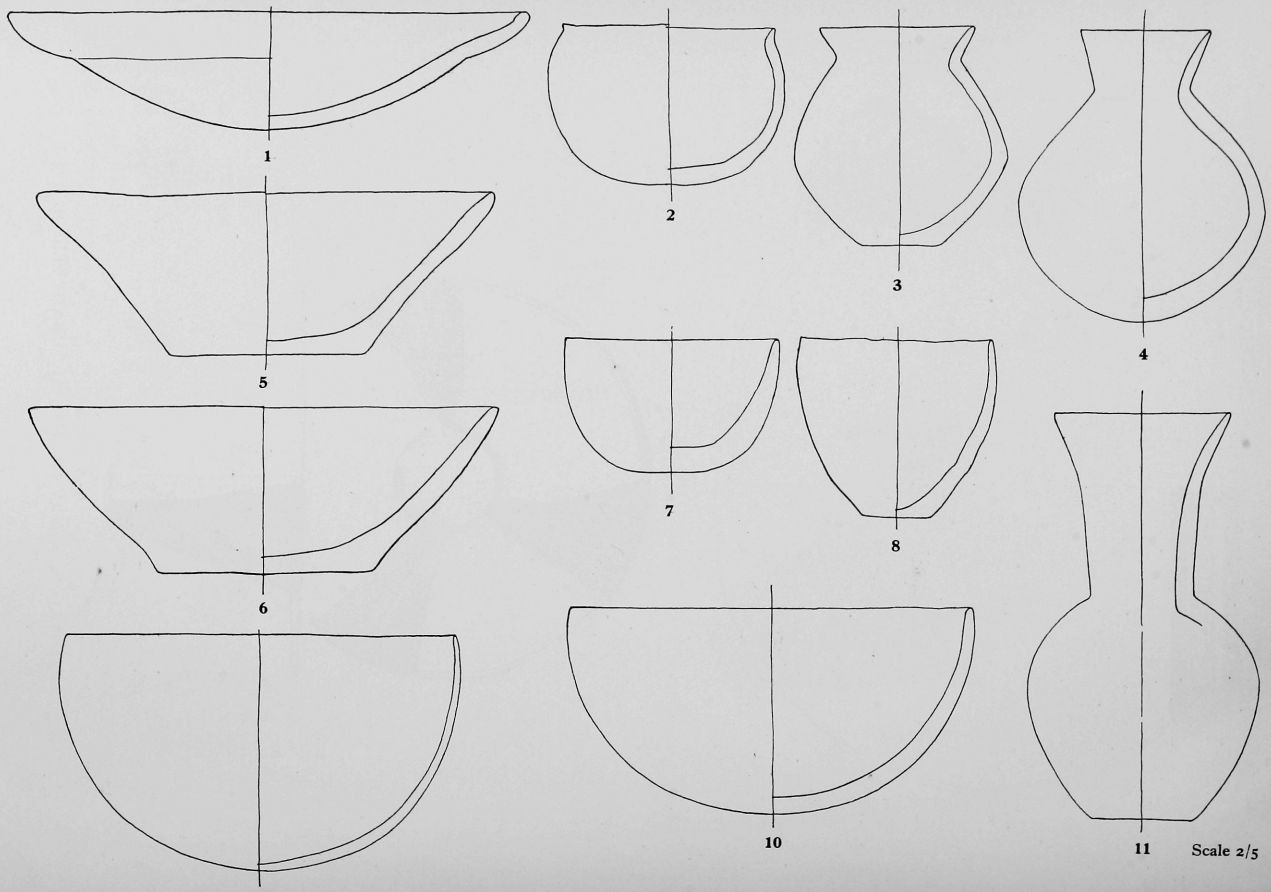


FIG. 39. UNPAINTED POTTERY OF THE AL 'UBAID PERIOD

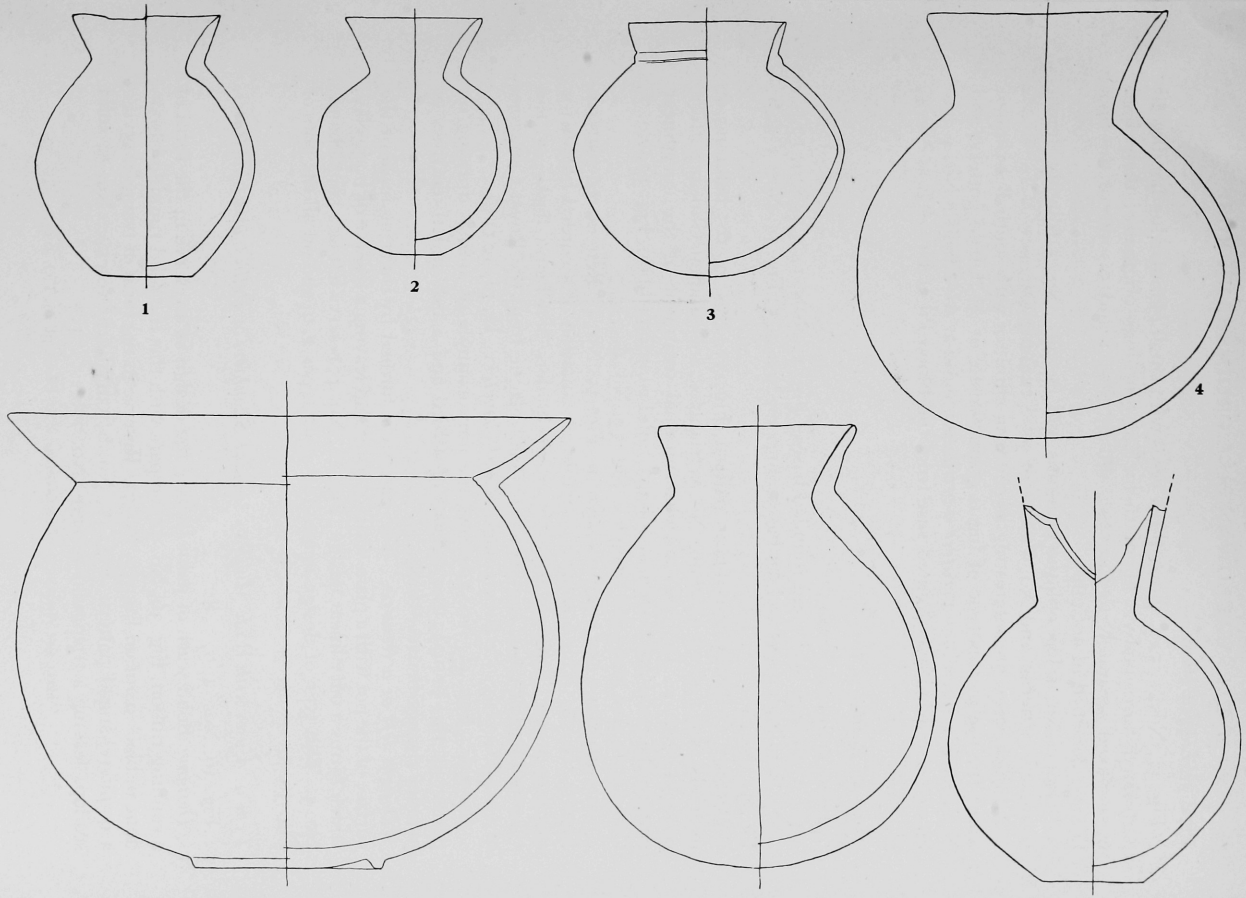


FIG. 40. UNPAINTED POTTERY OF THE AL 'UBAID PERIOD

Type 7. Lugged Vases.

Fig. 34, Nos. 1, 5, 6, shows three vases with small globular lug handles all perforated horizontally. All of them had four lugs originally: these lugs were affixed separately to the vase, and in Nos. 1 and 5 some of the lugs became detached in antiquity.

Designs. No. 1 has oblique chevrons and zigzags, No. 5 roughly drawn rectilinear patterns, and No. 6 a row of solid running lozenges.

All these vases are interesting as showing affinities with south Babylonian ware; the use of this type of lug is characteristic of Al 'Ubaid pottery, and No. 1 closely resembles a *cratère à oreillettes* found at Al 'Ubaid.[1] No. 4 may be well paralleled by a painted vase from the Flood Pit at Ur, *A.J.* x, No. 4, pl. 45 (*b*).

Type 8. Bottles.

These are of two types:

(*a*) With high necks and rounded bases. Fig. 35, Nos. 1, 2, 7, 8, 9, 10.

(*b*) With high necks and flat bases. Fig. 36, Nos. 4, 5; Fig. 35, Nos. 3, 4, 6; Fig. 33, No. 8.

Designs. Ordinary curvilinear pattern, Fig. 35, Nos. 9, 10; hatching at intervals, No. 2; cross-hatching, No. 8; triangles, arcs, and curvilinear pattern pendent, No. 1. In this somewhat unusual treatment of the curvilinear pattern the paint is a brownish colour. Solid running ribbon, Fig. 35, No. 7. Concentric arcs and solid triangles, Fig. 35, No. 6.

Cross-hatching and oblique chevrons, Fig. 35, No. 4. Reticulated pattern, Fig. 33, No. 8. This is almost certainly an imitation of a corded holder for carrying a vase, comparable to the straw holders of Chianti flasks, cf. the vase in a wicker cover engraved on a shell plaque from the Royal Cemetery of Ur (Woolley, *Ur Excavations, Royal Cemetery*, II, pl. 105).

Animals. Fig. 35, No. 3, shows the only example of animal drawing on pottery of this period; this consists of a bird and a fish and three rows of parallel zigzags between them.

Designs left as a Reserve. The pattern is formed by covering most of the surface of the pot with a plain wash of paint and leaving a reserve of body clay, which forms a curvilinear design, Fig. 36, No. 4; reserve left as a single band, No. 5. This type of design is also found on types 2, 9, and on all the pots of Fig. 36.

Type 9. Vases with Wide Mouths, Angular Shoulders or Bellies, and Flat Bases.

Fig. 36, Nos. 3, 6, 7, 8.

Designs. Solid wash of paint leaving the design as a reserve in the form of a running ribbon, Fig. 36, No. 3 (compare with this the solid running ribbon done in black paint on Fig. 35, No. 7). Reserve in the form of triangles giving a counterchanged pattern, Fig. 36, No. 6; curvilinear reserve, No. 8; solid scallops leaving a triangular reserve, No. 7.

[1] Hall and Woolley, *Ur Excavations*, I. *Al 'Ubaid*, pl. 49, T.O. 515.

Type 10. Large Jars with Flat or Rounded Bases and Pronounced Bellies.

Fig. 37.

Designs. Hatched zigzags leaving large open triangles, Fig. 37, No. 1; hatched curvilinear pattern No. 2 (closely paralleled by a design of the Al 'Ubaid period from Talloh); plain band, No. 3; rosette of nineteen petals done as a medallion in a reserve, No. 5; more than half the jar is covered with a solid wash of ill-fixed brownish-purple paint.

No. 4. The jar is covered with a plum-red paint, except for a narrow band just below the junction of the neck and shoulder, where the design consists of a solid cable pattern done in black paint between two bands of scallops. The shoulder of the jar is decorated with sets of four bosses done at intervals, the bosses are worked up from the body clay. This jar is of special interest because it forms a link with Al 'Ubaid, Uruk, and Jamdat Nasr ware. In shape this vase is a more bellied variant of a type found at Jamdat Nasr itself;[1] whereas the solid wash of paint connects it more closely with Uruk red slip ware, as also do the bosses which, however, on Uruk ware are usually in the form of pellets *appliqué*, and not worked up from the body clay. Note also the overhanging bevelled rim characteristic of Uruk and Jamdat Nasr. On the other hand, the bellied body of the vase can also be paralleled at Al 'Ubaid; cf. a vase in the Iraq Museum from Ur, U. 16626. The vase consists of a creamy clay and has been very carefully made by hand, not on the wheel: the paint is ill fixed and flakes off easily, another characteristic of Jamdat Nasr polychrome ware. This pot was found in G 21, the only extended burial on the site—a possible link with the extended burials from the Flood Pit at Ur. This interesting type is therefore an indication that the Arpachiyah ware of this period belongs to the end of Al 'Ubaid and the beginnings of Uruk-Jamdat Nasr: we know from Babylonian sites that these periods with their distinctive wares do in fact overlap, and here we have interesting confirmation of this. Moreover, we may suspect that the polychromy of Jamdat Nasr owes something to the polychromy of Tall Ḥalaf, and that ultimately these two wares are to be derived from the same family.

UNUSUAL TYPES

Type 11. Beaker.

Fig. 33, No. 10, shows the single example of a beaker found in this period. It is oval in plan, and the design consists of a double triangle point to point alternating with vertical curvilinear bands. The design is typical of all early prehistoric wares.[2] This beaker occurred as a surface deposit, probably votive.

Type 12. Deep Jar with Rounded Base and Ledge on the Inside below the Rim.

Fig. 38, No. 1.

The ledged inner rim was undoubtedly made to hold a lid, a feature

[1] E. Mackay, *Report on Excavations at Jemdet Nasr, Iraq* (*Field Museum of Natural History, Anthropology Memoirs*, Vol. I, No. 3), Pl. 77, No. 1 (Chicago, 1931).

[2] Herzfeld, *Iranische Denkmäler*, Lieferung I, Reihe 1, Taf. XV, 1, for a closely similar design at Persepolis.

commonly observed at Al 'Ubaid and in *Nin. 3*. Note also the perforation through the side of the vase, below the rim. The lid was probably also perforated and could thus be attached to the pot with string.

Design consists of a hatched running ribbon: this pattern is interesting because it occurs very commonly in the earlier Tall Ḫalaf period, and shows that the Al 'Ubaid potters had knowledge of this older pattern. Cf. also the solid running ribbon on Fig. 35, No. 7, and the running ribbon left as a reserve on Fig. 36, No. 3.

Type 13. Deep Bowl with Round Base.

Fig. 38, No. 2, shows an unusual type of bowl.

Design consists of a ring painted on the base, and attached to it three solid triangles bisected by an impaled ladder pattern. The design is suspiciously skeuomorphic: it may again be a copy of a holder or vase carrier, as in Fig. 33, No. 8, but in this example we may have an imitation of some stitched hide or stiff material suspended from a metal ring: such a contraption would form a convenient container for a vessel that required suspension. Cf. also Fig. 29, Nos. 1, 2, 4, 6, for the painted ring design at the base of a bowl. For the hatched ladder pattern as an indication of a skeuomorphic design, cf. the stitchwork bowls from Cyprus.[1]

TECHNICAL CHARACTERISTICS OF THE PAINTED WARE OF THE AL 'UBAID PERIOD

(*Cf. Plate* IV, *and Plate* V (*e*) (*f*).)

Most of the ware was hand-turned; a few examples were probably made on the tournette, or slow wheel, as in Susa I and Al 'Ubaid. In general the painted ware of this period is greatly inferior both in technique and design to the finely executed wares of the earlier Tall Ḫalaf period. In the first place the makers of the Al 'Ubaid ware no longer knew where to find the fine ferruginous clays used by the Tall Ḫalaf potters: the ware of the later period was usually of a coarse silicious clay, with chopped straw, sand, and quartz pebbles as a common *dégraissant*. The surface is often left rough, and a slip is only very rarely used though not unknown; cf. Fig. 34, No. 1. Above all, the potter had lost the art of regulating his furnaces, a practice which had been brought to a high degree of efficiency in the previous period. It is possible that the Al 'Ubaid potter was also using an inferior fuel, and indeed we may suspect that the Tall Ḫalaf potter used an oil furnace, and was thereby enabled to produce a high and steady combustion.

Another distinctive feature of the Al 'Ubaid period is that the paint is always matt, and we no longer have the lustrous vitrified paints which enhance the beauty of Tall Ḫalaf ware. In general, the Al 'Ubaid potter uses an inferior paint, which often fails to cohere with the body clay, and we may suspect that this is partly due to the fact that the potter now very rarely burnished the surface of the pot. Both clays and paints vary considerably in colour, and according to firing the paint changes from black to brown

[1] J. L. Myres, *Handbook of the Cesnola Collection*, 1915.

(*a*) A 276. Cream slip, brown paint. Ht. 0·127 m. (B)

(*b*) A 275. Buff clay, brown paint. Ht. 0·10 m.

(*c*) A 178. Pink slip, brown paint. Ht. 0·082 m.

(*d*) A 135. Buff clay, black paint. Ht. 0·08 m.

(*e*) A 194. Drab clay, brown paint. Ht. 0·129 m.

(*f*) A 192. Buff clay, black paint. Ht. 0·122 m.

(*g*) A 139. Buff clay, black paint. Ht. 0·085 m. (B)

(*h*) A 173. Buff clay, black paint. Ht. 0·077 m. (B)

(*i*) A 190. Buff clay, black paint. Ht. 0·097 m. (B)

(*j*) A 277. Cream clay, black paint. Ht. 0·138 m. (B)

PAINTED POTTERY OF THE AL 'UBAID PERIOD

and is sometimes greenish, while likewise the clays vary from a light drab to a greenish colour, and in the best examples have a smooth cream surface. It is interesting in this connexion to note that on the whole the pottery associated with the graves is of the coarser variety, whereas votive deposits and much of the domestic ware found in the houses is often of better fabric and more skilfully made. In particular we may note that votive deposits not associated with bones are superior in quality to pottery in the graves. Yet many of the pots used in the graves had undoubtedly previously been used for domestic purposes as we have examples of pottery which had been broken and mended with bitumen before being placed in the grave, as in G 27, e.g. the pot figured in Fig. 28, No. 5, a coarsely made bowl with a very coarse bitumen mend.

EVIDENCE FOR THE GENERAL CONTINUITY OF AL 'UBAID WARE AT ARPACHIYAH

As none of the graves in the main cemetery overlap, we have no evidence to show that there is any one stratum that can claim priority in time over another. Graves 1–21 and 23–43 all occur at a fairly constant depth varying from 2 to 3·5 m.

There is, however, a second group of graves which occurs much closer to the surface, and contains some pottery which can be differentiated in style from the graves of the deeper group, and may be slightly later in time. G 22, a post-cremation type of burial with a grey ware urn, occurs at 1·3 m. from the surface, and G 46 was at a depth of 1·6 m. Graves 44, 45, 47, 48 all occur within the top metre and contain well-developed types. In addition there are a number of votive deposits in the sub-surface which obviously belong to this group.

On the other hand, there are a number of identical types which occur both in the surface and in the deep groups, so that the general contemporaneity of the ware is clearly established. Of the thirteen basic types, there are seven, Nos. 3, 4, 6, 7, 11–13, which do not occur in the deep groups.

A detailed examination of these two main groups will explain the argument, which may best be understood from the following analytical table:

Type.	*In the Main Graves*, 1–43, *or in Deep Levels below* 2 m.	*In Late Group* 44–8 *or Subsurface* (*i.e. not below* 1·6 m.)
1. BOWLS WITH ROUNDED BASES (cf. Fig. 25, *a–e*)	Fig. 26, Nos. 1, 2; Fig. 27, Nos. 1, 4 Fig. 28, Nos. 1, 3 Fig. 28, No. 5 Fig. 29, Nos. 1, 2, 4, 6, 7 Fig. 30, Nos. 1, 2, 4 Fig. 38, No. 2, intrusive in TT 7 Fig. 34, No. 7	Fig. 26, Nos. 3, 4 Fig. 27, No. 3 Fig. 28, Nos. 2, 4 Fig. 29, No. 3

Remarks: The main types, therefore, occur in both groups. But the delicate type, Fig. 29, Nos. 1, 2, 4, 6, also Fig. 30, No. 2, with carefully drawn minute geometric designs, occurs only in the main graves. Fig. 28, No. 4, in the surface group, shows a bolder, broader design characteristic of surface groups. Fig. 29, No. 3, similar in profile to Fig. 34, No. 7, illustrates the overlap between both groups.

Type.	*In the Main Graves, 1–43, or in Deep Levels below 2 m.*	*In Late Group 44–8 or Subsurface (i.e. not below 1·6 m.)*
2. BOWLS WITH FLAT BASES (cf. Fig. 25, *f–i*)	Fig. 31, Nos. 2, 5 Fig. 36, No. 2	Fig. 30, Nos. 3, 5 Fig. 31, Nos. 1, 3, 4, 6, 7, 8 Fig. 36, No. 1

Remarks: The distinctive 'reserve design' occurs in both groups, cf. Fig. 36, Nos. 1, 2; this clearly demonstrates the continuity of tradition in the later surface groups. On the other hand, note the obviously distinct types occurring in the surface group only; Fig. 31, Nos. 3, 4, which are carefully made vessels, better fired, and have that bolder, broader treatment of design, which differentiates some of the pottery of the surface group.

3. SPOUTED VESSELS	None	Fig. 30, No. 6

Remarks: Only found in the surface group.

4. LARGE BASINS WITH FLAT BASES	None	Fig. 32, Nos. 1–4

Remarks: Only in the surface group; note again the bold, broadly treated design; basins closely associated with bowls on Fig. 31, Nos. 3, 4.

5. VASES WITH SHORT NECKS AND ROUNDED BASES	Fig. 34, No. 4 Fig. 33, Nos. 6, 7 Fig. 35, No. 5 (in TT 5)	Fig. 33, Nos. 1–4 Fig. 34, No. 2

Remarks: The type is equally divided between both groups; but Fig. 33, Nos. 1–4, which are probably based on basketry prototypes, form a distinctive surface group, and it is noteworthy that Fig. 34, No. 2, which was one of the most beautifully executed vases in the whole collection, belongs to the surface group. The fine, careful brushwork on this vase is more characteristic of the early group, but the general technique, well-finished surface, well-fixed paint, and even firing, is characteristic of the best vases of the late group. Note that Fig. 33, No. 6, which is found at a level intermediate between the surface group and the graves, is in some respects similar to a prehistoric vase from Ur (U. 15555 in the Iraq Museum).

6. VASES WITH HIGH NECKS AND FLAT BASES	None	Fig. 33, Nos. 5, 9 Fig. 34, No. 3

Remarks: Only found in the surface group. Note especially the beautifully executed delicate type Fig. 34, No. 3, analogous to an Al 'Ubaid type from Ur.

7. LUGGED VASES	None	Fig. 34, Nos. 1, 5, 6

Remarks: Only found in the surface group. With the exception of Fig. 34, No. 5, which is a coarsely executed pot, the other two are finely made specimens, and particularly important because of their close resemblance to Al 'Ubaid ware from Babylonia. Fig. 34, No. 1, is similar to a *cratère à oreillettes*, Al 'Ubaid,[1] pl. 49, T.O. 515, and No. 6, with the curved lozenges, may be compared with the vase from the Flood Pit, Ur (*A.J.* x, No. 4, pl. 45).

[1] HALL and WOOLLEY, *Ur Excavations, Al 'Ubaid.*

Type.	*In the Main Graves*, 1–43, *or in Deep Levels below* 2 m.	*In Late Group* 44–8 *or Subsurface* (*i.e. not below* 1·6 m.)
8. BOTTLES: (*a*) ROUND-BASED	Fig. 35, Nos. 1, 2, 7–9, 10	None

Remarks: Only found in the main graves at deep levels; but Fig. 35, No. 10, may belong to a grave late in the series, on the grounds of its association with the jar shown on Fig. 37, No. 4, which appears late in style. Cf. G 21 in the catalogue of graves, p. 39.

(*b*) FLAT-BASED	Fig. 35, Nos. 3, 4, 6	Fig. 33, No. 8 Fig. 36, Nos. 4, 5

Remarks: Fig. 36, Nos. 4, 5, the two examples in the surface group have the distinctive 'reserve design' found both in graves and on top; Fig. 33, No. 8, has the reticulated skeuomorphic design; with these exceptions all the bottles, both round- and flat-based, occur in the graves.

9. VASES WITH WIDE MOUTHS, ANGULAR SHOULDERS OR BELLIES, AND FLAT BASES	Fig. 36, No. 8	Fig. 36, Nos. 3, 6, 7

Remarks: The type is equally divided between both groups; note the bold design and counter-changed patterns: the occurrence of this type in both groups shows the continuity of the Al 'Ubaid ware in all levels, in spite of certain differences.

10. LARGE BELLIED JARS	Fig. 37, Nos. 1, 4	Fig. 37, Nos. 2, 5. No. 3 (intrusive into TT 6)

Remarks: The shape occurs in both groups, but there is a certain difference of design in the examples which occur in the late group. The polychrome example on Fig. 37, No. 4, with its affinities to Uruk-Jamdat Nasr ware has already been discussed on page 63, and it is therefore possible that G 21, the grave in which it was found, may be late in the main group. Fig. 37, Nos. 2, 5, both show the bold rich designs which we have observed to be characteristic of some of the surface groups. No. 3 was found in G 49, a grave intrusive into the Tepe, but shows the improved firing of the later pottery, and by its association with type 13 may be reckoned late.

11. BEAKER	None	Fig. 33, No. 10

Remarks: Only one example found on the site. Note the bold rich design; the clay, however, was overfired and had a greenish flair.

12. DEEP JAR WITH INNER LEDGE FOR A RIM	None	Fig. 38, No. 1

Remarks: This type of rim is commonly found in TT and in the surface levels; it is characteristic of the pottery of *Nin. 3* period, cf. *A.A.A.* xx, pl. 49, and is also found among the Al 'Ubaid ware in Babylonia.

13. DEEP BOWL WITH ROUND BASE	None	Fig. 38, No. 2 (intrusive into TT 6)

Remarks: The type is really a variant of type 1. The painted ring at the base of a bowl is found on Fig. 29, Nos. 1, 2, 4, and 6, of the early group; but the design here is treated in the broader style of the late group and does not show the delicate meticulous brushwork of the above-mentioned examples. For a detailed discussion of this type, cf. page 64.

SUMMARY OF THE EVIDENCE

In accordance with stratification and the development of design we may conveniently divide the Al 'Ubaid ware into three categories, as follows:

A. Ware which only occurs in the main graves and deep levels, therefore presumed early.
B. Ware which occurs both in the main graves and in the surface group, and is therefore representative of both periods.
C. Ware which only occurs in the surface group, therefore presumed late.

A. *Early Ware, only found in the Main Graves or Deep Levels.*

Type 1. Fig. 29, Nos. 1, 2, 4, and 6, and Fig. 30, No. 2. Delicate bowls with minute designs, done on a small scale, with carefully executed thin brush strokes; distinctive in treatment from the bolder sweeping designs of the late group.

Type 5. Fig. 33, Nos. 6, 7.

Type 8. Fig. 35, Nos. 1, 2, 3, 6–9, 10. The bottle seems to be an early type, but No. 10, which occurs in G 21, may be later, and No. 7 has a parallel design in the later series. Note that No. 3, with animal drawings, belongs to the early group.

Type 10. Fig. 37, No. 4. This jar occurs in a deep grave G 21, and therefore belongs by stratification to the early group, but in view of its advanced style, which relates it to Uruk-Jamdat Nasr ware, it probably comes at the end of the early group. No. 1, from G 27, is early, by stratification.

B. *Ware which occurs both in the Main Graves and in the Subsurface Groups and is therefore characteristic of both Periods.*

Type.	*Main Graves and Deep Levels.*	*Corresponding Subsurface Type.*
Type 1	Fig. 27, No. 1. Fig 25 *a* Fig. 28, No. 3. Fig. 25 *b* Fig. 27, No. 4. Fig. 25 *c* Fig. 34, No. 7. Fig. 25 *d*	Fig. 27, No. 3. Fig. 25 *a* Fig. 28, No. 2. Fig. 25 *b* Fig. 26, No. 3. Fig. 25 *c* Fig. 29, No. 3. Fig. 25 *d*
Type 2	Fig. 31, No. 5. Fig. 25 *g* Fig. 36, No. 2. Fig. 25 *g* Fig. 31, No. 2. Fig. 25 *i*	Fig. 31, No. 6. Fig. 25 *g* Fig. 36, No. 1. Fig. 25 *g* Fig. 31, No. 1. Fig. 25 *i*
Type 5	Fig. 34, No. 4	Fig. 34, No. 2.

Type 8. The bottle type is generally early, cf. Group A above; but Fig. 36, Nos. 4, 5, shows two bottles from the surface group done with the all-over and reserve pattern which appears on other types of pottery in the deep group, e.g. Fig. 36, No. 2.

Type 9	Fig. 36, No. 8	Fig. 36, Nos. 3, 6, 7
Type 10	Fig. 37, Nos. 1, 2	Fig. 37, Nos. 3–5

Special designs common to both groups:

The all-over and reserve pattern; cf. Fig. 36.
The solid lozenge; cf. Fig. 34, Nos. 4, 6, 7.

C. *Late Ware, only found in the Surface Groups.*

Type 1. Fig. 28, No. 4. The design shows an unusually bold, broad rendering of the common curvilinear design.

Type 2. Fig. 31, Nos. 3, 4. Distinctive shapes, well levigated clay, evenly fired. Bold sweeping design similar to that on type 4.

Type 3. Fig. 30, No. 6. Spouted vessel.

Type 4. Fig. 32, Nos. 1–4. Basins of well levigated, evenly fired clay. Bold, sweeping curvilinear patterns, a decided change in style when compared with the minute brushwork of the older types shown on Fig. 29, Nos. 1, 2, 4, 6, and Fig. 30, No. 2.

Type 5. Fig. 33, Nos. 1–4. A special type, apparently imitating basketry.

Type 6. Fig. 33, Nos. 5, 9; Fig. 34, No. 3. Note the lanceolate leaf pattern on this vase, analogous to a design on a vase from Ur. *A.J.* x, pl. 44 (*b*).

Type 7. Fig. 34, Nos. 1, 5, 6. All lugged vases. Nos. 1, 6 resemble vases from Al 'Ubaid and Ur respectively. Both are well-made vessels; note the broadly treated design on No. 6.

Type 10. Fig. 37. By stratification No. 4 belongs to the early group, but is late in style; cf. remarks under A. No. 3 is of well levigated clay, carefully fired; Nos. 2, 5 illustrate the bold, broad treatment of design characteristic of the late period.

Type 11. Fig. 33, No. 10. Note the bold, rich design characteristic of the surface groups.

Type 12. Fig. 38, No. 1. The jar, with the inner ledge for a lid, is found in south Babylonia and in *Nin. 3* period.

Type 13. Fig. 38, No. 2, shows a boldly treated, broad design.

Al 'Ubaid painted ware. Conclusions.

Taking the combined evidence of stratification, association, and style, we have been able to divide the pottery of this period into three groups, A, B, and C. Groups A and C correspond to two periods, an early and a late period respectively, and Group B contains a number of types common to both periods.

The early ware is on the whole of a coarser clay, and shows inferior firing, while in general the treatment of design is on a smaller scale and shows a meticulous, careful brushwork.

The late ware shows a number of types which may be differentiated from the earlier group; in particular, there is a broader, more sweeping treatment of design, best seen on the basin type 4. The lugged vase and the spouted vase are introduced in this period; there is a general improvement in firing, and most of the best executed wares come from this group. Noteworthy are the fine specimens on Fig. 34, Nos. 2, 6. Finally, we have the important fact that most of the vessels resembling south Babylonian types occur at this period.

But while there is a development in style, which corresponds to two different groups of burials and deposits, there are a considerable number of

specimens found in Group B which are common to both periods. Moreover, it has been shown that none of the graves in the main cemetery overlap, so that it seems most probable that, in spite of certain differences in style, the Al 'Ubaid ware at Arpachiyah does not cover a very long period of time, and it is certain that it belongs to a single homogeneous ceramic period.

It is difficult to decide to what stage of southern development the Arpachiyah pottery of this period corresponds; for in the first place, apart from Ur, we know very little about the development of the southern Al 'Ubaid ware. It will be noticed that at Arpachiyah, the Al 'Ubaid ware shows no examples of the ring base, which in the south is common; this may indicate that at Arpachiyah we have a primitive stage of Al 'Ubaid, though it might equally be argued that the absence of ring base implies a degeneration in style. On the other hand, the closest resemblance of Arpachiyah specimens with southern ware is clearly to Al 'Ubaid 1–2, the richest period of design: this, therefore, favours an early connexion. But in Fig. 37, No. 4, we have a pot which bears stylistic affinities with Uruk-Jamdat Nasr ware; and taking into account the evidence from Nineveh, where *Nin. 3*, the stratum corresponding to Al 'Ubaid, is followed by a stratum containing vessels of the Uruk period,[1] it seems likely that some of the Arpachiyah ware may correspond with the last phase of southern ware, that known as 'Ubaid 3, while the earlier stages may go back to a period at least as early as Al 'Ubaid 2.

UNPAINTED WARE OF THE AL 'UBAID PERIOD

(Figs. 39, 40, 41, Nos. 12–15, 17–20.)

The plain pottery of this period is of little interest as compared with the painted pottery. Most of it is roughly made ware, hand-turned, in a coarse drab clay. It forms only a small proportion of the pottery, and roughly the ratio of unpainted to painted ware was about 1:4 in this period. In the Tall Ḥalaf period the ratio of unpainted to painted was only about 1:10. This fact is of some interest. It is probable that in the Al 'Ubaid period this increase in proportion of unpainted ware is symptomatic of the progress of metallurgy. In Babylonia painted pottery shows a decline *pari passu* with an increase in metal working.

Only about half the types which occur in the painted pottery occur in the unpainted. The types common to both painted and unpainted ware are as follows:

Type 1. Bowls with wide mouths and rounded bases. Fig. 39, Nos. 2, 9, 10.
Type 2. Bowls with wide mouths and flat bases. Fig. 39, Nos. 7, 8.
Type 3. Spouted vessels: a few spouts were found, no complete pots.
Type 5. Vases with short necks and rounded bases. Fig. 41, Nos. 14, 19; Fig. 40, No. 3.
Type 6. Vases with short necks and flat bases. Fig. 39, No. 3; Fig. 41, Nos. 12, 13.

[1] *A.A.A.* xx.

Type 7. Lugged Vases. A few unpainted fragments.
Type 8. Bottles: (*a*) With rounded bases. Fig. 39, No. 4; Fig. 40, No. 6.
(*b*) With flat bases. Fig. 40, Nos. 1, 2, 4, 7.
Types 9–13 do not occur in the unpainted ware.

Special types only found in the unpainted ware.

A. Fig. 39, Nos. 5, 6. Very coarsely made bowls, with wide mouths and flat bases, similar to coarse ware of *Nin. 3* period.

B. Fig. 39, No. 1. Wide-mouthed bowl with rounded base, coarse ware, probably made on the wheel. This example was found close to the surface and a similar type was associated with a grey ware urn in a late grave G 10; this bowl is therefore probably *Nin. 3*.

C. Fig. 41, No. 18. A 'spectacle vase' with a double mouth, perhaps a flower vase. The spectacle vase, with varying shapes, is also found in south Babylonia: at Al 'Ubaid[1] it occurs in a grave of the middle period, and a similar vase occurs at Ur:[2] it is not mentioned as occurring in a Royal Cemetery group and presumably comes from a Jamdat Nasr grave under the royal tombs. Both these south Babylonian examples are probably later than the Arpachiyah specimen. In any case the occurrence both in the north and in the south of this distinctive type is interesting. The Arpachiyah example is roughly made, of pinkish-buff clay, and was found 1 m. below the surface in square Fe V. 2.

D. Fig. 39, No. 11, shows a tall vase with an abnormally high funnel-like neck and splayed rim, from G 11, only one example of this type was found on the site. Associated with it were Fig. 41, No. 8; Fig. 30, No. 4; Fig. 31, No. 5.

BURNISHED WARE

Characteristic of the Al 'Ubaid period are a number of burnished wares. The only complete specimen recovered is shown on Fig. 40, No. 5; it was restored from fragments found in the Tepe house level TT 3. This vase, like most of the grey ware, was probably fired in a muffled kiln: the clay which was exposed to smoke on the outside was allowed to take a grey tinge, and after firing was brought to a high polish with a bone or pebble burnisher, on the outside: the inside remained a dull drab colour. This particular example is interesting because it has a ring base. One of the outstanding features of the Al 'Ubaid pottery at Arpachiyah is the complete absence of ring bases. This vase, therefore, provides a link with the south Babylonian ware which is commonly characterized by ring bases. Further, it is obviously related to the large grey ware burnished urns of *Nin. 3* period: a hopelessly damaged specimen of a grey ware burnished urn of *Nin. 3* type was actually found in G 22, q.v., p. 39.

In addition to the grey ware a number of sherds of burnished red ware were also found: the red was probably produced by exposure of the body of the

[1] HALL and WOOLLEY, *Ur Excavations*, I, *Al 'Ubaid*, pl. 60, type 94.

[2] WOOLLEY, *Ur Excavations*, II, *The Royal Cemetery*, pl. 267, type 253.

pot to an open flame in an oxidizing atmosphere. There was one example of a red burnished vase of the same type as Fig. 39, No. 5, but the majority of sherds were from flat bowls of *Nin. 3* type.

An interesting combination of red and grey burnish was also found: two sherds showed a grey burnish on the outside and a red burnish on the inside; this was probably effected by exposing the outside of the vessel to smoke and the inside to the naked flame, a practice which may be compared with the manufacture of the predynastic Egyptian black-topped ware, in which case the black tops were the portion of the vessel covered by cinders.[1]

The importance of the monochrome grey and red wares at Arpachiyah is that they provide a definite link with the prehistoric *Nin. 3* period; cf. *A.A.A.* xx, No. 4, 163. This ware is commonly associated with pottery with grooved rims, and we may suspect that it belongs to the latest period of Al 'Ubaid ware at Arpachiyah. It is curious that no examples of this ware were found in the graves, with the single exception of surface G 22, q.v., p. 39, of the later group. The occurrence of grey ware in south Babylonia, together with Uruk red slip ware, and in the Jamdat Nasr period at Ur, is another reason for suspecting that it belongs to the end of the Al 'Ubaid period at Arpachiyah.

Chapter 5

Miniature Pottery, Painted and Unpainted; Stone Vases

Miniature Pottery.

The practice of making miniature pottery, though common in the earlier Tall Ḥalaf period, was rare in the Al 'Ubaid. Incidentally, miniature pottery is also rare in the Al 'Ubaid period in south Babylonia; in fact in the volume on Al 'Ubaid[2] there are not more than two types that could be called miniature, and there is no evidence that minute vessels were commonly made on any other site during this period.

It is hardly necessary to enumerate the variety of uses to which miniature vessels might have been put; it seems that certain types with pinched spouts, blackened with smoke deposit, may have been used as lamps, and another small vessel with a long spout looks like a dropper. These small vessels could also have been used as crucibles, or as painter's mixing bowls—some of the smaller stone vessels were almost certainly used for this purpose; others again may have been put to votive and ceremonial uses, and in addition we know that small vessels were, in antiquity, as they are to-day, commonly used as containers for cosmetics.

Miniature Painted Pottery.

Fig. 42 shows the painted examples. Nos. 1, 2, 4, and 7 may belong to the Al 'Ubaid period; the others are all certainly of the older Tall Ḥalaf

[1] Opinions differ, however, as to the technique employed. Cf. Lucas, *Annales du Service des Antiquités de l'Égypte*, 1932. Also Lucas, *Ancient Egyptian Materials and Industries* (2nd. ed.) pp. 329–332.

[2] Hall and Woolley, *Ur Excavations*, I, *Al 'Ubaid*, pl. li.

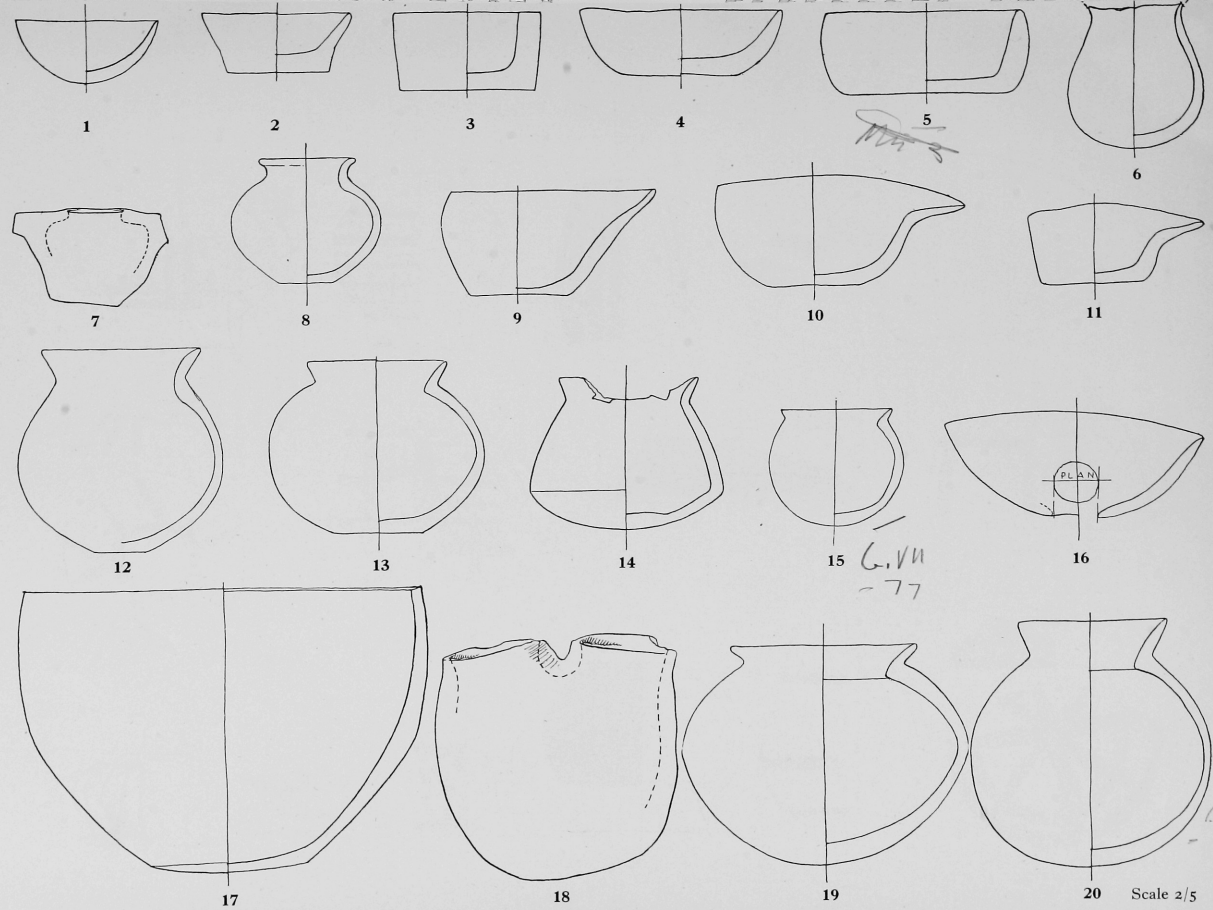
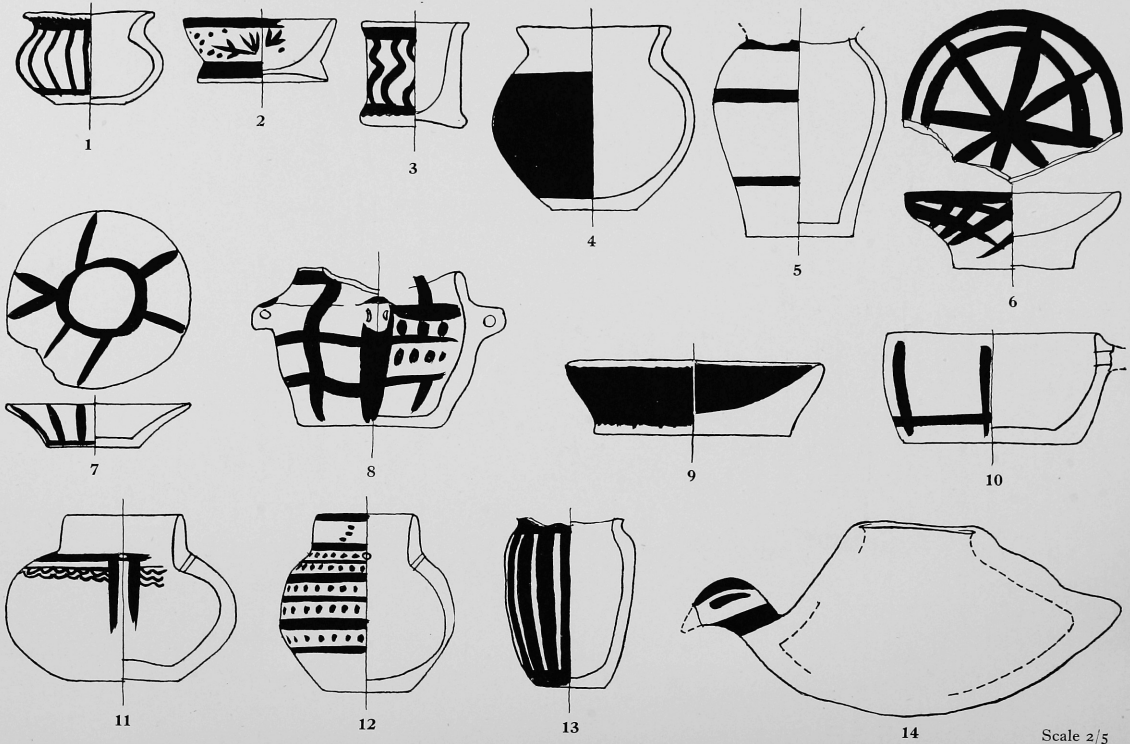


FIG. 41. UNPAINTED POTTERY



Scale 2/5

FIG. 42. MINIATURE POTTERY, PAINTED

period. All this miniature pottery is too individual to enable us to classify it by reference to any constant shape or design. The Al 'Ubaid examples are coarser than the Tall Ḫalaf and distinguished by the use of greenish-black paint. No. 14, a zoomorphic vase in the shape of a dove with hollow body, may also be an Al 'Ubaid example, and must be compared with the miniature terra-cotta doves on Fig. 46, Nos. 1, 2, of the same period; this vessel is almost certainly votive. The dove is also found in the Al 'Ubaid period in south Babylonia both at Ur and Uruk.

Of the earlier Tall Ḫalaf period, Fig. 42, Nos. 11 and 12, are both interesting, as they are both found in the burnt houses on TT 6, and are therefore certainly contemporary with the finest polychrome ware of the Tall Ḫalaf period. They bear the distinguishing marks of the best Tall Ḫalaf ware in that they are very finely made of a smooth clay and careful finish, and have a rich red paint: there is none of the careless work and coarse finish so common in the Al 'Ubaid period. No. 8 is also of the Tall Ḫalaf period, and has bulbous-lug handles pierced horizontally. No. 9 is probably the earliest vessel of the whole series: it was found in a deep stratum just above the level of virgin soil.

Miniature Pottery, Unpainted.

Fig. 41, Nos. 1–11, 15, 16; Fig. 43, Nos. 1–27.

Of all these examples only two may be classified with certainty as belonging to the Al 'Ubaid period, and it will be observed that they are slightly larger in size than the remainder—another indication that miniature vases are not a fashion natural to the Al 'Ubaid period.

Fig. 41, Nos. 8, 15, are the only two vases which may be classified with certainty as belonging to the Al 'Ubaid period: they come from G 11 and G 23 respectively. No. 8 contained a stopper of black sun-dried clay inside it. Both these vessels are rather larger than the majority of miniatures.

Fig. 41, No. 6, and Fig. 43, No. 7, show two more examples which probably belong to the Al 'Ubaid period. The latter example was found in the Tepe, TT 4, the earliest of the Al 'Ubaid house levels, and is in a dark carbonized clay.

All the remainder of these miniatures belong to the earlier Tall Ḫalaf period: a few of them have special features which are of interest.

(*a*) *Bowls with pinched trough spouts*; probably lamps. Fig. 41, Nos. 9–11; Fig. 43, No. 5. Two of these, No. 11 of the first figure and No. 5 of the second, have a blackened surface, carbonized by smoke: this fact and the pinched spout suggests that they may have been used as lamps; the wick end would presumably rest in the trough spout. The open trough lamp appears in a more magnificent form in the Royal Cemetery at Ur, and on many other south Babylonian sites; all these may well be derived from this primitive prototype. Similar lamps blackened by smoke have been found at Tall Ḫalaf.[1]

[1] VON OPPENHEIM, *Der Tell Halaf*, taf. 51, Nos. 5, 7.

(*b*) *Bowls with tubular spouts.* Fig. 43, Nos. 1–4, show this type. These again might have been used as lamps, but they show no signs of burning, and it is more probable that they were simply used as droppers for some liquid that had to be administered in very small quantities.

Noteworthy also are Fig. 43, No. 13, a very early type from the deep levels: the stem is solid and could be used as a convenient handle if the vessel was used as a mixer; No. 20, a rare bottle shape; No. 25, interesting because of its ring base, from one of the earliest levels; Nos. 10, 12 are both beautifully made vases with the characteristically fine finish of vessels from the burnt house; both come from TT 6. No. 14, an incised vase of black, carbonized clay, was found in a Tall Ḫalaf grave, G 58, together with Nos. 21, 27.

Stone Vases.

Fig. 44. The large majority of these belongs to the Tall Ḫalaf period; there is only one, A 416, Fig. 44, No. 10, which was found in an Al 'Ubaid surface deposit and therefore is presumably of that period, but I am inclined to suspect that even this had been made in the Tall Ḫalaf period, and was a survival. Many of these examples are fine specimens of the stone-worker's skill in the Tall Ḫalaf period; many of them are beautifully finished, and have a high polish. Nos. 4, 5, and 6 are fine examples of miniature stone carving; No. 15 is a remarkable specimen, as it is made in obsidian, a highly refractory material: it was evidently ground out with a cylindrical drill, but as will be seen from the section, the obsidian worker feared for the fracture of the vase and was content to leave a very small aperture; the carving of this vase was really a *tour de force*; it is at present the earliest example of an obsidian vase from Assyria, and for antiquity only the obsidian vases from Uruk can compare with it.[1] This example comes from the burnt house TT 6. Cf. also Plate v (*c*).

These vases are made in a wide variety of materials, including diorite, alabaster, white limestone, brecciated grey limestone, iron-stained stalagmitic limestone, fine grained cream-coloured limestone, serpentine, chlorite rock, and fine grained micaceous calcareous sandstone, or gritty shale, and steatite.[2]

Most of these stones may have been obtained locally, from the foot-hills, but the obsidian may be Vannic,[3] and the chlorite may come from Persia.

Fig. 44, Nos. 7–10 and 17–18, are of special interest: the type constantly recurs, and from its association in TT 6 with the painters' palettes and paint may be a painter's mixing bowl, in which case it may aptly compare with painters' mixing bowls from the province of Honan, China.[4]

Lastly, special attention should be called to the fine specimen on Fig. 44, No. 16, and Plate v (*d*), of pink and white mottled limestone, with raised base: this is related to a 'champagne vase type' found in TT 6, which was made of the local gypsiferous limestone, known to-day as Mosul marble. The latter

[1] Jordan, *Uruk*, 1932, taf. 20.

[2] We are indebted to Dr. H. H. Thomas of the Petrographical Department of the British Museum, South Kensington, for the identification of these materials.

[3] G. A. Wainwright, *Obsidian* (*Ancient Egypt*, *September*, 1927, Part III).

[4] *Illustrated London News*, Oct. 28, 1933.

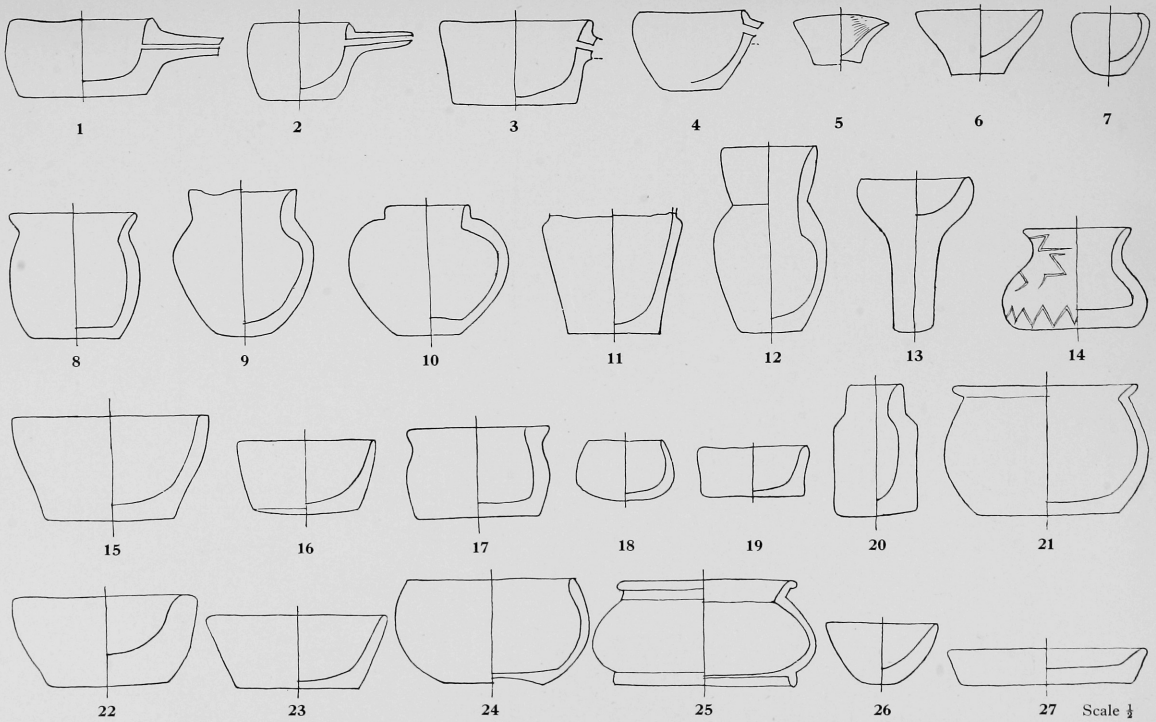


FIG. 43. MINIATURE POTTERY, UNPAINTED

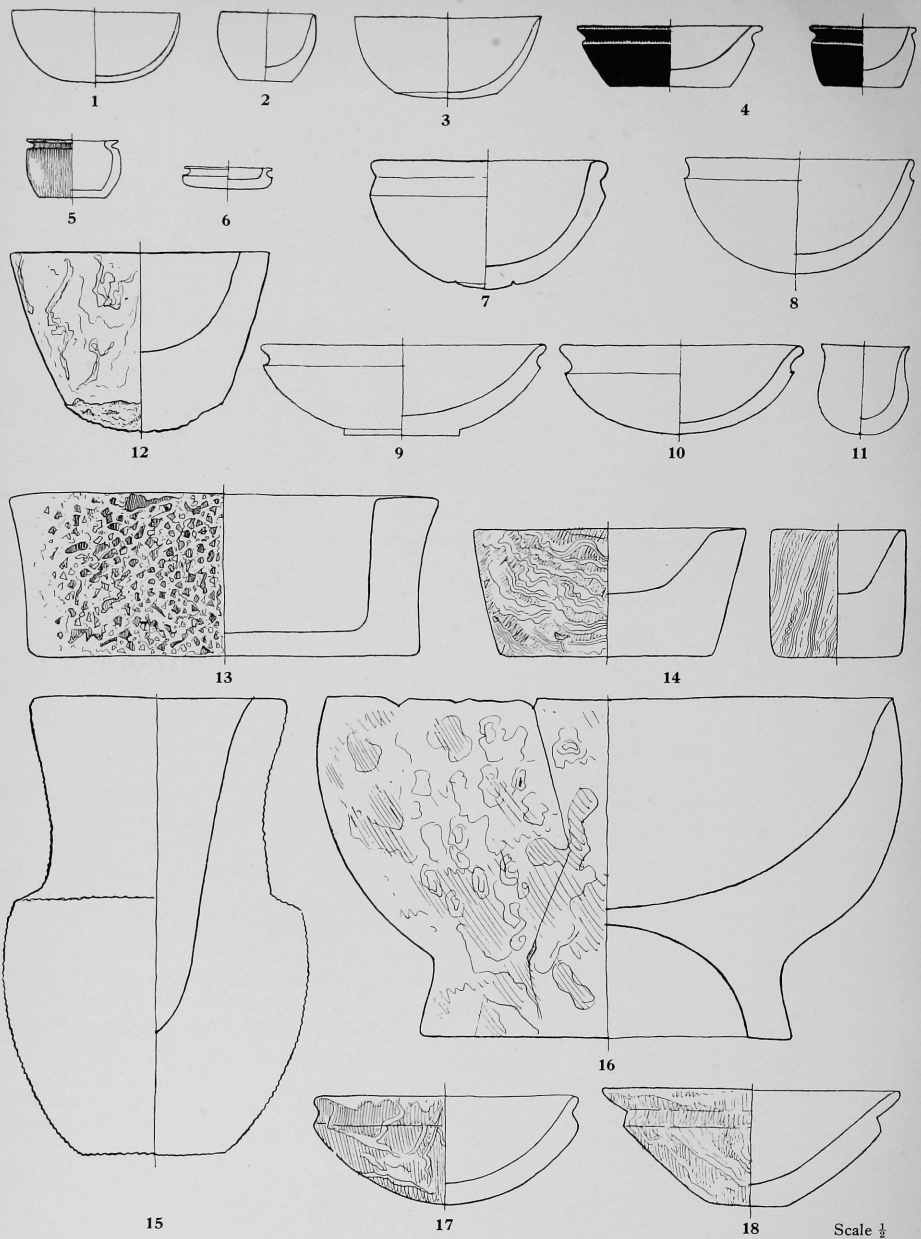


FIG. 44. STONE VASES

specimen is in Baghdad, and cannot be reproduced here as it was restored after the expedition had left.

Many other stone bowl fragments illustrated the artistry and skill of the stone-worker: there were specially selected fine limestones, chosen for their fine graining, exactly as a wood-worker selects a fine grained wood. Some of the small bowls had a slight boss on the inside in the middle of the base: this had been deliberately made to strengthen the bowl, and had been obtained by the use of some abrasive—probably emery.

Chapter 6

TERRA-COTTA AND SUN-DRIED CLAY FIGURINES

The models of figurines at Arpachiyah consist of two main classes—human and animal. In addition, there are certain other articles such as gaming-pieces, sling bolts, spindle-whorls, and cones.

The models of human figures are almost without exception females: they belong to that widespread series known as the 'mother-goddesses', and bear all the characteristics commonly associated with that type from palaeolithic times onwards.[1] The figures are sometimes roughly modelled in the round; more often they are flat. In all of them, prominence is given to certain features which these figures were obviously intended to emphasize; particularly the breasts, slender waist and pronounced navel, and steatopygous rump—anatomical features which have at all times been regarded by the Oriental as connoting desirability and fertility in women. Most interesting is the consistent attitude in which these figures are represented; it is almost always the squatting position. The significance of the squatting position, taken in conjunction with these other characteristics, is highly suggestive: it is a common practice in the Middle East and indeed in many other parts of the world for the woman to go through the process of childbirth in the squatting position,[2] and it is not unreasonable to suppose that this is the explanation of the prevailing attitude,[3] though it cannot be denied that the failure ever to represent the child does not allow this argument to admit of proof. In certain examples, however, the women appear to be represented in a state of pregnancy, and the general connexion of fertility with these figures, and therefore of fertile child-bearing, is beyond dispute.[4]

[1] Cf. E. Douglas van Buren, *Clay Figurines of Babylonia and Assyria*, for a general discussion on the significance of the nude female figurines. There is some doubt as to whether the type represents the 'mother-goddess' or a devotee, or whether it is merely symbolic of the functions of womanhood in general. Cf. also De Genouillac, *Les Premières Recherches Archéologiques à Kich*, where the nude female figurine is described as the doll goddess.

[2] Cf. W. S. Blackman, *The Fellahin of Upper Egypt*, Ch. 4, on birth and childhood.

[3] Cf. R. C. Buist, M.A., M.D., *Posture in Difficult Labour* (*The British Medical Journal*, August 9, 1924). In this most interesting article the eminent gynaecologist recognized the significance of the posture of a figurine from Tall Ḥalaf in the British Museum.

[4] Cf. W. F. Albright, *The Archaeology of Palestine and the Bible*, 109, for a remarkable Palestinian parallel to the Arpachiyah figurines, at Tell Beit Mirsim, in Stratum B (early Israelite occupation). There was a group of five figurines, 'all representing a naked woman in the process of accouchement. . . . There is an exaggerated pro-

Another interesting characteristic of these female figurines is the invariable absence of a human head: the head is never anything more than a peg-shaped stump, and it is possible that the representation of the female head was taboo. Although the artist of this period would no doubt have found some difficulty in modelling the human head, yet it is most likely that failure to represent the head was due not to inability, but to custom, which forbade him to represent it. In the first place, his superb artistry in other directions, in the representation, for example, of animals, shows that he had the ability to model natural forms; that he could model a human head is directly proved by a minute example of an alabaster figurine of the Tall Ḫalaf period found in the burnt house, where the head is very well represented; but it is significant that the head is that of a male, and not that of a female; cf. Plate x, 921.

The various forms in which the 'mother-goddess' is represented at Arpachiyah show the tendency towards conventionalization, which was a marked feature of the prehistoric artist. Side by side with figures that are naturalistically modelled in the round, we have a number of intermediate types obviously related to the main series, but so simplified that they become little more than amorphous stumps. An excrescence or an applied ribbon of clay was sufficient to show the intention of the figure: the very large number of these objects shows the importance attached by the people to their fertility charms; it is probable that the better modelled types were for more important uses and occasions, but for daily use the commoner could find sufficient protection in a simple lump of clay almost without form.[1]

Allied in purpose to these fertility figurines are the animals modelled in the round, in sun-dried clay and in terra-cotta. Most important is the figure of the dove, the constant attendant of the 'mother-goddess': this fact is of remarkable interest as it links the religion of these early inhabitants of Assyria with those of ancient Crete, where the 'mother-goddess' is from the neolithic period onwards associated with the dove, and where the goddess is, as at Arpachiyah, constantly represented in the squatting position.

The large majority of the animal figurines are domestic beasts of the farm-yard. We have representations of the pig, the cow, the humped ox, sheep, and goats. The representation of the *bukranium* also attests the importance of the bull cult, which is most clearly shown by the commonly represented bull's head on the pottery of the Tall Ḫalaf period. It is even possible that the terra-cotta object shaped like a bent nail, and commonly spoken of as a wall decoration, is really a bull's horn and has a religious significance; certain it is that as a wall decoration it is thoroughly unpractical.

In many ways, then, these terra-cottas bring us in closer touch with the prehistoric peoples of Arpachiyah than any other class of object. We learn

trusion of the vulvar region, which cannot denote a pathological condition, but must be an attempt to suggest the descent of the child's head, and the imminence of delivery.' Albright thinks it improbable that these figures represent the *Dea Syria* in any of her aspects, and takes what appears to be the most reasonable view in suggesting 'that these figures were merely intended to hasten parturition by sympathetic magic . . . that they also served as charms to bring fruitfulness to barren women'.

[1] EVANS, *Knossos*, I, Fig. 12.

that they were a people worshipping the 'mother-goddess', and therefore had a cultural relationship both with India on the east and with Crete on the west; their faith in the efficacy of these fertility charms is shown both by the large numbers of figures and by the diversity of forms in which they chose to represent them. The masculine element in their religion would seem to be occupied by the cult of the bull. That agriculture was their principal pursuit is shown by the abundance of wheat and barley found on the site, as well as by the common farming implements; from the enormous number of whorls we may judge that spinning was an important form of activity, and no doubt weaving was practised too. The varieties of domestic animals have already been indicated, and there is a representation of a dog on a seal impression. Finally, the painting of their figurines is a further witness of that art, in which they were supreme masters, the painting of pottery.

MOTHER-GODDESS FIGURINES. MAIN TYPES

Type 1. Erect or Squatting.

The fully erect type is rarely represented. Fig. 45, No. 1, shows a steatopygous type, in terra-cotta, with details of what would appear to be a diaphanous garment done in a red paint. Fig. 45, No. 8, may have been a full-length figure; note the prominent breasts and the incised line between the legs. Details of dress are also shown on Fig. 45, No. 2, where on the front of the body there are braces crossed between the breasts, and Fig. 45, No. 3, also shows a dress represented by horizontal bands of red paint.

Fig. 45, No. 4, is an interesting fragment of a painted steatopygous figure in the squatting position; note again the crossed braces and stippling, perhaps tattoo marks[1] (?) on the front of the body. Fig. 45, No. 5, is a fragment belonging to a similar type. These two figures, done in a greenish-black paint, may possibly have been made in the Al 'Ubaid period; all the other painted figurines of 'mother-goddess' type are of the Tall Ḥalaf period.

Fig. 45, Nos. 6, 7, in sun-dried clay, are good examples of the larger type of squatting figure; note the position of the arms and the drooping cylindrical breasts of Fig. 45, No. 7.

Also of the erect type are a number of small figures in sun-dried clay: Fig. 47, Nos. 21, 22, are very roughly modelled, and have flat bases; Fig. 47, Nos. 23, 24, are rare examples showing modelled legs; in both the enlarged triangle is emphasized, and Fig. 47, No. 23, has a beak-like protuberant breast.

Type 2. Figurines with Hollow Bodies (Terra-cotta).

Figs. 45, Nos. 10–12, show three examples of the 'mother-goddess' type with hollow body: one of them was probably intended to be used as a vase; Fig. 45, No. 12, has a top which has been cut down and smoothed like the rim of a vase. Fig. 45, No. 10, is an interesting painted example; the left shoulder is done in red paint with the design of a Maltese cross which evidently has some religious significance; cf. Chapter 9.

[1] Cf. *A.J.* x, pl. 48, for painted clay figurines of the Al 'Ubaid period, with tattoo (?) marks on the body.

Type 3. Flat Figurines with Fiddle-shaped, or Truncated Fiddle-shaped, Bodies.

Fig. 46, No. 5, is a truncated type, with a high peg-shaped head. The base seems to have been cut down in antiquity. Fig. 46, No. 6, is a similar example painted; note the prominent breasts, and stripes running across the body. The peg-shaped head was perforated horizontally, thus allowing the figure to be worn as an amulet. Fig. 46, No. 8, is another example with cylindrical breasts and crossed braces, and Fig. 46, No. 4, is a simple painted type; Fig. 46, No. 7, unpainted. Fig. 46, No. 9, is a fine example of a fiddle-shaped body, with stripes and stippling between them; note that on the chest there is stippling, which may perhaps represent cupping of the breasts; dress is indicated on the back as well as on the front of the body. Four examples in sun-dried clay also belong to this category, Fig. 47, Nos. 18–20, and Fig. 47, No. 4. The last example is noteworthy for the prominent navel which seems to represent a female in a state of pregnancy and suggests that the squatting figures are connected with the act of childbirth. This should be compared with Fig. 47, No. 1, where a protuberant navel also indicating pregnancy is clearly modelled.

Type 4. Steatopygous Squatting Figurines in Sun-dried Clay and Simple Variants based on this type.

Figs. 47, Nos. 2, 3, are the standard types. They are in a black sun-dried clay; Fig. 47, No. 2, is a perfect specimen; note the peg-shaped head, protuberant navel, and wide hips; the type is strongly reminiscent of palaeolithic figures. A remarkable conventionalization of this type appears in Fig. 47, Nos. 5–11, where the entire body is reduced to a peg, but the figure is still intended to be squatting on its haunches; this is clearly a derivative from the above-mentioned prototype. Further variants are seen in Fig. 47, No. 8, where the figure is very nearly reduced to a conical shape, and yet retains the separated legs; in Fig. 47, Nos. 13, 14, on which there are applied ribbons of clay to emphasize the legs; in Fig. 47, No. 9, the figure has become a simple cone without any embellishments: the squatting position reduced to its very simplest form is also shown in Fig. 47, No. 12, Fig. 45, Nos. 14, 15. Fig. 47, No. 16, is surely allied to this series, but its exact intention is a secret that remains with its maker. Two interesting examples of the squatting type, both exceptional, are Fig. 45, Nos. 13, 16. Fig. 45, No. 13 is reminiscent of a palaeolithic type. Fig. 45, No. 16, is a finely modelled piece. Fig. 47, No. 15, Fig. 49, No. 1, show amorphous lumps which probably belong to the series.

FOREIGN RELATIONS

It is difficult to point to exact resemblances with the divergent forms of the 'mother-goddess' found at Arpachiyah. Indeed on the site itself no one figure is identical with another. But there are certain broad relations between the various types which take us very far afield. In the first place it is obvious that many of these figures are allied to palaeolithic types, even though they

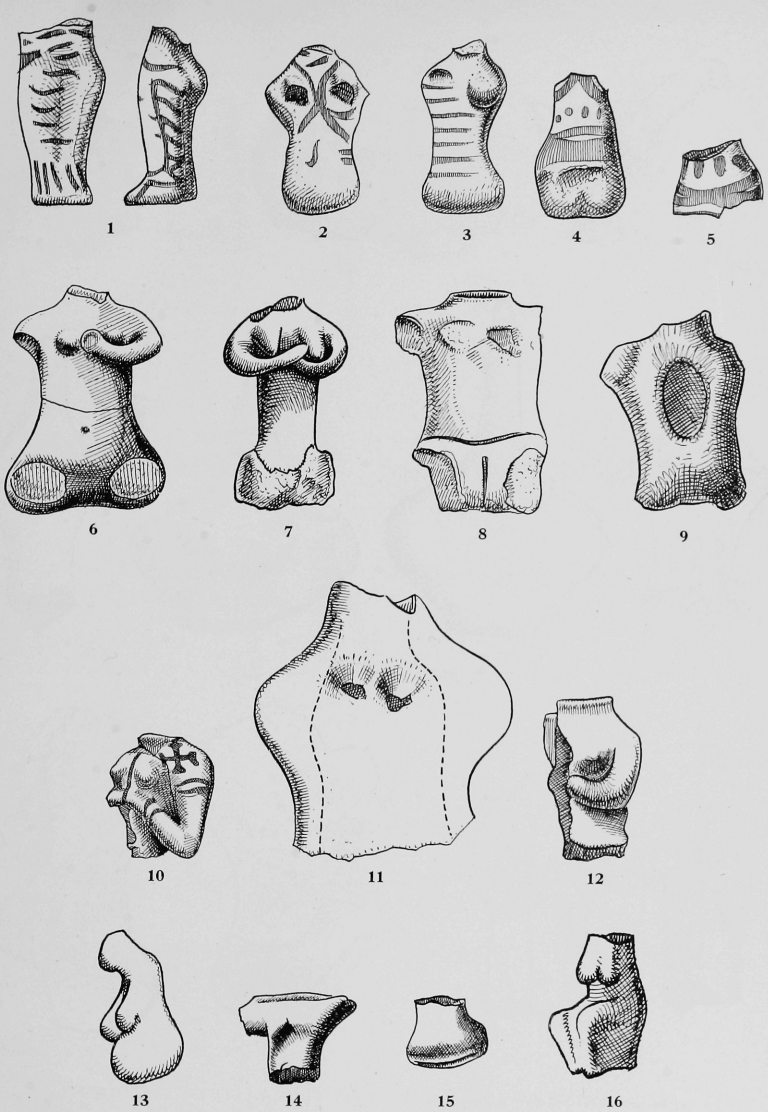


FIG. 45. TERRA-COTTA AND SUN-DRIED CLAY FIGURINES. 'MOTHER-GODDESS' TYPE

Scale $\frac{1}{2}$, except Nos. 13, 16, which are $\frac{1}{4}$

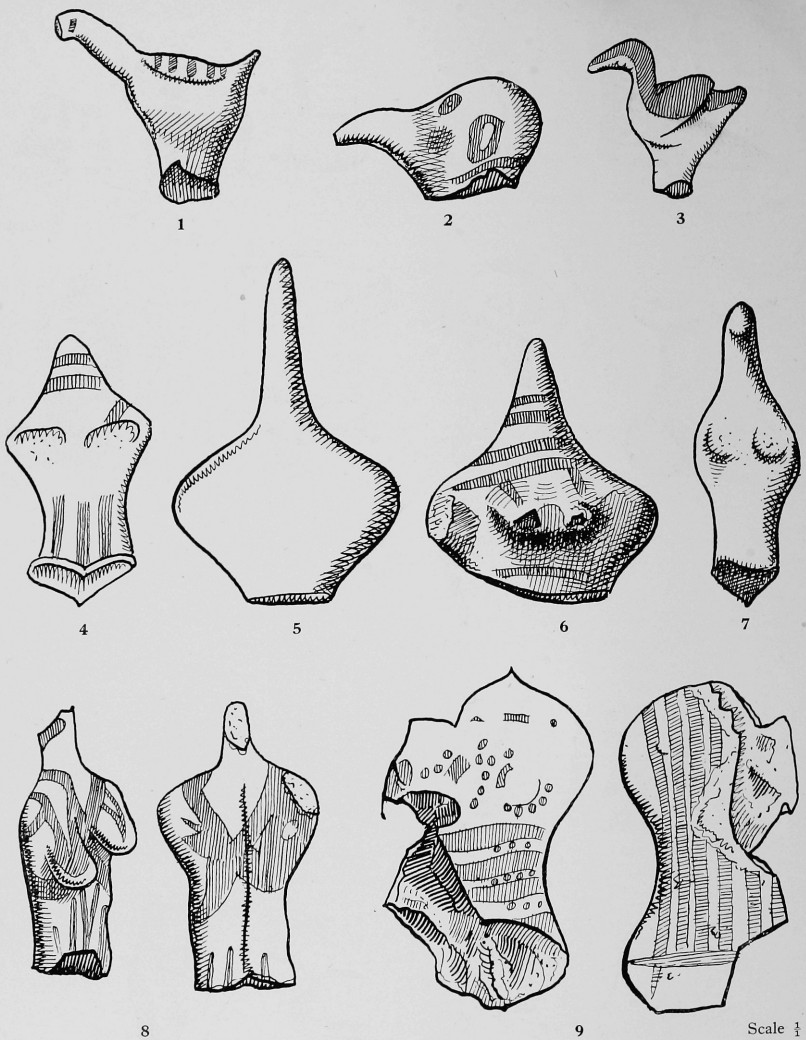


FIG. 46. PAINTED AND UNPAINTED TERRA-COTTA FIGURINES. DOVES AND 'MOTHER-GODDESS' TYPE

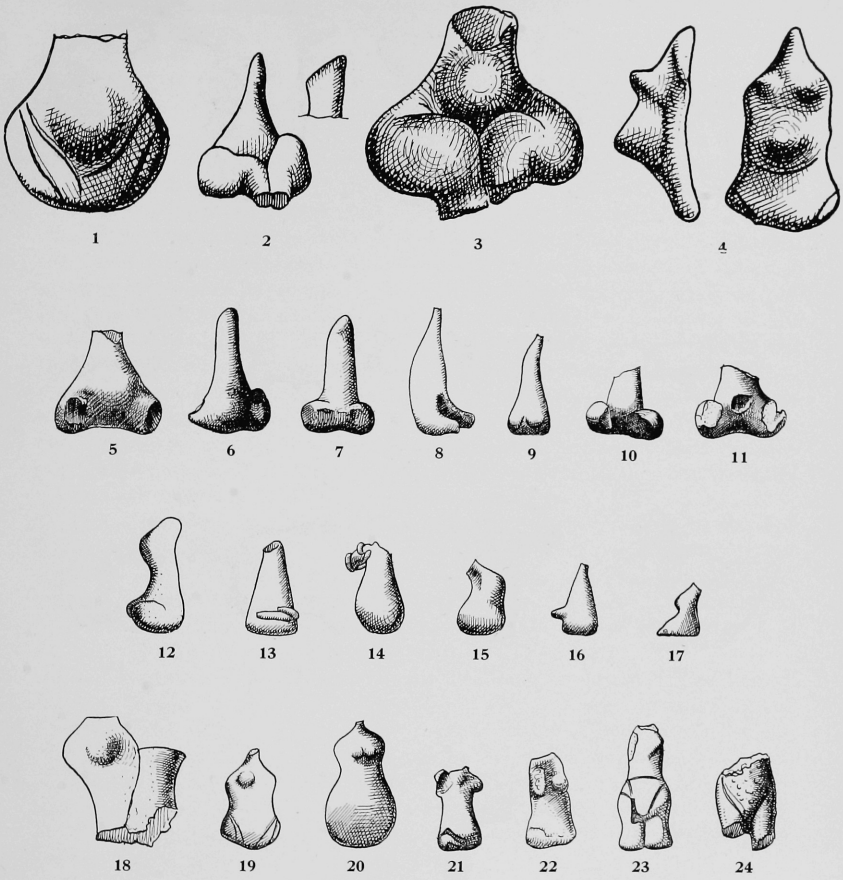


FIG. 47. SUN-DRIED CLAY FIGURINES. 'MOTHER-GODDESS' TYPE

Scale: Nos. 1–4, $\frac{1}{1}$; Nos. 5–24, $\frac{1}{2}$

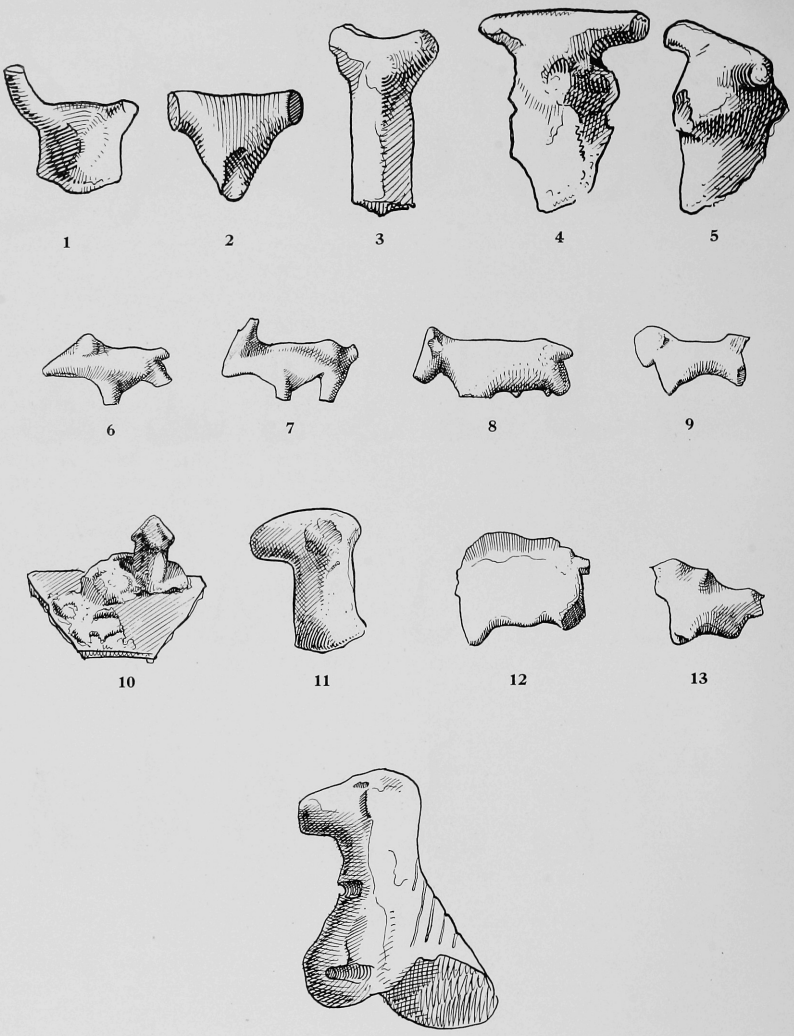


FIG. 48. FIGURINES OF ANIMALS, IN TERRA-COTTA AND SUN-DRIED CLAY

Scale: Nos. 1–5, $\frac{1}{1}$; Nos. 6–13, 3/5; No. 14, $\frac{1}{2}$

may be separated by an immense span of time from Aurignacian days. The exaggerated steatopygy, cylindrical breasts, broad hips, narrow waists, the formless heads, the incised triangle, and the condition of pregnancy, leave no doubt that we are in direct line with a tradition that goes back to the famous Venus series which includes those of Brassempouy, Lespugue, Willendorf, and Wisternitz:[1] fertility worship connected with a 'mother-goddess' cult must indeed be one of the oldest and longest surviving religions of the ancient world.

In the chalcolithic period itself, to which these figures belong, we may trace connexions from the Balkans through Crete and the Aegean, Anatolia, the Middle East, and Persia to Baluchistan. A most interesting series of grouped types may be found in SIR ARTHUR EVANS, *Knossos*, I, 48, fig. 13. Knossos itself in the neolithic stratum provides many examples of the squatting type; cf. Fig. 12, op. cit., and for the steatopygous type in the round, p. 48, No. 5 and No. 6, op. cit., from Iflatun Bunar in Anatolia. Figs. 10–16, op. cit., show a most interesting series of parallels for the flat figurines with fiddle-shaped bodies (type 3 of Arpachiyah). Note the Cycladic examples from Amorgos, and from Kuban in the Caucasus, where we have the long peg heads resembling Arpachiyah, Fig. 46, No. 5; parallels may also be found in the Gedrosian and Baluchi sites examined by Stein.

With a few rare exceptions, the Arpachiyah figurines belong to the Tall Ḥalaf period, and it is the site of Tall Ḥalaf which provides the closest parallels. VON OPPENHEIM, *Der Tell Halaf*, Taf. 56, Nos. 1, 3, 5, shows painted figurines very closely resembling Fig. 46, Nos. 4, 6, at Arpachiyah, and there is another obvious connexion with the figures in stratum I at Alishar,[2] though these are almost certainly of a later date.

Only two of the female types appear to belong to the Al 'Ubaid period, Fig. 45, Nos. 4, 5, which are of a different clay and done in characteristic greenish-black paint. These, however, are certainly different from the distinguished svelte type of figurine found in the corresponding period at Ur, *A.J.* X, pl. 48: the association of the Ur figures with a child would seem to indicate that we have two different classes of figurines, one of which, the southern, may represent the goddess after fertility, and the northern, the goddess in the actual condition of fertility.

ANIMALS

The Dove is almost certainly to be associated with 'mother-goddess' worship: the best evidence for this association comes from Crete. At Arpachiyah there are four examples. Fig. 46, Nos. 1, 2, belong to the Al 'Ubaid period. The former has details of feathers and eye done in paint, and the latter, a head with a long beak, may conceivably have been originally fitted to a human body, and might therefore be a parallel with the lizard-headed figures at Ur. The most perfect specimen, Fig. 46, No. 3, comes, like all the finest objects, from the burnt house, TT 6, and has its wings painted in black

[1] BURKITT, *The Old Stone Age* (1933).
[2] E. F. SCHMIDT, *The Alishar Hüyük*, part I, fig. 62.

on a buff clay. The earliest, largest, and crudest specimen with hollow body, and pedestal base, was found in one of the oldest levels just over virgin soil. Cf. Plate v (*b*), A 97. The body is hollow, and the hole in the back may be intended to allow of the insertion of some thin object. This type may be paralleled in Anatolia, Crete, Egypt, Susa, and Uruk; cf. the alabaster vase in Jordan, *Uruk*, 1932, taf. 18.[1] Plate v (*a*), A 99, one of the most interesting of all the animals, is probably intended to represent a hedgehog, though as with many prehistoric models of animals we can really only guess at the name of the beast, and it is sometimes to be wondered whether the maker himself had any specific beast in mind. This zoomorphic figure has a hollow body and a cup-shaped top; it was therefore intended to hold some liquid. The head and snout are missing, the body is painted with red bristles on a buff clay. The cup-shaped top is characteristic of Tall Ḫalaf pottery; this object was found in TT 6 adjoining the burnt house.

Cattle. As on all early Mesopotamian sites, these are very common. The importance of the bull is shown by numerous designs on the Tall Ḫalaf pottery; there are also a few examples in terra-cotta and sun-dried clay, Fig. 48, Nos. 1–5. In this connexion should be noted the magnificent brecciated limestone amulet, Plate VI (*a*), A 895. The buffalo or humped ox is shown in Fig. 48, No. 13, an interesting connexion with Elam and Baluchistan; Fig. 48, Nos. 8–11, 14, show cows and sheep; Fig. 48, No. 14, a terra-cotta, is late and may have had wheels attached. A boar is shown on Fig. 48, No. 12, and pigs on Fig. 48, Nos. 6, 7 (?), perhaps the earliest representations of pigs in Mesopotamia.

VARIA

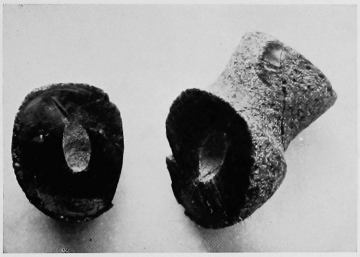
Very common were spindle-whorls, sometimes plain, Fig. 49, No. 15, sometimes decorated with incised nicks, Fig. 49, No. 16; with these we might perhaps associate certain cushion-shaped lumps of sun-dried clay, Fig. 49, Nos. 5–7. They may have served as carding combs, though the exact use of the latter pieces is really altogether doubtful. Large numbers of double-conoid-shaped objects generally about 5 cm. long are likely to have been sling bolts, though some authorities deny this; at all events small boys from Nabi Yunus could catapult these objects, with both force and accuracy, and they would be suitable for killing birds.

Gaming-pieces were also common: Fig. 49, Nos. 13, 14, are conical in form, a type well known to the ancient world; there is an alternative possibility that some of them may have been used as weights. There were also miniature balls (A 57), stamps, Fig. 49, No. 19, anchor-shaped pieces, No. 20. Among objects of uncertain use are Fig. 49, No. 20, and Fig. 49, Nos. 3, 4, lumps of sun-dried clay with arms or wings, perhaps analogous to Mycenaean winged terra-cottas; a sun-dried clay object shaped like a human hand with prongs, Fig. 49, No. 2; perhaps a pronged winnowing fan comparable to the Cretan θυρνάκ ; model legs in terra-cotta and sun-dried clay, Fig. 49, Nos. 17, 18.

[1] Cf. H. FRANKFORT, *Studies in Early Pottery of the Near East*, 1924, pl. 8, and GLANVILLE, *Egyptian Theriomorphic Vessels in the British Museum* (*J.E.A.* XII), also EVANS, *Knossos*, I, fig. 107.

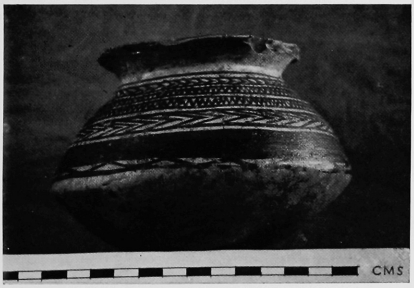
(*a*) A 99. Painted zoomorphic figure with hollow body and cup-shaped top. TT 6. Ht. 0·12 m. L. 0·19 m. (B)

(*b*) A 97. Terra-cotta dove, from one of the earliest Tall Ḥalaf levels. Ht. 0·07 m. L. 0·12 m.



(*c*) A 411. Obsidian vase in two pieces, showing fracture, Tall Ḥalaf period. TT 6. Ht. 0·16 m. (B). Cf. Fig. 44, No. 15

(*d*) A 409. Pink limestone bowl. TT 6. Ht. 0·118 m. (B). Cf. Fig. 44, No. 16



(*e*) A 127. Painted clay vase of the Al 'Ubaid period. Ht. 0·093 m. (B). Cf. Fig. 34, No. 2

(*f*) A 136. Painted clay vase of the Al 'Ubaid period. Ht. 0·132 m. (B). Cf. Fig. 34, No. 6

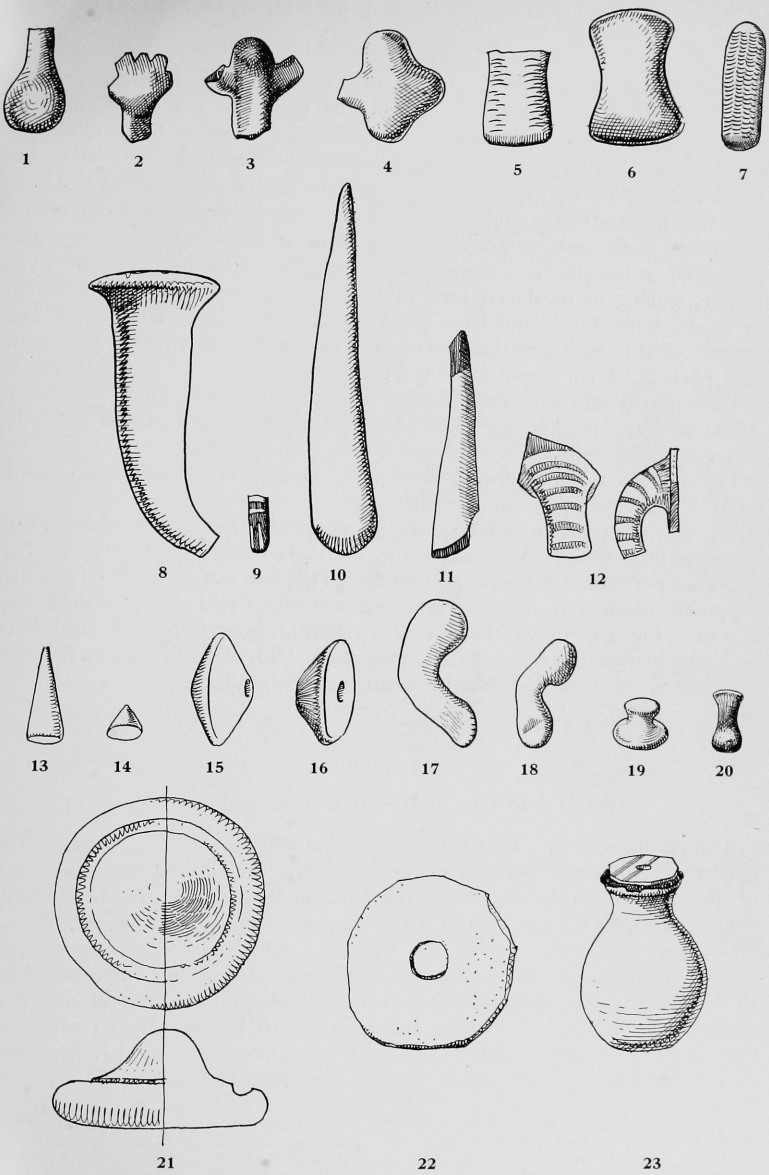


FIG. 49. SMALL OBJECTS OF SUN-DRIED CLAY AND TERRA-COTTA

Scale: Nos. 1–12, $\frac{1}{2}$; Nos. 13–22, 3/5

TERRA-COTTA CONES

To this category belong the bent nail, Fig. 49, No. 8, in terra-cotta and sun-dried clay. It is sometimes argued that these are wall decorations and must be compared with the decorative wall cones found in Babylonia in the Jamdat Nasr period. It seems hard to believe that these can have been put to such a purpose; these cones are only bent at the extreme end and come to a fine point; they would therefore be a singularly useless form of wall decoration as the ends would snap almost immediately and would form a very poor hold; it has also been suggested that they are sickle hand protectors for reapers, analogous to objects used in India to-day: they might equally well be model bulls' horns and have some votive significance allied to the *bukranium*. It is to be hoped that, eventually, they will be discovered in a verifiable context. Their importance at Arpachiyah is that they occur in the Al 'Ubaid period and therefore provide another link with south Babylonia. Allied to these are Fig. 49, Nos. 9–11, all painted cones; these examples are certainly of the Al 'Ubaid period.

Fig. 49, No. 12, is a painted terra-cotta handle of a pot again comparable to Al 'Ubaid types as yet unpublished.

Fig. 49, No. 21, shows a terra-cotta jar stopper; stoppers of sun-dried clay have also been found. Very interesting are disks of terra-cotta, Fig. 49, No. 22, often perforated through the middle. They are not, as De Morgan had supposed, beads, but clay vase lids; one was found still adhering to the top of a vase, Fig. 49, No. 23, the sides stuck with bitumen to make it fast: there is no doubt that the hole was for attachment with string. This is the first time the use of these disks has been satisfactorily explained.

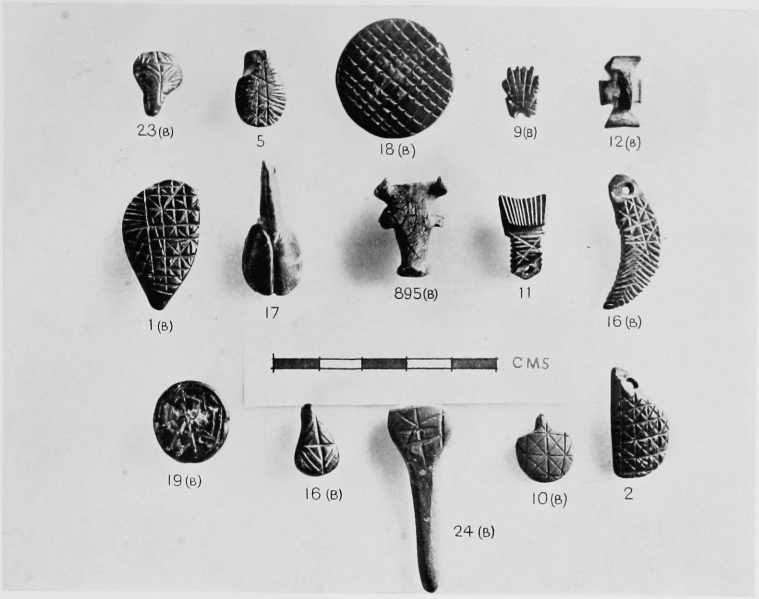
Chapter 7

AMULETS, BEADS, SEALS, AND SEAL IMPRESSIONS

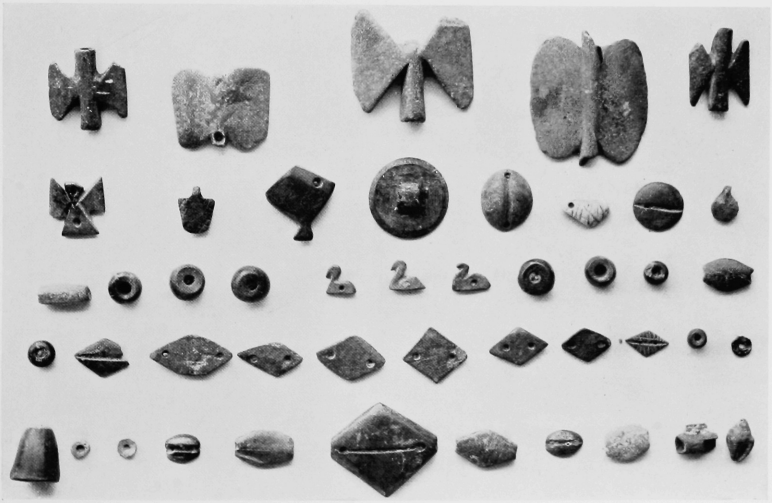
The amulets from Arpachiyah are especially interesting because the majority are of a type that has as yet very rarely been found in Iraq. Many of them are obviously peculiar to the land of Assyria, and for the present, similar examples have only been found on prehistoric sites in the neighbourhood, such as Tepe Gawrah and Gögjali.[1] Although certain types may also be paralleled in Babylonia, the commonest forms are obviously distinct from anything found in the south, and are certainly not of southern provenance. By far the closest analogies are to be found on prehistoric sites in north Persia, such as Nihavand and Damghan,[2] so that from the available evidence connexions seem strongest with the east.

[1] A mound 2 miles east of Arpachiyah: on the surface I observed sherds of Tall Halaf ware.

[2] Cf. E. Herzfeld, *Archaeologische Mitteilungen aus Iran*, Band v, Heft 2, and particularly Abb. 13–18, where many seals are illustrated analogous to types 1–4 at Arpachiyah. Cf. also Pl. 1 at the end of that volume. The date of many of these Iranian seals is still a matter of doubt, but it is probable that many of them come from the earliest strata, and that the old types persisted in Iran.



(*a*) Amulets of the Tall Ḥalaf period



(*b*) Double-axe pendants, beads, and amulets from the burnt house, TT 6. Scale *c.* ½

Top row. A 862 (B) A 864 A 863 (B) A 865 (B) A 861
2nd row. 860 874 869 (B) 866 877 (B) 867 879 868
3rd row. 879 870 (B) 871 872 (B) 880 (B)
4th row. 879 879 870 (B) 876 (B) 870 (B)
5th row. 878 877 (B) 879 875 880 (B)

All the principal types of amulets have linear markings, and were undoubtedly used as seals, as we know from the numerous seal impressions in sun-dried clay bearing marks identical in type with those on the amulets. The incisions are all linear or rectilinear, and in many cases may be paralleled by designs on the Tall Ḫalaf pottery. Nearly all of these seals appear to have been made in the Tall Ḫalaf period, but undoubtedly they survived long, and many of them continued to be used by the later Al 'Ubaid peoples. It seems probable that these seal pendants, all of which have different markings, must have been used as identification signs indicating individual ownership, and that these vague scratchings were the nearest approach to writing made by the primitive inhabitants of Arpachiyah. On the other hand, there seems not to be any fixed system in these signs. The most carefully executed are those which have designs consisting of incised St. Andrew's crosses in squares, and it might conceivably be supposed that they contained some system of numeration; but even in these examples there is an all-over pattern obviously stylistically allied to certain designs which appear on the pottery, and though no doubt certain sets of designs did have certain special connotations, intelligible to their owners, in general we can hardly see more in these rough scratchings than individual markings, which could be used as indications of private ownership and identification.

Materials.

By far the commonest is black steatite, but coloured limestones, calcite, terra-cotta, and even frit, cf. Plate VII (*a*), A 20, are also used, and there are some examples of quartzite.

Types.

There are in all eight main types, and in addition to these numerous models of specific objects. Among the main types two are certainly models of tools, and it may be supposed that certain of the other types, especially types 1, 2, are intended to be imitations of certain other objects. I am indebted to Mr. C. J. Gadd for pointing out the resemblance between certain of these types and tools, and further for suggesting that others might be representations of winnowing fans. The winnowing fan in antiquity was frequently used in fertility and harvest festivals, and one might well expect to find them represented as amulets. But the winnowing fan proper was really a basket, and it seems hard to conceive that any of the amulets are baskets. On the other hand, certain hand-shaped amulets may represent the pronged type of winnowing fan known in Crete as *θυρνάκι*, and it is interesting to recall that the winnowing fan is still used in the Sudan as a support for women in the act of procreation;[1] as such it might well be associated with the procreating 'mother-goddess' type. The identification is indeed still very doubtful, but it suggests a possible line of research.[2]

[1] W. S. Blackman, *The Fellahin of Upper Egypt*, Ch. IV, fig. 29.
[2] J. E. Harrison, *Mystica Vannus Iacchi* (*J.H.S.* XXIII, XXIV).

Type 1. Drop-shaped Pendants.

Figs. 50, Nos. 1–6, and Plate VIII (*a*), top two rows. No two pendants are absolutely identical in form, and they must at best be reduced to rough categories. Pendants of type 1 are as a rule flat on one side and convex on the other, and generally, though not invariably, have their markings on the flat side. The type varies considerably in convexity, the flatter type appears in Fig. 50, No. 6, and the most convex in Fig. 50, No. 5, in which both sides are convex.

Type 2. Three-sided Pendants with Straight or Curved Sides and One Convex Face.

Fig. 50, Nos. 7–9, and Plate VIII (*a*), bottom two rows. The sides are sometimes straight as in Fig. 50, No. 9, and in Plate VIII (*a*), A 49, which is a truncated triangle, more often curved as in Plate VIII (*a*), A 50, 551, 553, 554, 557. This type includes the largest specimens found on the site; it generally has a distinct tang perforated for suspension, but sometimes as in A 552, Plate VIII (*a*), the perforation is made without the use of a tang.

Type 3. Triangular Pendants with Flat Faces.

Fig. 50, Nos. 10–12, and Plate VII (*a*), A 37 and A 581, Plate VIII (*a*), A 49. The horizontal ribbing in A 581, Fig. 50, No. 10, is uncommon.

Type 4. Four-sided Pendants with One Face Convex.

Fig. 50, No. 13, Plate VII (*a*), A 22, 573, Plate VIII (*a*), 559; note the fineness of the linear markings on this example, Fig. 50, No. 13.

Type 5. Rectangular Flat Pendants.

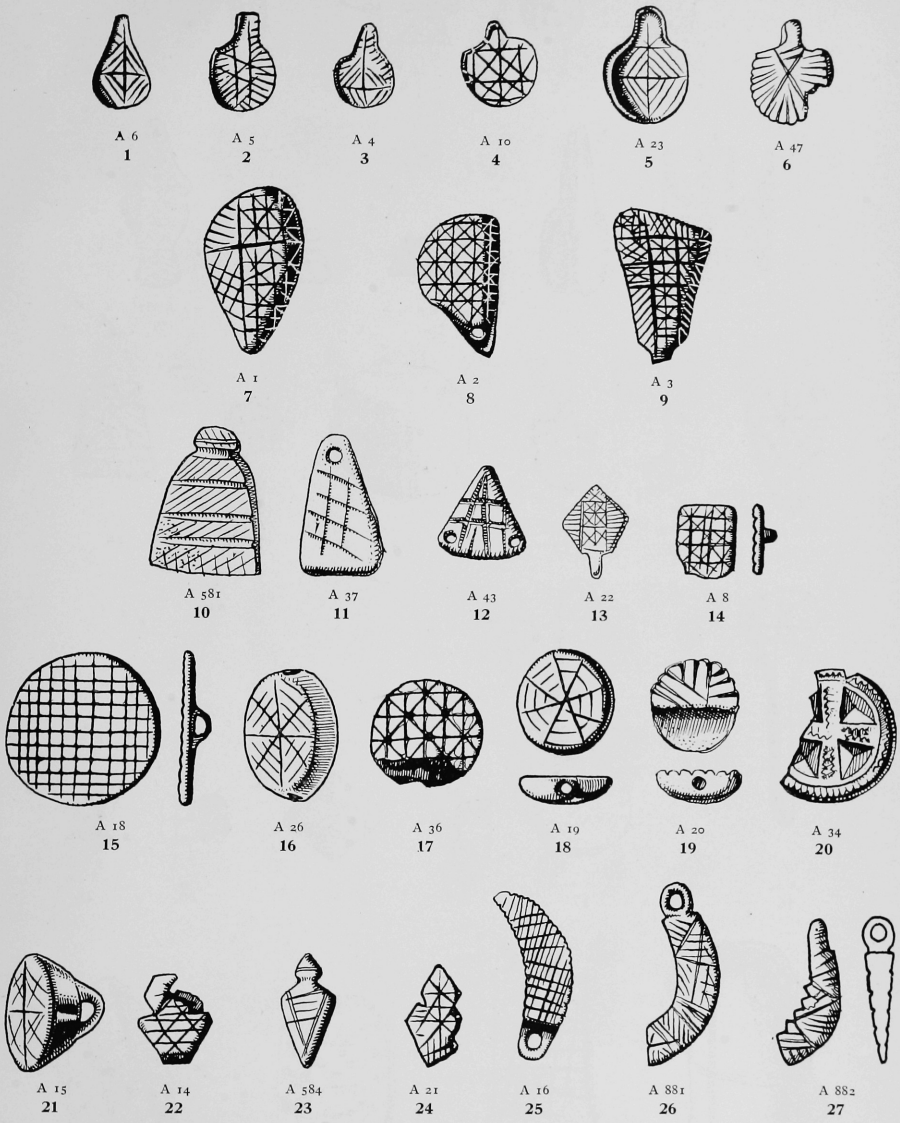
Fig. 50, No. 14, and Plate VII (*a*), second row, A 8, 570, 572, 574. These sometimes have roll handles as in 572, and sometimes are perforated through the middle as in 570; note the very regular markings on 574 which may have some numerical significance.

Type 6. Discoid Pendants.

Fig. 50, Nos. 15–20, Plate VII, top row, A 18, 20, 26, 36, 560, 561, 563, 564. This type generally has rectilinear markings and roll handles; cf. 561 for a clear example, Plate VII (*a*), top row, of the roll handle. The type also includes the convex cone disk, Plate VII (*a*), second row, A 19, 20, Fig. 50, Nos. 18, 19; the cylinder disk, A 26, Fig. 50, No. 16: all of these are pierced longitudinally. A 20, Fig. 50, No. 19, is of special interest because the material is frit, which is thus attested as in very early use in Assyria.

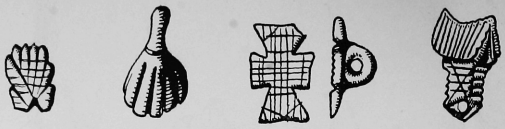
Type 7. Conical.

Fig. 50, No. 21, and Plate VII (*a*), top row and bottom row. The different classes of conical pendants are shown in A 15, Fig. 50, No. 21, and Plate

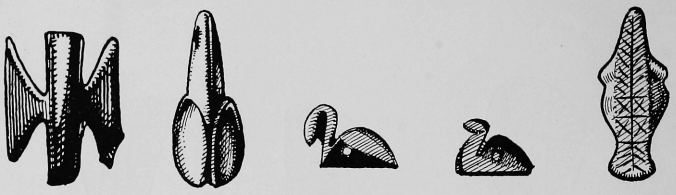


Scale $\frac{1}{1}$

FIG. 50. STONE AMULETS AND SEAL PENDANTS

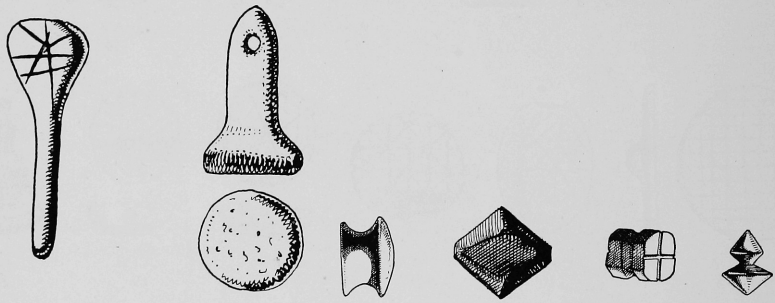


A 9 **1** A 39 **2** A 12 **3** A 11 **4**

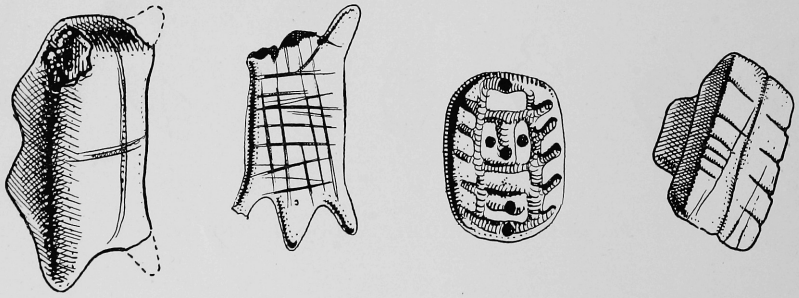


A 861 **5** A 17 **6** A 870 **7** A 873 **8** A 887 **9**

A 13 **10** A 867 **11** A 874 **12** A 25 **13** A 7 **14** A 35 **15**

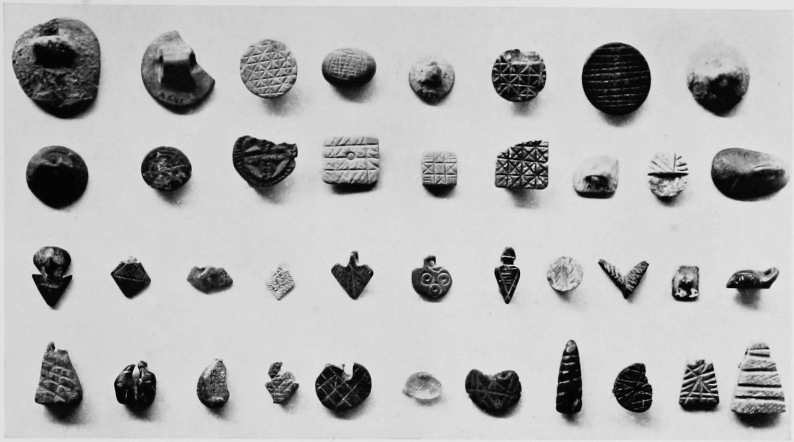


A 24 **16** A 29 **17** A 38 **18** A 875 **19** A 31 **20** A 32 **21**



A 33 **22** A 27 **23** A 28 **24** A 30 **25** Scale $\frac{1}{1}$

FIG. 51. STONE AMULETS, SEAL PENDANTS, TERRA-COTTA STAMPS, AND SMALL OBJECTS



(*a*) Stone amulets and seals

Top Row.	560 (B)		561		563 (B)	582 (B)	564		36		18 (B)		562	
2nd Row.	15		19 (B)		34	570	574 (B)		8 (B)	572		20 (B)		580 (B)
3rd Row.	583 (B)	573 (B)		21	22	585 (B)	577 (B)		584	565	568	8 (B)		26 (B)
4th Row.	37	569 (B)	578 (B)		14	575	579 (B)	576 (B)	586 (B)		566	35 (B)	581	

Scale *c.* $\frac{1}{2}$

(*b*) Amulets, seals, and beads

Top Row.	881		16 (B)		882	883 (B)		25 (B)		884 (B)		885 (3)		
2nd Row.	11	886 (B)		887		H 150		H 200		888 (B)		F 140		
3rd Row.	FW 300		889		24 (B)	890		12 (B)		891 (B)		FN 370		
4th Row.						893 (3 to B)								

Scale *c.* $\frac{1}{2}$

VII (*a*), 562, 586; the first two examples have perforated loop handles, the last example is perforated at the base and has a plain spiral decoration.

Type 8. Wedge-ended Beads.

Fig. 50, No. 22–4, and Plate VII (*a*), third row, A 583, 584, 585, are examples of this peculiar type.

Type 9. Sickle-shaped.

Fig. 50, Nos. 25–7, Plate VII (*b*), top row, and Plate VI (*a*), A 16, 881–2. The most interesting type is No. 882, Fig. 50, No. 27, which has a serrated edge, and is almost certainly a model of a sickle set with flint or obsidian blades.[1] The sickle with serrated edge is found in Egypt in the eighteenth dynasty,[2] and in Mesopotamia there are numerous examples of flint and obsidian blades set in bitumen. There is little doubt that at Arpachiyah sickle blades were set in wood (in south Babylonia the whole blade was of terra-cotta). This accounts for the fact that thousands of flint and obsidian blades were found, and not a single sickle: being made of wood, the sickle itself perished and only the blade remained. A 882, Fig. 50, No. 27, is the only example with a long tang; none of the other blades are serrated.

With this type we should mention A 2, Fig. 50, No. 8, which in shape is closely allied to the flint and obsidian knife blades, Fig. 52, Nos. 20–3, and may well be an imitation of a knife.

Type 10. Hand-shaped Pendants.

Fig. 51, Nos. 1, 2, and Plate VI (*a*), A 9. Fig. 51, No. 1, is an example which might be taken to represent a hand consisting of five fingers and a thumb; more probably it is a model of some pronged implement, conceivably a pronged winnowing fan; in Crete prongs are used to pick the corn on to the basket,[3] and we might perhaps associate with this the ribbed type A 39, Fig. 51, No. 2.

Type 11. Cruciform Pendants.

Fig. 51, No. 3, Plate VI (*b*), second row, A 860, an amulet from the burnt house TT 6, is a Maltese cross with one arm stunted, and A 12, Fig. 51, No. 3, a variation of the Maltese cross, but with two arms straight.

Type 12. Double Axes.

Fig. 51, No. 5, and Plate VI (*b*), top row, A 861–5. These remarkably interesting pendants all come from the burnt house TT 6, and are therefore associated with the fine polychrome ware of the Tall Ḥalaf period. They are of two kinds, (1) the butterfly 864, 865, (2) the type with plain triangular blades, A 261–263. In Crete the 'mother-goddess', the dove, and the double axe are among the most important cult objects in the Cretan ritual. It is therefore

[1] I am indebted to Mr. C. J. Gadd for this identification.

[2] SIDNEY SMITH, *Early History of Assyria*, 7, for references to sickles.

[3] *J.H.S.* XXIII, XXIV.

very important to have discovered these three elements associated with one another at so early a period in north Mesopotamia. Many years ago, Sir Arthur Evans suggested that the double axe entered Crete from somewhere in western Asia. These examples are all presumably considerably earlier than anything of the kind in Crete, and Sir Arthur Evans's prophecy therefore finds a remarkable fulfilment many years after the making of it. The double-axe amulet has also been found at Tall Ḫalaf. It should be observed that the type has a tubular centre which is usually perforated transversely at one end, for purposes of suspension.

Type 13. Models of Animals and Other Objects.

Fig. 51, Nos. 6–9, and Plate VI (*a*). A 895, Plate VI (*a*), second row, is a model of a bull's head in a greenish-grey brecciated limestone, one of the most beautiful miniature pieces discovered at Arpachiyah; it is from the early Tall Ḫalaf period and was found in a deep stratum not far above virgin soil. It must be allied with the earliest form of *bukranium* design at Arpachiyah—the naturalistic type. The bull's hoof is finely modelled in A 17, Fig. 51, No. 6; it has a long tang perforated for suspension; a small fragment of a hoof, A 896, was also found. A 887, Fig. 51, No. 9, shows a steatite boar's head with linear markings on the underside; it was found at Gögjali, a prehistoric Tepe in the neighbourhood, and obviously belongs to the Tall Ḫalaf period. Five charming miniature duck beads, Fig. 51, Nos. 7, 8, were found in the burnt house TT 6; cf. also Plate VI (*b*), third row, 870–2; all are in steatite. A. 568, Plate VII (*a*), third row, may be a fly amulet, and bears comparison with an amulet from Nihavand published by Herzfeld.[1] Phallic objects, probably the male organs, appear to be represented in A 569, Plate VII (*a*), fourth row; Plate VII (*b*), third row, A 891 and A 898, the latter not illustrated. Finally there is A 11, Fig. 51, No. 4, and Plate VI (*a*), second row, one of the most interesting of all the amulets, which would appear to be the model of a gabled house with bending roof pole; for a discussion on the gabled house, cf. Chapter 2. In describing this as the model of a house one has, of course, to explain the pillar-like tang; most probably this was made for convenience of suspension. We cannot say for certain that the amulet is a model house, but failing a better explanation there is no reason for not accepting this identification. In this connexion compare the terra-cotta gabled roof from Al 'Ubaid, Fig. 17.

Peculiar Types.

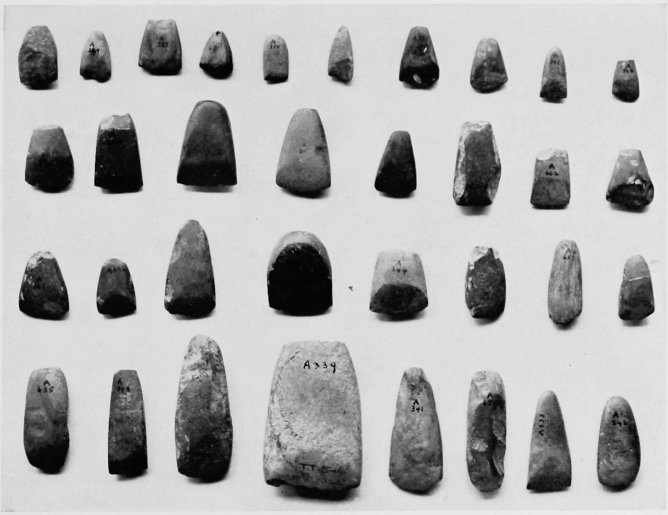
Special types which do not come within any particular classification are A 25, Fig. 51, No. 13, an obsidian disk; A 884, Plate VII (*b*), top row, a plain conical piece; A 886, Plate VII (*b*), second row, a ribbed steatite pendant comparable to A 581, Plate VII (*a*), bottom row; A 24, Fig. 51, No. 16, a spatula-shaped stick with linear markings, unperforated; A. 888, Plate VII (*b*), second row, a kind of cruciform quatrefoil; A. 867, Fig. 51, No. 11, a

[1] HERZFELD, *Archaeologische Mitteilungen aus Iran*, Band V, Heft II.

(*a*) Stone seal pendants

Top Row.	39	40	6	41	42	43	44	45 (B)	46
2nd Row.	47	7	558 (B)	22 (B)	10 (B)	5	4		48 (B)
3rd Row.	49	50 (B)	2	559 (B)	551	552			13 (B)
4th Row.	1 (B)	3	553	554 (B)	555 (B)	556 (B)			557

Scale *c.* $\frac{1}{3}$



(*b*) Stone celts

Top Row.	337	349	327 (B)	651 (B)	350 (B)	326 (B)	385	331 (B)	347	348 (B)
2nd Row.	334 (B)	654 (B)	302 (B)		311		307	303 (B)	662 (B)	346
3rd Row.	661	336 (B)	305		319		344	306 (B)	657 (B)	304 (B)
4th Row.	655 (B)	343 (B)	340		339		341	659 (B)	333 (B)	342

Scale *c.* $\frac{1}{4}$

lunate pendant in a hard milky-white stone; and a series of peculiar terra-cotta stamps, Fig. 51, Nos. 22–5; Fig. 51, Nos. 22, 23, resembling an inflated water-skin; Fig. 51, No. 24, deeply cut, perhaps a demon's face (?); Fig. 51, No. 17, a long tanged stamp; Fig. 51, No. 25, a rectangular stamp with linear markings, and Fig. 51, No. 20; Fig. 51, No. 21, a bobbin; and the ear-stud familiar to all prehistoric sites, Fig. 51, No. 18.

BEADS

Generally the beads from Arpachiyah are of rough workmanship and primitive in form; those found in the burnt house TT 6 are notable exceptions, and like all the material from that place show first-class workmanship. There is a variety of material which includes black steatite and glazed white steatite, mostly small ring beads, limestone, calcite, quartz, frit, obsidian, shell, terra-cotta, serpentine, carnelian, lapis lazuli, and small dentalium shells which were sometimes painted red, and cowries, also occasionally filled with a red paste. An interesting example was a spherical ball bead made of a hard bitumen with inlaid disks of whitish vitreous paste, evidently intended to be an imitation of breccia; it was observed in describing the stone bowls that brecciated limestone was a common material. Most of the common forms of regular beads are represented, only a few special types will therefore be described; it is to be hoped that eventually the beads will be given a special study by Mr. Beck.

Special types.

One of the most interesting was a necklace, A 909, Plate XI (*a*), found in the burnt house TT 6. This consisted of long flattened obsidian double conoid beads, pierced longitudinally, and between them cowrie shells, the backs of which had been cut away and filled with red paint, thus giving the favourite contrast of red and black, common in the Tall Ḥalaf period. In the same necklace there was also a plain pendant in a grey stone. The order of stringing is shown in the photograph Plate XI (*a*).

A 905 and 906, Plate XI (*b*), show a collection of rectangular obsidian links perforated at the ends sometimes twice, sometimes four times. The convex side is smooth and carefully polished, the underside is concave and often rather rough; it seems likely that they were sewn on to a stuff and formed part of some decorative head-piece. All were found at the end of a single room, and they would seem to be too numerous and indeed not suitable in shape for use as wrist bangles, to which this type of ornament is sometimes ascribed. A possibility is that they may have been the links of a girdle, but their convexity and difference of size makes it more probable that they were shaped to fit a head, and by far the closest analogy is the remarkable boars' tusks head-piece, reconstructed by Professor Wace from his finds at Mycenae.[1]

A selection of the most carefully made beads, all from burnt house TT 6,

[1] WACE, *The Chamber Tombs at Mycenae* (*Archaeologia or Miscellaneous Tracts relative to Antiquity*, LXXXII), pl. 38, 1932.

is shown on Plate VI (*b*). It will be seen that one characteristic feature is a shallow groove running longitudinally along one face of many of the beads. It is possible that this was intended to receive a coloured paste, or more probably, seeing that all traces of paste are non-existent, coloured thread.

Lastly A 893, Plate VII (*b*), bottom row, shows an important set of flattened double conoids in terra-cotta and sun-dried clay, decorated with incised markings. These are of special interest because they may be paralleled by similar incised beads both from Al 'Ubaid and Talloh, and therefore provide yet another link with the Al 'Ubaid period in Mesopotamia.[1] A. 890, Plate VII (*b*), No. 2, third row, is a finely incised bead from TT 6 in a greenish serpentine.

Conclusions.

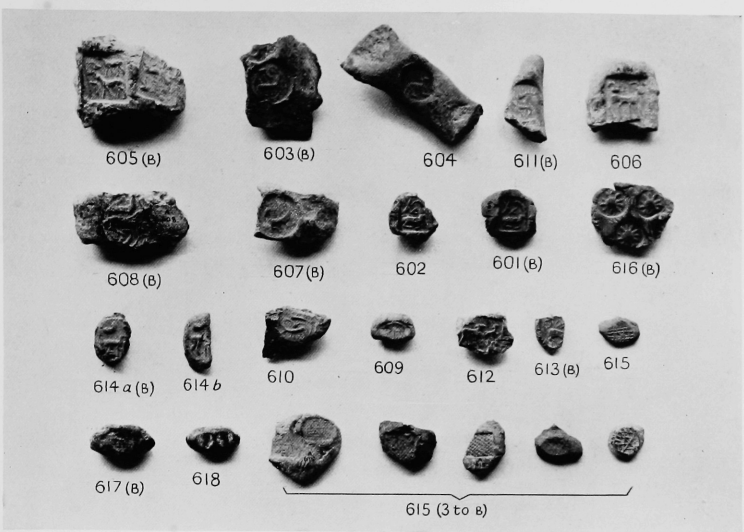
Perhaps the most striking features are the use of a glazed frit and obsidian. Interesting also is the great scarcity of lapis lazuli and carnelian, which later on became so common in Babylonia. Once again we have to emphasize the importance of the peculiar terra-cotta beads, one of them with a wedged cuneiform decoration, giving us another link with the early period in south Babylonia.

SEAL IMPRESSIONS

The chief interest of the numerous impressions in sun-dried clay is that they reproduce many of the markings characteristic of the steatite pendants and prove conclusively that these were used as seals. The early Tall Ḫalaf type of seal impression, A 619, 620, is shown on Plate IX (*b*). The impressions are on ovoid or circular lumps of clay, as a rule pierced longitudinally, and in many cases bearing the marks of knotted string. These clay lumps were evidently used as labels, and must have hung down from the necks of various store jars, which they were used to docket. They are much earlier editions of the elaborate sealings of the Jamdat Nasr period, with arabesque designs.[2] A 615, 617, 618, Plate IX (*a*), fourth row, are other examples which clearly illustrate the rectilinear impressions commonly found on the pendants. Probably early is A 609, Plate IX (*a*), third row, which bears a beautiful impression of a boar, and A 616, second row, with its rayed suns is another early Tall Ḫalaf type.

Important are Nos. 601–8, 610–14, Plate IX (*a*), top three rows, all of which are later than the Tall Ḫalaf period, and are exactly similar to a series of stamp seal impressions from Nineveh, of the *Nin. 3* period. At Arpachiyah they all occur in superficial strata and are therefore presumably contemporary with the Al 'Ubaid period. The designs are all impressed from square and circular stamp seals and consist of finely drawn *cervidae*, mostly the ibex: as at Nineveh there are two principal types, one of which is a beautifully drawn ibex, Nos. 601, 602, Plate IX, second row, while other examples are more crudely drawn and often

[1] Hall and Woolley, *Ur Excavations, Al 'Ubaid*, I, pl. XXXVII, T.O. 415.
[2] *A.A.A.* XX. 141.



(*a*) Seal impressions on sun-dried clay. Scale *c.* $\frac{2}{3}$

(*b*) Black sun-dried clay jar-labels with seal impressions. Scale *c.* $\frac{1}{3}$

Top and 2nd row. A 619 (divided between Baghdad and expedition)
3rd row. A 620 (divided between Baghdad and expedition)

have sausage-shaped bodies; some may be deer. Nos. 601, 602, second row, have been stamped from the same seal; 604, top row, may be a gazelle. The animals are sometimes illustrated as at rest, at other times as running; a smaller beast often fills the field above, and there appear occasionally to be birds in the background, 601, 602. Of great interest is No. 612, third row, which depicts some kind of a coursing dog, perhaps a greyhound. Cf. *A.A.A.* XX. 135–7, for a detailed discussion on this type of seal and pl. 64 of the same volume for illustrations of the Ninevite examples. Cf. also footnote on p. 137 of that volume for references to Syro-Cappadocian, south Mesopotamian, and Elamite parallels.

CHAPTER 8

STONE FIGURINES AND CULT OBJECTS, PAINT AND PAINTERS' PALETTES, CELTS, TOOLS AND IMPLEMENTS IN STONE, FLINT, OBSIDIAN, METAL AND BONE.

The burnt house in TT 6 contained an interesting collection of cult objects in stone and in bone: these objects were all found together at one end of a room and may be regarded as a set of ritual figures, the equivalent perhaps of a set of Chinese altar-pieces. Plate X (*a*) shows the complete group. A 920 (Fig. 52, No. 3) is a flat limestone figurine of the 'mother-goddess', more regularly and carefully modelled than the terra-cotta types; even the head is better formed than on any other example; the prominent breasts, absence of arms, and incised triangle are noticeable features. Beside it is a minute male figure in alabaster, the only model of a male figurine found on the whole site: it stands no more than 17 mm. high (less than $\frac{3}{4}$ inch); the head has slanting eyes cut as deep furrows, and a prominent nose, and though it is hard to base an aesthetic judgement on so small a figure, there is little doubt that the head is Sumerian in character; each arm is held against the waist, and the right arm holds an offering perhaps intended to be the ritual vase that commonly appears in the hands of divinities in Sumerian art of every period. Associated with the two figurines were found five models of human finger-bones in stone, and one genuine human finger-bone. In Plate X (*a*), top two rows, of the stone examples, A 922 (B) has a flat base upon which it may stand upright, and it has the appearance of a gaming-piece; this particular example may be compared with a later stamp seal type found in Crete, EVANS, *Knossos*, I, fig. 51. It is, of course, possible that the model bones, Fig. 52, Nos. 1, 2, may have been gaming-pieces, but the discovery of a genuine human finger-bone, together with the models, suggests rather some ritual use. There is at present no known parallel in Babylonia for this type of object; in this connexion it is interesting to note the discovery of human finger-bones in a Tall Ḫalaf grave G 58, q.v., pp. 42–43, deposited amid the votive objects belonging to the grave, though as the skeleton had been disturbed in antiquity, it is not quite certain whether the particular finger-bones in question were

really votive offerings. Also found with this group was a miniature steatite trough bowl no more than 0·017 m. long, Plate X (*a*), bottom row.

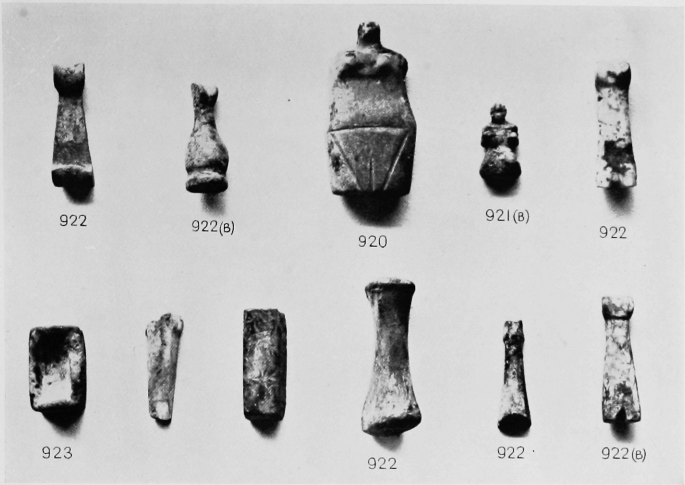
In the same house were found four more curious objects, of which three are of pumice, and one is of sandstone, again apparently votive in character, Plate X (*d–g*), A 904, of which (*e*) seems to show the semblance of a human head; (*f*) No. 3, the sandstone example, is paralleled by an object from Tall Ḫalaf.

Fig. 52, No. 4, shows a painter's stone palette also found in the same house, TT 6; it is shaped like a flat trough, with low sides, and is open at both ends, and has in the middle a rough hollow or depression for holding the paint; several examples of the type were found at Arpachiyah, some were in pinkish limestone and others in a mottled grey brecciated limestone, and there were also examples in plain white limestone and in bone, Plate XII (*a*), A 713, 714, top row; one contained faint traces of paint, and the example found in the burnt house was closely associated with a large lump of red ochre, identical with the paint used on the fine polychrome bowls found in the same house; there can be no doubt, therefore, that some of these palettes were used by the potter when at work on the painting of the pottery: a similar example was found at Ur, B.M. no. 124427, and there is another specimen from Amorgos, Æ 181, not dissimilar in type, in the Ashmolean Museum, Oxford, presumably of the prehistoric period. But the most remarkable parallel comes from a tomb in the province of Honan in China,[1] cf. the *Illustrated London News* of October 28th, 1933: a photograph is there shown of an ancient Chinese painter's outfit which includes a tile palette, almost identical with the Arpachiyah type, and a smaller hollowed example, which looks remarkably like a bone object from Arpachiyah shown on Plate XII (*a*), A 713, top row. The Chinese outfit includes a small water-bowl for dissolving the pigment, again well paralleled by the stone bowls in the painter's shop at Arpachiyah; in fact the only object from the Chinese set missing at Arpachiyah is the lacquer bowl, which probably contained the pigment powder. It must, of course, be remembered that the Chinese examples are dated to the Chou dynasty (770–249 B.C.) and are therefore very far removed in time from the Mesopotamian group; but the parallel is altogether too remarkable not to attract comment, and it is surely not fantastic to suppose that ultimately there is a connexion between the painted potter's art of the Middle East and that of China, where the painting of pottery seems to have thrived from the beginning of time; and Honan itself in which these articles were found is known to be one of the Chinese centres of prehistoric painted pottery. At Arpachiyah, lumps of black, red, and yellow paint have been discovered, and the analysis of these pigments—undoubtedly local, and probably obtained from the hill country to the north-east—should prove interesting.

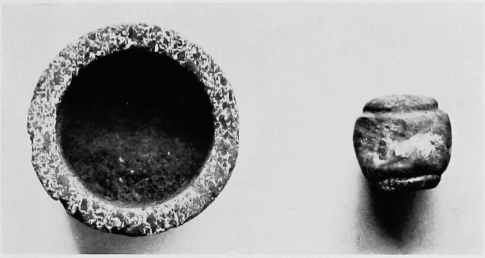
Celts.

Numerous examples were found on the site and the principal types are shown on Plate VIII (*b*) and Fig. 52, Nos. 5–11. Many of them were un-

[1] W. C. White, *Tombs of Old Lo-Yang*, 32, and pl. XLI.



(*a*) Cult figurines from TT 6, including limestone 'mother-goddess' and stone finger-bones. Scale *c.* $\frac{1}{5}$



(*b*) Diorite bowl. A 412. Cf. Fig. 44, No. 13

(*c*) Limestone mace head. A 903 (B). Ht. 0·07 m.

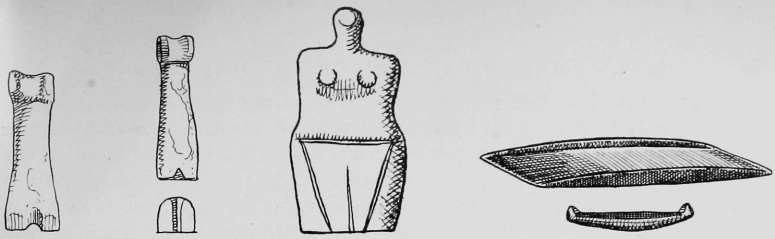
(*h*) Basalt axe (B). Scale *c.* $\frac{2}{5}$

(*d*) 1 (B) (*e*) 2

(*f*) 3 (B) (*g*) 4

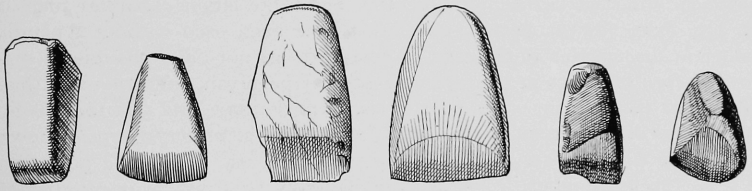
A 904, Nos. 1–4. Cult objects in basalt and pumice stone. Scale *c.* $\frac{2}{5}$

(*i*) Copper chisel. A 353. Scale *c.* $\frac{1}{2}$

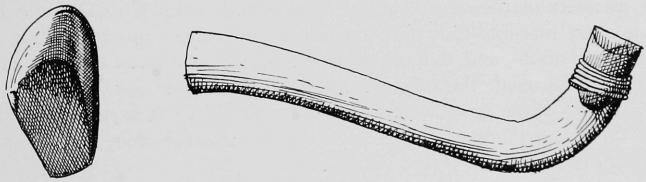


Models of Finger-bones and 'Mother-goddess' in Limestone

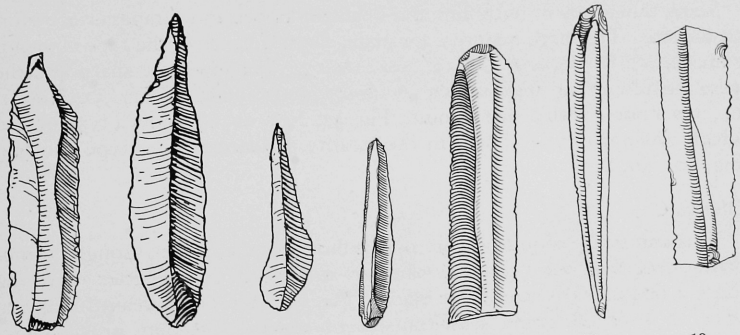
Painter's Palette



Stone Celts



Celt, showing method of hafting



Flint

Obsidian

Obsidian

Flint

FIG. 52. CULT OBJECTS, PAINTER'S PALETTE, STONE CELTS, FLINT AND OBSIDIAN IMPLEMENTS

Scale: Nos. 1–3 are $\frac{1}{4}$, Nos. 4–11 are $\frac{1}{2}$, Nos. 13–19 are $\frac{1}{1}$, Nos. 20–5 are $\frac{1}{2}$

doubtedly worked by being held in the palm of the hand, but others were probably hafted on to wood; the actual type of wooden haft with curved handle was discovered on one example from TT 6; it was found lying on the floor of the house, with a thin film of carbonized wood, reduced entirely to a powder, but still leaving in the soil the outline of its form; this is sketched in Fig. 52, No. 12. The handle has an ogee curve, probably a common haft form for tools in Mesopotamia; cf. the shell relief found at Kish depicting a man carrying an axe.[1] This is the first occasion upon which a wooden haft has been observed *in situ*. On the other hand, the larger examples such as A. 339, Plate VIII (*b*), bottom row, must have been used without a handle rather in the manner of the *coup de poing*. It has not been possible to discover a type sequence in the forms found at Arpachiyah, and it is more than likely that all the main types were in use from the first, and that there is no typological development on this site. In fact all the principal types, shown on the top row of Plate XII (*b*), A 663–7, were in use at a single period in TT 6—the burnt house. These types are now regarded by a number of authorities as being typical of the Chalcolithic age:[2] they did in fact appear in remote quarters of the world, about that period, from China to the Baltic, and it is quite possible that they are not a true stone type at all, but imitations of metal tools, and that metal being scarce, the stone counterpart had frequently to be used; the discovery of a single copper celt, cast in an open mould, A 353, Plate X (*i*), would support this view. A variety of materials is used for the making of these celts, including sandstone, serpentine, and chlorite and dolerite.

Flint.

Many thousands of both flint and obsidian knives and scrapers were found on the site. The large majority are plain, faceted flakes of the type shown on Plates XI (*c*), XII (*b*), and Fig. 52, Nos. 16, 17. The edges are sharp and they were useful cutting implements. A rarer type is shown in Fig. 52, Nos. 13, 14; it is a borer with a sharp point. Fig. 52, Nos. 22, 23, show a type of knife which was apparently copied in the steatite pendants of the type shown in Fig. 50, No. 8.

Obsidian.

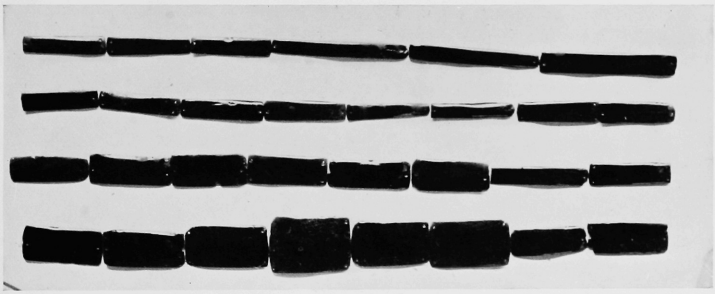
This material was quite as common as flint, and the blades, though far more brittle than flint, were certainly sharper, and would give a better shave than many a bad modern steel razor blade. The obsidian had a beautiful appearance; it is of the shiny semi-translucent black variety, its provenance is probably Lake Van in Asia Minor;[3] a few absolutely clear colourless translucent blades were also found, cf. Fig. 52, Nos. 18, 19. This very beautiful translucent variety is also associated with the dark variety in Van; and there

[1] E. MACKAY, *A Sumerian Palace and the A. Cemetery at Kish, Mesopotamia* (*Field Museum of Natural History, Anthropology Memoirs*, vol. I), pl. XXXV.

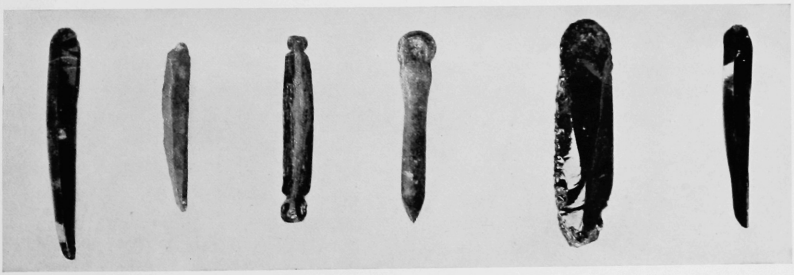
[2] I am indebted to Mr. Sidney Smith for information on this point.

[3] G. A. Wainwright, *Obsidian* (*Ancient Egypt*, September, 1927, Part III).

(*a*) A 909. Necklace of obsidian beads and cowries



(*b*) Obsidian links, perforated at the ends. A 905, A 906 (B). Scale *c.* $\frac{1}{4}$



(*c*) Obsidian, flint, and bone implements. Scale *c.* $\frac{3}{5}$

is in addition a dark smoky obsidian, many specimens of which were recovered from the bottom of the well in TT 10. Some of the flakes were wonderfully fine, sometimes they were no more than 2 mm. thick and being brittle they were extraordinarily fragile; possibly they were used for the cutting of fine thread or hair. Fig. 52, Nos. 20, 21, show a scythe-shaped blade with a short tang similar to examples done in flint; this type is of interest because some of the amulets seem to have been cut in imitation of this tool, cf. Fig. 50, No. 8; many of these blades were no doubt set in bitumen and hafted with wood. Numerous cores, both of flint and obsidian, were recovered and show that the blades were struck on the spot: it is almost certain that one of the occupants of the burnt house TT 6 was a worker in flint and obsidian, as in addition to flint cores there were thousands of chips and wasters typical of the refuse in a knapper's workshop, cf. Plate XII (*b*), middle row. Obsidian was evidently prized for its attractive iridescence, and vases, Plate V (*c*), No. 4, amulets, Fig. 51, No. 13, and beads, Plate XI (*a*), as well as tools, were made out of this material. It is interesting that three of the Tall Ḫalaf graves, G 54, 56, 58, contained flint and obsidian knives amid the votive objects.

Bone.

Objects in this material were common: the majority consisted of awls which showed considerable variation in size, ranging in length from 0·09 to 0·05 mm. They have a groove on one side, come to a sharp point, and appear generally to have had bitumen handles; one perfect specimen was found with its handle intact, A 710, Plate XII (*a*), bottom row, which should be compared with a copper bradawl found in the Royal Cemetery at Ur.[1] Some of these awls were found in Tall Ḫalaf graves, G 54, 58. In addition to their use for the obvious purpose of boring holes in hides, skins, and tough materials, they may have served as engravers for the incising of pottery; two bone implements on Plate XII, A 715, bottom row, are almost certainly pottery burnishers, and A 713, 714, top row, are probably both painters' palettes; A 713 has already been commented on, as similar to a Chinese type. Occasionally the bone implements are decorated with incisions, cf. A 716, Plate XII (*a*), top row, an object of uncertain use; a human finger-bone which appears to have a ritual use has been mentioned above on p. 99, cf. Plate X (*a*), middle of bottom row; lastly, two interesting bone sticks are figured on Plate XII (*a*), middle row, A 711, where the top end is carved in imitation of a *bukranium*, and may belong to the *bukrania* series, done in stone, terra-cotta, and most frequently painted on the Tall Ḫalaf pottery. Also to be numbered among the craftsman's equipment in the burnt house was a set of bone tubes together with a trumpet-shaped mouthpiece in mottled grey limestone; almost certainly a blow-pipe.

Metal.

Only four metal objects were discovered at Arpachiyah; but their discovery was of paramount importance, as they prove that the material remains all

[1] WOOLLEY, *Ur Excavations, The Royal Cemetery*, II, pl. 229.

belong to the Chalcolithic period. It is, indeed, a fact that nowhere in Babylonia, Assyria, or Iran has there yet been discovered a site which may correctly be described as Neolithic; even at prehistoric Persepolis, which Herzfeld labels Neolithic, copper objects have been found.

In TT 6, the burnt house, a small conical piece of lead was found 0·042 m. high and 0·02 m. in diameter; this therefore proved that lead was already in use in the Tall Ḫalaf period. Moreover, we shall see in the succeeding chapter when we come to describe the Tall Ḫalaf pottery that some of the Tall Ḫalaf pottery shapes, in particular the type with bevelled grooved base, hereafter referred to as the Arpachiyah cream bowl, was almost certainly a copy of a metal type; so that even had no metal been found on the site, we could have inferred that it existed: certainly, however, it was a great rarity; and doubtless no piece of metal was ever thrown away or discarded if it could possibly be avoided: no doubt metal was constantly being re-smelted, and the raw material such as copper and lead would, in the early periods of the Chalcolithic age, be as jealously preserved and handed down as gold always has been since its first discovery. No single object either in gold or in silver has been discovered in the Tall Ḫalaf period as yet; but it is not improbable that it existed. Gold has been found in the Al 'Ubaid period in Babylonia, and at Tepe Gawrah in the north it appears to occur approximately at the Al 'Ubaid period.

The other three examples of metal from Arpachiyah were all copper implements, two were fragments of pins, A 351, 352, both much corroded, and the third implement, shown on Plate x (*i*), A 353, was a copper chisel of the flat type evidently cast in an open mould. The type is of great interest as it is a smaller edition of a type that occurs with the fine Susa 1 ware at Susa. The Arpachiyah example probably belongs to the Al 'Ubaid period.

Various Stone Objects.

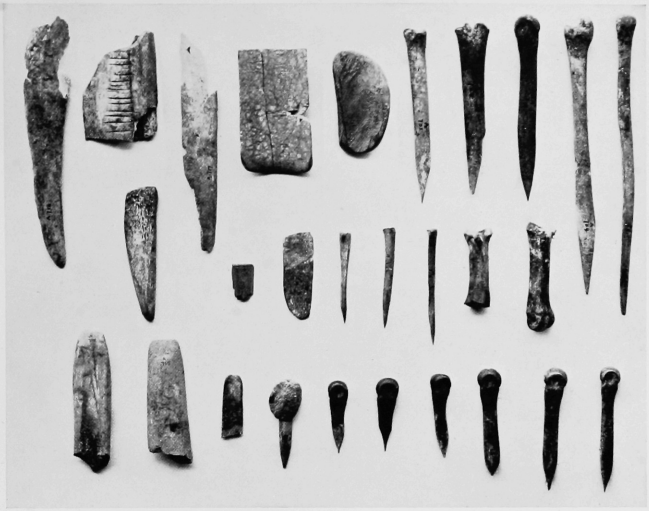
Plate x (*c*), A 903, shows a blue-grey limestone object of the local variety from TT 6, which may possibly be a mace head; it is not unlike mace heads from Babylonia; it has only a shallow cavity and the sides are unnecessarily thick for a bowl. Other stone objects include door-sockets, and most common were crude basalt agricultural objects such as pestles, querns, grinders, hammers, burnishers with a grooved top, and there were one or two examples of shaft-hole axes, see Plate x (*h*), showing an example in basalt.[1]

Chapter 9

TALL ḪALAF WARE: POLYCHROME POTTERY FROM THE BURNT HOUSE IN THE SIXTH SETTLEMENT, TT 6

The most interesting discoveries at Arpachiyah were made in two rooms of a single house. The outstanding feature of this rich and varied material is the painted pottery, which in excellence of technique and beauty of design

[1] Gordon Childe, *Eurasian Shaft-Hole Axes* (*Eurasia Septentrionalis Antiqua*, IX).



(*a*) Bone objects. Scale *c.* $\frac{1}{4}$

Top row. 718 716 (B) 717 (B) 714 713 705 708 (B) 706 704 (B) 703 (B)
Middle row. 719 (B) 712 (B) 712 709 709 (B) 709 711 711 (B)
Bottom row. 715 (B) 715 715 710 701 (half to B)

(*b*) Celts. Scale *c.* $\frac{1}{4}$

Top row. A 663 (B) A 664 (B) A 665 A 668 A 666 A 667 TT 6
Middle row. Obsidian chips from the stone-worker's shop. TT 6
Bottom row. Flint and obsidian knives and scrapers. TT 6

is certainly one of the finest collections of its kind. This pottery, most of which is polychrome, is entirely distinct from that of the Al 'Ubaid period, and belongs to a northern family of painted ware, which from its first discovery by Baron von Oppenheim, at the site of Tall Ḥalaf on the Ḥabur, has come to be known as Tall Ḥalaf ware.[1]

Potter's Shop in TT 6.

The house that contained the finest specimens lay 4 m. below the surface of the Tepe, in the sixth settlement, previously referred to as TT 6 and described above in Chapter I, p. 16. It seems that the building must have been inhabited by the headman of the village, for it lay in the very centre of the site and was more spacious in plan than any other found; cf. Fig. 5 (*c*). Moreover, the rich and varied character of the objects which it contained proved that its occupant was a man of substance. Stone vases, jewellery, cult figurines, amulets, and flint and obsidian tools were found in abundance scattered over the floor of a single room; the presence of thousands of flint and obsidian cores and chips was clear evidence that this was at least in part a stone-carver's shop, and the discovery of a large lump of red ochre and of painter's palettes lying on the floor, beside the painted pottery, proved that another occupant of the shop was a potter. All the objects found in this house displayed that elegance of finish which is the hall-mark of the master craftsman. It is significant, therefore, that this place of manufacture lay in the very centre of Arpachiyah. From the fact that the most important site in the village was given over to the manufacture of *objets d'art* we may infer that the wealth of Arpachiyah came from these factories. Even the kilns lay in the centre of the site.

Wealth of Arpachiyah derived from potting. Status and importance of the potter.

It is true that in the East the bazaar, or *suq*, often lies in the middle of a town; but when in a comparatively small village we find the richest site given over to the manufacture of objects of luxury, rather than of mere utility, we may assume that the master craftsman enjoyed some special status, and that the prosperity of the village came from the pursuit of the handicrafts and not merely from agriculture and a pastoral life. We might, in fact, guess that the stone-carver and painter at Arpachiyah had as a class singled themselves out in a manner similar to the Amarah silver-worker of to-day. In the East the more specialized trades, remaining hereditary for so long, are often found to be in the hands of special communities. In Iraq at the present day the silver-workers are Subbis and the jewellers Armenians. Whether indeed the makers of the splendid polychrome pottery at Arpachiyah were of a different race and caste we have no means of determining, but it is at least certain that their skilled labours had brought them to a position of high importance in the community.

[1] VON OPPENHEIM, *Der Tell Halaf.*

Luxury ware.

Perhaps the most striking characteristic of the remarkable polychrome Tall Ḫalaf pottery from TT 6 is its fineness of quality, which must make it rank as a luxury ware. And the presence of a luxury ware in an early chalcolithic community, where we expect most products to be utilitarian in character, is indeed remarkable. If we take any of the fine examples of plates such as are shown on Plates XIX, XXII, we shall see that the paint is liable to damage, the clay delicate and easily fractured. It is true that such objects may have been put to some ceremonial or ritual use which demanded something more worthy of the occasion than the ordinary domestic vessels. But the fact that already in this early period, some six thousand years ago, man had attained both the ability and the desire to fashion these superb works of art, and, moreover, had found a market for them, argues a stage of civilization in which there was time and leisure to pursue the beautiful as well as the useful.

Destruction by fire of the potter's shop. Partial and total discoloration of vessels.

The fortunate chance which resulted in the discovery of so many superb examples of painted pottery was due ultimately to the fortunes of war. The sixth settlement had been sacked and burned by some invader—presumably the southern peoples who introduced the Al 'Ubaid ware found in all the upper settlements. When the enemy entered the potter's and stone-carver's shop he found it richly stocked with variegated wares, and his eye was attracted by the brilliantly painted plates which lay stacked on the tables or shelves with which the rooms seem to have been furnished. The first instinct of man in the heat of the fight is to destroy, and here was glorious material for destruction. After he had killed or driven out the occupants, the invader had indulged in an orgy of smashing; had deliberately hurled cups, saucers, bowls, plates, and dishes against the walls, sometimes irretrievably destroying large portions of the vessels, sometimes actually preserving them by this very act of vandalism. For when he had tired his arms with the breakage, he kindled a fire which burned more virulently in some parts than in others. The worst of the conflagration raged at the south end of the house: debris cast in that direction had therefore as a rule suffered terribly, whereas material that had chanced to fall at the opposite end had often hardly suffered at all. As a result many of the reconstructed vessels from this room show a remarkable unevenness of colour. Thus those parts of the vessel that had been cast into the thickest of the fire were generally hopelessly carbonized, and in some cases the design is burnt right out. (Cf. Plate XIX.) Other pieces from the opposite end of the room have retained their colour and give us the exact appearance of the original vessel. (Cf. frontispiece.)

The task of collecting and reconstructing these vessels was both laborious and prolonged, more particularly because certain portions of the vessels had been completely destroyed. But wherever the pieces were to be found we

eventually succeeded in putting them together again: proof of the care with which all joined in the search is shown by the complete piecing together of the magnificent polychrome plate (frontispiece), reconstructed to its entirety from no less than seventy-six pieces.

Polychrome plates, and plates with rosette centre-pieces.

Outstanding among the pottery found in the burnt house were polychrome plates, richly painted in three colours both inside and outside. All of them were reconstructed from scattered fragments, and it was fortunate that the largest and most brilliant specimen, A 748, represented in colour on the frontispiece, could be mended to its entirety.

This plate has a rim diameter of 0·32 m. (12½ in.), ht. 0·091 m., and base 0·065 m. The centre-piece is a floral design consisting of thirty-two petals, done in red paint, radiating around a black corolla; each petal is picked out from the background by a thin line of the pinkish body clay, which is left as a reserve; the ground on which the thirty-two petals stand is painted black. The remainder of the inside of the plate is done in a black and red chequer pattern, with a quatrefoil design in white paint, superimposed on the black squares. The rim is grooved and has a black zigzag design running round it. The outside has plain black and red bands done on to the pinkish-buff body clay. The brilliance of the stylized sunflower centre-piece is enhanced by the dark field in which it is set, and by the skilful use of the thin reserve around each petal. The effect of the white quatrefoils on the black and red chequers is singularly beautiful, and this plate deserves to rank among the masterpieces of pottery of the chalcolithic age. Other examples may show a greater delicacy of brush-work, here the painter relies for his effects on a bold contrast of strong colours.

Metallic form of plate.

The shape of this plate is of special interest: it is a deep bowl with splaying sides, and about half-way down, in section, there is a sharp curve forming a groove, both on the outside and inside. Here, therefore, there was a very sensitive junction between the collar and the base, and when the plate was smashed it slithered badly at this point of weakness. In fact the shape is not natural to pottery, and it cannot be denied that in order to get his effect of a deep-set floral centre-piece the potter found himself obliged to affect a shape that endangered the structural solidity of the vessel. We might, indeed, suppose that he was copying a metal prototype, as this shape would be more natural to metal than to clay (and is partly analogous to the copper ceremonial patens from the Royal Cemetery of Ur);[1] but it is more probable that in order to achieve his artistic effects the potter found himself being carried away from his natural medium and sacrificed mere utility in order to achieve an appearance of depth in keeping with his design.

[1] C. L. Woolley, *Ur Excavations, The Royal Cemetery*, II. 302, and type 32, pl. 234.

Unity of style in Tall Ḫalaf pottery.

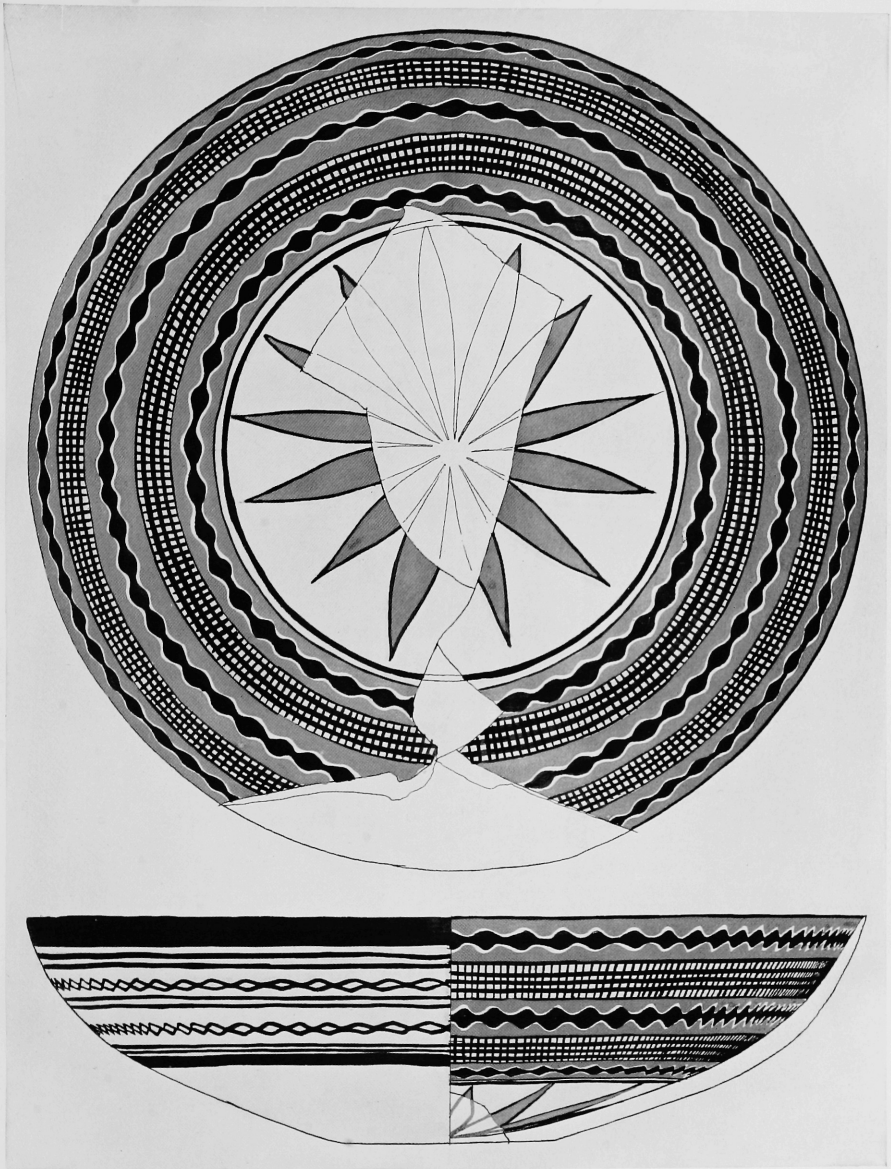
In style we may observe here what Matz[1] refers to as the essential *Drehbarkeit*, or rotability, characteristic of the painted wares of Susa, in contrast to the axiality of Egyptian painting; that is to say, the design is conceived as a unity; we can feel the bowl rotating under the potter's hand, so that from whatever aspect we look at the pattern, it remains always the same, and no one element of the design can be detached without affecting the unity of the whole. This stylistic unity may be observed throughout the whole of the Tall Ḫalaf period and achieves perfection in the polychrome pieces of the sixth settlement.

Plate XIII, A 750, shows another plate which relies for its effect on solid brush-work and boldly contrasted colours. The dimensions are: rim diameter 0·297 m., ht. 0·08 m. This example was found at the east end of the long room on the north side of TT 6 and was much discoloured and in part carbonized by the burning of the house; a portion of the centre-piece had been completely destroyed. The plate is made in a reddish-buff clay. The centre-piece consists of a thirteen-petalled rosette done in red, and outlined in black paint, on the reddish-buff body clay. The sides of the bowl have a design consisting of three rows of solid cables in black paint on a red ground, and picked out by the lighter body clay. The remainder of the design consists of black cross-hatching done directly on the reddish-buff clay. On the outside there is an open angular cable pattern and black bands. No slip is used, but the clay has a smooth finish and is lightly burnished, and the paint lustrous. It is interesting to observe the skill with which the painter enhances his petals by picking them out with a black outline on the light ground; in the previous example the dark ground on which the centre-piece was set made the use of the lighter body clay as a reserve around the petals more effective.

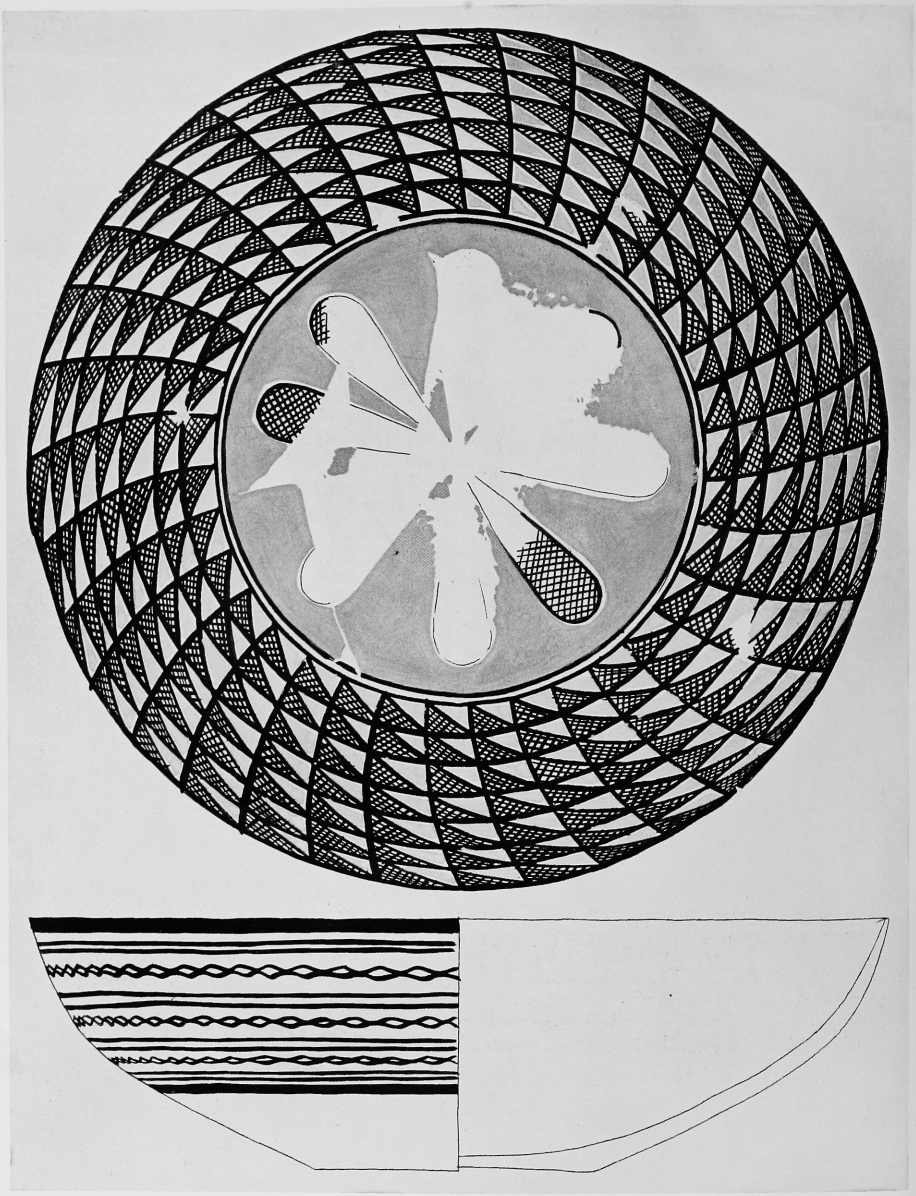
Plate XIV, A 753, shows a more damaged specimen, which again relies on a bold simple design for its effects. The dimensions are: ht. 0·086 m., rim diam. 0·30 m. The clay is again a deep pinkish-buff, and the design in black and red, much discoloured by exposure to fire. The centre-piece consists of an eight-petalled rosette, each petal cross-hatched and outlined in black paint on to the body clay. The sides of the bowl consist of a diagonal diaper pattern with the triangles alternately solid red with a fine surround of pinkish-buff clay and cross-hatched in black. The outside of the bowl has an angular cable pattern in three bands, similar to the two-banded example on Plate XIII described above. It will be observed that the central rosette has suffered badly in the fire, the colours have run and mostly disappeared.

Fig. 53, No. 1, A 747, shows another example of a plate similar in style, but smaller in size. Rim 0·19 m., ht. 0·055 m. This plate came from the same end of the room as the well-preserved specimen on the frontispiece and had therefore suffered little from the fire. As with Plate XIV, the centre-piece

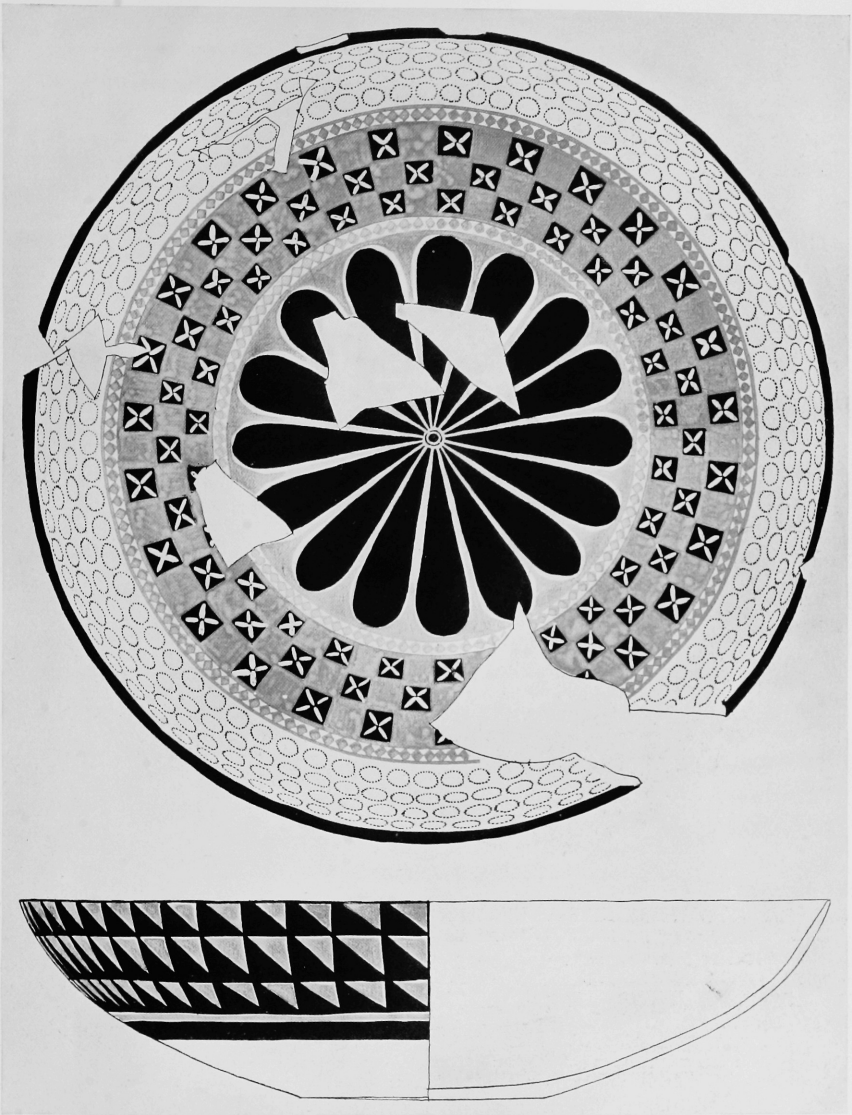
[1] MATZ, *Die frühkretischen Siegel*, 84.



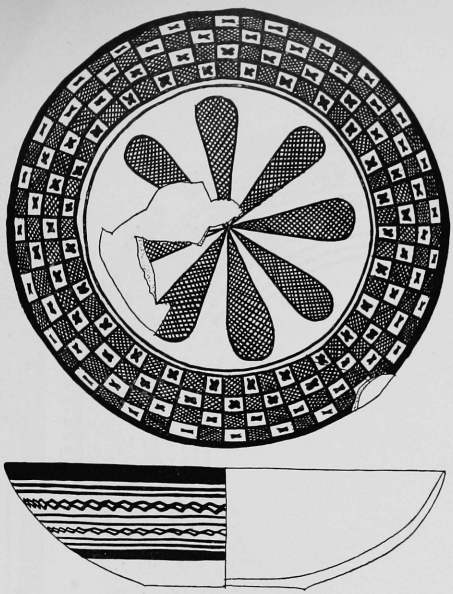
A 750
POLYCHROME PLATE OF THE TALL ḤALAF PERIOD
From TT 6. Scale $\frac{1}{2}$



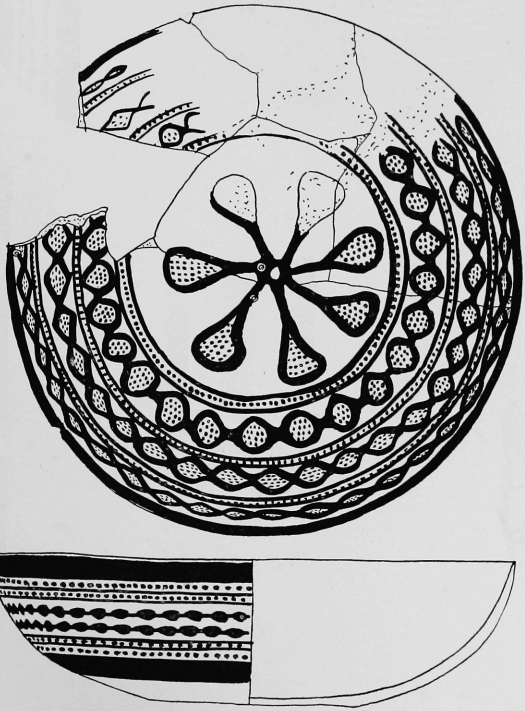
A 753 (B)
POLYCHROME PLATE OF THE TALL ḤALAF PERIOD
TT 6. Scale ½



A 752
POLYCHROME PLATE OF THE TALL ḤALAF PERIOD
TT 6. Scale ½

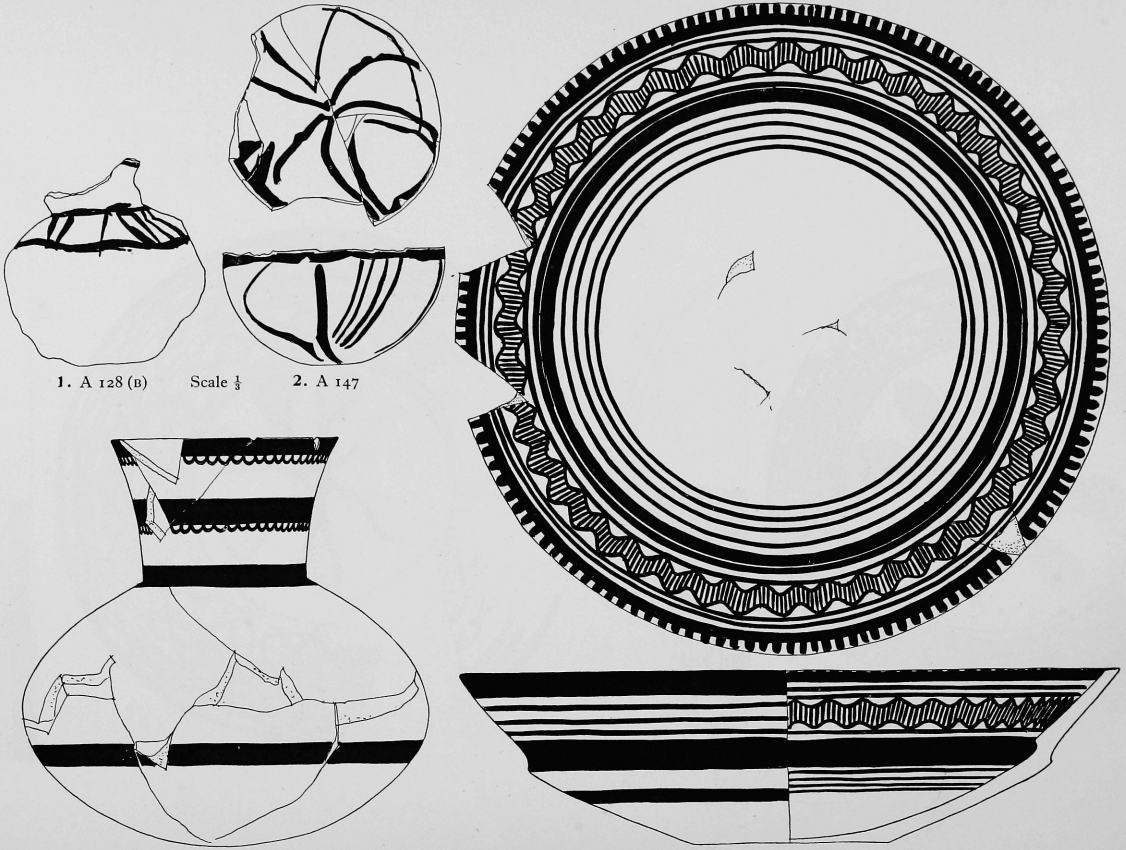


1. A 747 (B). TT 6 Scale 2/5



2. A 734. G 53. TT 7 Scale 3/5

FIG. 53. PAINTED POTTERY OF THE TALL ḤALAF PERIOD, TT. 6, 7



1. A 128 (B) Scale $\frac{1}{3}$ **2.** A 147

3 Scale $\frac{1}{8}$ **4.** A 749. TT 6 Scale $\frac{1}{8}$

FIG. 54. PAINTED POTTERY OF THE TALL ḪALAF PERIOD

consists of an eight-petalled cross-hatched rosette on a pinkish-buff burnished slip. The surround at the sides consists of a chequer pattern with the squares alternately cross-hatched or containing a St. Andrew's cross. The outside of the bowl has plain bands and angular cables. The entire design is done in a lustrous light red paint on to the pinkish-buff slip.

Fig. 54, No. 4, A 749, shows the largest plate discovered at Arpachiyah. Rim 0·34 m., ht. 0·093 m. In shape this plate is identical with the deep angular-sided bowl shown on the frontispiece, and described above on p. 107. The design has become entirely carbonized through exposure to fire on the sack of the burnt house, almost all the paint has turned to a dull black, and the body clay has become a smoky grey colour. The centre is left plain, and is the only example of a large plate without a painted centre-piece. The design, both inside and out, consists of a hatched running ribbon. Traces of red still remain on the bands on the outside of the bowl. A design, exactly similar to this open-hatched running ribbon pattern, occurs on a small bowl with a rim diameter of 0·066 m. and ht. 0·035 m., shown on Fig. 71, No. 1, A 518, from the same house: this small bowl was again badly carbonized; the colour had turned to a dull black, and the clay was a smoky grey.

Plate XV, A 752, shows another masterpiece of the potter's art. The plate belongs to the large series, dimensions: rim 0·29 m., ht. 0·07 m. The design is polychrome, done in a black and red lustrous paint with the addition of dull white on a smooth, burnished, light buff clay. The centre-piece consists of a sixteen-petalled rosette, the petals in black paint, and outlined by the light buff body clay on a red ground. There is a small corolla consisting of concentric circles of the body colour on a black ground. The lower portion of the sides of the bowl has a chequer pattern in black and red, with white quatrefoils on the black squares: the chequer pattern is separated from the centre-piece by a ring of finely drawn solid running lozenges done in red on a buff ground: another of these rings of red lozenges separates the chequer design from the upper sides of the bowl, where we have four rings of circles, each circle done in a minute dot stipple with a very fine brush. The outside of the bowl has a diagonal diaper pattern; the triangles are done in solid red and black paint alternately, and separated by a reserve of the lighter body clay.

It is interesting to compare this superb specimen of the potter's art with the equally remarkable example described above, and shown in colour on the frontispiece. The main elements of design and method of execution are exactly similar, but the example before us on Plate XV perhaps shows a greater delicacy of brush-work, especially in the fineness of the stippled circles, the execution of which must have been a labour of love: indeed the brush-work displays a lightness of touch which produces an effect most pleasing to the eye, and the use of a lustrous paint serves to emphasize the design.

On the other hand, some might consider the pattern on the frontispiece more successful, because of the perfect relation of every element in the design to the whole: it will be observed that whereas in A 748, frontispiece, there are thirty-two petals, in Plate XV there are only sixteen, with the result that in the

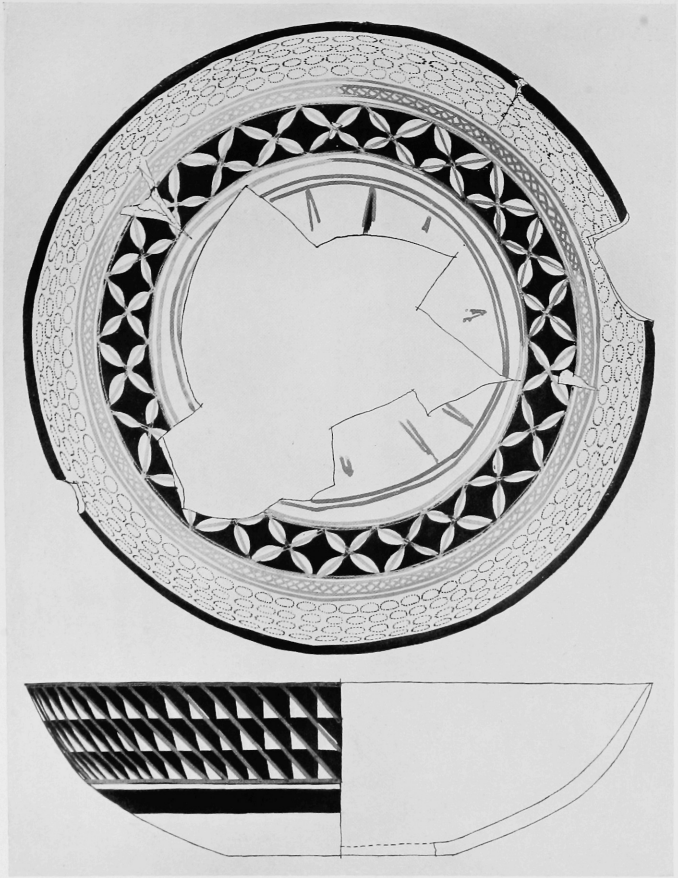
reproduction the rosette centre-piece seems to stand out somewhat heavily from the centre, and is perhaps overweighty in its effect against the light stippled circles. But it must be remembered that the blackness of the design in the reproduction is more prominent than in the original, so that the overweighting of the centre-piece is less violent on the object itself. Moreover, in the original there is a subtle gradation of colour which carries the eye easily from the dark centre, through the lighter red surround, to the light buff border, and the depth at which the rosette is set enables it to combine harmoniously with the remainder of the design. It would be hard to find a more effective pattern for the outside of the bowl than the diagonal diaper which carries the eye around the circumference.

Another interesting contrast between this plate and A 748 is the difference in shape: the metalliform contours of the latter (frontispiece) have been noted above; Plate XV is a bowl type that would be equally suitable to wood or clay. Many of these large bowls with simple curves do indeed suggest wood turning, and it is probable that side by side with these types there existed wooden plates, identical in shape.

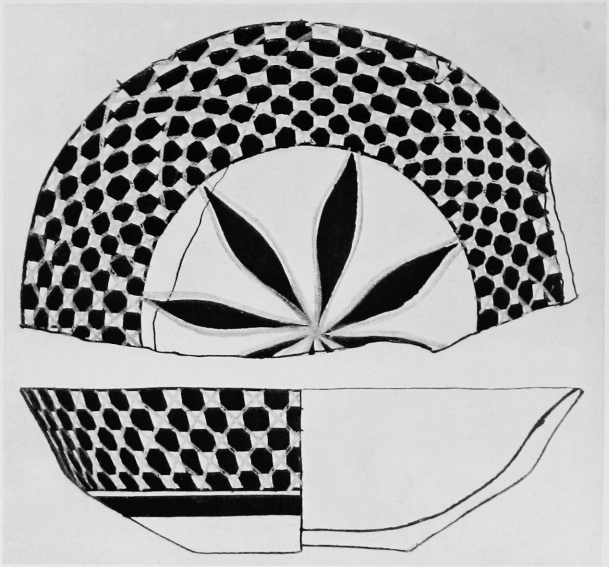
In Plate XVI (*a*), A 746, we have another polychrome bowl which bears close comparison with the previous example. The dimensions are approximately the same: rim 0·295 m., ht. 0·083 m.; the clay is buff and the paint brownish-buff and red. Most of the centre-piece is missing: it consisted of a rosette which probably had twelve petals, in black paint with a red outline, on the buff clay; outside the medallion there is a band of quatrefoils left as a reserve on the buff body clay, in a black background, and impaled with red diagonals. There is a red open running lozenge surround, and the upper half of the sides has the fine stippled circle designs which we have already seen on Plate XV. The outside of the bowl has a diagonal diaper pattern with alternating triangles in black paint and the buff body clay of the vase, and there are red diagonals running obliquely to the vertical axis of the bowl. The wide horizontal band is in black paint, and the thin horizontal lines in red. The paint is again lustrous, and fairly well preserved; but the brushwork does not show the same care as that displayed on the previous example, and the thin rosette centre makes a somewhat weak medallion, an interesting contrast with the previous example, Plate XV, where we observed a tendency to overweighting: it would seem that the frontispiece, A 748, showed the happiest solution for the centre-piece; in this example there is too much empty space between the petals. None the less, it is still a fine piece.

Rosette centre-piece on a saucer.

Plate XVII (*a*), A 755, shows a small saucer only 0·107 m. in diameter and 0·02 m. high. The design is polychrome, and there is an eight-petalled rosette centre-piece in black, and outlined with the buff-coloured body clay reserve on a red ground. All the surrounds are done in a black paint, and on the sides of the saucer, both inside and out, there are solid black circles with red centre-pieces, and a double ring of black stippling surrounding the circles.



(*a*) A 746 (B) TT 6. Scale $\frac{3}{8}$

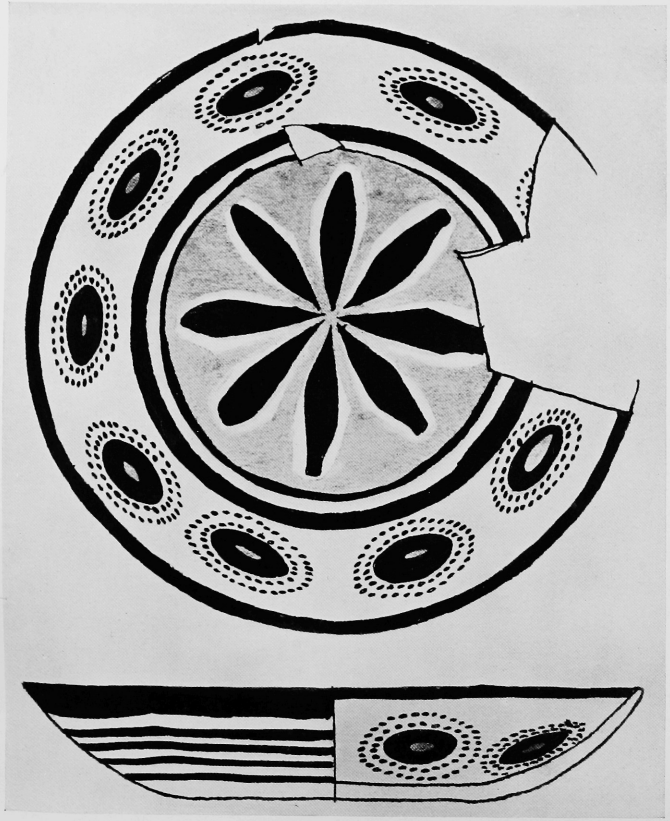


(*b*) A 511 TT 5. Scale $\frac{5}{8}$

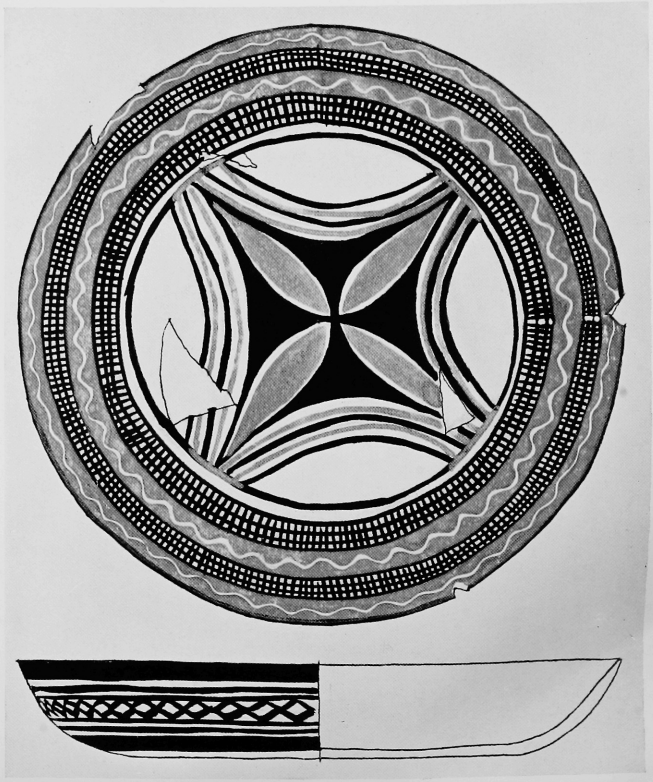
Coarse buff clay, dark terra-cotta, and plum-red paint.

POLYCHROME POTTERY OF THE TALL ḤALAF PERIOD. TT 5, 6

PLATE XVI



(*a*) A 755 (B)
Scale $\frac{1}{1}$



(*b*) A 745
Scale $\frac{3}{4}$

POLYCHROME SAUCERS OF THE TALL ḤALAF PERIOD. TT 6

A 751 (B) Scale $\frac{2}{5}$

POLYCHROME PLATE OF THE TALL ḤALAF PERIOD

TT 6

This delicate piece is a charming example of the miniature work with designs similar in style to those on the larger vessels.

Cruciform designs on plates, bowls, and saucers.

Another common centre-piece affected by the potter of this period was a cruciform design. As a rule the cross was not straight-armed, but was of the Maltese type, with curved arms, and a common variant was a design which has been aptly described by Professor Gordon Childe as the Maltese square.[1] The significance of these cruciform patterns will be discussed in Chapter II, where we shall notice it again as a design frequently associated with funerary wares of the chalcolithic period.

Plate XVIII, A 751, shows a representation of a magnificent specimen of a polychrome plate from the burnt house. This example had suffered very badly in the fire, and only a small portion retained its original colouring; cf. the photograph on Plate XXII, No. 10, where it will be seen that the greater part of the vessel is carbonized. The coloured illustration shows as nearly as possible the original colouring of the vessel. The dimensions are: rim diam. 0·235 m., ht. 0·035 m. The design is done in a lustrous black and red paint on a shiny, burnished, orange-red slip. The centre-piece consists of a Maltese square, outlined in black, with a red chequer pattern centre, and the four triangles abutting on the corners of the centre square are filled in with a solid wash of red paint. On the sides of the plate there are black dots between lines and three rows of solid cables, also done in black. In each of the segments left by the four arms of the Maltese square there are red circles with black stippled surrounds. On the outside the design consists of a black angular cable design with red borders.

This plate is thin and delicate, highly baked, and made from a ferruginous clay which takes a vitreous lustre similar to *urfirniss* ware. In keeping with the delicacy of the clay is the fineness of design and minute brush-work, which compares very favourably with the two fine examples on Plates XV, XVI (*a*). This must be considered one of the most brilliantly successful pieces of the whole collection.

Of great interest is the Maltese square centre, which is almost identical with a design found on a bowl from the early cemetery at Samarra.[2] We have seen that at Nineveh, and at Arpachiyah, Samarra ware overlaps with that of Tall Ḥalaf, and when we find so distinctive a design as the Maltese square with curved arms appearing on the pottery of the last three sites, it becomes certain that there must have been some interrelation between them, and further that some of the Samarra ware may be contemporary with the most developed Tall Ḥalaf ware of the type found in TT 6. Elsewhere we find

[1] GORDON CHILDE, *Notes on some Indian and East Iranian Pottery* (*Ancient Egypt and the East*, March, June 1933, Parts I, II). The term 'Maltese square' is used to describe a square with triangles at the four corners. This very convenient term deserves notice, as it serves to describe a complicated design constantly used on Chalcolithic pottery.

[2] E. HERZFELD, *Die Ausgrabungen von Samarra*, 52, taf. XXIII.

the Maltese cross and the Maltese square on the funerary pottery of Susa I,[1] and in the cemetery of Shahi Tump in Baluchistan.[2]

Another plate with a cruciform centre-piece is shown on Fig. 55, A 754. This bowl, which has a rim diameter of 0·23 m. and a height of 0·07 m., has a design in a bright red lustrous paint, on a burnished pink clay with a smooth finish. The centre-piece is a Maltese cross with curved arms and incurving lines as a surround. There are two undulating lines left as a reserve in the body clay, as well as cross-hatching both inside and outside the bowl; and on the outside there is an impaled *bukranium* pattern. The *bukranium* design consists of pairs of horns impaled by a single horizontal line. The significance and development of the *bukranium* pattern will be discussed in Chapter 11. We may observe in the segments left by each arm of the cross a small open lozenge.

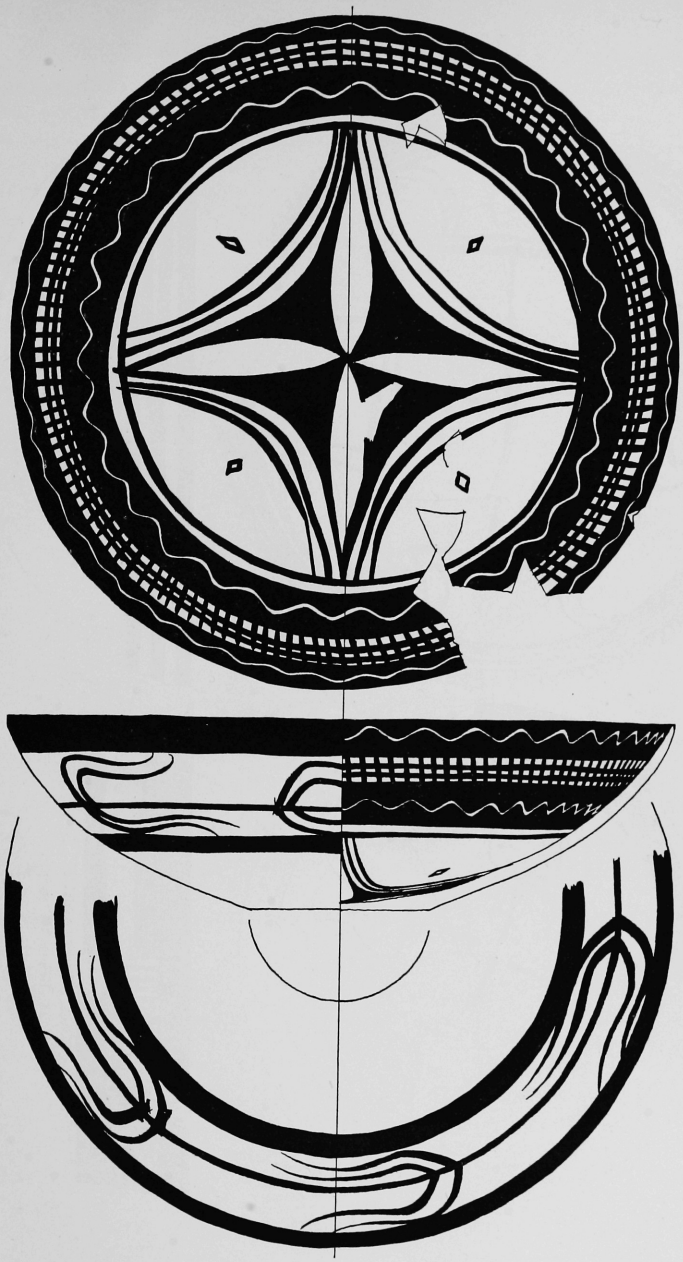
Cruciform bukranium centre-piece on a plate.

Fig. 56, No. 2, A 515, shows another large bowl with a cruciform centre-piece. Dimensions: rim 0·26 m., ht. 0·095 m. This specimen, like many others noted above, has suffered considerable damage from the conflagration. The clay, which was unevenly fired, varies in colour from buff to reddish-yellow, and the paint from sepia to orange-red, and in places the design has been burnt right out. The centre-piece is a bold stylized cruciform *bukranium* pattern: the arms of the cross are straight, and at each end there is a pair of curved horns.

Earlier example of the cruciform bukranium design.

It is interesting to compare this example with a second similar bowl, of a slightly earlier period, illustrated side by side with the example from the burnt house on Fig. 56, No. 2. This slightly smaller specimen on Fig. 56, No. 1, A 728, has a rim diameter of 0·22 m. and height 0·057 m. The clay is apricot and has a smooth burnished surface, with the design done in a lustrous reddish-black paint. The centre-piece consists of a cross, each arm being a naturalistic *bukranium*, with a clear drawing of the bull's horns, head, and ears. To some extent the drawing is stylized, but it is far more naturalistic than the *bukranium* design on the previous figure, where the head is reduced to a simple line. The outside of the bowl consists of a design of ripples and horizontal zigzags. Both in technique, and from its find place, it is certain that this bowl belongs to an earlier period than the example from TT 6 described above. This specimen was found at 1·8 m. below the surface in sq. Ga IV. 4, at a level which stratification proves to have been earlier than TT 6 as it lies beneath a tholos, and beneath the level of the stone roads. This example in fact probably belongs to a period at least as early as TT 10 or earlier. The squat shallow type of bowl is one of the earliest shapes found at Arpachiyah, and the paint turning from black to red indicates a less skilful

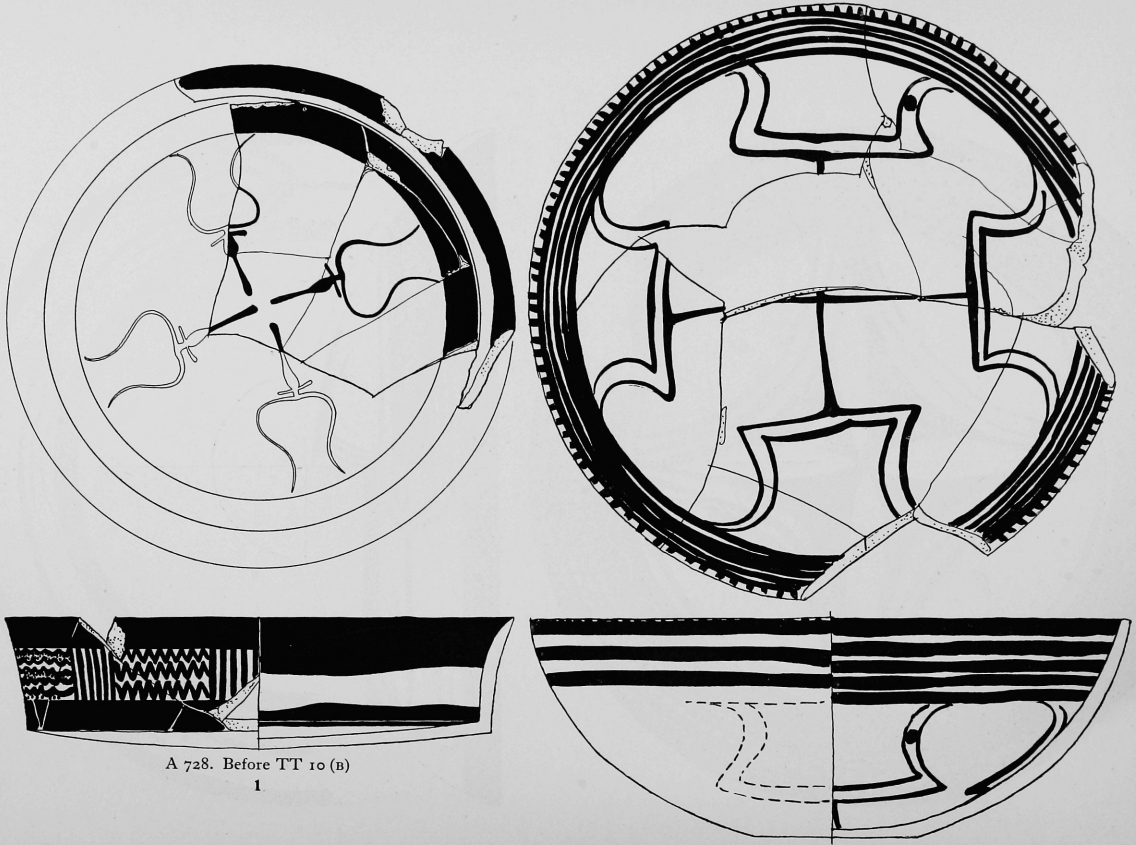
[1] *D.P.M.*, tome 13, pls. XVI–XVIII.
[2] *Memoirs of the Archaeological Survey of India*, No. 43, pl. XV.



A 754 (B) Scale $\frac{1}{2}$

Inside: Cruciform design *Outside*: Impaled *Bukranium*

FIG. 55. PAINTED PLATE OF THE TALL ḤALAF PERIOD
TT 6



A 728. Before TT 10 (B)
1

2. A 515. TT 6

Scale 2/5

FIG. 56. PAINTED POTTERY OF THE TALL ḤALAF PERIOD WITH *BUKRANIUM* DESIGNS

regulation of the furnace; but the surest index of an early piece is a tendency towards naturalistic representation: in the fully developed period of TT 6 design becomes severely abstract.

Double cross design on a saucer.

Fig. 57, No. 1, A 742, shows a small bowl, rim diam. 0·16 m., ht. 0·042 m., from the burnt house, TT 6. The design is polychrome, black on the inside, and bright indian red on the outside; the clay is pinkish-buff. The centre-piece is a six-armed or double cross, each arm triangular, and on the sides there are three rings of horizontal ripples. Next to this bowl there was another specimen almost identical in clay, colour, and design, A 743, but of slightly smaller dimensions (rim diam. 0·14 m., ht. 0·032 m.); curiously enough this was the only instance in which two bowls with identical designs were found in TT 6. In spite of homogeneity of style, almost every piece of the Tall Ḫalaf period is an individual work of art, no one piece being exactly like another.

Cruciform designs on saucers.

One of the most attractive shapes affected by the potter of TT 6 and immediately preceding periods is the shallow bowl or saucer, with thin sides; one example has already been described on pp. 112–113 above, Plate XVII (*a*), A 755. The finest polychrome specimen is shown on Plate XVII (*b*), A 745. The dimensions are: rim diam. 0·14 m., ht. 0·023 m. The design is in black and red paint on a buff clay slip. The centre-piece consists of a Maltese cross with curved arms, in black paint and outlined by the thin reserve of buff slip; the space between the arms is filled with red paint, and outside the end of each arm of the cross there are concentric arcs in red and black paint alternately. Around the centre-piece a circle is described in black paint, but at the junction of the arcs on to the circle, the paint is red. The design on the side of the bowl consists of cross-hatching in black paint and there are two bands of red paint in which there is a design consisting of a thin undulating line left as a reserve on the slip.

The outside of the bowl has an angular cable design in black paint, between bands.

The paint on this saucer is matt, except on the outside, where it is lustrous. This piece, which has suffered hardly at all from the fire, has a singular charm. The design is flowing and there are easy curves which, though lacking the mathematical precision of other designs, as for instance the slickly drawn cross on Fig. 61, No. 2, A 732, gain in charm by their softness of effect. The piece is a little coarser than egg-shell, but still very fine, and of great delicacy.

Cruciform chequer pattern on a plate.

One more fine example of a bowl with cruciform patterned centre may be mentioned here, though this specimen shown on Plate XIX, No. 6, A 524, was found in TT 7 and is probably a little earlier in time than the pottery

from the burnt house. Ht. 0·065 m. The design is done in a brown paint on a buff slip. The centre-piece consists of a cross with straight arms, and in the cross there is a chequer pattern, the squares alternating with a stipple and a quatrefoil. The cross is surrounded by a ripple design. In the segment formed by the arms of the cross there are rayed suns. On the outside there are diagonals running obliquely to the vertical axis of the pot.

The cruciform centre divided into a chequer pattern is interesting, as it is suggestive of the designs used on the Sumerian gaming-boards, and may perhaps be a prototype of these boards.[1] The design of suns is commonly found in the earliest period at Arpachiyah: it will be observed also that the bowl has been badly warped in the baking. The centre of the bowl is less fully decorated than the bowl types in TT 6. The three characteristics—inferior baking, absence of polychromy, and sparseness of design in the centre—show what we already know from stratification, that this bowl dates from an earlier period than the pottery of TT 6. In the time series it comes between the period of the earliest settlement and that which contains the fully developed ware of TT 6, i.e. it probably belongs to TT 7–10.

Bowl with cruciform design on the underside.

Fig. 58, No. 1, A 763, shows a bowl from TT 6 again with a cruciform centre. Dimensions: rim. diam. 0·16 m., ht. 0·05 m. The type is peculiar. There is a single band on the inside; on the outside there are horizontal bands with vertical parallels crossing them. The cruciform design is painted on the base, on the underside of the bowl, suggesting that the bowl was intended to be turned upside down and used as a table; perhaps a gaming-board (?). The cross consists of eight vertical parallels and eight horizontal parallels, intersecting at right angles; there is stippling between each of the outer parallels.

Fig. 58, No. 2, A 521, shows a deep dish, of a peculiar type, from TT 6. Ht. 0·076 m.; the clay is yellowish-buff, the paint black; unlike most of the specimens from Arpachiyah the clay is heavily impregnated with salt, and suggests that it is of a different variety from that ordinarily used. The design consists of metopes of double triangles placed point to point, both on the inside and outside of the bowl. The metopic treatment is interesting: it is rare at Arpachiyah, but a natural treatment for the double triangle design which is best rendered as a separate element of composition. Note the effect of counterchange by the juxtaposition of triangles. A similar effect may be noted on No. 3 of the same figure, an earlier specimen.

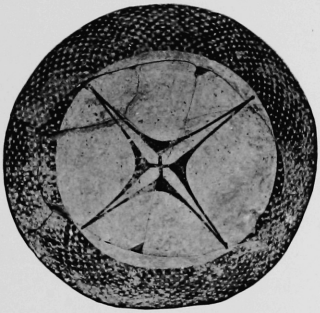
Vases.

A number of vase types were found in the burnt house, but there was only one polychrome specimen. This example is shown on Plate xx (*b*), A 739: although not damaged by fire the design has faded and is very faint in the original, cf. Plate xxii. The height of the vase is 0·145 m. The design is con-

[1] Woolley, *Ur Excavations, The Royal Cemetery*, ii, pls. 95, 96.

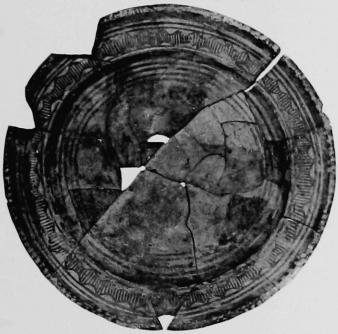
1. A 748 (B). Cf. Frontispiece

2. A 752. Cf. Plate XV



3. A 732 (B). Cf. Fig. 67, No. 2

4. A 754 (B). Cf. Fig. 55



5. A 749. Cf. Fig. 54, No. 4

6. A 524 (B)

7. A 740. Cf. Fig. 60, No. 5

8. A 744. Cf. Fig. 64, No. 2

9. A 531 (B)

NOS. 1–8. PAINTED POTTERY OF THE TALL ḤALAF PERIOD
NO. 9. A FRIT VASE

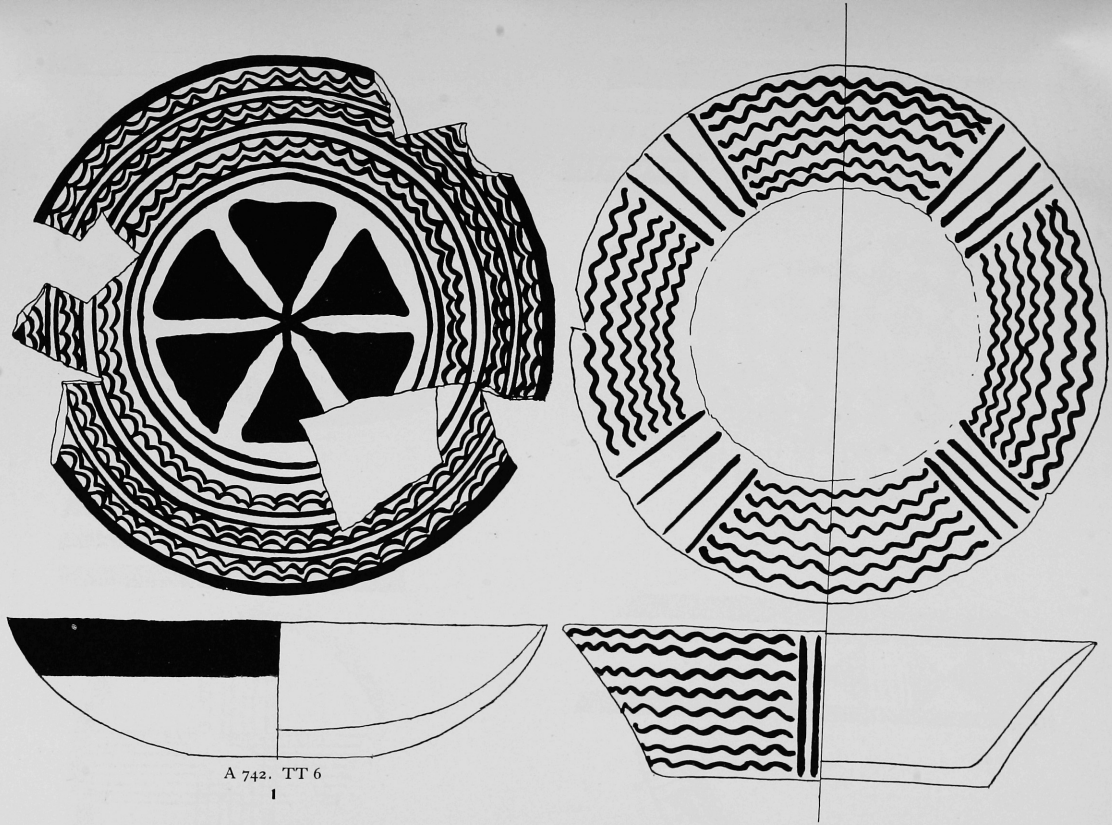
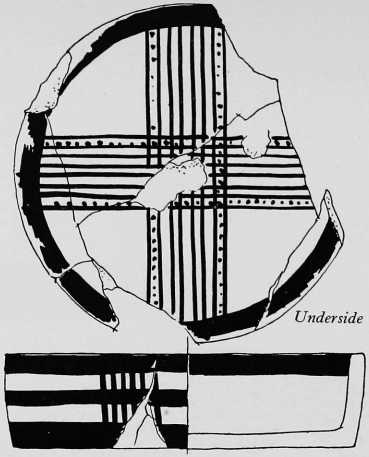
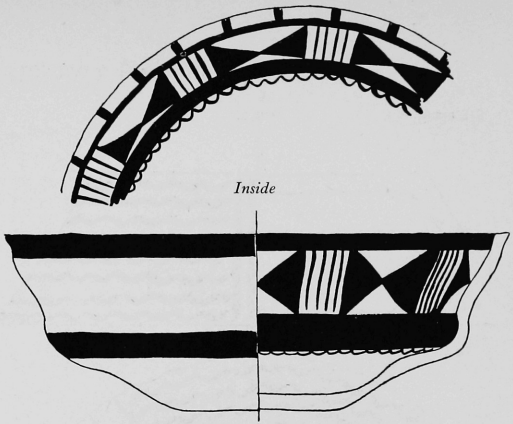


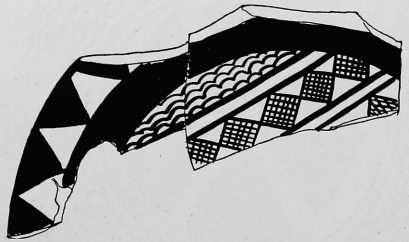
FIG. 57. PAINTED POTTERY OF THE TALL ḤALAF PERIOD

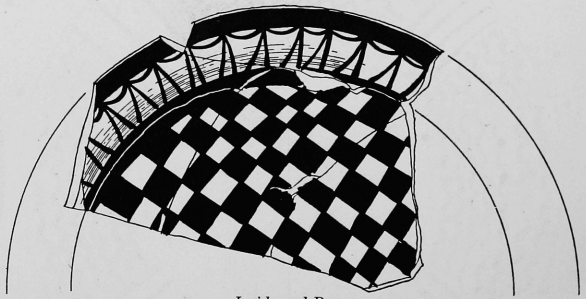


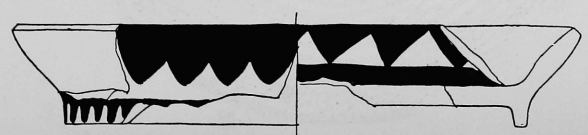
1. A 763. TT 6 (B)



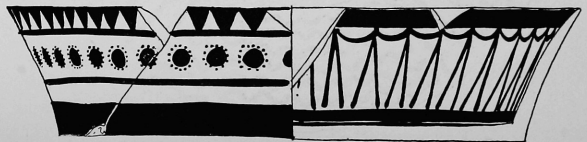
2. A 521. TT 6 (B)







3. A 770



4. A 729 (B)

FIG. 58. PAINTED POTTERY OF THE TALL ḤALAF PERIOD

Scale 2/5

fined to the outside of the bowl and consists of horizontal and oblique parallels done in black paint, on to the neck, the bottom horizontal being red. On the shoulder of the vase there is a chequer pattern consisting of black squares alternating with the pinkish-buff body clay. The uncoloured squares are impaled by intersecting diagonals drawn at a single sweep through the four rows of chequers, and giving the appearance of St. Andrew's crosses in the light squares.

Fig. 59, No. 1, A 768, shows a vase from the burnt house; it has an angular body and a bevelled rim. The bevelled rim is rare at this period, but will be observed in two other examples found in graves and votive deposits, Fig. 59, No. 2, and Fig. 60, No. 2. The height of this example is 0·085 m., the clay is buff, the paint dark red, and the design consists of hatching and horizontal bands; there is also a plain band on the inside of the rim.

Fig. 59, No. 5, A 516, shows another small vase, ht. 0·084 m., on which the colour has been almost burnt out by the fire in TT 6; the design is now a carbonized black, and the clay a dirty grey colour. The pattern is of the very simplest type, horizontals and an undulating line, with bands on the inner side of the rim.

Fig. 64, No. 4, A 517, ht. 0·075 m., is another example which has suffered badly in the fire and shows a similar carbon deposit to that found on the previous example; the colour is also similar. The two bands of undulating lines on the shoulder of the pot form a kind of guilloche pattern.

Fig. 64, No. 2, A 744, ht. 0·058 m., shows a much finer specimen, a miniature vase with lug handles, perforated horizontally: the use of the lug in Tall Ḫalaf pottery of this period is interesting. The height is 0·06 m., the clay pinkish-buff, with a smoothed well-finished surface, and the paint reddish-black; the base is very slightly concave. The principal design consists of four rows of oblique chevrons; a few of those in the top row are painted over the lugs.

Deep bowls with flat bases.

This type, which is illustrated on Fig. 60, Nos. 1, 3, 5, and 6, occurs at the most developed period of Tall Ḫalaf ware, and there are two fine examples from TT 6.

Fig. 60, No. 3, A 741, has a height of 0·085 m. The design is done in a reddish-brown paint on a cream slip. On the outside the design consists of quatrefoils left as a reserve on the body clay, and set in a background of reddish-brown paint. The quatrefoils are impaled by diagonals also done in reddish-brown. This pattern produces a very clever counterchange effect, so that the design appears either to be a quatrefoil pattern or as light circles enclosing squares with incurving sides. The method of brush-work may be understood from a portion of the design where the paint failed to run. It appears thus that the painter first of all drew his main lines, the horizontals, verticals, and diagonals, as a framework on the surface to be decorated: in the squares he then drew the outlines of a lozenge, with curved sides, and filled

this in with a solid wash of paint, thus producing a pattern with the lozenge and quatrefoil counterchange just described. The pattern was in fact produced by the construction of a purely formal geometrical diagram. The addition of two undulating parallels at the bottom of this pattern effectively prevents the scheme from becoming monotonous to the eye. On the inside there is an undulating line pendent from the band below the rim, in the characteristic manner of the Tall Ḫalaf potter.

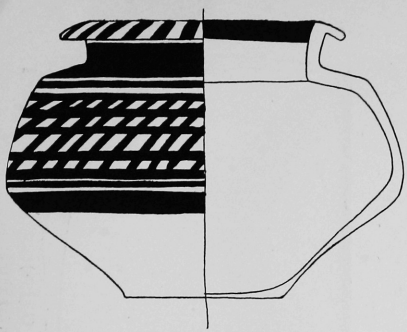
Fig. 60, No. 5, A 740, is another example of the type. The height is 0·095 m. This specimen has suffered severely in the fire. The design is done in a reddish-brown paint on a cream slip, but the greater part of the pot has become carbonized, and most of the body clay has turned to a smoky grey colour. The design consists of squares intersected by diagonals, so that each square is divided into four triangles. In each open triangle of the square there is a solid triangle, so that each square produces the effect of containing a Maltese cross with the arms unjoined. It will be seen that the original framework of the design for this bowl must have been drawn out exactly in the same way as on the previous example just described, Fig. 60, No. 3, and we may suspect that the same painter did both vessels, and perhaps the more elaborate pattern seen on the other example was evolved from this simpler type of design. Below the squares there is again a row of oblique chevrons, the counterpart of the undulating lines in the previous example. On the inside of the bowl there is an undulating line pendent from a band.

Fig. 60, No. 4, A 769, shows a variant of the type with a base smaller in proportion to the rim than the other specimens, and more sharply incurving sides. The height is 0·07 m. This rather inferior specimen has the design of oblique chevrons done in a red paint on a buff clay.

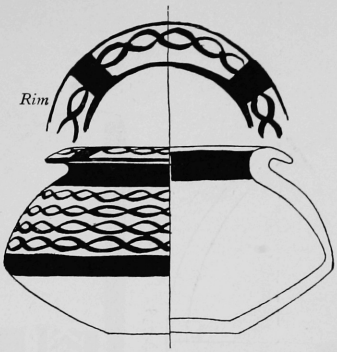
Pottery of TT 6 period found in graves, or in other parts of the settlement.

For the history of the development of the Tall Ḫalaf ware, the discovery at Arpachiyah of so many vases, in a single settlement TT 6, is of paramount importance, for it is certain that the large majority if not all of these vessels were made at the same period, many of them probably by one man, and we therefore have admirable data for comparison with other material which can be proved to belong to an earlier stage. A number of other specimens, however, not found in the burnt house, manifestly belong to the same period, as may be proved from stylistic and technical considerations. The specimens described below are probably therefore contemporary with TT 6; but it is well to make it clear that they come from different find places, each of which is mentioned in the description.

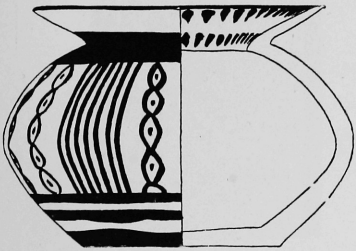
The first group consists of pottery found in graves dug down against the tholoi on the Tepe, and it will be seen at once that all this pottery is very closely related to material from TT 6. The description of the two graves, G 51, 53, was given above in Chapter 3, p. 42, under the catalogue of the graves. Both these graves were buried against the foundations of the tholoi of TT 8, and they cannot be earlier than TT 7 or later than TT 6, which is



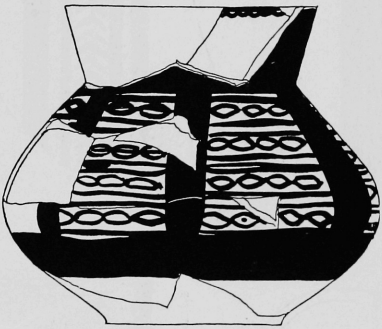
1. A 768. TT 6



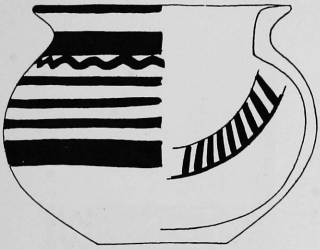
2. A 731. G 51



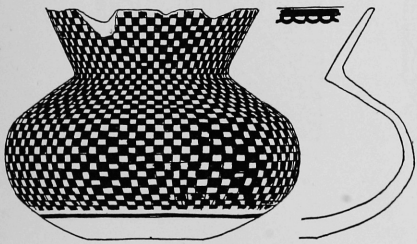
3. A 285 (B)



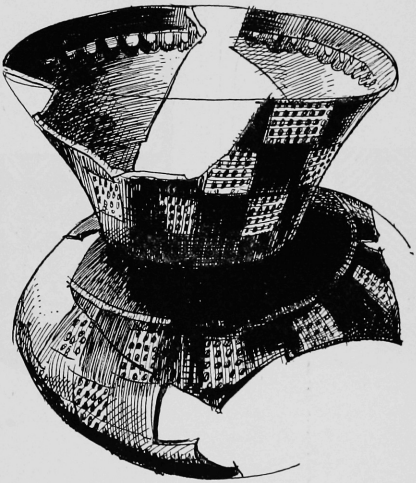
4. A 103



5. A 516



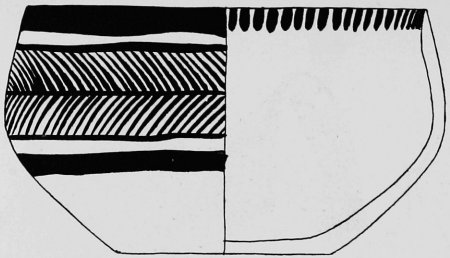
6. A 120 (B)



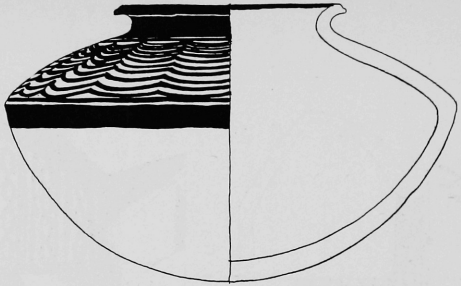
7. A 106

Scale ½

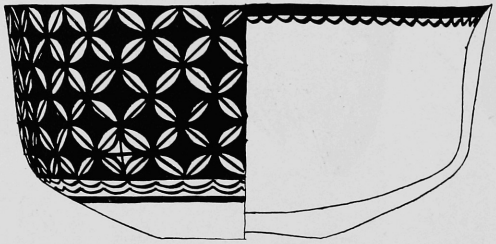
FIG. 59. PAINTED POTTERY OF THE TALL ḤALAF PERIOD



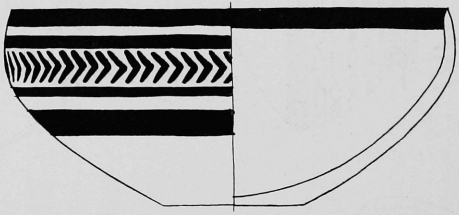
1. A 737 (B). Associated with **2.** A 738 in a votive deposit



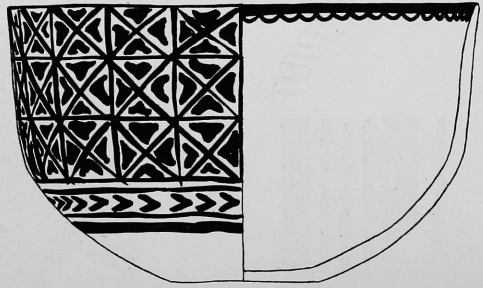
2. A 738



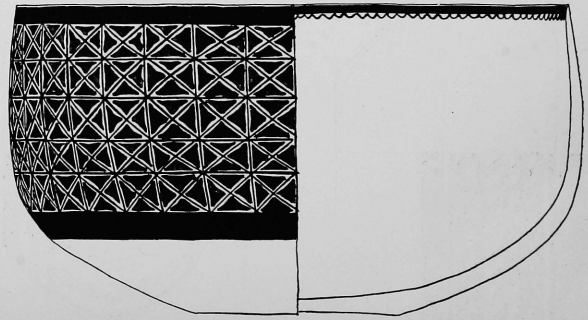
3. A 741 (B)



4. A 769



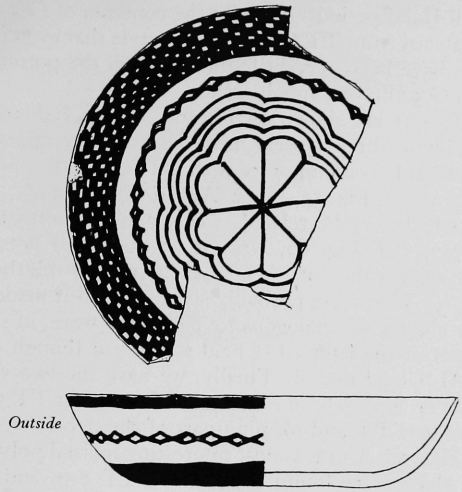
5. A 740



6. A 733. G 51 (B)

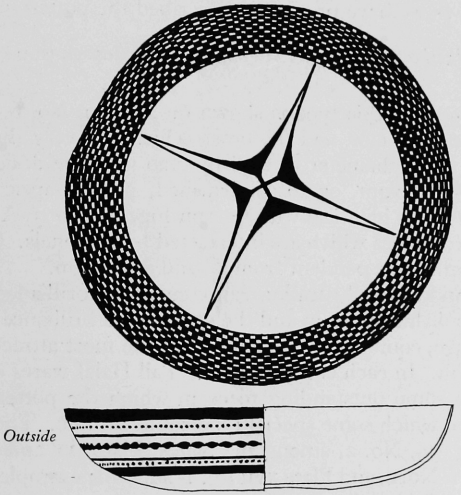
Scale ½

FIG. 60. PAINTED POTTERY OF THE TALL ḤALAF PERIOD. TT 6



A 116. TT 8

1



A 732. G 51 (B) Scale $\frac{1}{2}$

2

FIG. 61. PAINTED SAUCERS OF THE TALL ḤALAF PERIOD

the end of the Tall Ḫalaf period. Actually the contents of G 51 will be seen to resemble the material from TT 6 so closely in style that even if they belong to TT 7 there can have been very little difference in the pottery from these two strata, nor can G 52 be very much earlier.

The contents of G 51 are shown on Fig. 60, No. 6, Fig. 59, No. 2, and Fig. 61, No. 2. These three vessels must all be contemporary with one another, and are probably contemporary with TT 6. Another piece probably contemporary is shown on Fig. 53, No. 2, A 734, from G 53.

Another group which may be related to this material consists of the two painted vases A 737, 738, Fig. 60, Nos. 1, 2: these two pots were found deposited together against the outside face of the wall of the tholos in TT 7 near G 49; cf. Fig. 3. They were probably a votive deposit made from TT 6, and although their shapes are analogous to Tall Ḫalaf ware, in some respects they are reminiscent of the later Al 'Ubaid style even though they are certainly not of the Al 'Ubaid period. Finally, we have the two vessels shown on Plate XVI (*b*), A 511, a polychrome saucer discovered in TT 5, but almost certainly belonging to TT 6 and forming part of the debris on which TT 5 was founded, and Plate XX, A 512, a most interesting incised polychrome vase, the fragments of which were found scattered in TT 5–6, and were pieced together again. This vase again almost certainly belongs to the TT 6 period.

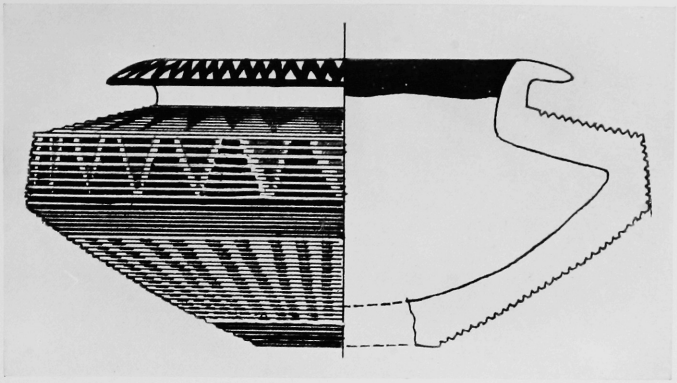
Now that we have indicated the find place of each of these pots which on grounds of style we may assume to be contemporary with the TT 6 material, we may proceed to describe them according to their various categories of shape and design, as we have previously described the pottery of TT 6.

Deep bowls with flat bases (cf. pp. 121–122, for the description of the type in TT 6).

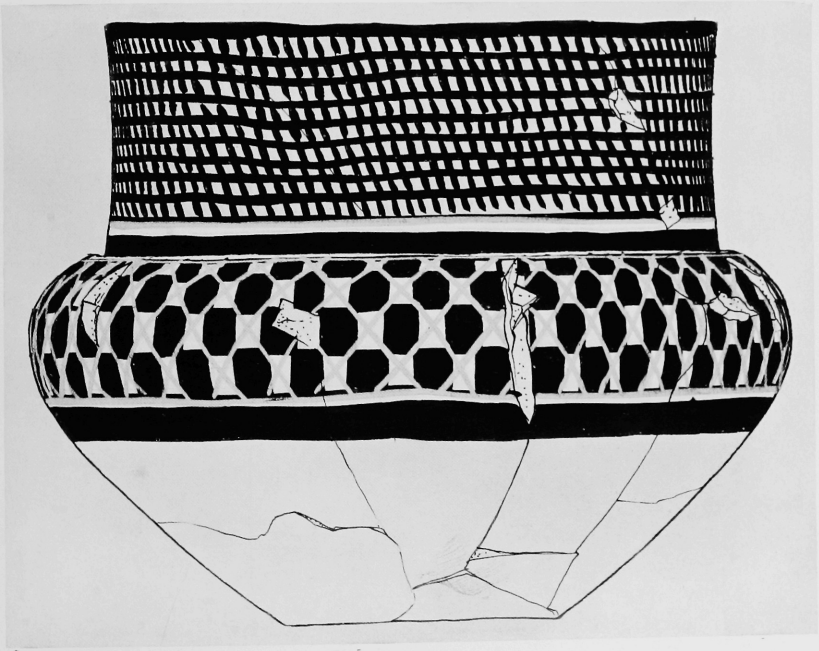
The finest example of this type is shown on Fig. 60, No. 6, A 733, from G 51. The height is 0·11 m. and the bowl, which was very slightly warped in the firing, has a rim diameter of 0·18 by 0·20 m. The design is done in a lustrous orange-red paint, on to a burnished, pinkish-apricot slip. The pattern on the outside is identical with that on Fig. 60, No. 5, A 740, a cruciform design inside squares which are intersected by diagonals. On the inside there is an undulating line pendent from a band at the rim.

Neither description nor illustration can convey the brilliance of the bowl itself. The high polish of the slip and the exceptional brilliance of the paint, with its orange tinge, combine to make it one of the most attractive pieces in the whole collection. In each category of the Tall Ḫalaf wares of this period there seems to be some outstanding piece in which the potter showed the supreme excellence which some special type could assume. Thus among the vases we have Fig. 59, No. 2, among the plates, Plates XV and XVIII, among the saucers, Fig. 61, No. 2, and Plate XVII (*b*), as supreme examples of technical and artistic excellence in each type.

Fig. 60, No. 1, A 737, from a votive deposit in TT 7, belongs to the same bowl type as Fig. 60, No. 6, but is a much less attractive example. The height



(*a*) A 512 (B)
INCISED AND PAINTED VASE
TT 6. Scale $\frac{1}{4}$



(*b*) A 739
POLYCHROME VASES OF THE TALL ḤALAF PERIOD. TT 5, 6
TT 6. Scale $\frac{3}{4}$

is 0·10 m., the clay is cream, and the surface has a smooth finish, the design is done in a brownish paint, and consists on the outside of a row of impaled oblique chevrons, between bands, and on the inside of vertical dashes pendent from the rim. Superficially the design is reminiscent of the simpler patterns on the pottery of the Al 'Ubaid period, but the skilful baking and fine quality of clay show that it must be assigned to the Tall Ḫalaf period. The design may be compared with the simple drawing on Fig. 60, No. 4, A 769, where we have an illustration of a very simple bowl from the burnt house, showing that the Tall Ḫalaf potter produced the simplest designs side by side with his more finished and elaborate pieces.

An interesting feature of this bowl is the potter's mark on the inside of the bowl, incised on to the base: it consists of two simple curves, shaped like an m.

Vases. (Cf. pp. 118–119 for a description of the type in TT 6.)

Fig. 60, No. 2, A 738, shows a vase from the same deposit as the bowl Fig. 60, No. 1, described above, and certainly contemporary with it. The height is 0·104 m., the clay cream, with a smooth well-finished surface, the paint plum-red. The design consists of parallel horizontal ripples painted on to the shoulder of the vase, and is almost identical with an example from the Tall Ḫalaf *Nin.* 2[1] stratum. The squat neck and sharply bevelled rim are characteristic of Tall Ḫalaf vase types; this use of bevelled rim and plum-red paint is also characteristic of Jamdat Nasr ware, as we shall see below.

A second vase, from G 51, Fig. 59, No. 2, A 731, is the most perfect example of its type. The height is 0·066 m. The design is done in a lustrous black paint on a burnished salmon-pink slip. On the rim there are four bands dividing the circumference into four equal parts, and between each band there is a simple cable. On the outside there are four rows of cables. Here again, no illustration can convey the brilliance and finish of the original which is as fine an example of the potter's art as can be desired. The clean ferruginous clay which could be fired at a high temperature displays the vitreous lustre which enhances the design on the Tall Ḫalaf pottery, and in effect may be compared with the glossy print of a photograph.

The last example of a vase of this period is shown on Plate XX (*a*), A 512. This remarkable piece has a height of 0·05 m. and is both incised and painted, with a polychrome design in bright red and black paint. The incised pattern consists of a very fine horizontal ribbing over the entire surface of the vase. The top section of the body of the vase is painted over with triangles done in red paint on to the buff body clay, the middle section has a row of triangles which are alternately in red and in black paint, and the bottom section has alternate bands of black paint and buff body clay. On the outside the rim has a black zigzag design identical with the zigzag pattern on the rim of the fine plate done in colour, frontispiece, A 748. On the inside of the rim there is a plain black band.

The type of incised pattern, with fine ribbing, is reminiscent of basketry,

[1] *A.A.A.* XX, pl. XLII, No. 3.

and we may surmise that the potter here had in mind some coloured basket-work prototype.

In style this little vase suggests certain affinities with pottery of the Jamdat Nasr period. We may mention especially the bevelled rim and short straight neck, and the combination of light and dark triangles as a painted pattern.[1] On the other hand, this vase clearly fits in with the Tall Ḫalaf series: the type of ribbed incised ware was frequently found in the Tall Ḫalaf levels. Cf. below, p. 174. At most, therefore, this example suggests a possible point of contact between Jamdat Nasr and Tall Ḫalaf. There is as yet no proof; but there is a certain possibility that the later polychrome pottery of Jamdat Nasr which is intrusive into southern Babylonia over the Al 'Ubaid, may have been derived from a northern ancestry, ultimately to be traced back to the early school of polychromy represented by the ware of the Tall Ḫalaf period. This vase was made up from scattered fragments which were found both in TT 5 and in TT 6.

Saucers. (For the type in TT 6, cf. p. 117.)

Another of the gems of the collection came from G 51. The example shown on Fig. 61, No. 2, A 732, came from the inside of the bowl shown on Fig. 60, No. 6, which was placed by the head of the skeleton, cf. photograph, Plate III (*c*). This delicate thin-walled piece, which is so fine as nearly to be an egg-shell ware, has a height of 0·032 m. and a rim diameter of 0·137 m. The design is in lustrous black paint on a burnished cream slip, and on the inside the centre-piece consists of a Maltese cross with curved arms, leaving a most effective counterchanged cruciform pattern as a reserve on the light body clay. The surround at the sides consists of a chequer pattern, and on the outside there is a solid cable between two rows of dot stippling.

This very beautiful specimen shows a delicacy of brush-work which makes the piece rank among the finest products of the period. The very effective centre-piece is a precise geometric drawing, enhanced by a skilful use of the counterchanged pattern. We have mentioned the significance of the Maltese cross on p. 113, above; here we have proof positive that the design has funerary associations. The exceptionally fine quality of every piece found in G 51 suggests that it was the burial-place of some one of considerable importance, and that the precincts of the disused tholos of TT 7 were chosen as hallowed ground; cf. Chapter 2, p. 34 above, on the purpose of the tholoi.

Fig. 61, No. 1, A 116, shows another saucer of a similar type but coarser in quality of clay and in general technique than the previous example. The height is 0·032 m. and the clay is buff, the design done in a lustrous black paint. The centre-piece consists of an eight-petalled rosette, each petal having a curved end and straight sides. The rosette is surrounded by three rings composed of curves which are concentric with the curved ends of the petals. Also on the base of the bowl there is a cable design and a chequer

[1] Mackay, *Jemdet Nasr*, I, pl. 78, and *passim*.

pattern on the sides. On the outside there is a plain angular cable design between bands.

A not altogether dissimilar design, eight-armed, rather than eight-petalled, may be seen on a sherd from Sur Jangal[1] where, however, the divisions corresponding to the petals in the Arpachiyah example curve in towards the centre of the bowl instead of away from it.

The Arpachiyah example has suffered from exposure to fire after baking. It was found in a black ash stratum in Fd V. 2 in rubbish adjacent to the tholos, which suggests that it may originally have belonged to the tholos and was partially destroyed in the fire which seems to have taken place in this area. This example was found at a depth of 2·5 m. below the surface, and if it is to be associated with the tholos would probably be contemporary with TT 8 and therefore a little earlier than the previous fine example, Fig. 61, No. 2, which was associated with TT 7. The slightly coarser design and finish bears out the evidence derived from the stratification, and indicates that this piece was made some time before the fully developed period of TT 6. Cf. table on p. 21.

Fig. 53, No. 2, A 734, shows another delicate saucer from a disturbed Tall Ḥalaf grave, G 53. The height of this piece is 0·05 m. and the rim diameter 0·15 m. The clay is buff with a smoothed surface, and the paint, originally red, has turned to a reddish-black in the firing. The centre-piece consists of a seven-petalled rosette, very crudely and unevenly drawn, with stippled petals. The surround consists of three rings of stippled cables separated by stippled bands. On the outside the design is composed of two rings of solid cables, plain bands, and stippling. This delicate piece is rather coarser both in finish and design than the small saucers of TT 7 and TT 6, and probably belonged to a slightly earlier period; if we compare the centre-piece with any other of those previously described on the finer wares, we shall see at once the crudeness of the drawing.

Plate XVI (*b*), A 511, shows a bowl with a polychrome design, which in shape comes half-way between the shallow saucer, Plate XVII, and the deeper bowl type shown on Fig. 60, Nos. 1, 3–6. The height is 0·045 m., the clay is buff, with a coarse finish, unburnished, and the design is done in dark terra-cotta and plum-red paint. The centre-piece consists of an eight-petalled rosette, the petals done in dark red and outlined in light red. The sides, both inside and out, consist of a chequer pattern in dark red squares alternating with the buff of the body clay, and intersected by diagonals in light red.

This bowl was found in TT 5 amid the debris of TT 6, which had been used for the purpose of relevelling. The general effect is attractive but the brush-work and finish is coarser, and the furnace must have been ill-regulated during the baking, as the red shows considerable variation in tone.

We have now surveyed the rich and fine material from TT 6; we have observed the able use of geometric designs, many of them figures constructed as formal geometrical diagrams, based on a skilful use of the square and the

[1] STEIN, *Memoirs of the Archaeological Survey of India*, No. 37, pl. XX, S.J. II, 4.

diagonal, producing a counterchanged effect whereby the body-clay ground contrasts with the painted figure. The firing shows considerable technical skill; the use of a lustrous paint on a burnished slip gives an added brilliance.

In the succeeding chapter we shall see that this technique was based on a long tradition of potting, and that the workmanship of pieces found in the very earliest settlements at Arpachiyah is directly related to the more finished products of a later age. Innovations there were, but from the beginning there was a latent talent the full maturity of which we have been studying in the finished products of TT 6.

Chapter 10

TALL ḤALAF WARE: POTTERY FROM THE EARLY LEVELS, PRECEDING TT 6

In the Tall Ḥalaf period at Arpachiyah there are no two painted pots which are identical in shape and design. As with the early pottery of the chalcolithic age, every piece is made by hand, without the use of the wheel, and in consequence shows some individual characteristic that distinguishes it as a work of art with its own special significance. With the coming of the wheel the making of pottery was speeded up, and the potter began to find himself the slave of the machine: mechanical mass production set in with the inevitable deterioration of quality in certain directions, in spite of advances in others. For it is indeed a universal aspect of human progress that in whatsoever direction a man may advance he must lose something in the process: whatever gain man makes, is made at a price. In every branch of industry a stage comes in intensive commercialization when the output declines in quality.

Certainly at Arpachiyah there was never again a pottery which could compare with the early hand products of the Tall Ḥalaf age. The highly vitreous clays, skilful firing, great hardness of slip, vivid colouring, the use of polychromy, skill and variety of design, the freshness of each individual piece—all these things surpassed by far the later efforts of the mechanical artisans of Babylonia. But it is just this individualism that makes a comprehensive survey of this early ware so difficult: in Babylonia pottery sorts itself out easily into a number of set types, or set forms of design. For the Tall Ḥalaf ware, no single system of classification could be at once consistent and comprehensive; and in describing the majority of this pottery we shall therefore be obliged to obtain some kind of order in our description, partly by reference to design, and partly by reference to shape, our main purpose being to indicate certain broad principles of style and varieties of design on the one hand, and on the other hand, to point to a few fixed shapes which were dependent on the particular use for which the vessels were intended. We shall find that no single category is self-contained; but we shall find also that there are certain characteristics which distinguish a pot as coming early or late in the series, and therefore enable us to work out a sequence in the development of this ware.

The Arpachiyah cream bowl. (Fig. 62, Nos. 1–5; Fig. 63, Nos. 1–3; Fig. 76, No. 3.)

Here we have a distinctive type which can be assigned to a special class. These bowls are all delicate pieces with thin walls, highly baked, almost invariably covered with a slip, and with designs done in a lustrous paint. The base is bevelled and has a sharp groove on the inside, suggesting the use of a last; at all events while the bowls were drying, before being baked, it is probable that a ring of wood, made to measure, was inserted to enable the potter to mould his sharp base, and fit it on to the body of the pot, as well as to prevent the walls from falling in. Some of the examples were probably made in two separate pieces, but the junction of base and side is as a rule so skilfully done that there is not the slightest indication of the two parts having been fitted together separately. The clays were ferruginous, thus enabling the thin walls to stand up to a very high degree of heat without warping—one of the most remarkable characteristics of this ware.

The feature which distinguishes this class of bowl from all others at Arpachiyah is the sharply bevelled base. This peculiar base suggests a metal prototype: certainly this form of base, highly fragile and difficult to make, is far more natural to metal than to pottery. Our own workmen from the modern village of Arpachiyah used an almost identical type of milk bowl, only of larger dimensions, in copper. This bevelled base is one that is easily hammered out by the copper-smith, and the groove on the inside allows the drinker to swill the liquid freely round the base of the pot. The present-day use of an identical type of milk bowl suggested the term 'Arpachiyah cream bowl' for this small and delicate type, which up to date has not been found on any other site outside Arpachiyah and Nineveh.[1] That metal was used on the site in the early period is made certain from the discovery of a lump of lead in the burnt house, and there were three copper fragments at other places on the site.[2]

The design most commonly applied to the 'Arpachiyah cream bowl' is a stippling, and the bevelled base as a rule is divided into squares or rectangles of dark paint alternating with the lighter body clay, giving an empanelled effect. The illustrated examples show the main varieties of design; they are as follows:

Fig. 62, No. 1, A 762. Rim diam. 0·125 m., ht. 0·04 m. Burnished apricot clay, very clean in section. Design in red paint consists of panels of egg and dot stippling, and vertical parallels. On the base rectangles of the light body clay, alternating with rectangles of red paint. Undulating line pendent from a band at the rim, on the inside. From sq. Fb IV. 4, at 2·5 m. below the surface. Probably as early as TT 10.

Fig. 62, No. 2, A 772. Ht. 0·065 m. Deep apricot clay with smooth burnished surface. Reddish-black paint; egg and dot stippling and vertical ripples. On base, solid, stippled, and open rectangles. From sq. Fb IV. 4, at 1·5 m. below the surface. Pre-TT 6.

[1] *A.A.A.* xx, pl. xlii, No. 19.

[2] Cf. Chapter 8, pp. 103–104.

Fig. 62, No. 5, A 771. Rim diam. 0·22 m., ht. 0·082 m. Unusually large specimen. Polished cream slip, design in reddish-black paint. Panels of egg stippling and vertical ripples. Solid and open rectangles on base. Undulating line pendent from a band, on the inside. This specimen was broken and mended with bitumen in antiquity. From sq. Fd IV. 4, at 2·5 m. below the surface. Probably as early as TT 10 or earlier, cf. photograph, Plate XXII, No. 7.

Fig. 63, No. 2, A 154. Ht. 0·059 m. Polished apricot slip, lustrous black paint. Panels of circles with dot centres and stippled borders, alternating with panels of vertical ripples with stippling between each rippled band. Solid and stippled rectangles on the base. Undulating line pendent from a band at the rim on the inside. Exceptionally fine specimen; the design is enhanced by the bright burnish and lustrous paint. From sq. Fb IV. 4, at 1·5 m. below the surface. Pre-TT 6.

Fig. 62, No. 3, A 767. Rim 0·16 m., ht. 0·072 m. Apricot clay with smooth well-finished surface, black paint. Outside, plain bands, and on the base, solid circles with stippled borders. Inside, undulating line pendent from a band at the rim. From sq. Fb IV. 4, at 2 m. below the surface. Probably as early as TT 7 or earlier.

Fig. 62, No. 4, A 764. Rim 0·19 m., ht. 0·072 m. Burnished apricot slip. Lustrous black paint. Outside, a row of solid running triangles or wedges with curved sides between bands of stippling; similar triangles on the base. Inside, triangles between stippling and a double undulating band forming a guilloche pattern; cf. Fig. 64, No. 4, A 517, from TT 6 for a similar design. The full decoration of the inside as well as the outside of the cream bowl type is exceptional. From sq. Fb IV. 4 at 1·7 m. below the surface. Probably as early as TT 7 or earlier.

Fig. 63, No. 1, A 153. Ht. 0·03 m. Cream clay, with smooth polished surface. Lustrous reddish-black paint. Cross-hatched running lozenge design with infilling. On the base, alternating solid and stippled rectangles. Inside, undulating line below a band. Plain band under base. This is one of the most beautiful specimens of the type; the walls of the bowl are exceptionally thin, very nearly egg-shell in thickness, and the delicacy of the piece is enhanced by the fineness of brush-work. Loose in soil near tholos, in Fd V. 2. Early design, probably as early as TT 10, or earlier.

Fig. 63, No. 3, A 726. Ht. 0·07 m. Apricot clay, smooth matt surface, bright red paint. *Bukranium* design consisting of pairs of horns, a single row on the side of the bowl and a series of rows on the base. On the outside plain cross-hatching and parallel obliques on the bevelled base. This is the largest example of the type in the collection. On the developed type of *bukranium* design, see below, p. 158, Chapter 11, for a more detailed discussion. From sq. Fd V. 2, at 1·2 m. below the surface. Period corresponds to TT 6 or TT 7.

Fig. 76, No. 3, A 727. Ht. 0·038 m. Apricot clay, smooth matt surface. Lustrous red paint. Inside and outside, horizontal T skulled *bukranium* back to back on stippled background. This and A 726, 764, Fig. 62, No. 4,

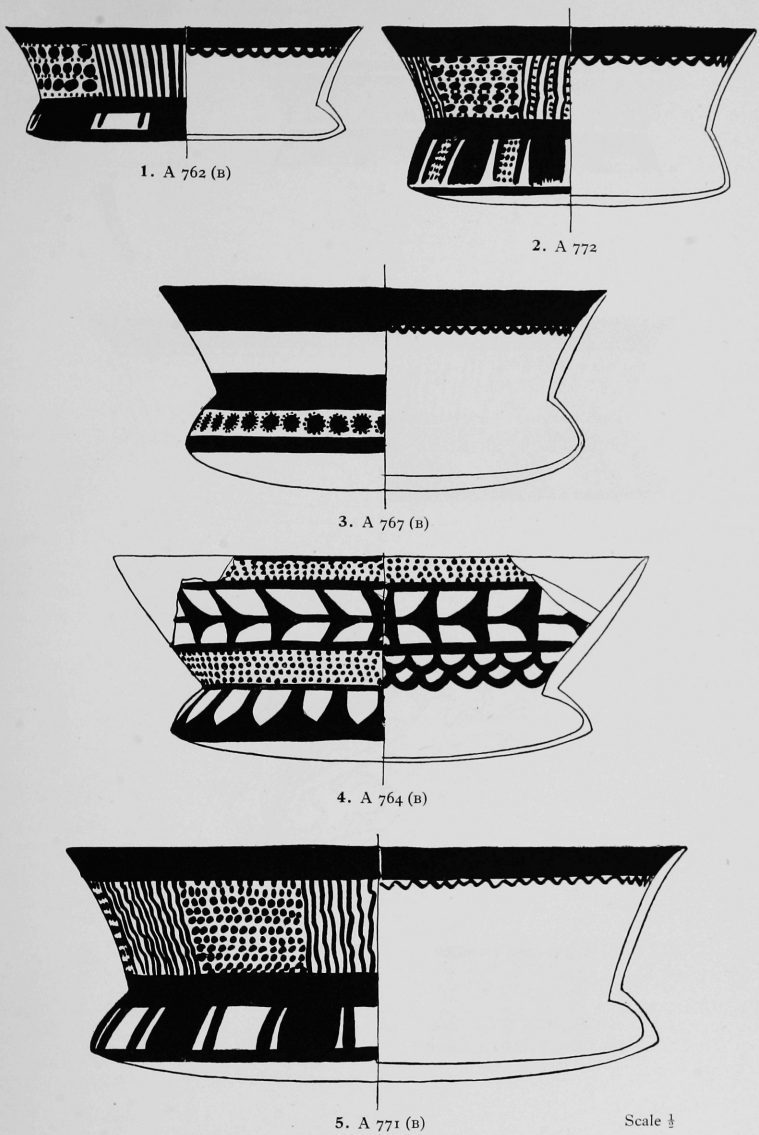
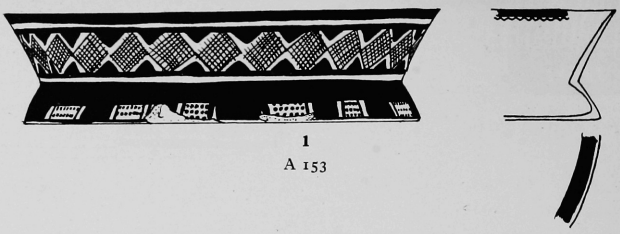
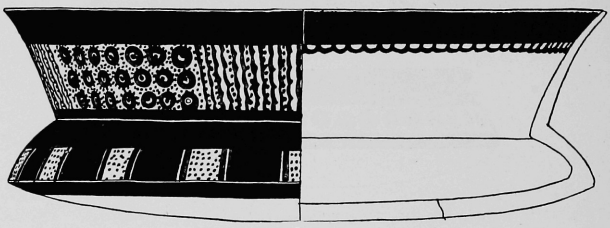


FIG. 62. PAINTED POTTERY OF THE TALL ḤALAF PERIOD
'THE ARPACHIYAH CREAM BOWL'

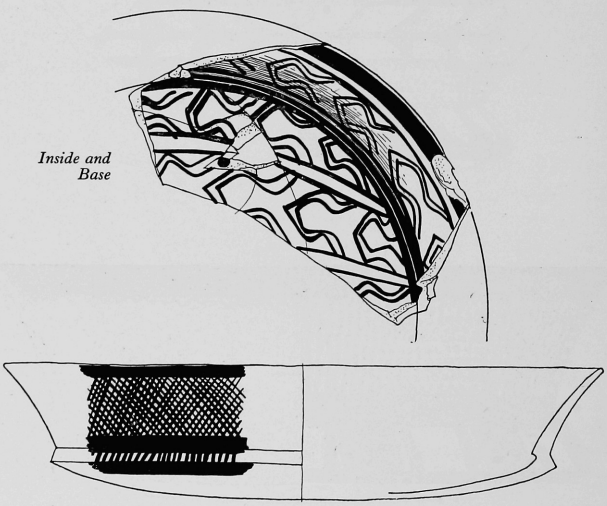


1
A 153



2
A 154

Scale 3/5



3
A 726

Scale $\frac{1}{3}$

FIG. 63. PAINTED POTTERY OF THE TALL ḤALAF PERIOD
'THE ARPACHIYAH CREAM BOWL'

Fig. 63, No. 3, are the only specimens fully decorated both inside and outside. The *bukranium* pattern is of the developed type; cf. below, pp. 156 ff. From sq. Fb V. 1, an ancient rubbish dump at 2·5 m. below the surface. TT 6 or earlier.

'Arpachiyah cream bowl': sequence dating.

In addition to the pieces described above, a number of fragments of this type with bevelled base were found in the earliest levels at a depth of 5 m. below the surface, just above virgin soil, in sq. Fd IV. 4. It is therefore certain that this delicate type was known in the very earliest period of which we have evidence at Arpachiyah, and this in itself is conclusive proof of the general homogeneity of the Tall Ḥalaf pottery. Reference to the strata in which the pieces described above were found shows that no single example comes from TT 6, and that the majority of pieces seem to be a little earlier than this period. The bevelled section and splayed side is curiously enough found on some of the large polychrome plates, c.f. frontispiece, with the addition of a flat base; this type may therefore be a development of the cream bowl type. It is perhaps surprising that this delicate class of ware should not have turned up in TT 6, and this suggests that the type had gone out of fashion by the time of the polychrome period, though it is always dangerous to argue from negative evidence. At all events it is certain that the majority of the extant specimens belong to a period prior to TT 6 and that the earliest specimens are earlier than TT 10 and are to be found in the first settlements on the site. The only difference between them and the later specimens is a difference in quality of clay and firing. The earliest specimens are of a coarser clay, less evenly fired, and the paint tends to run from black to red, producing an accidental polychrome effect, which may be termed polytone rather than polychrome.

Pottery with stippled designs.

On the Arpachiyah cream bowl type we saw that one of the most characteristic designs was stippling. The use of stippling is very common at Arpachiyah, and the most delicate brush-work is seen in the finely stippled circles on the polychrome plates of TT 6. The design is more common than any other at Arpachiyah, and it will be found convenient to take under a single heading all those pots which have a stippled design as their principal pattern: the stipple will as a rule be found to cover the greater part of the surface of the pot on the outside.

Stippled designs. Champagne vase. Fig. 65, No. 4, A 730, shows a fine specimen of a champagne vase with a design of egg and dot stippling and a chequer pattern on the outside, and of vertical parallels below the rim on the inside. The clay is apricot with a smooth finished burnished surface, and the design is done in a lustrous black paint. The cup is oval in shape, measuring 0·20 m. by 0·066 m., and the height 0·185 m. The champagne vase type, though rare at this period, is represented by a number of fragments

of pedestals[1] from levels prior to TT 6, and in the burnt house there was a champagne vase type in stone and fragments of two painted examples in pottery. Cf. above under stone vases, pp. 76–77, Fig. 44, No. 16.

This specimen was found lying in the ground with three other vases of the Tall Ḫalaf period shown on Fig. 64, Nos. 7, 9, A 736, 735, both with stippled designs, and A 285, Fig. 59, No. 3, a vase with a cable pattern. These four vases were all broken and found together with some ribs of sheep at 1·7 m. below the surface in sq. Fc V. 1, and there is little doubt that the entire group was a votive deposit, deliberately smashed and buried in the ground; a token of some magico-religious ceremony. The breaking of pots appears to be mentioned in the Old Testament as an apotropaic rite.[2] At Arpachiyah in this group we have the earliest example of this type of ritual. For the deposit, cf. photograph, Plate XXI (*c*). Period: probably about TT 7–8.

The discovery of this deposit has, however, a further importance in that it enables us to point to four types of pot all of which must have been contemporary. Two of the vessels, both with stippled designs, are described immediately below, the third, which has a cabled design, will be described in its appropriate context.

Stippled design. Squat vases. Fig. 64, No. 7, A 736, shows another vase that was part of the deposit. The height is 0·073 m. The design is in a lustrous black paint on a burnished apricot slip. Some of the paint has turned from red to black in the firing. The stipple is an egg and dot pattern, and there is a zigzag design on the outside of the rim, and on the inside an undulating line below a band.

The vase with bevelled rim has been observed before in TT 6 and is commonly found in the Tall Ḫalaf period; cf. Fig. 59, Nos. 1, 2.

Fig. 64, No. 9, A 735, shows the third vase with an egg and dot stipple from the same group. The height is 0·098 m. The design is done in a lustrous red paint, which has partly turned black, on a burnished apricot slip. Inside there is a band of vertical parallels pendent from the mouth of the vase. The high-splayed neck seen on this type is common in the Tall Ḫalaf period; cf. Fig. 59, No. 4, A 103; Fig. 65, No. 3, A 160; Fig. 64, No. 3, A 268.

It is interesting that these three vases from the votive group were all made out of exactly the same material—a clean ferruginous clay which takes an apricot tinge.

In addition to these specimens the following vases of the squat type and stippled design may be mentioned:

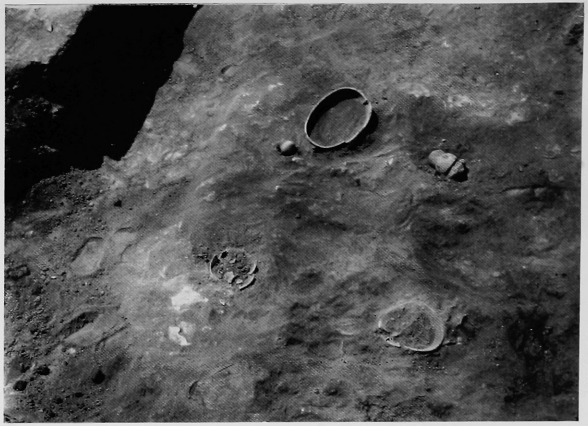
Fig. 64, No. 10, A 146. Ht. 0·08 m. Egg stippling. Pinkish-buff clay, black paint. Found loose in soil.

Fig. 64, No. 6, A 286. Ht. 0·066 m. Similar in shape to the previous example, with high-splayed neck; the design consists of oval stippling in

[1] A fragment of a cup with dotted circles in black paint on a buff clay, and another with a red quatrefoil design on a dark ground, from TT 6. Also fragments of pedestals from sq. Fb V. 2, at 1·5 m. below the surface. Period: TT 6–7.

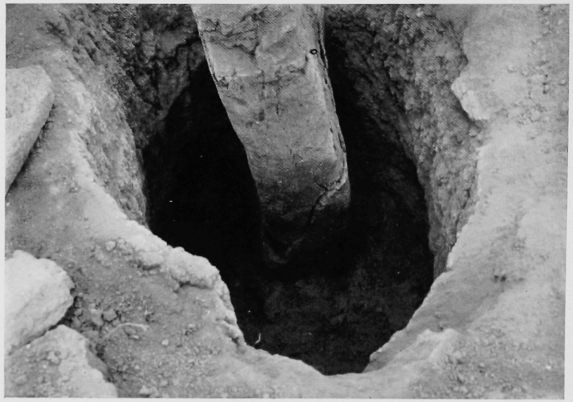
[2] Isa. xxx. 14, 'and he shall break it as the breaking of the potters' vessel that is broken in pieces'. Cf. also Jer. xix. 11 and Ps. ii. 9. Cf. J.R.A.S., 1926, 708, note 1.

(*a*) Large unpainted clay jar as found underneath the floor of the burnt house TT 6



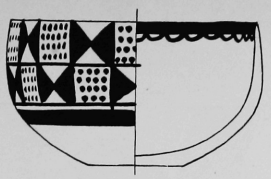
(*b*) Objects as found on the floor of the potter's shop in the burnt house TT 6

(*c*) Votive deposit of painted pottery and animal bones, found at 1·7 m. below the surface in square Fc V 1. Cf. Fig. 65, No. 4, for the reconstructed 'champagne' vase

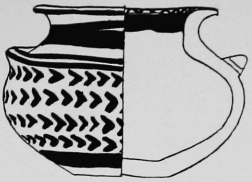


(*d*) Kiln of the Tall Ḥalaf period

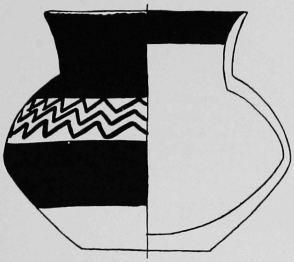
PLATE XXI



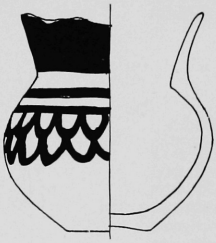
1. A 761 (B)



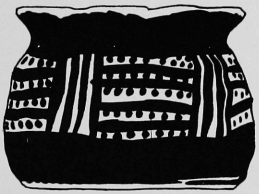
2. A 744. TT 6 (B)



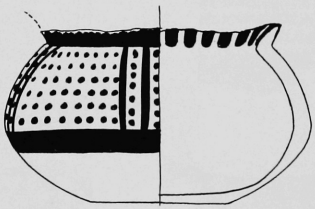
3. A 268



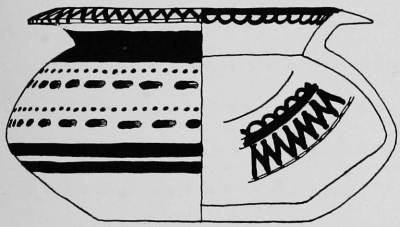
4. A 517. TT 6



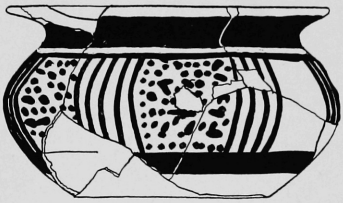
5. A 124 (B)



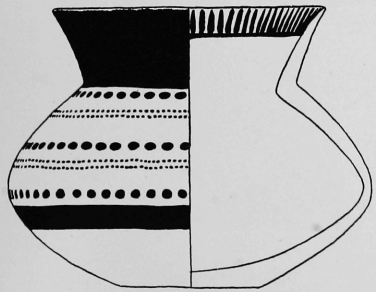
6. A 286 (B)



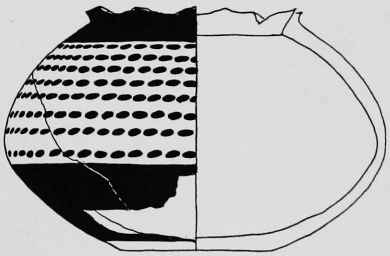
7. A 736



8. A 115



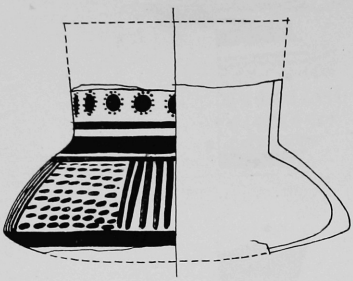
9. A 735 (B)



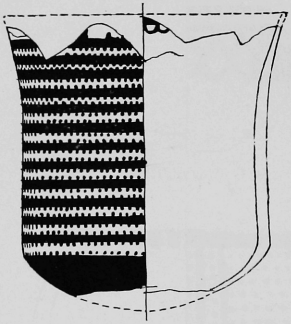
10. A 146 (B)

Scale $\frac{1}{2}$

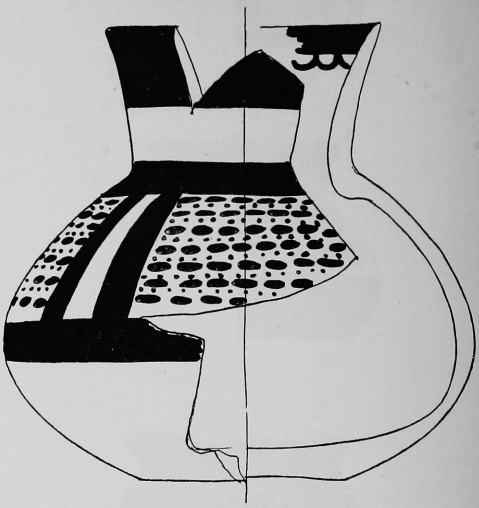
FIG. 64. PAINTED POTTERY OF THE TALL ḤALAF PERIOD



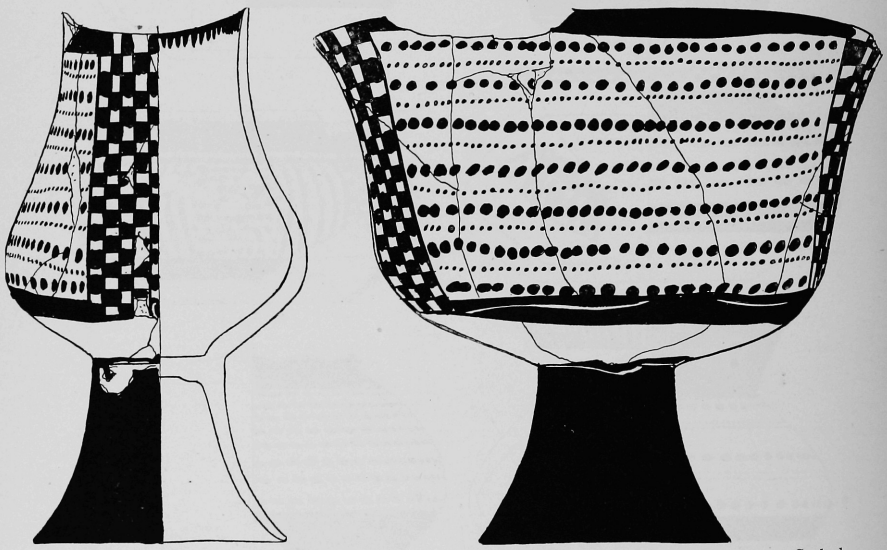
1. A 519 (B)



2. A 520 (B)



3. A 160



4. A 730 (B)

Scale ½

FIG. 65. PAINTED POTTERY OF THE TALL ḤALAF PERIOD

Before TT 6

panels, each panel separated by four or five vertical lines, red lustrous paint, mostly turned black in the firing, on a bright cream slip. From sq. Fb V. 1, at 2 m. below the surface. Corresponds to TT 7 or earlier.

Fig. 64, No. 8, A 115. Rim diam. 0·11 m. Similar to the previous example, but squatter, with a well-defined rim. Design in a black paint on a creamy-white burnished slip. Unlike most of the slips at Arpachiyah, this cream slip, which is slightly lustrous, does not adhere well to the body of the vase, and is a sign of early period. From sq. Fd IV. 4, at 2·5 m. below the surface. Corresponds to TT 10 or earlier.

Fig. 64, No. 5, A 124. Ht. 0·064 m. Shows a very coarse roughly made vase, with an empanelled stippled design in brownish-black paint on a buff clay, which is very thick in section. Found loose in soil. Coarse technique. Early period, probably before TT 10.

Stippled design. Large-bellied vase. Fig. 65, No. 3, A 160, shows a large-bellied vase, rim 0·09 m., ht. 0·158 m., with an egg and dot stipple, empanelled. The design is in black paint on a buff clay. On the inside there is an undulating line below a band. From sq. Fd IV. 5, at 2·5 m. below the surface. Deep level, coarse firing shows it to be early. Probably before TT 10.

Stippled design. Vase with squat body and high straight neck. Fig. 65, No. 1, A 519, shows a rare and delicate type, which with its fine clay and lustrous paint is reminiscent of the Arpachiyah cream bowl type. Probable ht. 0·082 m. The clay is dark buff and carbonized, the design is done in a lustrous black paint on a cream slip (?), and consists of solid circles on the neck with a stippled dot border; part of the neck is missing, and there may originally have been two or three rows of circles; on the body the design is an empanelled egg stippling. From an ancient rubbish dump in sq. Fb V. 1. Probably before TT 6.

Stippled design on a beaker. Fig. 65, No. 2, A 520. Ht. 0·104 m. This is a very rare type, and there is only one example of it at Arpachiyah. The design is in a lustrous red paint on a cream slip, and the clay in section is light red. The design consists of parallel bands with dot stippling between; the dots partly overlap the bands. On the inside there is an undulating line pendent from a band at the rim. This is an exceptionally fine piece, perfectly fired at a high temperature; the attractive lustrous paint and burnished slip give an elegant finish to the piece. From sq. Fd IV, at 1 m. below the surface. Period: about TT 6 or 7.

Stippled design combined with a chequer patternon bowls with flat or round bases. Fig. 66, No. 7, A 104, shows a fine example of the type. The height is 0·105 m. The design is done in a bright red paint on a yellowish clay. On the outside the design consists of a chequer pattern, stippled squares alternating with squares containing an impaled quatrefoil design. On the inside there is an undulating line pendent from a band at the rim. The impaled quatrefoil we have already observed on pottery from TT 6, but the design is to be found on many earlier pieces. This example was found on a denuded portion of the Tepe in sq. Fe V. 1, and belongs to a level which corresponds approximately with TT 8–9.

Fig. 66, No. 6, A 140, rim diam. 0·125 m., shows a bowl with a rounded base, and a similar form of design, but the quatrefoils are impaled by a Maltese cross with long arms and curved ends as well as by intersecting diagonals. Lustrous black paint, yellowish-black clay, vertical dashes below the rim on the inside. From a *pisé* level in sq. Fc V. 2, at 1·6 m. below the surface. Level probably corresponds with TT 8–9.

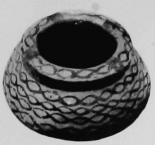
Fig. 66, No. 5, A 148, shows a deep bowl, with flat base, splayed neck, and convex shoulder. Ht. 0·10 m. The design is in red paint on an apricot clay, and consists on the outside of bands and dot stippling, and on the inside of rectangular panels of dot stippling and squares containing a pattern made up of a Maltese cross with elongated arms and curved ends, and a quatrefoil design left as a reserve on the body clay. On each petal there is an almond-shaped eye design. In shape this vessel belongs to the same series as A 521, Fig. 58, No. 2, and A 749, Fig. 54, No. 4, both TT 6 plates. This specimen was found in an ancient rubbish dump in sq. Fc V. 1, at 3 m. below the surface, but here the depth cannot be taken to imply early date. This specimen is probably earlier than TT 7, but not earlier than TT 10.

Fig. 64, No. 1, A 761, shows a fine example of a miniature bowl, rim diam. 0·086 m., ht. 0·05 m. The design in red paint on a pink clay consists of a chequer pattern with alternate squares of dot stippling and triangles placed point to point; on the inside an undulating line pendent below a band. From a denuded portion of the Tepe in sq. Fe V. 1, found close to Fig. 66, No. 7, A 104, above, probably contemporary with it. Level corresponds to TT 8–9.

Stippled design. Other examples. Stippling has now been shown to be a common motif on almost every shape of pot, from the earliest levels down to TT 6. It is also used on certain other examples which are not described under this heading, e.g. Fig. 59, No. 7, A 106, on a vase, combined with a chequer pattern; Fig. 76, No. 3, A 727, where it forms the background for a *bukranium* design; cf. p. 132 under the Arpachiyah cream bowl. In Fig. 76, Nos. 2, 4, it figures again on pots with *bukranium* patterns, and on a fine early vase, Fig. 67, No. 1, A 144, with an angular cable; cf. p. 143. A possible origin for the stippled design will be described in Chapter 11 on the evolution of design at Arpachiyah.

Cable design on vases.

Fig. 59, No. 4, A 103, shows a vase with a bellied body and high neck. The height is 0·115 m. The clay is light buff, and the design is in a lustrous black paint on an apricot burnished slip. The design consists of empanelled cables; some of the cables are impaled. On the inside there is an undulating line pendent below a band at the rim. The pot is very thin in section; the uneven firing, and a slight unevenness of colour in the paint, marks the specimen as early. Generally speaking, what may be termed as empanelled designs, where the pattern is divided into sections, each section being separated by verticals, is an early characteristic which occurs before TT 6. Contrast this with Fig. 59, No. 2, A 731, from TT 7, where the cable is continuous. This



1. A 731. Cf. Fig. 59, No. 2

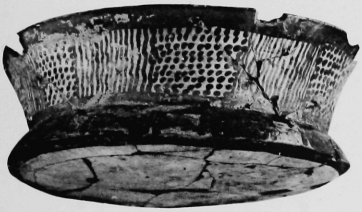
2. A 739. Cf. Plate XX (b)

3. A 738. Cf. Fig. 60, No. 2

4. A 735 (B). Cf. Fig. 64, No. 9

5. A 730 (B). Cf. Fig. 65, No. 4

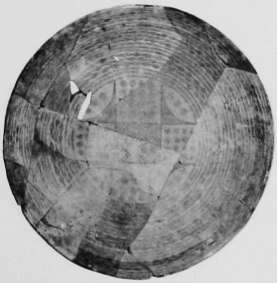
6. A 285 (B). Cf. Fig. 59, No. 3



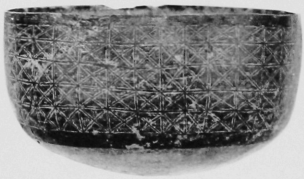
7. A 771 (B). Cf. Fig. 62, No. 5

8. A 112 (B). Cf. Fig. 72, No. 2

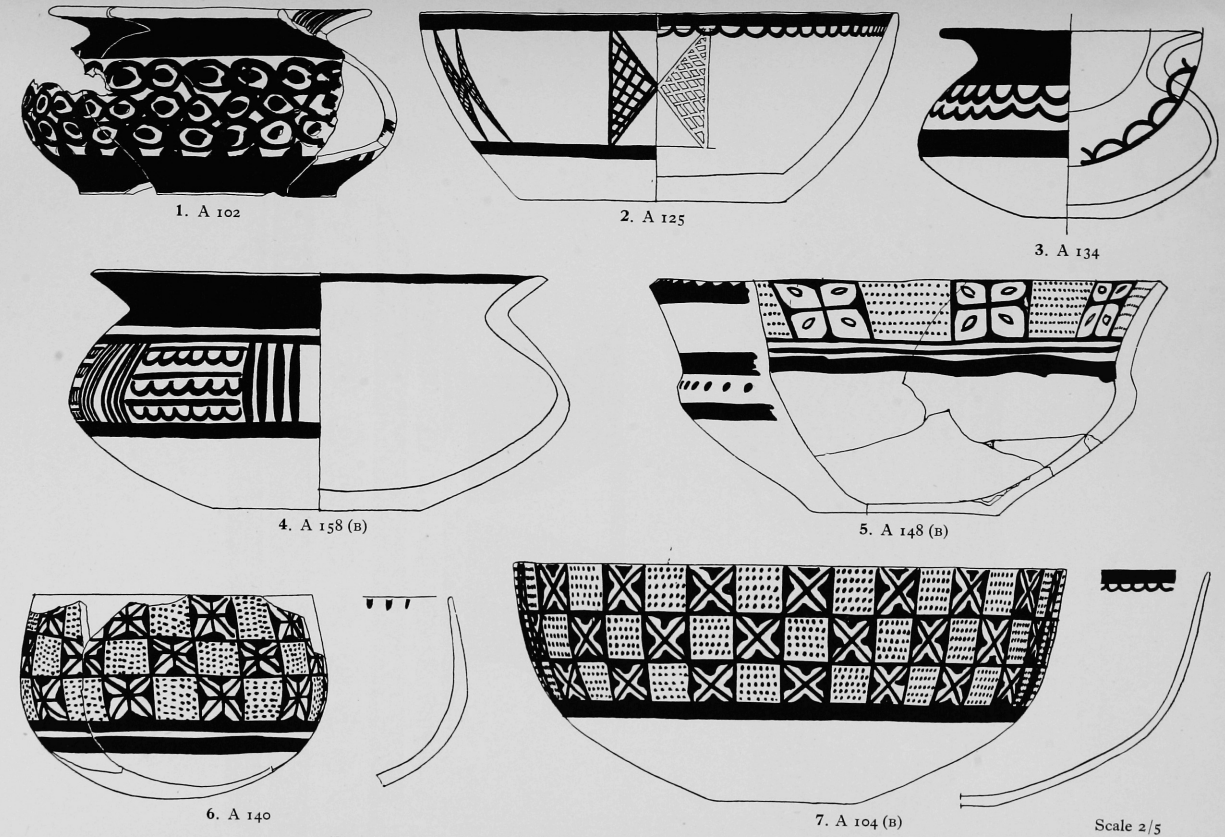
9. A 736. Cf. Fig. 64, No. 7



10. A 751 (B). Cf. Plate XVIII



11. A 733 (B). Cf. Fig. 60, No. 6



1. A 102

2. A 125

3. A 134

4. A 158 (B)

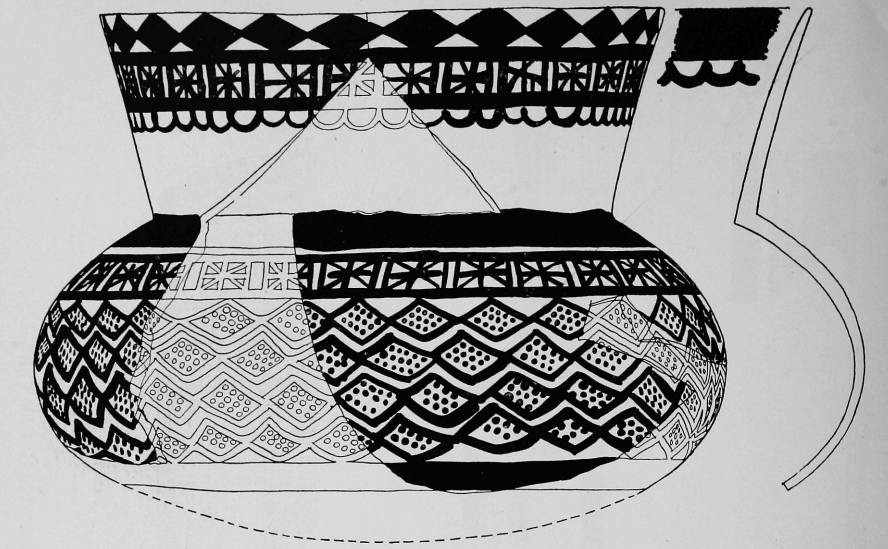
5. A 148 (B)

6. A 140

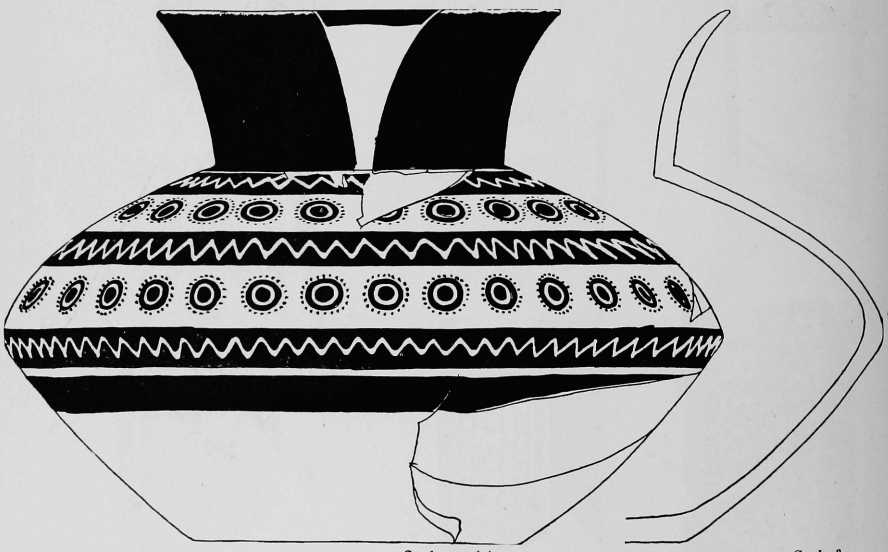
7. A 104 (B)

Scale 2/5

FIG. 66. PAINTED POTTERY OF THE TALL ḤALAF PERIOD



1. A 144 (B)



2. A 117 (B)

Scale $\frac{2}{5}$

FIG. 67. PAINTED POTTERY OF THE TALL ḤALAF PERIOD

Before TT 10

vase was found in sq. Fd IV. 4, at 2 m. below the surface. Probably before TT 7.

Fig. 59, No. 3, A 285. This fine example has a height of 0·087 m. The design is in a lustrous black paint on a cream slip. The cream slips never adhere to the body of the vase as well as the apricot. The design consists of a vertical stippled cable in panels separated by rows of seven vertical parallels: on the inside of the rim there are vertical dashes. This vase was found in the votive deposit containing the champagne vase together with other vases described above on p. 136; Fig. 65, No. 4, A 730, Fig. 64, Nos. 7, 9, A 736, 735. From sq. Fb V. 1, at 1·6 m. below the surface. Probably corresponds to TT 7–8 or earlier.

Fig. 67, No. 1, A 144, shows a magnificent specimen of a vase containing a cable design. This vase has a rim diameter of 0·204 m. and height of 0·184 m. The clay is apricot-coloured and has a smooth burnished surface, and the design is in a lustrous black paint. The neck has a design of solid running lozenges and a row of square panels or metopes containing four intersecting diagonals forming a rayed star pattern; below the metopes is an undulating line. On the body another row of rayed stars forming a metope pattern, and below this, four rows of angular cables with dot stippling. Inside an undulating line pendent below a band at the rim. This is one of the finest specimens of a vase from the early Tall Ḥalaf levels: it was found in sq. Fd IV. 4, at a depth of 2·5 m. below the surface, in one of the old occupation levels. Probably before TT 10. (Compare with it the fine specimen in the same Fig. 67, No. 2, found at the same level. Cf. below, p. 151.)

Fig. 66, No. 1, A 102, shows another example of a vase with a cable design, to be assigned to the early period. The height is 0·08 m., the clay buff, and the design in black paint consists of three rows of cables forming a kind of guilloche pattern, with heavy dot centres. Above and below the cables, plain bands, with infilling above the bottom band. On the inside of the rim vertical parallels at intervals. This specimen comes from a slightly higher level than the previous one, from sq. Fd IV. 4, at 2 m. below the surface. To be assigned to some period between TT 8–10.

Chequer designs on vases.

The chequer pattern has been met with frequently and discussed above, but two vases shown on Fig. 59, Nos. 6, 7, are special types.

Fig. 59, No. 6, A 120. Ht. 0·08 m. Pinkish-buff clay, black paint. Outside, an all-over chequer pattern. Inside, undulating line pendent from a band at the rim. Delicate piece. From a denuded portion of the Tepe, sq. Fe V. 1. Period: probably corresponds with TT 8–9.

Fig. 59, No. 7, A 106. A vase of unusual shape with a neck that is elliptical in plan, and a squat body. The rim diameter is 0·147 m. by 0·055 m. Buff clay, black paint. The design consists of an all-over chequer pattern with solid black and dot stippling alternately. Inside, an undulating line pendent from a band at the rim. The funnel-shaped neck and squat body of the pot

suggest a skeuomorphic origin. This form is natural to leather, and would be a useful shape for a leather pouch, which could be conveniently tied at the neck. There is a good parallel in the modern leather water-pourers in use at Mosul to-day. These water-pourers usually have funnel-shaped necks. From sq. Fc V. 1, at 3 m. below the surface. An early type, found in an early level, probably antedating TT 10.

A similar funnel-shaped neck with a quatrefoil design left as a reserve on a red ground was found at a level corresponding to TT 8–9, so that the type survived through a long period. The funnel-shaped neck appears also at Tall Ḫalaf.[1]

Simple rectilinear and curvilinear designs. Bands, hatching, undulating lines, ripples, zigzags, curves, on squat vases and bowls.

Fig. 71, No. 10, A 766, shows a fine example of a vase with a squat body and splayed neck. Ht. 0·066 m. The design is in lustrous red paint on a burnished apricot slip and consists of cross-hatching between bands. On the inside plain dashes below the rim. On the underside of the base a potter's mark or signature. Early period, from a Tall Ḫalaf house level, containing an oven, sq. Fc V. 1, at 3 m. below the surface. Period: probably before TT 10.

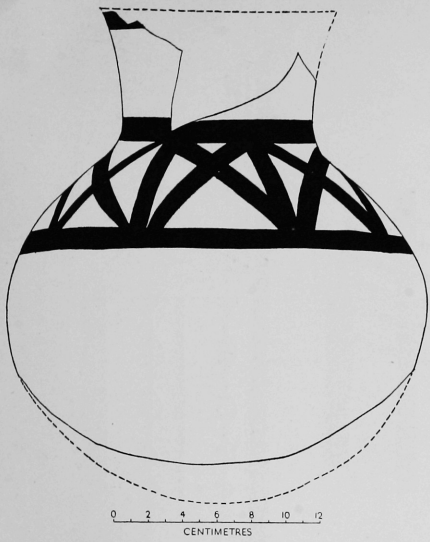
Fig. 66, No. 3, A 134, ht. 0·085 m., shows a vase of a pinkish-buff clay; the design is in black paint and consists of undulating lines between bands, and an undulating line on the rim. Apparently a late Tall Ḫalaf specimen, from sq. Fb V. 1, at 1 m. below the surface. Probably corresponds to TT 6.

Fig. 66, No. 4, A 158. Ht. 0·105 m. A vase with a design in black paint on a cream slip. The elements of the design are similar to the previous example, undulating horizontals running parallel, but they are empanelled. We have already observed that the metopic, or empanelled, style of design is usually an indication of early date. It is therefore interesting to find that this example comes from an earlier stratum than the previous specimen where there was a free running design. From sq. Fd IV. 4, at 2 m. below the surface. Probable period: corresponds to TT 8–9.

Fig. 76, No. 1, A 155, shows a squat vase, ht. 0·045 m., in pinkish clay with the design in red paint, consisting of parallel horizontal ripples between vertical bands. The walls of the pot are thin; the shape is interesting on account of the ring base, which is rare at Arpachiyah. From sq. Fe IV. 4, at 1·5 m. below the surface. Probable period: TT 7–8.

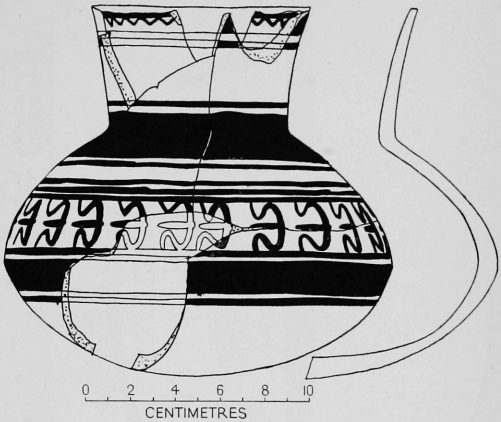
Fig. 64, No. 3, A 268, shows a vase with high neck, ht. 0·085 m., in a dark buff clay; the design, in black paint, consists of three parallel rows of horizontal zigzags between bands. The pot has been exposed to fire after baking, and has a carbonized polished surface. From sq. Ga IV. 4, at 1·4 m. below the surface. Period: before TT 6.

[1] VON OPPENHEIM, *Der Tell Halaf*, taf. 51.



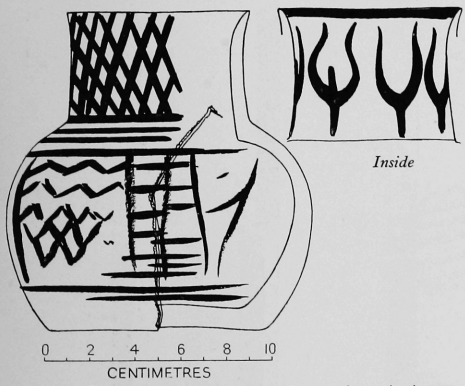
A 292. From grain silo

1



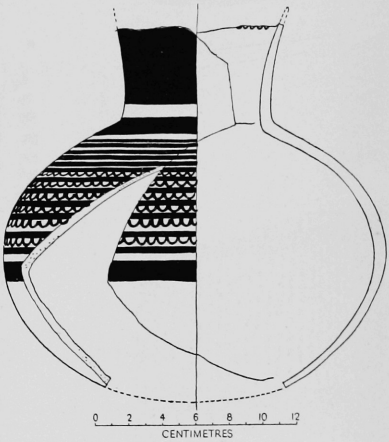
A 725

2



A 297. Broken and mended with bitumen in antiquity

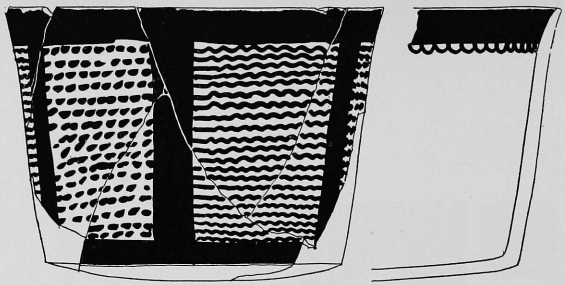
3



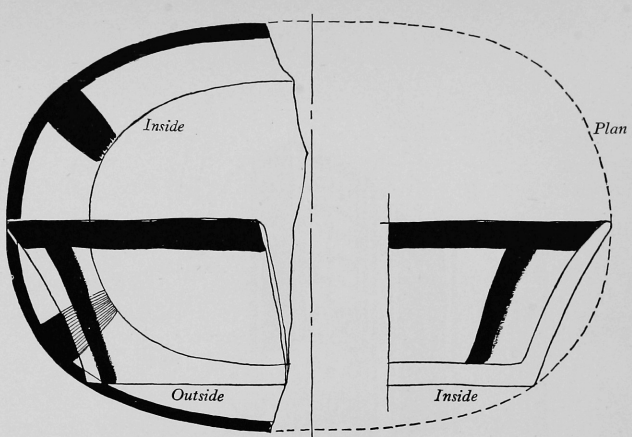
A 760

4

FIG. 68. PAINTED POTTERY OF THE TALL ḤALAF PERIOD



1. A 108 (B)



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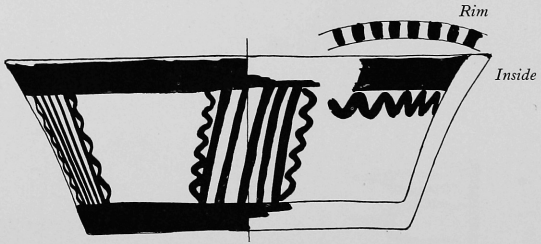
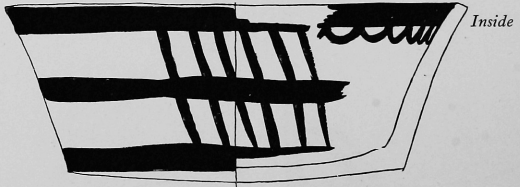
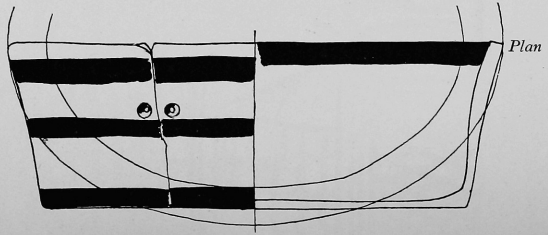


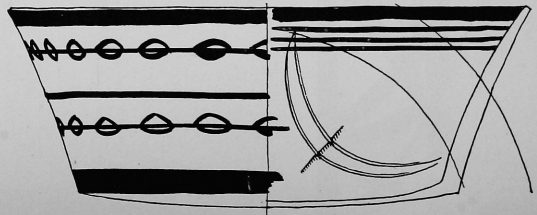
3. A 263



4. A 295 (B)



5. A 289
TT 6



6. A 296 (B)

Potter's mark on base.

Scale 2/5

FIG. 69. PAINTED BOWLS OF THE TALL ḤALAF PERIOD

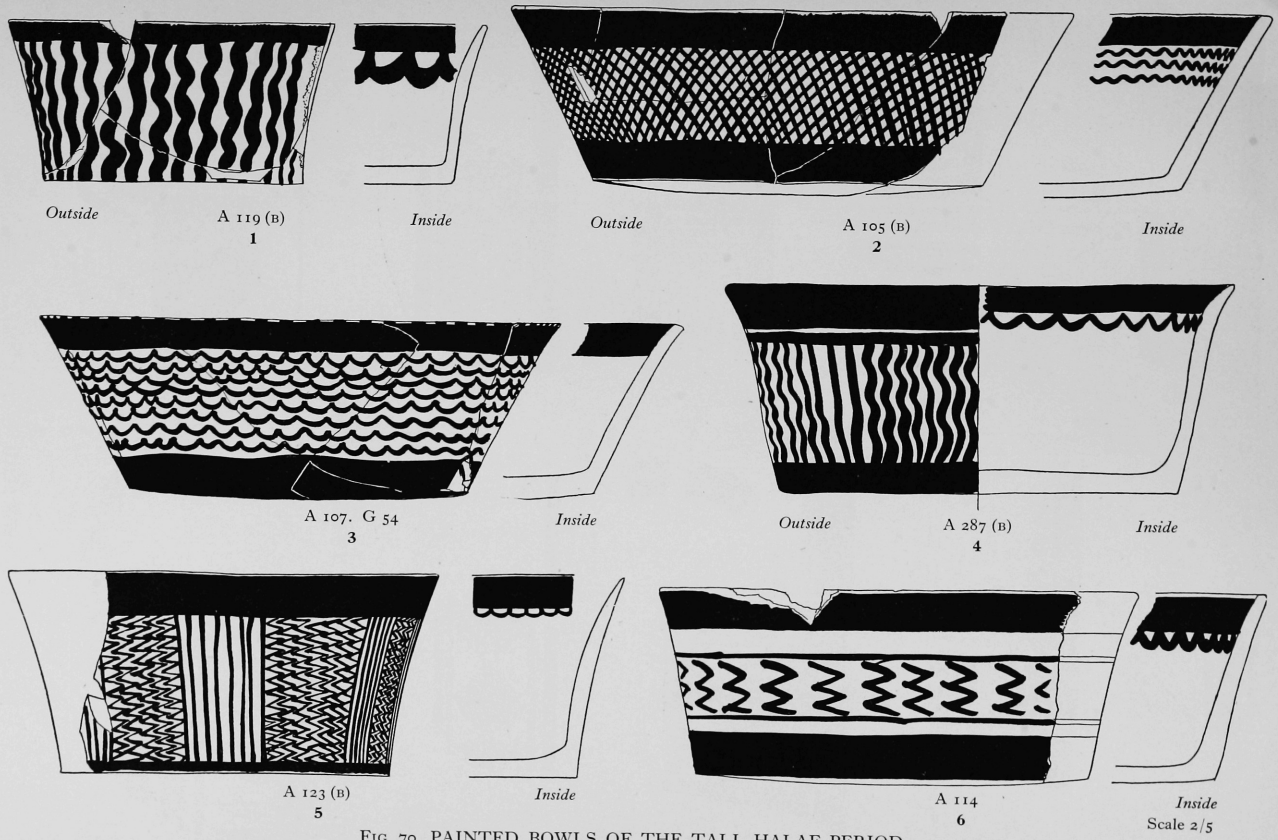
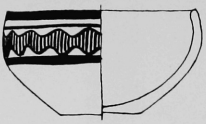
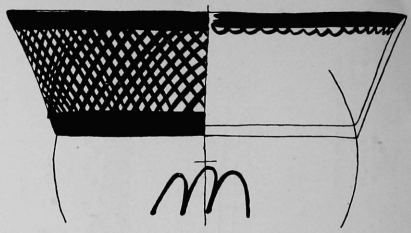


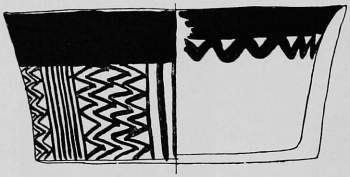
FIG. 70. PAINTED BOWLS OF THE TALL ḤALAF PERIOD



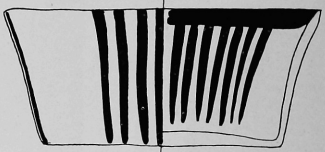
A 518 (B)
1



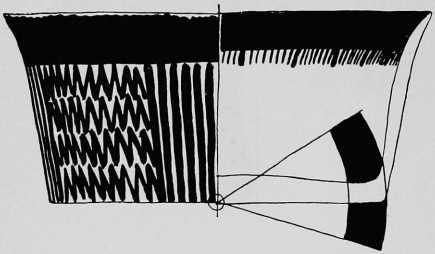
A 765 Potter's mark inside
2



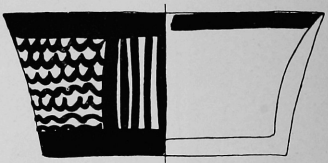
A 758
3



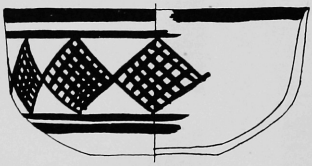
A 284
4



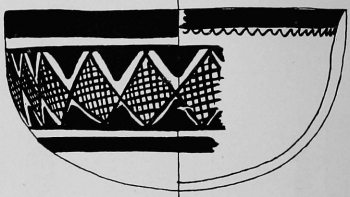
A 759 (B) *Plan*
5 *Base*



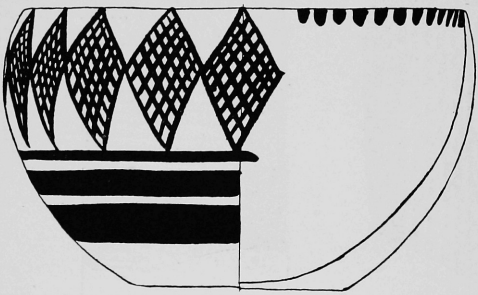
A 279 (B)
6



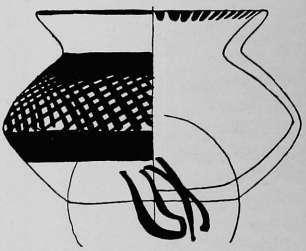
A 150 (B)
7



A 288 (B)
8

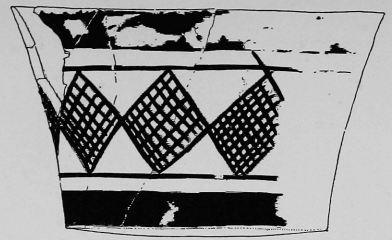


A 262
9

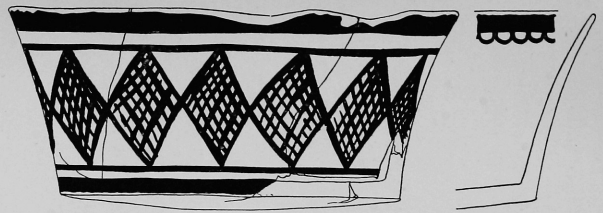


A 766 Potter's mark underside
10 Scale $\frac{1}{2}$

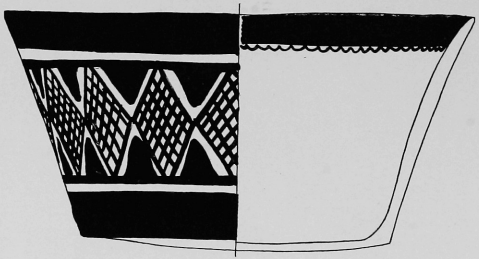
FIG. 71. PAINTED POTTERY OF THE TALL ḤALAF PERIOD



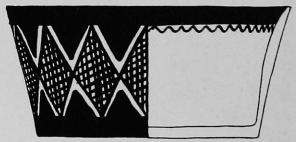
1
A 111. G 54



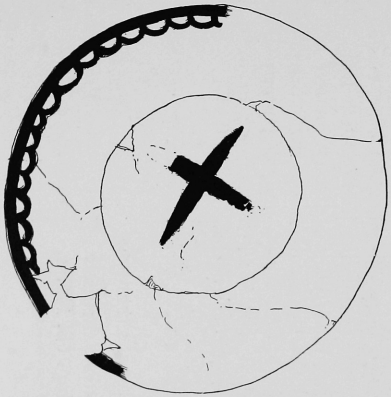
2. A 112 (B)



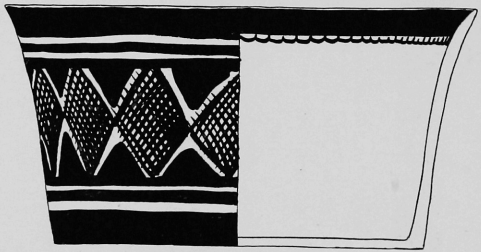
3. A 756 (B)



4. A 133



1



5. A 141 (B)

Scale 2/5

FIG 72. PAINTED BOWLS OF THE TALL ḤALAF PERIOD
Before TT 6

Crude linear designs on coarse pottery.

Fig. 54, No. 2, A 147, shows a vase, ht. 0·115 m., of a very coarse pinkish-buff clay, the design is done in black paint. This and the next specimen stand out as extremely coarse pieces, and we may suspect that both are the work of some raw apprentice. Found loose in soil.

Fig. 54, No. 1, A 128, a bowl, ht. 0·06 m., drab clay, arabesque design in black paint; exceptionally coarse ware; looks like the work of an apprentice. From sq. Fd IV. 4, at 2 m. Period: before TT 7.

Double cross-hatched triangle design on a deep bowl.

Fig. 66, No. 2, A 125, ht. 0·085 m., shows a bowl in pinkish-buff clay; the design is in red paint and consists of double triangles placed point to point and cross-hatched. On the inside there is an undulating line pendent from a band at the rim. The surface is well finished, and the bowl, which is evenly fired, shows good technique. The double triangle design occurs on pottery from TT 6; cf. Fig. 58, No. 2, A 521. This example is from sq. Fd IV. 4, sub-surface. Corresponds with TT 6.

All-over pattern on the base of shallow bowls.

Fig. 58, No. 3, A 770, ht. 0·043 m., shows a bowl in a deep apricot clay with a smooth burnished surface; the design in a lustrous reddish-black paint. On the outside there are solid triangles pendent from a band, giving a scalloped effect, and on the inner side, solid and open triangles giving a counterchanged pattern. The base has an all-over pattern consisting of rows of parallel ripples and cross-hatched running lozenges. Uneven firing and design suggest a period before TT 6. From sq. Fd IV. 5, at 1·7 m. below the surface. Probable period: before TT 7.

Fig. 58, No. 4, A 729, ht. 0·054 m., shows another fine example of the type, found together with the previous specimen described above. Buff clay, with smooth burnished surface, design in black paint. Outside, solid triangles pendent from the rim, and solid circles with stippled dot borders. Inner side, the undulating line pendent from a band at the rim, with the addition of two lines meeting at each incurve and forming a kind of festoon pattern with two legs, analogous to the Samarra festoon pattern, but a simpler version of it. On the base a chequer pattern. The bowl is important because of the analogy with Samarra designs.[1] From sq. Fd IV. 5, at 1·7 m. below the surface. Period: corresponds with TT 7–8.

Simple designs on large jars with high necks and rounded bases.

Fig. 54, No. 3, shows the type. Ht. 0·21 m. Smooth cream clay, design in lustrous black paint. On the neck undulating lines below bands, and one band on the body. Deep levels. Probably before TT 10.

Fig. 68, No. 4, A 760. Ht. 0·23 m. Design in a lustrous black paint on a deep cream slip. Horizontal undulating lines, or ripples, between bands.

[1] Herzfeld, *Die Ausgrabungen von Samarra*, taf. xix.

Early type. From sq. Fe IV. 4, at 2·5 m. below the surface. Probably before TT 10.

Fig. 68, No. 1, A 292. One of the largest painted jars in the collection. Ht. 0·285 m. Pinkish clay, with a smooth burnished surface; design, in bright red paint, consists of panels of intersecting diagonals. This jar was found in a silo, and had been used as a grain storer; cf. above, p. 15, and photograph, Plate I (*e*), showing the jar as found. Fragments of large painted jars bearing similar heavy rectilinear designs were found at Nineveh in the *Nin. 2* stratum,[1] and we may suspect that this type of ornamentation and vessel were regularly used in the granaries. From silo, at 3 m. below the surface, sq. Ga IV. 4. Period: TT 10 or earlier.

Stippled circle and reserved zigzag design on a large jar.

Fig. 67, No. 2, A 117, shows a fine specimen of the early period from the same stratum as that which contained Fig. 67, No. 1, A 144, described above, p. 143, and therefore presumably contemporary with it. The height is 0·19 m. The clay is greenish-buff, with a smooth surface; the design in black paint. Round the neck a solid wash of paint. On the shoulder there are bands of black paint, and in three of the bands, a zigzag design left as a reserve on the body clay. Between the bands there are two rows of concentric circles, with a stippled dot border. This vase undoubtedly belongs to the early period; from sq. Fd IV. 4, at 2·5 m. below the surface. Probably before TT 10.

Rectilinear and curvilinear designs on shallow bowls with wide mouths and incurving sides.

The type is shown on Figs. 69–72.

This class has been left to the last for description, as it is one of the earliest and commonest types of domestic pottery at Arpachiyah. Numerous complete specimens, as well as hundreds of fragments, were found in all the early levels; but the commonest type with an all-over pattern seems to have died out by the period of TT 6. Indeed, these bowls are hardly found at all in the Tepe, with a few rare exceptions, and the large majority, therefore, belongs to the period between the foundation of Arpachiyah and TT 10. As regards the evolution of this type, generally speaking, those specimens which are most sparsely decorated are the latest, and conversely those specimens which have an all-over pattern, where the artists seem to show a *horror vacui*, are the earliest. We may conveniently subdivide the type into early and late, roughly in accordance with the evidence of pattern and of stratification.

(*a*) *Late*, i.e. corresponding to some period between TT 6–10.

Fig. 69, No. 5, A 289, rim diam. 0·16 m. × 0·22 m., ht. 0·073 m., shows an example from the burnt house TT 6. Oval in plan. The design consists of plain bands of bright red paint on a smooth buff clay. The bowl was broken and riveted in antiquity, as is shown by the holes perforated at the points of fracture.

[1] *A.A.A.* xx, pl. xxxix, No. 15.

Fig. 69, No. 2, A 283, shows another simple type. Ht. 0·08 m. The design consists of bands in a reddish-brown paint on a whitish-buff clay. The painted bands are on both sides, as well as on to the rim. The plan is oval, as in the previous example. From sq. Fb V. 1, at 2 m. below the surface. Probable period: TT 7–8.

Fig. 69, No. 4, A 295. Ht. 0·08 m. Pinkish-buff clay, design in red paint, consists of oblique parallels impaled by a horizontal. On the inside an undulating line pendent from a band at the rim. This was apparently a votive deposit; it was found lying with animal bones, of an ox (?), at sq. Fc V. 1, at 2 m. below the surface. Probable period: TT 7–8.

Fig. 69, No. 3, A 263. Ht. 0·08 m. Reddish-yellow clay, the design is done in red paint on a cream slip. Outside, oblique parallels and vertical ripples; on the rim, dashes; inside, an undulating line below a band. Sq. Fc V. 1, at 2 m. below the surface. Period: TT 7–8.

Fig. 69, No. 6, A 296. Ht. 0·09 m. The design in brownish-black paint on a burnished cream slip, consists of two rows of impaled cables. Inside, parallel horizontals, and on the base a potter's mark—an incised crescent. Sq. Fb V. 2, at 2·4 m. below the surface. Period: TT 9–10.

Fig. 70, No. 6, A 114. Ht. 0·88 m. Buff clay, black paint. Vertical zigzags between bands. Inside, undulating line pendent from a band at the rim. From sq. Fc V. 2, at *c.* 2 m. below the surface. Probable period: TT 8–9.

Fig. 57, No. 2, A 101, ht. 0·045 m., a miniature of the type. Light buff clay, red paint. The design, which is very faint, consists of horizontal ripples and vertical bands, both on the inside and outside. The brush-work is careless. By stratification this piece is late, but it may actually be an older piece found at a late level. From sq. Fc IV. 5, at 1 m. below the surface. Period doubtful.

(*b*) *Early*, i.e. corresponding to some period before TT 10.

Fig. 70, No. 1, A 119. Ht. 0·07 m. Pinkish-buff clay, red paint. On the outside, vertical ripples; inside, undulating line below a band pendent from rim. The bowl was broken and mended with bitumen. From Fd IV. 5, at 2·7 m. below the surface. Before TT 10.

Fig. 70, No. 4, A 287. Ht. 0·09 m. Pink clay, red paint. Design similar to that on previous example, but the lines are finer. From sq. Fd V. 2, at 2 m. below the surface. Before TT 10.

Fig. 71, No. 4, A 284. Ht. 0·048 m. Pink clay, red paint. Vertical parallels both inside and out. From sq. Fd IV. 4, at 2·5 m. below the surface. Period: before TT 10.

Fig. 71, No. 6, A 279. Ht. 0·05 m. Buff clay, red paint. Alternate panels of vertical parallels and undulating horizontals on the outside. Plain band at the rim on the inside. At sq. Fd IV. 4, at 2·4 m. below the surface. Period: before TT 10.

Fig. 71, No. 2, A 765. Rim diam. 0·14 m., ht. 0·042 m. Design in lustrous red paint on an apricot slip. On the outside, cross-hatching over the entire

surface, between bands; inside, an undulating line pendent from a band at the rim. The cross-hatched design may possibly be based on a basketry prototype. Potter's mark or signature on the base, inside. From sq. Fe IV. 4, at 1.5 m. below the surface. Technique and quality of paint early, probably before TT 10.

Fig. 70, No. 2, A 105. Ht. 0·08 m. Lustrous black carbonized paint on an apricot slip. The design on the outside is similar to the previous example; on the inside, three horizontal ripples below a band. Probably based on a basketry prototype. From sq. Fe V. 4, below the level of a stone road at 1 m. below the surface. Early technique. Probably before TT 10.

Fig. 70, No. 5, A 123. Ht. 0·088 m. Design in a lustrous black paint on an apricot burnished slip. Outside, the design consists of vertical zigzags empanelled between vertical parallels; inside, undulating line pendent from a band at the rim. From sq. Fc V. 2, at 2·5 m. Period: before TT 10.

Fig. 71, No. 3, A 758. Ht. 0·052 m. Buff clay, reddish-black paint. Pattern similar to previous example. From sq. Ga IV. 5, at 1·5 m. below the surface. Probably before TT 10.

Fig. 71, No. 5, A 759. Ht. 0·065 m. Pinkish-buff clay, black paint. Outside, empanelled horizontal zigzags; inside, plain band and oblique dashes pendent from it at the rim. On the base a band. From sq. Fd IV. 4, at 2·6 m. below the surface. Before TT 10.

Fig. 70, No. 3, A 107. Ht. 0·08 m. Pinkish clay, red paint. Outside, rows of horizontal ripples or undulating lines between bands; inside, band; and on the rim, dashes. From a Tall Ḥalaf grave, G 54. Cf. p. 42 above. Associated with Fig. 72, No. 1, A 111, in sq. Fd V. 4, at 3·2 m. below the surface. Before TT 10.

Fig. 69, No. 1, A 108. Ht. 0·092 m. Pinkish-buff clay, black paint. Outside, alternate panels of egg stippling and horizontal ripples, imitating basketry. Found below the level of a stone road outside the Tepe. Probably before TT 10.

Cross-hatched running lozenge design on the shallow bowl with flat base and incurving sides.

The design which is shown on Fig. 72, Nos. 1–5, is the commonest form of decoration applied to this bowl type, and is only found in the early levels before TT 10. Sometimes in addition to the running lozenge there is an infilling in the form of solid triangles, as in Nos. 3–5. The design on the inside of the bowl is invariably the same: an undulating line pendent from a band at the rim. In the following examples, therefore, it will not be necessary to refer to the design in the description, with the exception of Fig. 72, No. 1, A 111, which has an additional sign on the base.

Fig. 72, No. 1, A 111. Ht. 0·10 m. Buff clay, black paint. On the base, inside, there is the undulating line and band design, and in the centre, a cross, probably a potter's mark. From a Tall Ḥalaf grave, G 54. Cf. p. 42 above. Associated with Fig. 70, No. 3, A 107, at 3·2 m. below the surface. Before TT 10.

Fig. 72, No. 2, A 112. Ht. 0·085 m. Buff clay, bright red paint. From sq. Fc V. 2, at 3 m. below the surface. A very early specimen. Before TT 10.

Fig. 72, No. 3, A 756. Ht. 0·105 m. Pinkish-buff clay, smooth burnished surface. Lustrous red paint, partly turned black. From sq. Fd IV. 4, at 2·5 m. below the surface. Before TT 10.

Fig. 72, No. 4, A 133. Ht. 0·058 m. Pinkish clay, bright red paint. From sq. Fd IV. 4, at 2·5 m. below the surface. Before TT 10.

Fig. 72, No. 5, A 141. Ht. 0·11 m. Yellowish clay, smooth burnished surface. Lustrous black paint. From sq. Fd IV. 4, at 2·7 m. below the surface. Before TT 10.

Cross-hatched running lozenge on variants of this type.

Fig. 71, Nos. 7–9, show three examples of this design on different types of bowl.

Fig. 71, No. 7, A 150. Ht. 0·052 m. Pinkish clay, smooth, well-finished surface. Red paint. The bowl is bellied, and the base is much smaller in proportion to the rim than on the usual examples of the type. Found loose in soil. Probably before TT 10.

Fig. 71, No. 8, A 288. Ht. 0·064 m. Pinkish-buff clay, smooth surface. Red paint partly turned black. This bowl was broken and mended with bitumen in antiquity. Hemispherical in shape. From sq. Fd IV. 4, at 2·8 m. below the surface. Before TT 10.

Fig. 71, No. 9, A 262. Ht. 0·10 m. Orange clay, red paint. On the inside, vertical dashes at the rim. Deep bowl with flat base and sides incurving sharply at the rim. From sq. Fb V. 1, at 3·7 m. below the surface. Before TT 10.

Chapter 11

THE *BUKRANIUM* DESIGN: EVOLUTION OF DESIGN OF THE TALL ḤALAF WARE: AL 'UBAID AND SAMARRA WARE COMPARED WITH TALL ḤALAF: GENERAL CONSIDERATIONS OF STYLE

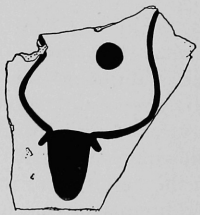


Fig. 73. *BUKRANIUM* DESIGN. EARLIEST STAGE

In order to understand the development in style of the painted designs on the Tall Ḥalaf pottery, it is necessary to make a detailed study of the *bukranium* design. We have already commented elsewhere on the frequent occurrence of the representation of the bull, not only on the painted pottery,

but in stone, in bone, in terra-cotta, and in sun-dried clay. It is evident therefore that the bull or *bukranium* cult must have been of paramount importance; and its constant representation under different forms, at all stages of development on the Tall Ḫalaf pottery, gives us a most important clue to the general stylistic evolution of design.

In describing the Tall Ḫalaf ware we have already had occasion to observe this design on certain standard types of pottery, and we shall refer to these again in our study of this design.

Fig. 74, Nos. 1–25, and Fig. 75, Nos. 1–16, illustrate the most important varieties of the design, and show us the principal phases in the evolution of the type.

The prototype of the design is shown on Fig. 73, where we have a crude naturalistic representation of a bull's head: the drawing is both simple and primitive, and head, ears, and horns are clearly represented without any attempt at stylization: between the horns there is a solid circle or disk, probably merely an addition to the design without any ulterior significance. The paint is red, and the clay pinkish-buff; the design is done on to the base of a bowl. The stratification of this particular sherd proves that it is early: it was found at a depth of 3·5 m. below the surface in sq. Fc V. 2 and must belong to a period before TT 10. It is a crude counterpart to the finely modelled *bukranium* in brecciated limestone which also antedated TT 10. Cf. Chapter 7, p. 96.

In the next stage we find that the *bukranium* is still naturalistic, but there is a certain tendency to stylization, which is more pronounced in some examples than in others. Fig. 74, No. 1, shows a crude naturalistic drawing, with a direct attempt to represent the top of the skull, but there is already a tendency to simplify the head. Fig. 74, No. 2, shows another stylized naturalistic example; there is an attempt to make the drawing regular and symmetrical, but the effort in the direction of naturalism is shown in the careful representation of the nostrils; in the later examples such details disappear entirely. A closely similar design which partakes of a certain formal naturalism is shown on a bowl on Fig. 76, No. 2, A 166, ht. 0·074 m. The design is in black paint on a cream slip which is well fixed, and the clay is reddish in section. On the outside there is a vertical *bukranium* pattern on a background of dot stippling, empanelled at intervals between stippled verticals; in addition there are panels of solid circles with stippled dot borders. On the inside there is an undulating line pendent from a band at the rim. We have already observed that the empanelled design is an indication of early date; so too is this shape of bowl which is really a variant of the shallow bowl with incurving sides, described in Chapter 10, pp. 151–153. This bowl comes from an early stratum, sq. Fb V. 2, at 3·4 m. below the surface, and antedates TT 10.

Another early example which belongs approximately to this stage of development is Fig. 74, No. 3, which, though still naturalistic, foreshadows more clearly than the previous examples the stylization to come. We have,

however, a crude attempt here to illustrate the eyes, showing that reverence for details on the original object that is characteristic of the early artist. On the other hand, we have a greater tendency towards regularity, and the insertion of an extra pair of horns is a specific expression of artistic symbolism: closely parallel with this is Fig. 74, No. 9, where the design has become more rigid and we have no attempt to represent the eyes.

In Fig. 74, No. 5, the design still belongs to the older naturalistic series, but shows further simplifications: this sherd is interesting because it has the conical design with dot stippling that appears at Arpachiyah on sherds of Samarra ware: this design we shall refer to below as the Samarra hut design, and it forms a link between the early Tall Ḫalaf period at Arpachiyah, and that of Samarra.

Fig. 74, No. 4, an exceptional stylized design, shows a type of *bukranium* which is interesting owing to its resemblance to a later Sumerian type represented in the round on a copper pin; the type occurs in the Royal Cemetery of Ur.[1] Another example of the naturalistic *bukranium* has already been described in detail in Chapter 9, shown on Fig. 56, No. 1, an early example of the design, forming a cruciform pattern in the centre of a bowl. The above are the most important specimens of the naturalistic type.

The next stage in the evolution of this design is one of marked conventionalization: the head and horns are still represented, but the original motif is now reduced to a simple rectilinear or curvilinear pattern, with a minimum of detail. This stage is shown clearly on Fig. 74, Nos. 6–16, and offers a number of variations. The types shown on Fig. 74, Nos. 6–8, are probably the oldest examples of this phase, as the design is empanelled, a feature which, as we have seen above, indicates an early date. No. 6 shows a great economy of detail: there is no attempt to represent the ears; in No. 7 there is a superficial resemblance to the '*ankh* sign, but we can hardly suppose there is any connexion: that it is a *bukranium* design is clear from the fact that the horns are separate. No. 8 is a crude design based on the older type; No. 10 a good example of the rectilinear stylization of head and ears and has the horns of each *bukranium* joined to form a running design, a precursor of the all-over *bukranium* pattern. No. 11 is a simplification of No. 10; in No. 12 the design is purely rectilinear. No. 13 is probably not to be connected with the *bukranium*; it is an early sherd in a matt black paint on a cream slip, and the firing is uneven. In Nos. 14 and 15 we have the logical development of this series: the stylized *bukranium* is now used to form an all-over pattern, No. 15 being a simplification of 14. In No. 16 a simple *bukranium* is combined with a chequer pattern, and the use of a white stipple indicates that it cannot be earlier than TT 7–8, and may be as late as TT 6.

Horizontal bukranium design.

On the sherds described in the foregoing pages, the *bukranium* was always drawn in the upright position, parallel with the vertical axis of the pot. In

[1] Woolley, *Ur Excavations, The Royal Cemetery*, II, pl. 231.

the succeeding examples the design is drawn on its side on the horizontal axis of the pot, and in its new aspect the *bukranium* becomes a formal abstract pattern, no longer naturalistic in style. When once the artist had adopted the abstract style, he ceased to be interested in objective details, and no longer felt the necessity of representing the bull in the normal upright position: in turning the *bukranium* on its side, he used it as a formal element in a pattern which flowed freely in a continuous zone around the circumference of the bowl.

Some of the numerous variations of the abstract stage in the *bukranium* pattern are shown on Fig. 74, Nos. 17–25, and Fig. 75, No. 1–12.

In the following examples the design is rendered parallel with the horizontal axis of the pot: Fig. 74, No. 17, the horns are drawn in pairs back to back and joined so as to form a fiddle-shaped design; at each end there is a T-shaped head. No. 18, the horns form a single fiddle-shaped design, instead of a double one as in the previous example; in the upper zone the horns are cross-hatched and have a T-shaped head, and in the lower zone the horns are elongated and left open, the T-shaped head disappears, and instead, each pair of horns is joined by a single line. Variants of this basic design are shown on Nos. 19–25. In No. 19 we have a dot stipple, and the use of minutely dotted circles suggests that this sherd is contemporary with TT 6. No. 20 figures on an 'Arpachiyah cream bowl' shown on Fig. 76, No. 3, A 727, and has been described in Chapter 10, pp. 132–133 above, and may be a little earlier than TT 6, but is not likely to be earlier than TT 8. No. 21 has a similar design to No. 20, without the stippled background. In No. 22 there are again double pairs of horns, but each pair now shares a single T-shaped head—a further stage towards simplification. A variant of this design with single instead of double pairs of horns is shown on Fig. 76, No. 4, A 151. This vase, which now stands to a height of 0·07 m., is in a light buff clay, and the design is in a brownish-black paint on a cream slip; the background is stippled. The vase has a ring base, a rare feature at Arpachiyah, and is not earlier than TT 7–8. No. 23 shows a still further simplification in that the T-shaped head has now totally disappeared and we have instead a single line joining double pairs of horns; a suggestion of the older technique survives in the vertical horns empanelled in the upper zone. With this design we may compare the well-made bowl shown on Fig. 76, No. 5, A 130. The height is 0·085 m. and the clay pink, with a smooth-finished burnished surface, and the design in red paint. On the outside there is a *bukranium* design similar to No. 23, and on the inside a series of concentric arcs, with dot centres, pendent from the rim. This bowl was found in pieces, at a depth of 4 m. below the surface, at the bottom of an ancient rubbish-pit in sq. Fd IV. 4, but here the depth is no criterion of early date, as the debris came from the destroyed settlements in the Tepe, and we need not suppose that this sherd is earlier than TT 7–8. No. 24 is closely similar to No. 23. In No. 25 the horns are impaled.

Fig. 75 shows a continuation of the series. In No. 1 the horns are impaled

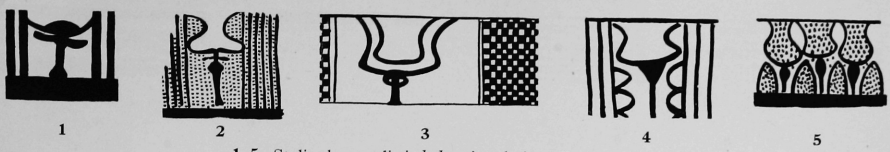
as in the previous example, but each pair is contiguous, and forms a continuous-running pattern. In No. 2 we have a similar pattern with double pairs of horns. In No. 4 we have another running pattern with hatching in the horns. In No. 3 there is an all-over pattern, but the horns, which form a fiddle-shaped design, are treated as separated elements. In No. 6 we have a reversion to the older naturalistic type, though the design is still abstract and remains essentially rectilinear and curvilinear. In No. 7 there are pairs of horns, drawn in bold sweeping curves; this type may go back earlier than the fiddle-shaped pattern which derives from it, and there are indications that these double horns are as early as TT 10; on the other hand, the closely similar impaled double horns of No. 8 occur in TT 6; cf. Fig. 55, A 754, and Chapter 9, p. 114, above. No. 10 again shows pairs of horns, in a more angular drawing, and the application of this design to a large specimen of the Arpachiyah cream bowl type is shown on Fig. 63, No. 3, A 726; cf. Chapter 10, p. 132, above. No. 9 shows an interesting development of the design, the double horns being used as elements in the formation of an all-over undulating pattern.

Bukranium pattern, derivatives and allied designs.

It has now been clearly demonstrated that the painter at Arpachiyah found himself easily progressing from an original naturalistic prototype into a large number of geometric variations of the original design, and in the specimens described above it has been easy to recognize the elements of the original design which the painter has abstracted. But these variant forms need no longer be thought to have any connexion with the *bukranium*; none the less they present certain analogies. Thus in Fig. 75, No. 5, we have a simple stippled cable pattern in which the cable is treated in precisely the same manner as the simplified horn design; and in No. 11, a curious curvilinear pattern in which we have a double-axe design formed by counterchange. In No. 12 simple curves are combined in a chequer pattern which may be aptly compared with the *bukranium* chequer pattern on Fig. 74, No. 16. These designs show how closely the advanced *bukranium* type approximated to purely geometric elements. It was in the execution of geometric patterns that the natural genius of the painter lay.

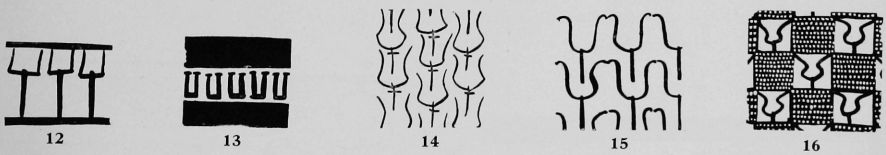
Variants of the bukranium: the 'moufflon' design.

Fig. 75, Nos. 13–16, show the principal varieties of this type. Here we have a design closely similar to the *bukranium*, but the horns are reversed, and there are no strictly naturalistic examples. The boldest design is on No. 13, where we have an all-over pattern on a stippled ground, and on Nos. 14–16 we have simple and somewhat crude variants. This design may easily have been suggested by the *bukranium*, but it may equally well have had an independent origin. On Fig. 68, No. 2, A 725, we have an example of its application to a vase. This vase has a height of 0·16 m. and the design is in a black paint on a buff slip, a zone of moufflons runs round the belly,

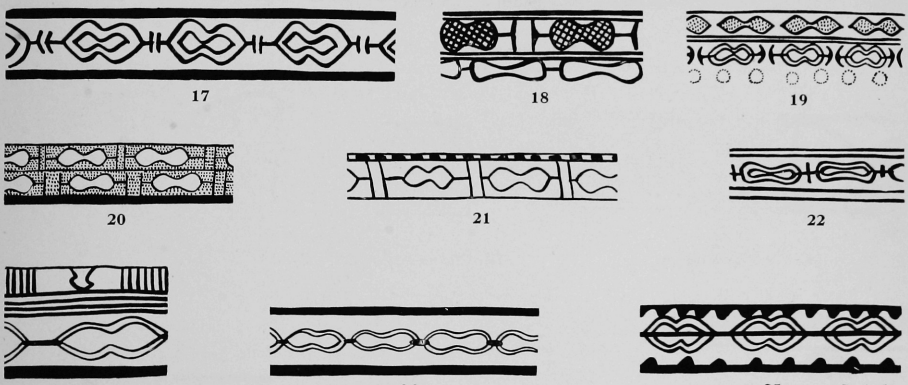


1–5. Stylized naturalistic *bukranium* design. Early stage

6–11. Development of stage shown in **1–5**

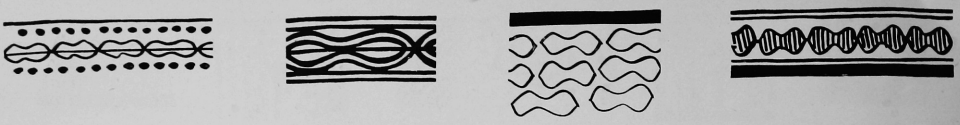


12–16. Vertical *bukranium* design. Developed type



17–25. Horizontal *bukranium* design. Latest stage

FIG. 74. *BUKRANIUM* DESIGNS ON POTTERY OF THE TALL ḤALAF PERIOD



1 2 3 4

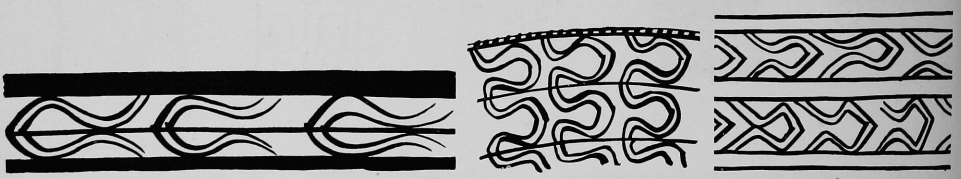
1–4. Stylized *bukranium* horns

5 6 7

5. Dotted cable.

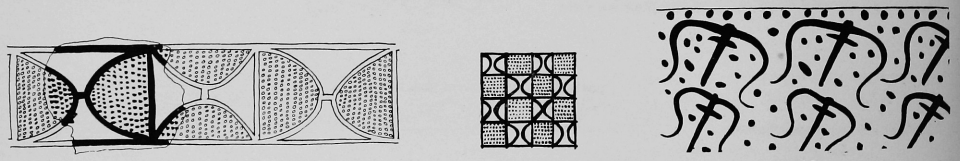
6. Stylized *bukranium.*

7. *Bukranium* horns



8 9 10

8–10. *Bukranium* horns

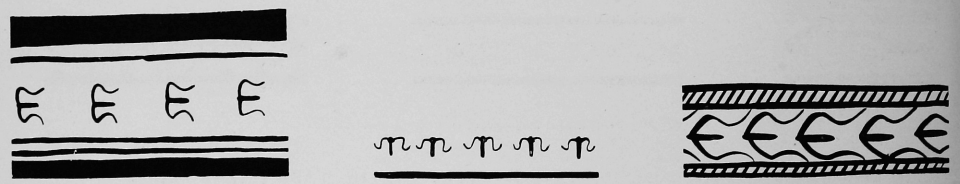


11 12 13

11. Double-axe design.

12. Chequer pattern.

13. '*Moufflons*'



14 15 16 Scale $\frac{1}{8}$

14–16. '*Moufflons*'

FIG. 75. *BUKRANIUM* AND ALLIED DESIGNS ON POTTERY OF THE TALL ḤALAF PERIOD

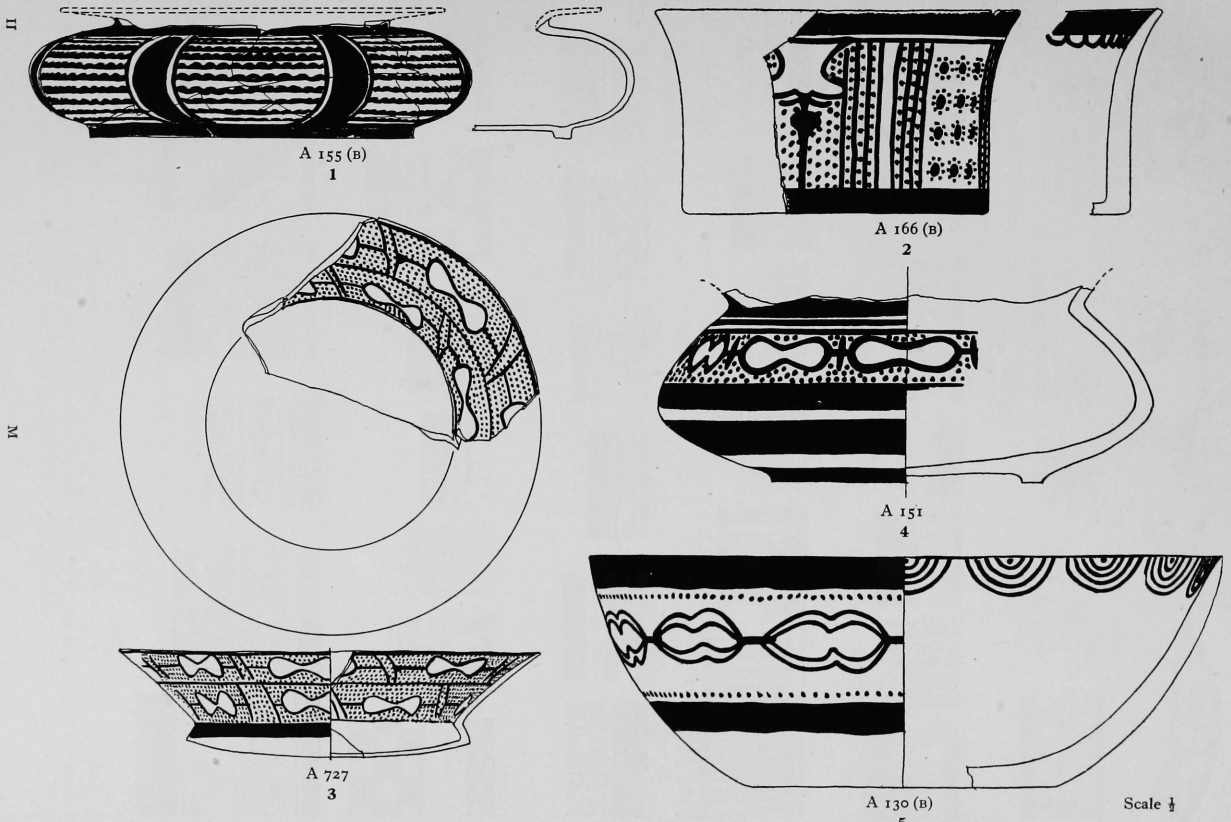
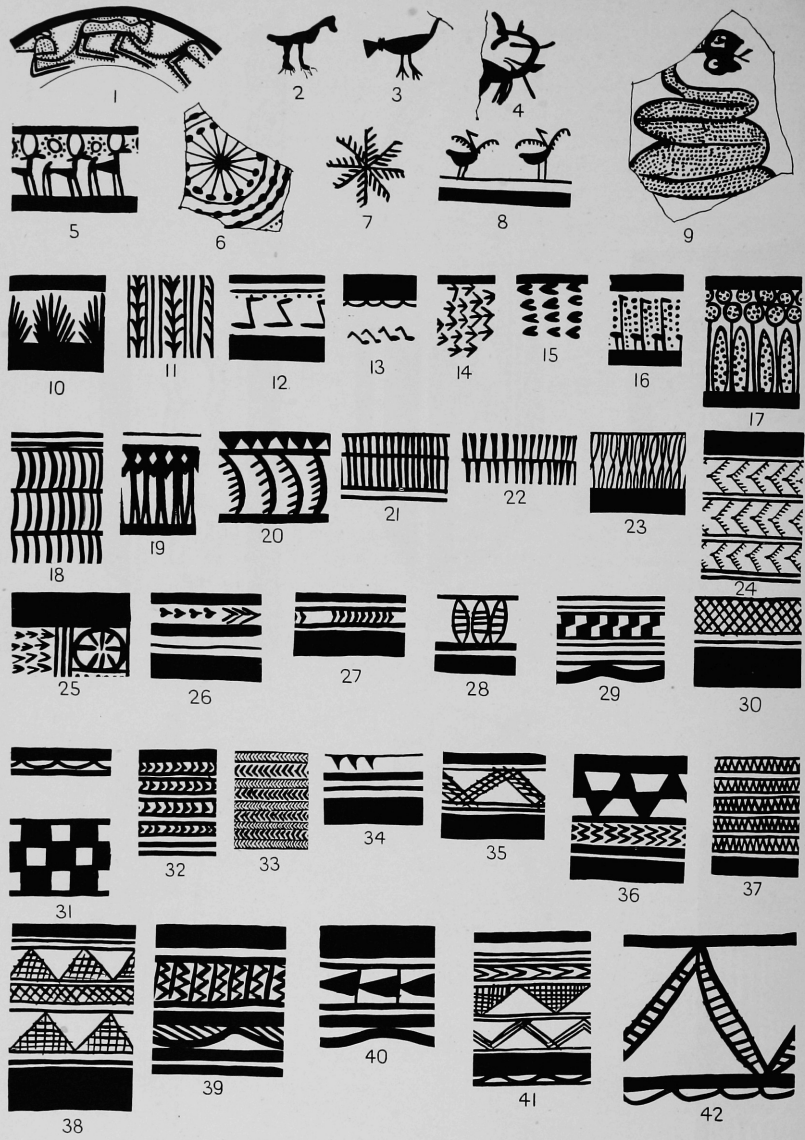


FIG. 76. PAINTED POTTERY OF THE TALL ḤALAF PERIOD



Nos. 4, 10–24, 29, Samarra ware; Nos. 25–28, 30–42, Al ʻUbaid ware; the remainder Tall Ḥalaf ware

FIG. 77. NATURALISTIC AND GEOMETRIC DESIGNS ON PAINTED POTTERY OF THE TALL ḤALAF, SAMARRA, AND AL ʻUBAID PERIODS

and on the inside there is an undulating line pendent from a band at the rim. This vase was broken and mended with bitumen in antiquity, showing that it must have been put to domestic use. It was found in sq. Fd IV. 4, at 2 m. below the surface, and probably corresponds to some period between TT 8–10.

It is curious that the *bukranium* does not appear on the painted pottery of Susa, but at Moussian there is one interesting sherd with a 'moufflon' design, and the human figures drawn on the pottery at that site and at Khazinah are in execution akin to the stylized *bukranium* figures that we have been considering. In this connexion it is interesting to quote the words of G. Contenau[1] on the pottery of Moussian, referring to an exactly similar development from naturalistic to geometric motifs that we have observed at Arpachiyah: 'les tessons de Moussian sont des plus instructifs car on y voit souvent mieux qu'ailleurs le passage d'un motif naturaliste à la stylisation, par exemple à côté des motifs géométriques, le végétal, les oiseaux, la file de bouquetins qui devient une chaînette, et toutes les variations que peut subir le corps humain.'

Bukranium design: conclusions.

The general development of this distinctive motif is now clear from our consideration of its varied forms both on sherds and on complete pots. The prototype in its most naturalistic form is seen on Fig. 73, and in succession we have observed first a series of empanelled figures, still naturalistic, but all to some extent stylized, Fig. 74, Nos. 1–4, then more formal types Nos. 6–16, in which the original details are gradually eliminated. The transition from naturalistic to abstract design had certainly occurred by the time of TT 10, and in TT 6, the latest period of Tall Ḫalaf ware, the transition to purely formal geometric design is complete. As a logical sequence of the old design we find that the potter no longer draws the bull's head vertically, but places it in zones on its side, around the circumference of the bowl; for he is now concerned with the formation of pattern and no longer treats the *bukranium* as a subject for exact copy.

General evolution of design at Arpachiyah.

The *bukranium* design illustrates better than any other the evolution in painting from naturalism to abstraction, but there is interesting confirmation of this development in other motifs. Fig. 77, Nos. 1–5, 8, 9, show a number of sherds with animal drawings, all of which come from deep levels on the site, and certainly antedate TT 10, the earliest stratum dug in the Tepe itself.

Fig. 77, No. 1, shows a most interesting sherd with the design in a lustrous black paint on an apricot clay, with a smooth burnished surface. This particular sherd is of great importance on stylistic grounds, as it was found at a depth of over 5 m. below the surface in sq. Fd IV. 4, in a Tall Ḫalaf house level which was one of the earliest settlements on the site, just above virgin

[1] G. Contenau, *Manuel d'archéologie orientale*, I. 411, and figs. 213–23.

soil. We may therefore confidently accept this piece as one of the earliest fabrics discovered on the site of Arpachiyah. The drawing is crude and consists of a chain of animals coarsely outlined, the bodies decorated with a dot stipple. The design is done on to the rim of a vase. Here we have a straightforward crude animal drawing, a simple attempt on the part of the primitive artist to render an animal: there is no effort to select or abstract any one feature of the design, or to form a geometric pattern, although there is already present the desire to render the subject in the manner most appropriate to its medium, and the artist has therefore selected the rim of the vase, and placed his animals to form a ring around it.

It is often tempting, and always dangerous, to conjecture the type of animal portrayed in primitive naturalistic drawing. In this example we should be tempted to guess—and it is an attractive suggestion—that the animals represented are leopards, and that we have here an early picture of the leopard with his spots. If we could accept this interpretation, it would be easy to understand the remarkable affection for a stippled design shown by the potter at Arpachiyah. It is known that the leopard was a beast familiar to the kings of Assyria, and in Babylonia in the time of Sargon of Akkad, the leopard is represented on cylinder seals. If we supposed that the inhabitants of Arpachiyah had close enough access to leopards to obtain their skins, it would be easy to understand how the spot design attracted the potter as a most suitable pattern to cover the surface of a vase, just as he selected designs commonly used on basketry for delineation upon clay. Whether or not this design does indeed represent a leopard, we have here at any rate a possible explanation for the egg and dot stipple of the Tall Ḫalaf period; but it must be admitted that in this particular figure the contour of the back, and the curve over the head may be taken to suggest the humped ox, and that once again we have a naturalistic design related to the early *bukranium* of Fig. 73. In favour of the theory that this is a leopard would be the continued stippling on the tail: if this design represents an ox then we have to suppose that the artist is simply making use of the stipple to fill the empty space on the bodies of the animals.

Another fine example of an early animal design is the handsome cobra with its double fangs on Fig. 77, No. 9. Here the snake is represented in the attitude that strikes the imagination most—an attitude admirably adapted for the decoration of a vase. The design is in a lustrous black paint on an apricot clay. This specimen again antedates TT 10.

Fig. 77, No. 5, another early specimen, shows a group of cervoids, again a crude piece of naturalistic drawing which has no place in the geometric creations of the potter of TT 6.

Fig. 77, Nos. 2, 3, and 8, have crudely drawn birds: No. 8 shows them as about to take flight, an attitude common on chalcolithic pottery from other sites; this example, however, does not come from a well-stratified level, and we cannot be certain that it is early, as Nos. 2, 3 certainly are.

Fig. 77, No. 4, unfortunately incomplete, has a most interesting design

which may be considered to represent either a fish or a scorpion, and looks like a cross between the two: this design is almost certainly allied to the scorpion designs on the Samarra pottery, and as this sherd is made of an unusual clay, it may be an import.[1]

Other early animal designs are shown on Fig. 77, Nos. 12, 13, 16, which appear to delineate long-necked birds; but these designs are on an ill-fired gritty clay which appears to be an importation, and they are almost certainly specimens of Samarra ware: they come from a depth of over 2 m. below the surface in an early stratum of sq. Ga IV. 5, and probably antedate TT 10.

The few plant designs on sherds at Arpachiyah are again all early, and on sherds which almost without exception are of Samarra ware. Fig. 77, No. 10, is interesting as it figures a palm design: Arpachiyah lies north of the palm belt which does not extend beyond the Babylonian alluvium into Assyria. This is further confirmation of the fact that No. 10 is a Samarra sherd: sherds with this design often have the characteristic Samarra design shown on No. 19, on the back. Nos. 7, 11 of the same figure show more Samarra plant designs; these are stylized drawings, and No. 20 similarly may be based on a plant motif. The arrow-like drawings on Nos. 14, 15 are probably conventionalized birds. Most interesting is No. 17, a sherd on a grey gritty clay, in a matt black paint; the design, which is burnt well into the clay, and has eaten into it, consists of a most interesting pattern composed of elongated stippled cones and verticals capped by stippled circles. It is possible that the design is intended to represent flowers growing between huts; the flowers would be represented in false perspective with their heads full face, in the manner common to Sumerian and other primitive art. Here again, the suggestion that we have a drawing of huts may, like the suggestion of leopards for No. 1, be considered fanciful; but it is certain that the miserable hovels which lay on virgin soil at Arpachiyah were huts rather than houses.

All the sherds which we have been considering from p. 163 onward are from early levels, none of which are later than TT 10. If we turn to Fig. 78, we shall at once notice the progress of the artist. The only early exceptions on this figure, antedating TT 10, and therefore falling within the earlier category, are Nos. 11, 12, 21, 26, all of which are from deep levels outside the Tepe, and No. 27, a more advanced design, which, however, may be earlier than TT 10. Of these early examples, No. 11 is in the empanelled or metopic style characteristic of the earliest fabrics; the curious eight-petalled rosette is a rare design. No. 12 (=Fig. 74, No. 13) has been described and discussed on p. 156 above; No. 26, which comes from one of the earliest settlements just above virgin soil in sq. Fd IV. 4, is in a primitive technique, the clay unevenly fired, the design in a coarse reddish-brown paint; the brush-work is very crude. No. 27, also an early sherd, but a little later than the other two, displays a subtle use of solid triangles, and is a good example of the geometric skill of the early potter.

The remainder of the designs on Fig. 78 are good illustrations of the

[1] HERZFELD, *Die Ausgrabungen von Samarra*, 24, Abb. 31, Nr. 31.

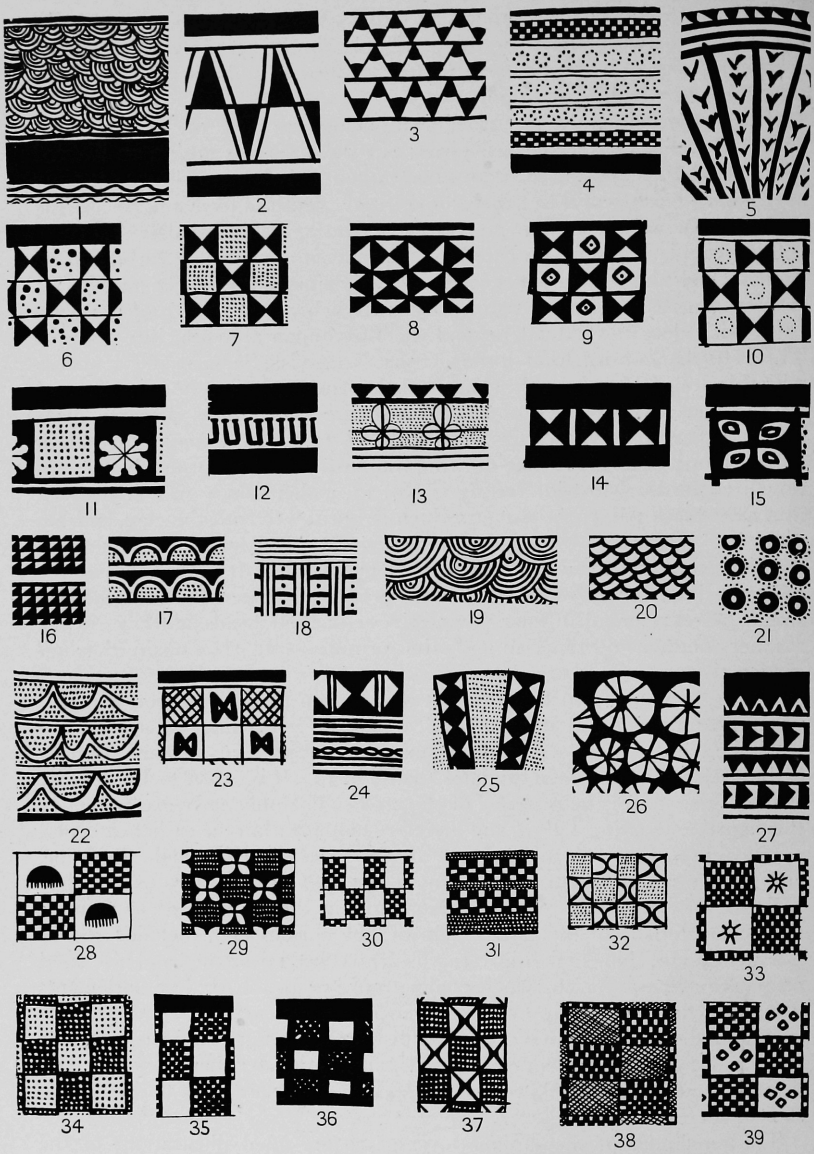


FIG. 78. GEOMETRIC DESIGNS ON PAINTED POTTERY OF THE TALL ḤALAF PERIOD

attractive varieties of pattern developed by the potter at Arpachiyah between TT 10 and TT 6. It is hardly necessary to discuss each example in detail. This plate should be compared with the designs selected by Hubert Schmidt in his study, *Muster der Malerei der prähistorischen Buntkeramik* of Tall Ḫalaf;[1] a comparison will at once show the extraordinary closeness of relationship between the painted pottery of Tall Ḫalaf and that of Arpachiyah.

Among the varied designs shown on Fig. 78, we may select Nos. 1, 19, which have a fish-scale pattern, a design which does not occur before TT 10, but becomes very common in TT 6–8: it is interesting to note that this pattern was deliberately copied in the Al 'Ubaid period. Nos. 2, 3 show different applications of the alternate triangle design; No. 4 is a design very familiar in TT 6; No. 5 has a design which appears to represent stylized birds and may be related to Samarra ware; it corresponds approximately to TT 10.

Nos. 6–10 show the variations based on a theme of triangles placed point to point—perhaps intended to represent double axes. No. 8 is a very carefully executed fabric in a lustrous reddish-brown paint on a cream slip. No. 13 is a rare design; No. 15 shows the Maltese cross with a quatrefoil pattern as a counterchange between the arms; No. 16 is a well-executed diagonal diaper pattern. No. 17 shows a curvilinear design; No. 18 a metopic pattern which occurs at Nineveh; No. 20 has a guilloche pattern; No. 21 shows a dotted circle design, probably earlier than TT 10: in the later periods the potter preferred a more minute finicking stipple. No. 22, a curvilinear design with a stippled background, is weak in its effect and calls attention to the fact that the Arpachiyah potter was at his best when drawing rectilinear rather than curvilinear patterns. No. 23 shows the double axe, the triangles left unfilled; No. 24 gives a counterchanged triangle pattern; No. 25 shows solid running lozenges.

Nos. 28–39 are good examples of the repertoire of the chequer pattern: the potter seems to have taken an especial delight in giving subtle variations of this motif. Nos. 29, 31, 34, 37 have a stipple in white paint, a characteristic which never occurs earlier than TT 8 and is most frequent in TT 6–7. The comb design in No. 28, in a bright-red lustrous paint on a cream slip, is reminiscent of a comb pattern at Tall Ḫalaf, and may also be compared with the comb patterns on the pottery of Susa I[2]; the design suggests also a rising sun with rays. The quatrefoil design in No. 29 is a purely formal geometric pattern, and it may be observed that all the floral and rosette patterns on TT 6 are purely geometric abstractions which have left nature far behind.

Figs. 77, 78 thus summarize the evolution of design and variation of pattern at Arpachiyah in the Tall Ḫalaf period. We have seen that in the earliest periods there are examples of animal designs which later on never occur, and in general in the later periods there is a far greater variety of subject and a

[1] VON OPPENHEIM, *Der Tell Halaf*, 251.
[2] *D.P.M.* XIII, pl. XVI, and VON OPPENHEIM, *Der Tell Halaf*, taf. 53, No. 1.

more skilled brush-work. But it must be remembered that the entire pottery of the Tall Ḫalaf period, from the time of the first settlements on virgin soil down to the fully developed products of TT 6, is a homogeneous fabric. From the first we have observed the ability to turn a design into a pattern, even when the early potter is drawing crude outlines of quadrupeds as in Fig. 77, No. 1, where he is careful to place them in a ring on the rim of his vase, in other words he is always trying to obtain the best possible disposition of his design. Again, the essential elements of geometric designs which are most characteristic of the period, are present from the first. In particular the stipple, and especially the egg and dot stipple, are to be found in the very earliest levels: the characteristic 'Arpachiyah cream bowl' with bevelled base and stippled design is found on virgin soil, and persists till the Al 'Ubaid period, when it drops out. There is of course a tendency in the earliest levels for design to be simpler, and rough linear and rectilinear designs are more common. We have seen that the shallow bowl type (described on pp. 153–154) with cross-hatched lozenge is only found in the early period.

Al 'Ubaid designs contrasted with Tall Ḫalaf.

Fig. 77, Nos. 25–8, 30–42, illustrate a number of sherds of the Al 'Ubaid period found in the top four settlements on the Tepe, TT 1–4. The contrast between these designs and those shown on Fig. 78, Nos. 1–39, of the Tall Ḫalaf period, is interesting. In both periods there is a common fund of geometric design, and certain basic geometric forms on which both schools of potting draw freely, though there are also a number of forms peculiar to each school. Thus Fig. 77, No. 28, the hatched ovals, No. 27, sets of small wedges, and the peculiar hatched design on No. 42, are typical of the Al 'Ubaid style and only found in that period. The remaining Al 'Ubaid sherds shown on this figure contain the rectilinear designs that may be found on any early chalcolithic pottery. But it is clear that the method of application and disposition of design is different on the Al 'Ubaid sherds from the disposition and application on the Tall Ḫalaf. In general the artistry of the Al 'Ubaid painter is jejune and uninspired. He has a set of stock motifs, a known fund of design upon which to draw, but he applies his designs with a monotonous regularity. Good examples of this monotony of style occur in Fig. 77, Nos. 30, 32, 37, 38: these display a fondness for all-over patterns of zigzags or wedges which are tedious to the eye. If we take two designs used both by the Tall Ḫalaf and the Al 'Ubaid potter we shall at once see how much more attractively the former blended and varied his motifs. Thus in Fig. 77, No. 36, we have sets of reversed triangles in the Al 'Ubaid manner, in Fig. 78, Nos. 2, 3, exactly the same design is used by the Tall Ḫalaf potter, but the latter's skilful disposition of the triangles at once makes a lighter and more attractive pattern. Similarly, if we compare the plain chequer design on Fig. 77, No. 31, of the Al 'Ubaid period, with the attractively varied chequers on the Tall Ḫalaf, Fig. 78, Nos. 28–39, we shall see at once how much more effective is the use made of this pattern by the artist of the earlier

period. On the other hand, the Al 'Ubaid painter does occasionally make use of a bolder, broader, and more sweeping treatment of design, in a manner altogether alien to the Tall Ḥalaf painter, cf. especially Figs. 32, 36. But for the most part the pottery of the Al 'Ubaid period is a provincial art which has strayed from its original home, and the painters' methods have often become perfunctory, as in the designs on the bowl types on Figs. 26, 29, No. 5, where there is a minimum of brush-work, and the pottery is painted according to the dictates of a formal tradition. Only rarely does the Al 'Ubaid painter show his technical capabilities, but when he sets himself to the task, he can give us attractive though uninspired pieces; cf. Fig. 47, Nos. 2, 3, 6, &c.

Samarra ware compared with Tall Ḥalaf.

The discovery at Arpachiyah of a number of sherds, and of one complete pot, of Samarra ware, was of great interest as it enabled us to correlate the pottery from the two sites. The majority of the Samarra sherds were found in sq. Ga IV. 4, at depths varying between 1·5 and 3 m., beneath the level of a tholos and of stone roads. It is certain therefore that all these examples must be earlier than TT 6, and some of them may be earlier than TT 10. We have already observed that the Maltese square on the fine polychrome Plate XVIII, cf. p. 113 above, found in TT 6, is a Samarra design; but most of the Samarra sherds correspond with levels prior to TT 6, and although no Samarra sherds were actually found on virgin soil, it is not improbable that the beginnings of Samarra are as early as the earliest material found at Arpachiyah. The evidence from the prehistoric pit at Nineveh showed that on that site Samarra ware was present from the first and actually made its appearance before Tall Ḥalaf ware.[1]

The most important Samarra pot at Arpachiyah is shown on Fig. 68, No. 3, A 297. The height is 0·14 m. The design is in reddish-brown paint on a buff clay. On the outside the neck has a cross-hatched design, and on the inside a vertical stylized *bukranium* pattern which belongs to the later series of *bukranium* designs. On the outside of the belly of the vase there are crude rectilinear patterns. The vase has been broken and mended with bitumen in antiquity. The colour of the paint and the shape approximate closely with Samarra ware, and the type is almost identical with the 'Flaschen mit hohem Hals' discovered by Herzfeld at Samarra. This pot was found at a depth of 1·5 m. in sq. Ga IV. 4, and corresponds to some period between TT 8–10.

A selection of Samarra sherds is shown on Fig. 77, Nos. 10–24, 29; some of them have been described above. Nos. 10–17 show conventionalized trees, birds, and flowers; No. 10 depicts the palm which, as we have mentioned above, has its natural home in Babylonia and does not grow in the non-alluvial Assyrian country. No. 18 is very closely paralleled by a sherd of Samarra ware found at Nineveh in the *Nin. 2* stratum, and Nos. 21, 22 have the buff clay and dull matt paint as well as the follow-through brush-work characteristic

[1] *A.A.A.* XX.

of Samarra. No. 29 shows the typical Samarra step pattern. Most characteristic of Samarra ware is No. 19, where we have a geometric pattern composed of solid triangles and lines, giving a design which resembles human beings with linked arms. The purely formal geometric arrangement of this design occurs at Samarra and at Nineveh, and at Tall Ḫalaf we have the counterpart of this figure in human guise. We cannot as yet be certain of the course of stylistic development of this pattern. In describing the examples at Nineveh, it was inferred that the geometric form was the earlier,[1] and that this suggested the human figure which was derived from it. If this supposition is correct, then this design runs counter to the normal stylistic development at Arpachiyah, which is undoubtedly from the naturalistic towards stylized abstractions. But it must be remembered that the representation of the human figure hardly ever occurs, and on the present example the design is geometric, though it does appear at Tall Ḫalaf[2] in a more naturalistic form. It is possible therefore that the restrictions attaching to the representation of the human figure caused it to appear comparatively late in the development of design, hence the apparent reversing of the normal process of development from naturalistic to stylized abstractions.

Samarra ware: conclusions.

On the whole the pottery of Samarra is far cruder than that of Arpachiyah and more limited in scope. Probably it is in closer touch with basketry prototypes, and indeed the rectilinear designs which are the principal feature of the Samarra pottery prove this close relationship to basketwork models. This ware showed comparatively little development, especially in the technique of firing and colouring, and unlike the Tall Ḫalaf ware, never entirely shook off its primitive origins.

Tall Ḫalaf pottery at Arpachiyah. Method and rate of progress.

We have been able without much difficulty to trace the normal development of design from crude naturalistic origins through a varied series of stylizations. Perhaps one of the most marked stylistic tendencies of the early period was the metopic or empanelled system of design; one that probably depends much on basketry, the vertical lines on the painted design corresponding to the strong vertical struts placed at intervals on the basket. But though the logical course of development is clear, and we see that eventually the potter shook himself free from the traditions of a crude naturalism and from slavish skeuomorphic imitations, yet it would be a mistake to suppose that the elaborations of design and pattern which he later on invented were the result of a slow and steady progress.

The earliest phase covers the period between the foundation of Arpachiyah and TT 10, and even there the potter could show considerable variations of design. But between TT 10 and TT 6 the potter had come into his own, and when once he came to realize his capabilities he indulged rapidly in

[1] *A.A.A.* xx. [2] VON OPPENHEIM, *Der Tell Halaf*, taf. 53, No. 17.

inventing the most diversified patterns. Thus many of the varied forms of *bukranium* of the advanced period shown on Figs. 74, 75 seem all to have been elaborated at a single period, and an examination of the pottery of TT 6 shows how diversified could be the workmanship in a single shop. It would therefore be a mistake to attempt a detailed analysis of any one set of geometric forms which occur between TT 6–10, and to argue from the greater elaboration of one design a later period of production. The marked stages of progress are clear, and perhaps the technique of firing is a better canon of period than any other, as we shall see in the succeeding chapter. In fact a monotonous and uniform series of one design may cover a very long period, and conversely a very varied series of forms may be the work of a few years. Evolution in art is not a slow and steady progress: on the contrary, art when it does develop advances by leaps and bounds.

Style of painting at Arpachiyah conditioned by a simple way of life.

Primarily, then, the painter of the Tall Ḥalaf period was concerned with geometric designs: many of them were no doubt symbolic; the *bukranium*, the double axe, the Maltese cross, and the Maltese square with funerary associations, to name the outstanding examples; even the grain-jars bore special designs. But even if the painter had a symbolic intention behind much of his work, he remained essentially an artist, and failed ever to fall into the slipshod ways that so often beset the craftsman who caters for a set purpose. His work remains ever fresh and varied like that of the artists of all the great ages, whether Minoan, Greek, or early Byzantine. Primitive we might still call his work, just as the seventh-century Greek sculptors or the twelfth-century Byzantine were primitive, but if it is primitive it is also crowned with the mark of perfection.

The primitive and unsophisticated side to his work is perhaps best illustrated by the love of minute designs. More especially the fondness for chequer patterns and the finely drawn dotted circles bring out this trait. Even in the finest plates of TT 6, with their marvellous sense of pattern, we never find that bold, broad, sweeping design that distinguishes the master craftsman of the Minoan Palace period in Crete: in that sense the Arpachiyah and Tall Ḥalaf painter is primitive. The reason is not difficult to explain: he lived in an early and a simple age, when metal was scarce and life not elaborate; his chief prototypes were the simple patterns in leather, skins, textiles, and basketry; he had not the great expanse of surface upon which the Cretan craftsman was accustomed to perform. His houses were unpretentious; he was by origin a humble farmer, not trained like the Cretan to cast his eye over the broad expanse of a lofty walled palace. Hence his art remains on the scale of his own life, bounded by humble limits, simple and sometimes minute, but nevertheless perfect after its own kind.

Chapter 12

TALL ḤALAF PERIOD: UNPAINTED POTTERY, INCISED POTTERY, GREY WARE, FRIT. DEVELOPMENT OF TECHNIQUE. FOREIGN CONNEXIONS

One of the most remarkable features of the Tall Ḥalaf period is the extraordinary rarity of unpainted pottery. In the Al 'Ubaid period there is a certain increase in proportion of unpainted to painted ware: at that time the unpainted is about 25 per cent. of the total, but in the Tall Ḥalaf period the unpainted ware is certainly not more than 10 per cent. of the whole. Excavators are sometimes reproached with neglecting the unpainted pottery on a site which is chiefly interesting for the painted specimens; but at Arpachiyah special attention was paid to the occurrence of plain ware, and it was soon evident that these specimens were in a small minority. Thus in the burnt house TT 6 against about 100 painted specimens there was only one that was unpainted. The complete unpainted specimens are shown on Fig. 79, Nos. 1–6, and a brief catalogue will suffice to describe them.

Catalogue of the most important unpainted pottery. Cf. Fig. 79.

Fig. 79, No. 1. Ht. 0·085 m. Bowl, drab clay. From sq. Fd IV. 4, at 2·5 m. below the surface. Period: before TT 10.

Fig. 79, No. 2, A 782. Ht. 0·17 m. Vase, drab clay, coarse finish. From sq. Fd IV. 4, at 1·3 m. below the surface. Period: probably TT 6 or earlier.

Fig. 79, No. 3, A 182. Ht. 0·20 m. Vase, burnished, brownish-grey carbonized clay, solid ledge handles. From an ash stratum in sq. Fe IV. 4, at 1·5 m. below the surface. Period: before TT 6. This type is also found in earlier levels, and probably covers a long period.

Fig. 79, No. 4, A 785. Ht. 0·105 m. Bowl, coarse reddish clay. From sq. Fd IV. 4, at 2·5 m. below the surface. Period: before TT 10.

Fig. 79, No. 5, A 801. Ht. 0·27 m. Spouted vase, coarse drab clay, broken and mended with bitumen in antiquity. The use of a spout is thus attested for an early period. From sq. Fd IV. 4, at 2·7 m. below the surface. Period: before TT 10.

Fig. 79, No. 6, A 802. Ht. 0·072 m. Pan with solid ledge handles, oval in plan. Dark drab clay, carbonized in section; underside is also carbonized from exposure to fire after baking. This was the only specimen of an unpainted vessel found in the burnt house TT 6, with the single exception of a large store-jar, below. Plate XXI (*a*) shows a large store-jar, 0·7 m. high, as found below the floor of the burnt house in TT 6. A similar specimen of approximately the same dimensions, in drab clay, was found at a level corresponding to TT 10. This large type of vessel sometimes had a rounded and sometimes a flat base, and was used both as a water container and store-jar for grain.

In general the unpainted pottery was all very coarse, made, like all the Tall Ḥalaf pottery, by hand without the use of the wheel, and was used for the roughest domestic purposes.

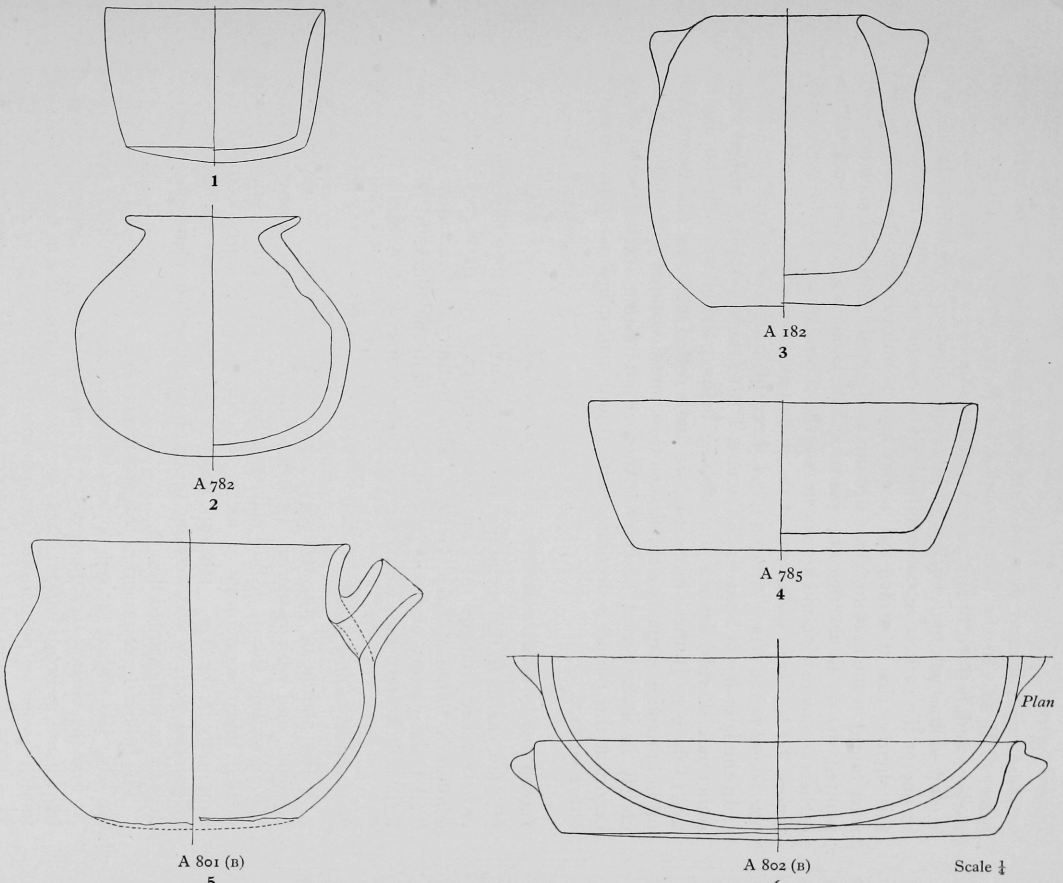


FIG. 79. UNPAINTED POTTERY OF THE TALL ḤALAF PERIOD

Incised pottery.

Sherds with incised designs were occasionally found in the early levels before TT 10. In the later periods, TT 6–10, incised design was almost always combined with paint. An important sherd in a buff clay with roughly scratched lines was found in sq. Fd IV. 4, at a depth of 5 m. below the surface in one of the earliest settlements just above virgin soil. The importance of this sherd is that it is identical in clay and technique with the early incised ware found in the bottom *Nin. 1* stratum at Nineveh[1], and its association with painted sherds shows that the painted Tall Ḫalaf ware goes back to the earliest prehistoric period known in Assyria. Common also in the early levels before TT 10 were specimens of the punctuated ware with stamped circles also found in the *Nin. 1* stratum (*A.A.A.* XX, pl. XLII, No. 10).

In the later levels between TT 6 and TT 10 there is a plain ribbed ware, sometimes sharply defined, the ribbing being parallel with the horizontal axis of the pot. In these levels, too, we find a coiled ware, the ribs being built up in horizontal strips one above the other, and decorated with shallow nicks clearly in imitation of basketry. Another interesting incised ware which occurs at this period is decorated with thumb-nail incisions—often over the entire surface.

Incised and burnished ware.

A few sherds in this technique are also important, as they have the incised cross-hatched triangles on a burnished light grey and dark grey surface so commonly found at Sakje Geuze.[2] This technique is certainly foreign to Tall Ḫalaf pottery and will probably eventually be found to be a characteristic of western sites which were in closer contact with Anatolia.

Incised and painted ware.

A few sherds in this technique again give important connexions with Nineveh, and with Samarra. In strata which correspond approximately to TT 10 we find sherds of buff clay with bands of black paint combined with incised linear scratchings or nicks. At Nineveh this ware occurred most commonly in the *Nin. 2* stratum, and it was suggested that the newer school of painted pottery was seeking to combine the older elements of incised decoration with painted design.[3]

The fullest development of this technique occurs between TT 6–10, where we have the ribbed incised pottery described above, combined with paint. At first the normal treatment is the simple application of vertical strokes of black paint in broad bands. Later we have solid triangles in black paint, and finally the use of polychrome designs in the elaborate form shown on Plate XX (*a*) and described above in Chapter 9, p. 126. This represents the fullest development of the technique.

[1] *A.A.A.* XX, pl. XXXV, No. 1.

[2] Ibid. I (1908).

[3] Ibid. XX, pl. XXXVI, Nos. 18–22, for illustrations of the type, and p. 150 for a general discussion.

Monochrome burnished ware.

In the earliest levels before TT 10 there were a few examples of dark grey burnished wares, carbonized in section, and one or two sherds of black burnished clay were also noted, but they were of great rarity. On the site of Tall Ḫalaf this variety of pottery appears to have been common in the earliest period.

Frit.

The discovery of two frit vessels in the Tall Ḫalaf levels was important as it carries back the history of this material to a very early period. Plate XIX, No. 9, A 531, shows the only preserved example; in form it is a vase that is clearly related to other known Tall Ḫalaf types, e.g. Fig. 66, No. 1: it is a developed type, with ring base, and is now bleached white. Ht. 0·07 m. From sq. Fd IV. 4, at 2·5 m. below the surface. Period: TT 6–7. A second example in poor condition was found in a deposit in TT 7, probably dug down from TT 6. Frit has been mentioned above in another context, as there are also stamp seals in this material made during the Tall Ḫalaf period; cf. above, Chapter 7, pp. 91, 98.

General development of technique.

The development of the incised ware has been described above, and the general progress of design in the previous chapter. The technique of firing and of modelling was undoubtedly precisely similar both at Arpachiyah and on the site of Tall Ḫalaf itself. A convenient summary of the colour technique at Tall Ḫalaf has been made by Hubert Schmidt.[1]

Of first importance is the fact that the pottery of the Tall Ḫalaf period is almost entirely hand-made, without the use of the wheel: some kind of turning instrument the potter had, of course, even if it was only a piece of wood made to revolve on its own axis, and some of the fragments of champagne-vase stems bear markings which seem to indicate the use of a tournette or hand-turned wheel; but it is certain that the fast wheel was not used, and indeed for the production of fine wares with thin walls the fast wheel is of no help. This building of pottery by the very simplest devices, relying as little as possible on the mechanized aid of a fast revolving wheel, was responsible for one of the most attractive characteristics of Tall Ḫalaf ware—its individuality. There was no mass production or stereotyped copying of set forms; every piece was treated as an individual work of art.

That the pottery was baked and painted on the site of Arpachiyah itself we know from the discovery of kilns and of painters' implements and colours including red ochre. Plate XXI (*d*) shows a kiln discovered in TT 8, unfortunately in poor condition. It had a circular base less than a metre in diameter and a central pillar which probably supported a domical roof; the pots must have been stacked around the pillar. The flues and vents were probably underground, but these and the superstructure had disappeared. Fragments

[1] VON OPPENHEIM, *Der Tell Halaf*, 253.

of two circular kilns of the Al 'Ubaid period with domed tops were also found. In the Tall Ḫalaf kiln it seemed that there was wood ash, and straw may also have been used for fuel, though it has been suggested above that an oil fuel may possibly account for the very high temperature at which many of these vases have been fired; cf. Chapter 4, p. 64.

The development of design and increased skill in brush-work have been described in previous chapters; even more noticeable is the improved technique of firing in the course of time. Thus in the earliest periods, before TT 10, we find continual evidence of ill-regulated furnaces: the clay on a single pot often shows considerable variation in colour, and in particular the paint constantly varies in tone on a single pot, brown and black shading into red. This variation of colour due to the difficulty of regulating the furnace is of cardinal importance, for it was owing to this that the potter eventually found himself led to the deliberate use of polychromy. In the first stage he deliberately exploited the variation of tone in colours by applying his paint with greater or less density according to his desire to obtain a red or a black tone. These variegated tones due to the different application of the same paint are found on bowls such as are illustrated in Fig. 70, No. 2; in particular the undulating lines below the rim being more thinly applied often come out a light red in contrast to the deeper tones on the main body of the vase. Finally, after TT 10 we find the deliberate exploitation of polychromy by the use of different colour materials. It is therefore quite wrong to suppose that the Tall Ḫalaf potter learnt the use of polychromy from an outside source: he discovered it for himself, by a natural and logical process of experiment.

The clays vary considerably in quality, and many types of *dégraissant* are used; but from the beginning the Tall Ḫalaf potter's most precious secret was the knowledge of a very fine clean ferruginous clay,[1] capable of being fired at a very high temperature. Doubtless the potter went to some special source for his supply. At Mosul to-day the potter often goes as far as four or five miles down the Tigris to obtain a suitable clay. Certain it is that the later potter of the Al 'Ubaid period did not know of this source and had not the use of these refined clays.

From the first, too, the Tall Ḫalaf potter made use of a slip. In the early period his slips, and particularly the cream slips, tended to flake off easily; but later on they became very hard and adhered perfectly to the body of the vessel.

From the first also the potter tended always to burnish his best pieces: he found doubtless that the paint adhered better on a well-prepared surface, and the lustrous paint which he had at hand was in keeping with a well-polished background.

It will be seen then that the main principles of technique were applied from the beginning; but the most skilful practice culminated, after many generations of experiment, in the fabrics of the potters' shop in the sixth settlement, where the final touch to fine polychrome technique was given by the

[1] The best clays must also have been washed and refined.

further application of a white paint—a discovery certainly not known before TT 8.

Foreign connexions.

In the course of describing the pottery of this period we have commented on those pieces which are imports from other sites, and on common stylistic grounds linking one pottery with another if not in time, at least in a common tradition. These connexions we may now recapitulate in their order of sequence.

Tall Ḥalaf. From the beginning there is the closest relationship, many of the forms and designs as well as much of the technique being identical. The main difference in style is that nowhere on the Arpachiyah pottery is the human figure represented, whereas it does occur at Tall Ḥalaf. These connexions then lead us in the direction of north Syria, and there are no doubt many talls both on the upper Tigris and Euphrates which will be found to have similar pottery. Even western Syria provides some analogies as we have seen in the incised burnished ware commonly found at Sakje Geuze: this site also contained a small proportion of imported Tall Ḥalaf ware. The Sakje Geuze type of sherd occurs a little later in the series than the earliest ware, though still before TT 10.

Nineveh and other Assyrian sites. Throughout we have pointed to the close relationship between Arpachiyah and Nineveh: the chief discrepancy between the stratification of the two sites is that Tall Ḥalaf ware did not become common at Nineveh till after the Samarra ware had been in use for some time. At Arpachiyah, Samarra ware appears before TT 10, but not in the earliest levels of all. The general evidence tends to show that the two wares were contemporary.

Many of the mounds in the neighbourhood bear the same pottery, Tall Keif, Gögjali, Tepe Gawrah, to name a few; the publication of the account of the excavations at the latter site should provide further most instructive comparative material. It may indeed be assumed that there are many other sites in Assyria which must bear the traces of this pottery, the earliest yet discovered in the land.

Samarra. Arpachiyah and Tall Ḥalaf ware was evidently exported to Samarra[1] just as Samarra ware was imported into Arpachiyah, as we know not only from the styles of design but from the differing qualities of the clays. Here then again we have a contemporaneous site.

Babylonia. Here we find no connexion as yet in the Tall Ḥalaf period. It has, however, been suggested that the polychromy of the Jamdat Nasr ware, intruding as it does on the Al 'Ubaid ware, and not developing out of it (as the Tall Ḥalaf polychrome developed out of the simpler Tall Ḥalaf ware), suggests the possibility that Jamdat Nasr may ultimately go back to a Tall Ḥalaf origin, or at any rate that there may be some ancestry common to the two wares.

[1] HERZFELD, *Die Ausgrabungen von Samarra*, pl. XLIV.

Iran, Susa. Although there are very great differences, there would appear to be a certain stylistic connexion between the finely made bowls of Susa 1 and the polychrome plates of TT 6. In both wares one of the most marked characteristics is the use of a stylized Maltese cross or Maltese square as a centre-piece, in both the design is conceived as a whole, intended to be looked at from many points of view, both have primarily geometric designs, and the naturalistic motifs when they occur are treated as stylized abstractions. Possibly, however, the similarity of design may be due to the fact that both were wares which were intended for some ceremonial or funerary purpose, deriving ultimately from common traditions. On the other hand, one vase with a stippled design found at Susa,[1] and unlike the usual Susa 1 ware, does seem to have striking affinities with Tall Ḫalaf designs, and suggests a possible contemporaneity.

Baluchistan. If we move farther east still we find that on the fringes of India there are certain wares which bear at all events a superficial resemblance to the Tall Ḫalaf ware. In particular the polychrome sherds of Sur Jangal[2] and related wares in feel, colour, and minuteness of design bear an apparent kinship to that of Tall Ḫalaf. Here again probably there is some tradition which ultimately connects the two: for the present there is nothing to suggest that the Baluchi ware goes back as early as the Tall Ḫalaf, and it is well to beware of fortuitous resemblances based on sherds of chalcolithic pottery; for although from Syria to India there is undoubtedly a large body of material which is interrelated, the connexions are often stylistic similarities due to traditions which extended over a very long span of time.

[1] *D.P.M.*, , XIII, pl. XXI, No. 2.
[2] STEIN, *Memoirs of the Archaeological Survey of India*, No. 37.